

**BEFORE THE BOARD OF COMMISSIONERS OF LANE COUNTY, OREGON**

**ORDINANCE NO PA: 1364**

IN THE MATTER OF AMENDING THE RURAL COMPREHENSIVE PLAN (RCP) TO ADOPT THE LANE COUNTY PARKS & OPEN SPACE MASTER PLAN, ADOPT THE HOWARD BUFORD RECREATIONAL AREA (HBRA) HABITAT MANAGEMENT PLAN, AND ADOPT THE 1994 HBRA MASTER PLAN THAT WAS PREVIOUSLY ADOPTED AS PART OF THE EUGENE-SPRINGFIELD METROPOLITAN AREA GENERAL PLAN (METRO PLAN) THAT HAS SINCE BEEN AMENDED TO NO LONGER INCLUDE HBRA, AS SPECIAL PURPOSE PLANS OF THE RCP; AND TO ADOPT A SAVINGS AND SEVERABILITY CLAUSE (FILE NO. 509-PA18-05762).

**WHEREAS**, the Parks & Open Space Master Plan will provide a 20-year vision for parks and recreational areas in Lane County, and changes in policy set forth in the 2018 Parks & Open Space Master Plan necessitate refinement to the adopted Parks Master Plan; and

**WHEREAS**, adoption of the 1994 Howard Buford Recreational Area Master Plan to the Rural Comprehensive Plan is necessary considering the area's removal from the Eugene-Springfield Metropolitan Area General Plan Boundary with Board Ordinance No. PA 1281; and

**WHEREAS**, adoption of the Howard Buford Recreational Area Habitat Management Plan is desired to provide a vision and guide Lane County land managers, park stakeholders, agency partners, and interested park users in managing and sustaining the 2,214-acre Howard Buford Recreation Area's valuable aesthetic and natural resources and their enjoyment by the public; and

**WHEREAS**, Lane Code 16.400 sets forth procedures and requirements for Rural Comprehensive Plan Amendments; and

**WHEREAS**, the Lane County Planning Commission reviewed the proposal at a public hearing held on November 6, 2018, and made a recommendation for approval to the Board of County Commissioners; and

**WHEREAS**, the Parks Advisory Committee reviewed the proposal at a special meeting held with the Lane County Planning Commission on November 6, 2018, and made a recommendation for approval to the Board of County Commissioners; and

**WHEREAS**, the Board of County Commissioners has conducted a public hearing on December 18, 2018, and is now ready to take action.

**NOW, THEREFORE, IT IS HEREBY ORDAINED**, the Lane County Rural Comprehensive Plan is hereby amended to adopt the 2018 Parks & Open Space Master Plan, a refinement to the adopted Parks Master Plan, 1994 Howard Buford Recreational Area Master Plan, and Howard Buford Recreational Area Habitat Management Plan as Special Purpose Plans of the Rural Comprehensive Plan.

The Special Purpose Plans are attached hereto and incorporated herein by reference.

If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion constitutes a separate, distinct and independent provision, and such holding does not affect the validity of the remaining portions hereof.

Nothing herein is intended to, nor acts to amend, replace, or otherwise conflict with any other ordinances of Lane County or any other Code or statutory provisions unless expressly so stated.

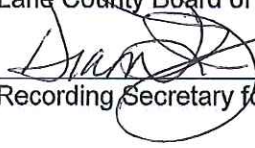
Ordinances, Lane Code sections, and regulations amended by this Ordinance remain in force to authorize a punishment, penalty or forfeiture incurred, or a suit, prosecution, or proceeding pending when the amendment takes effect, for an offense or violation committed under the amended Ordinance, code section, or regulation prior to the effective date of this Ordinance.

ENACTED this 18th day of December 2018.



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Jay Bozievich, Chair  
Lane County Board of Commissioner



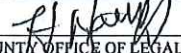
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Recording Secretary for this Meeting of the Board

APPROVED AS TO FORM

Date

11-26-18



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LANE COUNTY OFFICE OF LEGAL COUNSEL

**EXHIBIT A**  
**PROPOSED FINDINGS OF FACT & CONCLUSIONS OF LAW**  
**ORDINANCE NO. PA 1364 & ORDINANCE NO. 18-12| FILE NO. 509-PA18-05762**

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**I. INTRODUCTION**

This is a request for a Major Rural Comprehensive Plan (RCP) Amendment to adopt an updated Lane County Parks & Open Space Master Plan as a refinement to the 1981 Parks Master Plan, adopt the Howard Buford Recreational Area (HBRA) Habitat Management Plan, and adopt the 1994 HBRA Master Plan that was previously adopted as a refinement plan of the Eugene-Springfield Metropolitan Area General (Metro) Plan that has since been amended to no longer include the HBRA, as special purpose plans of the RCP; and a concurrent amendment to Lane Code 16.400(4) to add a reference to the aforementioned special purpose plans.

Applicable criteria for this request include:

- Lane Code (LC) 12.005
- LC 12.050
- LC 16.400
- LC 16.252, and LC 16.003 as applicable
- Statewide Planning Goals
- Applicable Rural Comprehensive Plan Policies/Plan Elements
- ORS/OAR as applicable

Section II of these Findings of Fact and Conclusions of Law address Lane Code. Section III addresses State law, including Statewide Planning Goals, as well as any applicable Rural Comprehensive Plan (RCP) policies.

In part, the County's Parks and Open Space Master Plan is intended to achieve compliance with Statewide Planning Goal 8. The 1981 Parks Master Plan and Recreational Resources Working Paper provided findings to address Goal 8. The 1981 Plan was enacted on January 28, 1981 with Ordinance No. 850 and is a Special Purpose Plan of the County's acknowledged Rural Comprehensive Plan. The updated Parks & Open Space Master Plan will serve as a refinement to the acknowledged 1981 Parks Master Plan. Where there are more specific goals, strategies, or site recommendations in the updated Parks & Open Space Master Plan than the 1981 Parks Master Plan, the 2018 refinement plan will supersede.

These findings of fact focus on the updated Parks & Open Space Master Plan. Where specifically applicable, findings of fact also address the 1994 HBRA Master Plan or HBRA Habitat Management Plan. This approach is based on the fact that while the plans are proposed as discrete Special Purpose Plans of the RCP, the updated Parks & Open Space Master Plan will serve as the overarching parks plan for the areas of the County outside urban growth boundaries. As a refinement plan to the 1981 Parks Master Plan, it is intended as one of the primary plan elements to address Statewide Planning Goal 8. The updated Parks & Open Space Master Plan includes the HBRA and as a site recommendation, direction that the HBRA efforts should follow the guidance of the HBRA Master Plan and HBRA Habitat Management Plan. Additionally, the HBRA Master Plan was adopted in 1994 within the Eugene-Springfield Metropolitan Area General (Metro) Plan. Ordinance No. PA 1281 enacted on June 4, 2013, has since amended the Metro Plan boundary such that it is coterminous with the City of Springfield Urban Growth Boundary east of Interstate 5.

As a result of this amendment, HBRA is no longer included within the Metro Plan boundary. This amendment is only proposed to add the HBRA Master Plan formally to the RCP. Finally, the HBRA Habitat Management Plan has in general been prepared to implement components of the Parks & Open Space Master Plan and HBRA Master Plan.

## II. LANE CODE CRITERIA

### *LC 12.005 Purpose.*

***(1) The board shall adopt a comprehensive plan. The general purpose of the comprehensive plan is the guiding of the social, economic, and physical development of the County to best promote public health, safety, order, convenience, prosperity and general welfare.***

**Finding 1.** The Board adopted the RCP with Ordinance No. 884, and the proposed amendments do not affect its acknowledged status beyond updating and adding parks and open space plan elements. The amendments will not impair the purpose of the Rural Comprehensive Plan as the guiding document for Lane County.

### *LC 12.050 Method of Adoption and Amendment*

***(1) The adoption of the comprehensive plan or an amendment to such plan shall be by an ordinance.***

**Finding 2.** The proposed amendments will be adopted by Ordinance when enacted by the Board.

***(2) The Board may amend or supplement the comprehensive plan upon a finding of:***  
***(a) an error in the plan; or***  
***(b) changed circumstances affecting or pertaining to the plan; or***  
***(c) a change in public policy; or***  
***(d) a change in public need based on a reevaluation of factors affecting the plan; provided, the amendment or supplement does not impair the purpose of the plan as established by LC 12.005 above.***

**Finding 3.** The Parks & Open Space Master Plan is an updated strategic planning document for county-managed parks and open spaces located throughout the county. It contains updated opportunities and needs analyses, goals and strategies, future site considerations, and implementation strategies. The Habitat Management Plan for Lane County's HBRA Habitat Management Plan is intended to provide guidance on conserving and managing a diversity of native habitats and species in the Howard Buford Recreation Area (HBRA) while effectively meeting demand for low intensity recreational use of the park, as provided for in the 1994 HBRA Master Plan. Adoption of these plans is needed per LC 12.050(2)(b) through (d).

The 1994 HBRA Master Plan, first adopted as a refinement plan to the Eugene-Springfield Metropolitan Area General Plan (Metro Plan), is now proposed for adoption to the Rural Comprehensive Plan (RCP) to reflect the fact that HBRA is no longer located within the Metro Plan boundary. Adoption of this plans is needed per LC 12.050(2)(b).



## **LC 16.400 Rural Comprehensive Plan Amendments**

***(4) Rural Comprehensive Plan Described. The Rural Comprehensive Plan of Lane County shall consist of the following components:***

***(b) Special Purpose Plans.***

***(iii) Parks and Open Space Plan (Adopted by Ordinance No. 850).***

**Finding 4.** A text amendment to Lane Code 16.400(4)(iii) is proposed to add a reference to the updated Lane County Parks & Open Space Master Plan adopted with Ordinance No. PA 1364, which is a refinement to the 1981 Parks Master Plan adopted by Ordinance No. 850. Text amendments to Lane Code 16.400(4) are also proposed to add references to adoption of the HRBA Habitat Management Plan and 1994 HBRA Master Plan as Special Purpose Plans of the RCP.

***(5) Interrelationship of Plan Components. New Comprehensive Plan components shall include a description of relationship to other Plan components within the respective Plan category and to the overall Rural Comprehensive Plan. Existing Plan components not containing such a description of relationship shall, at the next update of that Plan, be amended to include such a description.***

**Finding 5.** The purpose of this Ordinance is to adopt the updated Parks & Open Space Master Plan, HRBA Habitat Management Plan, and 1994 HBRA Master Plan as Special Purpose Plans of the RCP. The RCP and Recreational Resources Working Paper describe the relationship between the 1981 Parks Master Plan and other plan elements. The updated Parks & Open Space Master Plan includes site recommendations for the HBRA, recommending following the guidance of the HRBA Master Plan and Habitat Management Plan and updating the HBRA Master Plan as needed to acquire the Willamette Confluence Preserve, increase interpretative facilities and programs, and restore the house/barn as a nature center and rustic shelter. The HBRA Habitat Management Plan will in part address guidance of the HBRA Master Plan. The proposed update to the Parks & Open Space Master Plan does not affect the relationship to other plan components as it relates primarily to RCP Goal 8 policies. Furthermore, applicable RCP policies are addressed below under Section II – Statewide Planning Goals and Rural Comprehensive Plan Policies.

***(6) Plan Adoption or Amendment - General Procedures. The Rural Comprehensive Plan, or any component of such Plan, shall be adopted or amended in accordance with the following procedures:***

***(h) Method of Adoption and Amendment.***

***(i) The adoption or amendment of a Rural Comprehensive Plan component shall be by Ordinance.***

***(ii) The adoption or amendment shall be concurrent with an amendment to LC 16.400(4) above. In the case of a Rural Comprehensive Plan adoption, the Code amendment shall place such Plan in the appropriate category. In the case of a Rural Comprehensive Plan amendment, the Code amendment shall insert the number of the amending Ordinance.***

**Finding 6.** Adoption of the Parks and Open Space Plan, HRBA Habitat Management Plan, and 1994 HBRA Master Plan as Special Purpose Plans of the RCP is by Ordinance. A concurrent amendment to LC 16.400(4) is proposed to add a reference to each of these Special Purpose Plans.

***(iii) The Board may amend or supplement the Rural Comprehensive Plan upon making the following findings:***

*(aa) For Major and Minor Amendments as defined in LC 16.400(8)(a) below, the Plan component or amendment meets all applicable requirements of local and state law, including Statewide Planning Goals and Oregon Administrative Rules.*

**Finding 7.** Compliance with Statewide Planning Goals, any applicable Oregon Administrative Rules, the RCP, and Lane Code is address by these Findings of Fact.

*(bb) For Major and Minor Amendments as defined in LC 16.400(8)(a) below, the Plan amendment or component is:*

- (i-i) necessary to correct an identified error in the application of the Plan; or*
- (ii-ii) necessary to fulfill an identified public or community need for the intended result of the component or amendment; or*
- (iii-iii) necessary to comply with the mandate of local, state or federal policy or law; or*
- (iv-iv) necessary to provide for the implementation of adopted Plan policy or elements; or*
- (v-v) otherwise deemed by the Board, for reasons briefly set forth in its decision, to be desirable, appropriate or proper.*

**Finding 8.** The Parks and Open Space Plan, HRBA Habitat Management Plan, and 1994 HBRA Master Plan are proposed as Special Purpose Plans, or plan elements, of the RCP. Adopting these plans will in part provide for the implementation of RCP elements. Adoption of the 1994 HBRA Master Plan is needed due to the 2013 change to Metro Plan boundary that excluded HRBA. The HRBA Habitat Management Plan is intended to conserve a diversity of native habitats and species while also meeting demand for low intensity residential use of the park. The updated Parks & Open Space Master Plan, not updated since 1981, is proposed to address identified community needs and interests that are thoroughly analyzed by the Plan.

Therefore, the amendments will comply with (ii)-(ii) and (iv)-(iv).

*(9) Addition Amendment Provisions - Special Purpose Plans. In addition to the general provisions set forth in LC 16.400(6) above, the following provisions shall apply to any amendment of Rural Comprehensive Plan components classified in LC 16.400(4) above as Special Purpose Plans. Amendments to Special Purpose Plans may only be initiated by the County. Any individual, however, may request the Board to initiate such amendment. Requests must set forth compelling reasons as to why the amendment should be considered at this time, rather than in conjunction with a periodic Plan update. An offer to participate in costs incurred by the County shall accompany the request.*

**Finding 9.** Consistent with this provision, the proposed RCP amendment has been initiated by the County.

**LC 16.252 Procedures for Zoning, Re-zoning, and Amendments to Requirements.**

*(2) Criteria. [Amendments] shall be enacted to achieve the general purpose of this chapter and shall not be contrary to the public interest.*

**16.003 Purpose.**

*This chapter is designed to provide and coordinate regulations in Lane County governing the development and use of lands to implement the Lane County Rural Comprehensive Plan. To these ends, it is the purpose of this chapter to:*

- (1) Insure that the development of property within the County is commensurate with the character and physical limitations of the land and, in general, to promote and protect the public health, safety, convenience and welfare.*
- (2) Protect and diversify the economy of the County.*
- (3) Conserve the limited supply of prime industrial lands to provide sufficient space for existing industrial enterprises and future industrial growth.*
- (4) Conserve farm and forest lands for the production of crops, livestock and timber products.*
- (5) Encourage the provision of affordable housing in quantities sufficient to allow all citizens some reasonable choice in the selection of a place to live.*
- (6) Conserve all forms of energy through sound economical use of land and land uses developed on the land.*
- (7) Provide for the orderly and efficient transition from rural to urban land use.*
- (8) Provide for the ultimate development and arrangement of efficient public services and facilities within the County.*
- (9) Provide for and encourage a safe, convenient and economic transportation system within the County.*
- (10) Protect the quality of the air, water and land resources of the County.*
- (11) Protect life and property in areas subject to floods, landslides and other natural disasters and hazards.*
- (12) Provide for the recreational needs of residents of Lane County and visitors to the County.*
- (13) Conserve open space and protect historic, cultural, natural and scenic resources.*
- (14) Protect, maintain, and where appropriate, develop and restore the estuaries, coastal shorelands, coastal beach and dune area and to conserve the nearshore ocean and continental shelf of Lane County.*

**Finding 10.** LC 16.252(2) is addressed here to the extent that LC 16.252 is applicable to an amendment to LC 16.400(4). Per LC 16.003 Purpose, LC Chapter 16 is designed to provide regulations in Lane County governing the development and use of lands to implement the Lane County Rural Comprehensive Plan. LC 16.400(6)(h)(ii) provides specific direction that a Lane Code amendment is required concurrent with the adoption of a Special Purpose Plan. Therefore, amendments to LC 16.400(4) are proposed to add references to the Special Purpose Plans proposed for adoption in order to fully implement the proposed RCP amendment. The proposed amendments will support implementation of the updated Parks & Open Space Master Plan and HRBA Master Plan that are intended to provide for the recreational needs of residents of Lane County and visitors to the County, identified at LC 16.003(13).

Pertinent RCP policies are addressed below under Section II – Statewide Planning Goals and RCP Policies. Given that the proposed amendments are generally consistent with Statewide Planning Goals and RCP Policies, and with the purpose of LC Chapter 16, the proposed amendments are not contrary to the public interest.

### **III. STATEWIDE PLANNING GOALS & RURAL COMPREHENSIVE PLAN POLICIES**

#### **Statewide Planning Goal 1: Citizen Involvement**

**Finding 11.** The proposed amendment to the Rural Comprehensive Plan is subject to the Type IV legislative decision-making process, entailing public hearings before both the Lane County Planning Commission and Board of County Commissioners that allow opportunity for public comment. Notice of the public hearing will be published in the Register Guard at least 21 days prior

to each hearing. For the Planning Commission public hearing, notice was published on October 16, 2018. Notice of post-acknowledgement plan amendment was provided to Department of Land Conservation and Development on October 1, 2018, more than 35 days prior to the first evidentiary hearing. Additionally, public hearing notice signs will be posted at HBRA.

**Finding 12.** Both the Parks and Open Space Master Plan and HRBA Habitat Management Plan provide a comprehensive overview of their respective planning processes and public involvement efforts.

Drafting of the updated Parks & Open Space Master Plan was the result of ongoing guidance from a 23-member Task Force, supported by the Parks Advisory Committee (PAC) and Project Management Team (PMT), and several opportunities for community input. The Task Force members were selected to represent diverse interests and the County's six regions (Coast, Siuslaw, North Valley, McKenzie River/East Lane, and South Valley). The Task Force, PAC, and PMT reviewed and distilled previous planning data and collaborated to identify issues, assets, and opportunities within the County's parks and open space system. The assets and opportunities were then refined into three service provision scenarios. Public comment on the scenarios was welcomed and received through an online questionnaire, community workshops, and interactive activities at the 2017 Lane County Fair. Community priorities were incorporated into the Master Plan vision and goals.

Drafting of the HRBA Habitat Management Plan was guided by a Technical Advisory Group consisting of staff from various local, state, and federal agencies and organizations as well as Friends of Buford Park & Mt Pisgah, a non-profit 501c3 organization. Additionally, Lane County, in collaboration with Friends, sought public input during the development of this Habitat Management Plan through multiple outreach methods. Input from the public was essential to ensure that the resulting plan addresses the needs and perspectives of park visitors and stakeholders.

### **Statewide Planning Goal 2: Land Use Planning**

***RCP Goal 2, Policy 3: All products of the County Planning process shall be made available for public review and comment and shall be adopted through the hearings process.***

**Finding 13.** Goal 2 requires local governments to establish processes and policies for land use decisions. Land use decisions are to be made in accordance with a comprehensive plan, and jurisdictions are to adopt suitable implementation ordinances that put the plan's policies into force and effect. Lane County has an adopted comprehensive plan and land use regulations that comprise the planning program required by Goal 2. This is a post-acknowledgement plan amendment to update the Parks & Open Space Plan and add the HBRA Master Plan and HBRA Habitat Management Plan as elements of the RCP only. Lane County's acknowledged RCP and land use program will otherwise be unaffected.

This post-acknowledgement plan amendment will follow the County's process for a Type IV procedure pursuant to Lane Code Chapter 14, Lane Code 12.050, and Lane Code 16.400, ensuring consistency with Goal 2.

Consistent with RCP Goal 2, Policy 3, compliance with Statewide Planning Goal 1 for this project will ensure that all products of the planning process will be available for public review and input.



### Statewide Planning Goal 3: Agricultural Lands

**Finding 14.** Goal 3 defines "agricultural lands" and requires counties to inventory such lands and to "preserve and maintain" them through farm zoning. Lane County has an acknowledged Exclusive Farm Use (EFU) Zone and lands were appropriately designated through Ordinance No. 884 and subsequent post-acknowledgement plan amendments. No amendment to the RCP plan diagram or zone change is proposed at this time.

Several existing parks are located within the EFU zone. The updated Parks & Open Space Master Plan proposes no new parks at this time specifically, but does propose guiding goals and strategies and site recommendations. Per ORS 215.213(2)(e), public parks are a conditional use subject to ORS 215.296 that requires Planning Director review. Any future park development within the EFU zone will be subject to the procedures and criteria of LC 16.212, which will ensure consistency with Goal 3.

The HBRA is designated "Parks" on the RCP and consistent with that designation, is zoned Park and Recreation (PR). It is not designated as agricultural lands and no plan diagram amendment is proposed. Therefore, Goal 3 does not apply to the proposed HBRA plans.

***RCP Goal 3, Policy 16: Recreational activities in the Park and Recreation (PR/RCP) Zone District within agricultural areas that are outside lands for which a built or committed exception to a Statewide Planning Goal has been taken shall be limited to those uses consistent with Statewide Planning Goals 3 and 4.***

**Finding 15.** As mentioned above, while it includes certain site recommendations, the Parks and Open Space Plan proposes no new parks at this time. The Park and Recreation Zone has been developed and adopted in a manner to achieve consistency with this policy. Several existing parks are zoned PR and any park improvements or development within that zone will continue to be subject to the criteria of that zone, ensuring consistency with Goal 3 for areas not within an acknowledged built or committed exception area.

### Statewide Planning Goal 4: Forest Lands

**Finding 16.** Like agricultural lands, Goal 4 defines "forest lands" and requires counties to inventory such lands. This has been completed and no amendment to the RCP plan diagram or zone change is proposed at this time.

Several existing parks are located within the County's F-1 Non-Impacted Forest Lands and F-2 Impacted Forest Lands zones. Per OAR 660-006-0025(4)(f), public parks are a conditional use that include only those uses specified under OAR 660-034-0035 or 660-034-0040, whichever is applicable. The updated Parks & Open Space Master Plan proposes no new parks at this time, but does propose site recommendations. Any future park development in the F-1 or F-2 zone will need to comply with LC 16.210 or LC 16.211 as applicable, ensuring compliance with Goal 4.

The HBRA is designated "Parks" on the RCP and consistent with that designation, is zoned Park and Recreation (PR). It is not designated as forest lands and no plan diagram amendment is proposed. Therefore, Goal 4 does not apply to the proposed HBRA plans.

***RCP Goal 4, Policy 9: Recreational activities in the Park and Recreation (PR/RCP) Zone District within resource areas that are outside lands for which a built or committed***

***exception to a Statewide Planning Goal has been taken shall be limited to those uses consistent with Statewide Planning Goals 3 and 4.***

**Finding 17.** The standards of the PR zone will ensure consistency with Goal 4 for the same reasons that they ensure consistency with Goal 3. See **Finding 15** above, incorporated herein by reference.

**Statewide Planning Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces**

**Finding 18.** The Recreational Resources Working Paper addressed portions of Goal 5 compliance including Wilderness Area, Open Space, Scenic and Visual Resources, Oregon Recreational Trails, and Wild and Scenic Rivers, at the direction of LCDC to provide that analysis.

The Working Paper found that wilderness areas in Oregon are federally managed and Lane County has no direct jurisdiction over such areas. Forest zoning of wilderness areas will pay homage to the concept of County “protection” of those areas, but in practical fact they are out of the realm of County authority. The County can become involved in National Forest management and planning through forests’ planning processes, and wilderness areas were mapped.

Open space was considered to be agricultural or forest lands, other lands in resource-production use, as well as parks and significant natural areas. Agricultural and forest lands were designated with the Rural Comprehensive Plan. The 1981 Parks Master Plan provided strategies in the form of goal and policy statements for providing open space, particularly in developed areas, and analyzed Goal 5 open space requirements in Chapter V and VIII. The updated Parks & Open Space Master Plan does not plan for acquisition of specific parks at this time, but provides guiding goals and strategies that must be achieved if new sites are acquired in the future. In the event that the priorities of the 1981 Parks Master Plan and updated Parks & Open Space Master Plan conflict, the more specific goals and strategies of the updated Plan will supersede.

The Working Paper acknowledged the complexities of inventorying Scenic and Visual Resource areas, and provided discussion and guidelines for further analysis. The updated Parks & Open Space Master Plan is not anticipated to affect the Working Paper findings on Scenic and Visual Resource areas.

The Working Paper focused on Oregon Parks and Recreation and Oregon Department of Transportation trail projects to address the Goal 5 Recreational Trails component, while acknowledging the County’s involvement in those trail projects is limited and that trail development may be subject to the legal requirements of zoning. Therefore, the trails inventory is largely inapplicable to the County’s local park planning efforts.

The Goal 5 Wild and Scenic Rivers component acknowledged that scenic waterways are designated by the State and federal government, listing some waterways that were identified for potential future inclusion in the State/federal system, some of which (e.g. Upper McKenzie River) have since been added. The updated Parks & Open Space Master Plan does not affect that inventory and any future park development within scenic waterways would be subject to compliance with Lane Code and Oregon Scenic Waterways OARs.

Therefore, in general, the Parks & Open Space Master Plan continues to be consistent with portions of Goal 5 related to recreation. For the reasons described above, those portions of Goal 5 either appear to be inapplicable to the proposed amendment or the proposed amendment will be consistent with the County’s original analysis in the Working Paper and 1981 Parks Master Plan.

This amendment will only serve to adopt to the RCP the updated Parks & Open Space Master Plan as a refinement to the 1981 Parks Master Plan, the 1994 HBRA Master Plan, and the HBRA Habitat Management Plan. These plans do not include a change in plan designation or zoning that would allow for any greater intensity of use than currently allowed under the County's adopted zoning and development regulations. While the updated Parks & Open Space Master Plan recommends some changes in park activities and uses, those changes are still recreational in nature and expected to be compatible with existing parks and therefore, conflicts that must be addressed with an ESEE analysis are not anticipated. Adoption of the 1994 HBRA Master Plan is only proposed to reflect the fact that the Howard Buford Area is now in rural Lane County and not the Eugene-Springfield Metropolitan General Plan Area. The HBRA Habitat Management plan does not propose development that could be considered a conflict with Goal 5 inventoried resources.

Therefore, this amendment is consistent with Statewide Planning Goal 5 and it does not appear further Goal 5 analysis is required.

***Flora & Fauna RCP Goal 5, Policy 2: Recognize existing federal and state programs protecting threatened or endangered fish and wildlife species.***

***Flora & Fauna RCP Goal 5, Policy 3: Through the use of County regulations including zoning, seek to minimize the adverse impacts of land use changes on sensitive species (those susceptible to significant population declines resulting from habitat modification).***

***Flora & Fauna RCP Goal 5, Policy 17: Lane County recognizes that Douglas fir old growth stands provide valuable and unique wildlife habitat and will encourage the Forest Service and Bureau of Land Management to maintain acreage in this age class sufficient to ensure viable populations of dependent wildlife species.***

**Finding 19.** In general, strategies and site recommendations in the updated Parks & Open Space Master Plan call for natural resource stewardship including managing invasive species, native planting, increasing riparian barriers, and protecting nesting sites and rare plants.

The HBRA Habitat Management Plan includes several goals related to ecological preservation and enhancement, with recognition of sensitive plant and riparian species. The HBRA Habitat Management Plan considered in its methodology conservation targets that include priority ecological communities or habitat types found within HBRA, as well as endangered, threatened, or at-risk native plant and animal species. The HBRA Habitat Management Plan calls for targeted thinning or removal of conifers in some areas where mixed with oaks, with recognition that conifers such as Douglas fir have increased in density and compete with other habitats such as rare oak woodlands and savannas. Areas of conifers proposed for removal are not old growth stands and compliance with Flora & Fauna RCP Goal 5, Policy 17 can be achieved in other, appropriate locations of the county. Furthermore, the Conservation Vision for the park states that “conifer and mixed forest shall be retained and enhanced in upland portions of HBRA, particularly in portions of the park that historically supported forest conditions.” Page 29 of the Habitat Management Plan indicates that 377 acres of the park are projected to be vegetated with conifer forest following implementation of the HMP. These areas may develop old growth conditions over time, though not within the 15 year time span of the HMP.

Therefore, the proposed amendments appear to be consistent with the applicable policies of Flora & Fauna RCP Goal 5.

## **Statewide Planning Goal 6: Air, Water, and Land Resources Quality**

**Finding 20.** Water quality is achieved through avoidance and/or control of soil erosion, re-establishment of vegetation upon development, and compliance with Department of Environmental Quality (DEQ) standards. Air quality and noise mitigation is achieved through partnership programs with and compliance with the standards of Lane Regional Air Pollution Authority (LRAPA) and DEQ. Any park development or activities called for in the proposed plans will be consistent with Goal 6 by complying with any applicable DEQ, LRAPA, or other local, state, and federal standards or programs.

## **Statewide Planning Goal 7: Areas Subject to Natural Hazards**

**Finding 21.** Various natural hazards including flooding, seismic and tsunami activity, existing or potential landslide, wildfire, and coastal erosion exist and are mapped within Lane County. Lane County is a qualified participant in the Federal Flood Insurance Program. To the extent required by State and Federal requirements, Lane County has adopted regulations for safeguard against natural hazards in Lane Code, primarily but not limited to for flood risk, wildfire risk in forest zones, and coastal erosion. Future park development or activities within mapped hazard areas will be subject to compliance with the corresponding regulations of LC Chapter 16 and thus, consistency with Goal 7 is achieved.

## **Statewide Planning Goal 8: Recreational Needs**

*To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.*

**Finding 22.** Goal 8 is primarily achieved with the County's Parks and Open Space Master Plan. The 1981 Plan was enacted on January 28, 1981 with Ordinance No. 850 and is a Special Purpose Plan of the County's acknowledged Rural Comprehensive Plan. The 1981 Parks Master Plan and Recreational Resources Working Paper addressed Goal 8. As further described below, the 1981 Parks Master Plan provided detailed recreational needs analysis and goals aimed at providing adequate recreational facilities in the county to meet projected need.

The updated Parks & Open Space Master Plan will serve as a refinement to the acknowledged 1981 Parks Master Plan, supplementing the 1981 plan with goals, strategies, and site-specific recommendations that will serve to support further investment in County park facilities. The updated Parks & Open Space Master Plan notes that no specific new park sites are proposed at this time. New sites may be acquired on an opportunity basis where they advance Master Plan goals and are consistent with Master Plan strategies.

Where there are more specific goals, strategies, or site recommendations in the updated Parks & Open Space Master Plan than the 1981 Parks Master Plan, the 2018 refinement plan will supersede.

## **Guidelines for Goal 8**

### **A. PLANNING**

***1. An inventory of recreation needs in the planning area should be made based upon adequate research and analysis of public wants and desires.***



***2. An inventory of recreation opportunities should be made based upon adequate research and analysis of the resources in the planning area that are available to meet recreation needs.***

**Finding 23.** The 1981 Parks Master Plan evaluated the proposed expansion of existing facilities based on population projections (to 1995) and the results of a needs assessment that was conducted with surveys and public hearing outreach. The proposed Parks and Open Space Plan is an update and refinement to the 1981 Parks Master Plan, and the original analysis and findings of the 1981 Plan will retain adopted status.

The updated plan was informed by a detailed opportunities and needs analyses in Chapter 2 and 3. Detailed research and analysis of recreational resources, issues, and opportunities is provided in Chapter 2 of the Plan. Chapter 3 of the Parks and Open Space Master Plan describes the history of early outreach efforts and recent public engagement that has supported the development of the proposed Plan and identification of public needs and desires. In 2016 to 2017, public feedback was solicited through an online questionnaire, series of community workshops, and interactive activities at the County Fair. Outreach results were analyzed and revealed themes in community needs and priorities, and that analysis informed the development of Plan goals, strategies, and site recommendations.

***3. Recreation land use to meet recreational needs and development standards, roles and responsibilities should be developed by all agencies in coordination with each other and with the private interests. Long range plans and action programs to meet recreational needs should be developed by each agency responsible for developing comprehensive plans.***

**Finding 24.** The updated Parks & Open Space Master Plan has been developed in close coordination with the Parks Master Plan Task Force, Parks Advisory Committee, and Parks staff after robust community engagement efforts. It will serve as the guiding long range document for parks throughout the county. Staff note that several parks are located within other UGB planning areas (e.g. Florence, Dunes City, and the Metro Plan), and the Rural Comprehensive Plan and its elements only apply to rural Lane County areas located outside urban growth boundaries.

***4. The planning for lands and resources capable of accommodating multiple uses should include provision for appropriate recreation opportunities.***

**Finding 25.** While new sites may be acquired on an opportunity basis where they advance Master Plan goals and strategies, the updated Parks & Open Space Master Plan does not propose new parks at this time. The updated Plan identifies sites capable of accommodating various uses and potential future treatments for each Lane County park site. Site recommendations are intended to provide high-level guidance on the type of future improvements and development that are appropriate for each site, based on the current function of the park and its desired future use. By identifying appropriate treatments for specific parks, uses within each park will be provided appropriate recreation opportunities.

***5. The State Comprehensive Outdoor Recreation Plan could be used as a guide when planning, acquiring and developing recreation resources, areas and facilities.***

**Finding 26.** As discussed in Chapter 3 of the Parks and Open Space Master Plan, themes and findings from past public outreach as well as outreach findings from 2011 Oregon Statewide Comprehensive Outdoor Recreation and Park Plan (SCORP) survey findings for the Lane County region informed a technical analysis of Lane County’s park system to test areas that are most suitable for Lane County park services. Park classifications in the Plan were derived from SCORP classifications, but customized for Lane County according to industry standards and best practices.

***6. When developing recreation plans, energy consequences should be considered, and to the greatest extent possible non-motorized types of recreational activities should be preferred over motorized activities.***

**Finding 27.** In general, the 1981 Parks Master Plan considered energy consequences (e.g. the proximity of parks to transit and demands on transportation) in its subarea plans while also noting that energy sources are considered in federal and state energy inventories. The updated Parks & Open Space Master Plan further demonstrates consistency with the above Goal 8 guideline by calling for improved access, wayfinding, and connectivity to parks for bicyclists and pedestrians in addition to vehicles. Additionally, Plan strategies include advocating for and helping advance planned State, regional, and city trails, and on-street bike routes that advance the network. See *Strategy 2.1; 2.3.*

***7. Planning and provision for recreation facilities and opportunities should give priority to areas, facilities and uses that***  
***(a) Meet recreational needs requirements for high density population centers,***  
***(b) Meet recreational needs of persons of limited mobility and finances,***  
***(c) Meet recreational needs requirements while providing the maximum conservation of energy both in the transportation of persons to the facility or area and in the recreational use itself,***  
***(d) Minimize environmental deterioration,***  
***(e) Are available to the public at nominal cost, and***  
***(f) Meet needs of visitors to the state.***

**Finding 28.** This guideline was addressed in Chapters II through IV of the 1981 Parks Master Plan. The updated Parks & Open Space Master Plan further demonstrates consistency with the above Goal 8 guideline in Chapter 4 - Vision, Goals and Strategies. Chapter 4 includes strategies that promote ADA accessibility, connection to parks via bike routes and trails, protection of the natural environment, and regional tourism, for example. Additionally, site recommendations are provided for targeted sites, including existing parks located near population centers.

***8. Unique areas or resources capable of meeting one or more specific recreational needs requirements should be inventoried and protected or acquired.***

**Finding 29.** This guideline was addressed in Chapters V through VI of the 1981 Parks Master Plan. The Recreational Resources Working Paper and 1981 Parks Master Plan inventoried wilderness areas, scenic areas, and historic areas. The 1981 Parks Master Plan addressed areas of special concern including the Greenway and historic sites and archeological resources. The updated Parks & Open Space Master Plan provides a comprehensive inventory of existing parks and their variety and function, and provides updated goals and strategies, as well as site recommendations for existing parks. The updated Plan does alter the assumptions of the 1981 Parks Master Plan that addressed this Goal 8 guideline.

***9. All state and federal agencies developing recreation plans should allow for review of recreation plans by affected local agencies.***

**Finding 30.** As stated in the 1981 Parks Master Plan, the County processes its park development plans according to the review program found in Oregon's Recreation Resource Program developed by State Parks.

***10. Comprehensive plans should be designed to give a high priority to enhancing recreation opportunities on the public waters and shorelands of the state especially on existing and potential state and federal wild and scenic waterways, and Oregon Recreation Trails.***

**Finding 31.** The 1981 Parks Master Plan stated that Lane County has given high priority to enhancing opportunities on public waters and shorelands and intends to do so in the future.

As noted in the updated Parks & Open Space Master Plan, many of the County's existing parks are clustered near water bodies, including the Pacific Ocean and several rivers and reservoirs. While new sites may be acquired on an opportunity basis where these advance Master Plan goals and are consistent with Master Plan strategies, no new parks are proposed at this time. The updated Parks & Open Space Master Plan identifies potential site treatments for 29 water access parks, natural areas, and other park areas located in close proximity to water resources.

***11. Plans that provide for satisfying the recreation needs of persons in the planning area should consider as a major determinant, the carrying capacity of the air, land and water resources of the planning area. The land conservation and development actions provided for by such plans should not exceed the carrying capacity of such resources.***

**Finding 32.** The 1981 Parks Master Plan called for balancing recreation development with carrying capacity of the land and environmental quality. It included a study on "carry capacity" that, as noted in the Parks Master Plan, has been followed in development and acquisition program decisions. The updated Parks & Open Space Master Plan at this time does not propose specific park site acquisition. To the extent that park expansion or improvements or new park development is in the future proposed, Lane Code Chapter 16 will ensure compliance with development standards related to floodplain, riparian resources, agricultural and forest land impacts, and other criteria and development standards related to carrying capacity.

***RCP Goal 8, Policy 1: Lane County shall use the adopted Parks Master Plan as its chief guide for recreational development and service provision, to be supplemented by information obtained from the US Forest Service, the State Department of Transportation, the State Marine Board and other agencies.***

**Finding 33.** The Parks Master Plan has served as the chief guide for recreational development and service. The updated Parks & Open Space Master Plan will continue to serve that role as a refinement to the 1981 Parks Master Plan.

***RCP Goal 8, Policy 2: Private recreational development in areas predominated by public recreational amenities and facilities shall be encouraged, provided that development is complimentary to or supplements public facilities.***

**Finding 34.** Consistent with this policy, the updated Parks & Open Space Master Plan contains various policies addressing and supporting the presence of existing park vendors, concessionaires, and private/non-profit recreation providers at County sites. Additionally, site recommendations include “formalized partnership,” which involves developing a memorandum of understanding or other formalized agreement with site partners. This site recommendation is listed where appropriate for specific parks.

***RCP Goal 8, Policy 3: Proposals for major recreational developments which exceed projected needs contained in the Recreational Working Paper of the Parks Master Plan shall be accompanied by a demand analysis.***

**Finding 35.** This is a refinement only to the adopted Parks Master Plan. No major recreational developments or new parks are proposed at this time. A needs analysis was provided in the 1981 Parks Master Plan. Therefore, a new or revised demand analysis is not required.

***RCP Goal 8, Policy 4: Increase recreation opportunities, as needed, throughout the County.***

**Finding 36.** The updated Parks & Open Space Master Plan provides strategic goals and site recommendations that provide guidance on future investment in and management of existing parks. Additionally, several strategies support park improvements, increased park access, and expanded activities that would increase recreational opportunities. No new parks are proposed at this time; however, sites may be acquired on an opportunity basis where these advance the Master Plan goals and strategies.

***RCP Goal 8, Policy 5: Encourage private recreational development as an important component of the County's total supply of recreational facilities and services.***

**Finding 37.** The 1981 Parks Master Plan found that there were 13 public and private agencies that supply parks and/or recreational facilities in the County. The called for cooperating with other public and private agencies in planning park developments, taking an active role in public and private recreational industry, as well as encouraging the development of recreational facilities via private enterprise.

Chapter 2 of the updated Parks & Open Space Master Plan provides an inventory of existing parks throughout the County, noting that County Parks are interspersed among parks provided by a variety of other jurisdictions. Also see **Finding 34** above, incorporated herein by reference.

***RCP Goal 8, Policy 6: Encourage the development of recreation facilities in community development centers.***

**Finding 38.** After evaluating population projection data, the 1981 Parks Master Plan recognized and planned for the need for parks near populated areas. While the updated Parks & Open Space Master Plan does not plan for the development of specific new parks, several existing parks within Lane County that are recognized by the updated Parks & Open Space Master Plan are located near community or developed centers.

***RCP Goal 8, Policy 7: Encourage the development of environmentally compatible tourist and recreational facilities which enhance the economic prospects of rural areas while serving the recreational needs of tourists and County residents.***



**Finding 39.** Goal 4 of the updated Parks & Open Space Master Plan prioritizes creating a strategic and holistic park management approach that balances local and site needs with opportunities to create economic benefits or generate revenue to re-invest into parks. At the same time, Strategy 3.1 of the updated Parks & Open Space Master Plan recommends enhancing targeted parks as community outdoor recreation destinations. Strategy 3.3 prioritizes “nature play” as the preferred approach for play areas at Lane County park sites that would provide a range of experiences that reflect the local ecosystem and landscape. Goal 5, in part, prioritizes sustaining and protecting natural resources. When applied together, compliance with these goals and strategies will achieve consistency with the above policy.

Additionally, the HBRA Habitat Management Plan includes “Visitor Experience” as one of the conservation targets identified in the plan, which incorporates the concept of environmentally-compatible recreation facilities.

***RCP Goal 8, Policy 8: Continue development of a Countywide system of paths and trails for nonmotorized travel--pedestrian, bicycle and equestrian--interconnection development centers, recreation sites and scenic areas.***

**Finding 40.** Consistent with this policy, Strategy 2.2 of the updated Parks & Open Space Master Plan recommends enhancing connections to parks via bike routes and trails. Additionally, Strategy 2.5 recommends improved connectivity and access within Lane County parks by improving paths and trails in addition to roads. Strategy 2.6 recommends improvements to trailheads.

***RCP Goal 8, Policy 9: Increase public access to public outdoor recreation sites that can tolerate the pressure of increased use.***

**Finding 41.** Investment in specific sites is proposed in the updated Parks & Open Space Master Plan that considers the distribution and equity of recreation options, respecting the unique character and assets at specific sites, and building on sites with existing access, infrastructure, and opportunities to improve recreation experiences. The Plan includes various strategies intended to increase park usage and site recommendations for new or expanded park activities. The Plan takes into consideration the unique nature and amenities of each park and recommends tailored site recommendations, while at the same time proposing strategies and site recommendations for natural resource protection.

***RCP Goal 8, Policy 10: Encourage public and private participation to increase access to waterways, where needed, without infringing upon private property rights.***

**Finding 42.** Community input for the updated Parks & Open Space Master Plan indicated that Lane County Parks are best known for their water access, trail, and nature experiences, and residents look to Lane County Parks to support each of these. Additionally, access to the County’s rivers, creeks, reservoirs, and coast continue to be a top priority. Goal 1 strategies in the Plan include opportunities for collaboration with residents, volunteers, interest groups, educational providers, businesses, and local, state, and federal agencies to expand, enhance, interpret, provide, and protect parks, natural areas, trails, and recreation opportunities. Several parks are inventoried as “water access” parks, and various activities related to water access are proposed as site recommendations.

***RCP Goal 8, Policy 11: Encourage exchange of public lands of comparable value to offset acquisition of private lands for public use.***

**Finding 43.** It does not appear that the goals and strategies of the updated Parks & Open Space Master Plan would restrict future exchange of public lands.

**RCP Goal 8, Policy 12:** *The County should develop additional guidelines to encourage the private lease and development of existing County-owned land for public recreational facilities.*

**Finding 44.** The updated Parks & Open Space Master Plan contains various policies addressing and supporting the presence vendors, concessionaires, and private/non-profit recreation providers at County sites, consistent with this policy. Additionally, site recommendations include “formalized partnership,” which involves developing a memorandum of understanding or other formalized agreement with site partners.

### **Statewide Planning Goal 9: Economic Development**

**RCP Goal 9, Policy 9:** *Tourism shall be considered as a base industry having high potential for growth throughout the County. Development of facilities oriented towards tourists shall be given maximum support within the framework of these policies.*

**RCP Goal 9, Policy 10:** *As a stimulus to the tourist industry, the County shall maintain and where possible, improve public recreational facilities such as parks, boat ramps, etc. Wherever possible, private operations and contracts will be used in these endeavors.*

**Finding 45.** Goal 4 of the updated Parks & Open Space Master Plan includes strategies intended to generate economic vitality, including strategies that support tourism. Strategy 4.1 prioritizes collaborating with Travel Lane County and other regional tourism initiatives. Strategy 4.5 prioritizes cultivating and growing relationships with local businesses, hospitality industry and private sector recreation providers, including outdoor recreation manufacturers and retailers headquartered or with significant presence in Lane County. The goals, strategies, and site recommendations of the Plan address maintenance and improvement of existing parks and water access parks, and as addressed in **Finding 34**, consideration is also given to private operations and contracts.

### **Statewide Planning Goal 10: Housing**

**Finding 46.** The purpose of Goal 10 is to ensure the provision of adequate numbers of housing units and the efficient use of buildable land within urban growth boundaries, and to provide greater certainty in the development process to reduce housing costs. Goal 10 buildable lands requirements apply only within urban growth boundaries. Goal 10 is not applicable to adoption of a local parks master plan.

### **Statewide Planning Goal 11: Public Facilities and Services**

**Finding 47.** Goal 11 calls for the efficient planning of public services such as sewers, water, law enforcement, and fire protection. Cities or counties shall develop and adopt a public facility plan for areas within an urban growth boundary containing a population greater than 2,500 persons. Counties shall develop and adopt community public facility plans regulating facilities and services for certain unincorporated communities outside urban growth boundaries as specified by Commission rules.

**RCP Goal 11, Policy 6: Land designations and service levels:**

**Park or Recreation (PR)**

**Description: Lands or buildings devoted to public or semi-public recreational use. Included are such uses as golf courses, parks, reservoirs and surrounding land, etc.**

**Service Level: No minimum level of services is established for Park or Recreation areas outside committed areas. Service level for Park or Recreation areas inside committed areas shall be consistent with that level required for the Community or committed area outside of a Community.**

**Finding 48.** Except for Park or Recreation areas inside committed areas, no minimum level of service is required.

Parks in areas zoned Park and Recreation (PR) are subject to LC 16.215. In goal exception areas in the PR Zone, conditional uses must demonstrate that the proposed use will have a water supply of sufficient quantity and quality to meet reasonably foreseeable needs. In the Rural Park and Recreation (RPR) Zone implemented with LC 16.295, uses in developed and committed exception areas require a Type II land use application and must address that the carrying capacity of the soil or of the existing water supply resources and sewer service is not exceeded. Future development in the PR or RPR zone will need to comply with the applicable standards of those zones.

**Statewide Planning Goal 12: Transportation**

**Finding 49.** Notice has been provided to Lane County Transportation Planning and Oregon Department of Transportation and staff is awaiting response.

However, the updated Parks & Open Space Master Plan states no specific new park sites are proposed at this time. Future acquisition would need to comply with the Plan goals and strategies. Goals, strategies, and specific site recommendations will apply to existing parks. Staff note that certain strategies and site recommendations call for various activities such as increased rentals at Camp Lane, environmental education programming, expanded camping options in the Lane County parks system, and certain program provider or park-hosted events. However, these activities are recreational in nature, similar to existing park uses throughout Lane County, and no great increase in vehicular trip generation is expected as a direct result of the Plan. Additionally, any future park development will be subject to the zoning of that park, and compliance with adopted County zoning will ensure park uses will in general remain rural as opposed to urban in nature. Therefore, significant affects to an existing or planned transportation facility are unlikely.

**Statewide Planning Goal 13: Energy Conservation**

**Finding 50.** Goal 13 requires local governments to consider the effects of its comprehensive planning decision on energy consumption. Energy consumption resulting from parks and open space planning can be attributed to vehicular travel to/from/within parks and heating and lighting of park facilities.

In general, the 1981 Parks Master Plan considered energy consequences (e.g. the proximity of parks to transit and demands on transportation) in its subarea plans while also noting that energy sources are considered in federal and state energy inventories.

The updated Parks & Open Space Master Plan further demonstrates consistency with the above Goal 8 guideline by calling for improved access, wayfinding, and connectivity to parks for bicyclists and pedestrians in addition to vehicles. Additionally, Plan strategies include advocating for and helping advance planned State, regional, and city trails, and on-street bike routes that advance the network. See *Strategy 2.1; 2.3*.

Therefore, staff find that Goal 13 has been addressed.

### **Statewide Planning Goal 14: Urbanization**

**Finding 51.** Goal 14 does not apply to the amendment. Goal 14 largely applies to areas within urban growth boundaries, with the exception of certain standards that limit the scale of commercial, industrial, and residential development to prevent urban development in rural areas. It requires cities to estimate future growth and needs for land and then plan and zone enough land to meet those needs. Presumably, any existing Lane County park areas that are located within urban growth boundaries would be taken into consideration in cities' buildable land inventories. However, it is important to note that adoption of the proposed Parks & Open Space Master Plan to the RCP will only apply outside urban growth boundaries.

### **Statewide Planning Goal 15: Willamette River Greenway**

***RCP Goal 15, Policy 28: Public recreation use areas shall be located in or near the more populated urban areas and shall emphasize access to the river.***

***RCP Goal 15, Policy 30: Recreation development shall include a variety of river-oriented opportunities in urban areas but shall be limited in rural areas to those river-oriented recreation uses that are compatible with the sensitive character of the river and other important resources.***

***RCP Goal 15, Policy 31: Consider and minimize the possibility that public recreation use might disturb adjacent private property owners.***

**Finding 52.** No new parks are proposed at this time with the updated Parks & Open Space Master Plan, though the Plan includes site recommendations. Where site acquisition opportunities are in the future available, future parks must be consistent with the Plan goals and strategies.

Strategy 5.6 of the Plan calls for the preservation and protection of natural resources, including increasing riparian buffers. A natural resource stewardship site recommendation is proposed that will consist of managing, maintaining, and/or restoring the natural resources and habitat to meet stewardship goals. This site recommendation also includes removing invasive plants, improving habitat, addressing wildfire hazards, and protecting tree canopy and ecological function of the park. The suitability of different park treatments has been carefully considered in the recommendation of site treatments, and the natural resource stewardship site recommendation and other site recommendations is proposed for specific parks. Additionally, any future site development of existing parks will be subject to the development standards of the zone as well as Lane Code 16.253 Riparian Regulations, which will limit potential impacts to inventoried Class 1 streams.

Given that parks identified in the Parks & Open Space Master Plan are existing, impacts of future park improvements and site recommendations are expected to be minimal. Where the 'site planning' treatment is recommended for specific parks, that treatment will include public outreach



and analysis to identify ways to best meet local and regional needs. Additionally, many zones will require application for a land use decision that requires public notice for any substantial park improvements that are proposed.

**Statewide Planning Goal 16: Estuarine Resources**

**Statewide Planning Goal 17: Coastal Shorelands**

**Statewide Planning Goal 18: Beaches and Dunes**

**Statewide Planning Goal 19: Ocean Resources**

**Finding 53.** Goals 16 through 19 require inventory and protection of the state's coastal resources. The County's Coastal Resource Management Plan, adopted with Ordinance No. 862 and 876, inventoried coastal resources in Lane County. The County's coastal program is implemented by Lane Code 16.234 through 16.243, which in general include land use regulations and procedures that require the protection of estuaries, shorelands, dredged material sites, and beaches and dunes. Any future park development located within coastal combining zones will be subject to Lane Code 16.234 through 16.243 as applicable, ensuring compliance with the coastal statewide planning goals.

**EXHIBIT B**

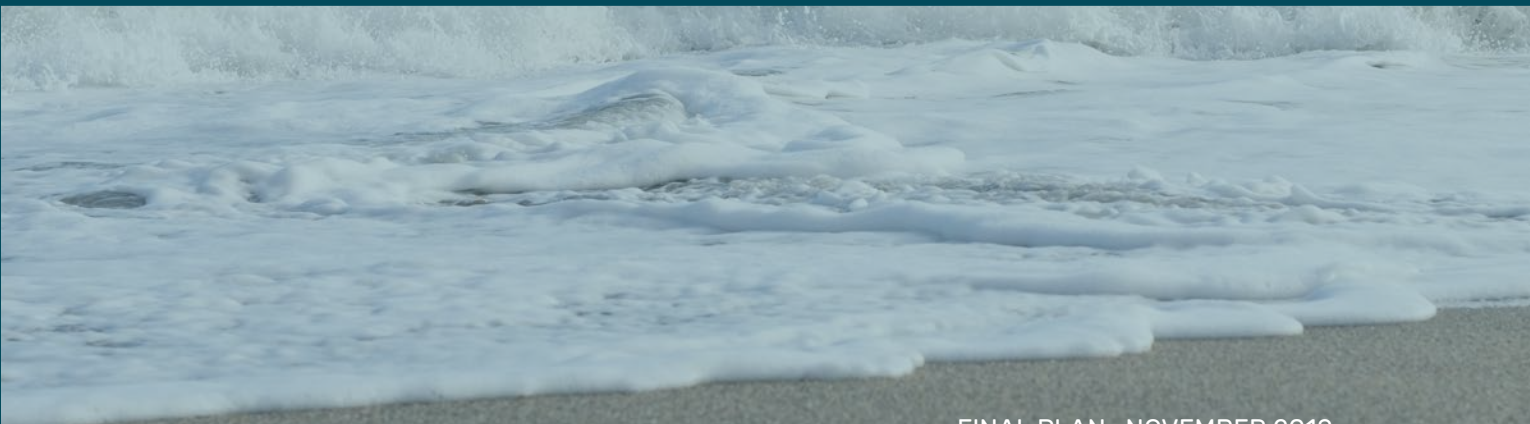
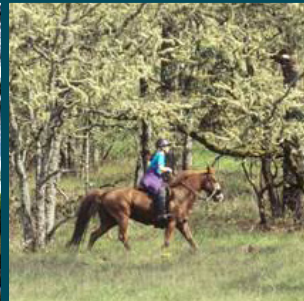
**AMENDMENTS TO LC 16.400 TO ADD REFERENCES TO ADOPTED PLANS**

**SEE ORDINANCE NO. 18-12**



**SEA TO SUMMIT:**  
CREATING THE FUTURE OF  
LANE COUNTY PARKS

**PARKS & OPEN SPACE MASTER PLAN**



*Lane County parks are safe, respectful and inclusive  
places free of hate and discrimination.  
All park visitors are welcome.*



# Sea to Summit: Creating the Future of Lane County Parks

## Parks and Open Space Master Plan

Final Plan

November 2018

Prepared by:



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# Foreword

Lane County is a special place – abounding with natural beauty and countless opportunities to connect with the wonder of the outdoors. We are fortunate to live and play in a county with an incredible variety of landscapes stretching from the beaches of the Oregon Coast, through the prairies of the Willamette Valley, to the forests of the Cascades. Exploring these landscapes through our Lane County parks is essential to the rich quality of life we enjoy.

The Parks Master Plan is a 20-year vision for the future of our parks. It was created through extensive public involvement and represents diverse, countywide values from residents for recreation, tourism, natural resource protection, economic development, and historical and cultural resource preservation. We are extraordinarily thankful for the countless hours of dedicated work that our volunteer advisors, staff and consultants have invested to create this robust and aspirational plan for sustaining and improving our parks.

Our parks and natural areas are essential for our health, our environment and our continued economic vitality. With the adoption of the Parks Master Plan, we recognize the challenges inherent in implementing this vision and the collaborative investments that will be necessary for success. We also recognize the vital importance of Lane County Parks and declare our commitment to protecting and enhancing outdoor opportunities for future generations. In preserving, protecting and enhancing our parks system, we will secure our Lane County vision – to be the best county in which to live, work and play.



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*County Administrator*



**Dan Hurley**  
*Public Works Director*



**Brett Henry**  
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# Acknowledgements

Thank you to Lane County's current and former community members, County staff, Board of County Commissioners, Advisory Committee, Task Force, and Project Management Team members who have given their time, energy, ideas, and guidance to this Master Plan. \* *Participants previously involved in the 2018 Master Plan.*

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The Preliminary Master Plan developed in the early 2000s is the foundation for the 2018 Master Plan. It was developed with contributions from many stakeholders and community members including the following people.

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# Executive Summary



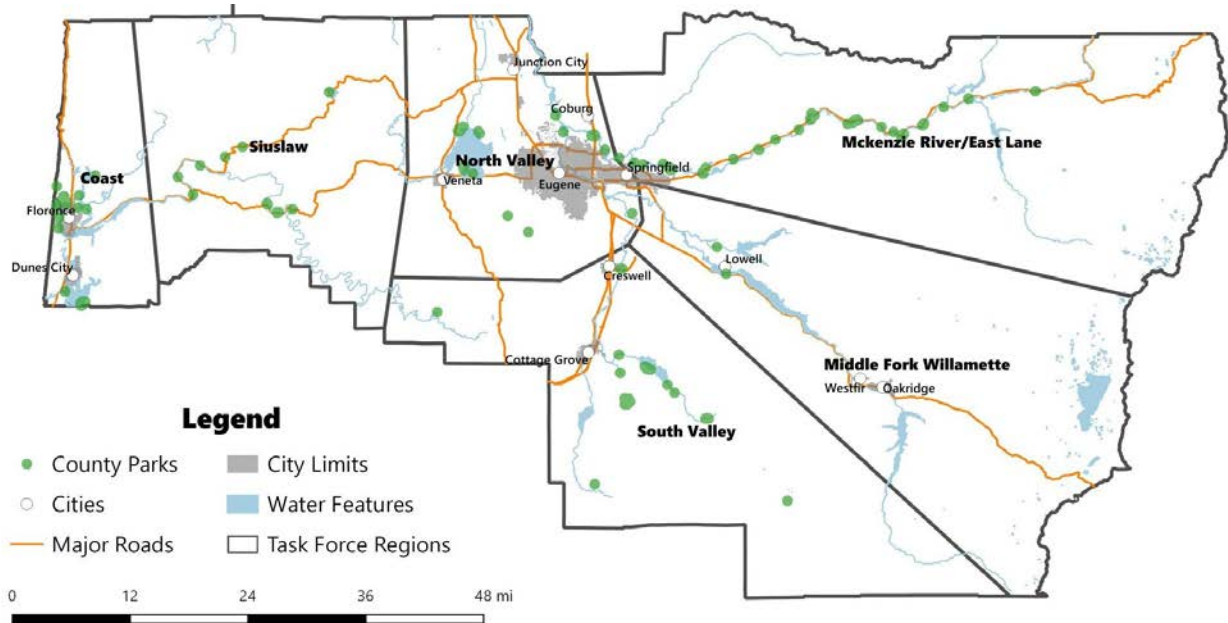
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# Executive Summary

Lane County’s parks include 4,364 acres of rich natural, recreational and cultural assets at 68 sites spread across the County’s 4,800 square miles. The County’s parks and open spaces encompass important ecosystems that support wildlife habitat, biodiversity and clean air and water. These parks also provide access to fishable, swimmable and navigable rivers, lakes and ocean beaches; historic covered bridges; and facilities such as campgrounds, picnic areas, and mountain trails. Because of the richness and diversity of assets, many people--from park neighbors to out-of-state tourists--appreciate and benefit from County parks and open space.

Much of this park system was built in the middle of the 20<sup>th</sup> century. Historically high timber sales from Federal lands provided funding for high-quality public services, including roads, schools, and parks. This allowed Lane County’s tax rates to remain low. Now, timber harvest revenues are severely limited, property tax increases are restricted, and General Funds are constrained. The County manages parks distributed from the coast to the mountains in six different regions (Figure i). It stewards this widespread and incredibly diverse park system with extremely limited resources. A greater investment in Lane County’s parks and open space is needed.

FIGURE i: LANE COUNTY PARKS BY REGION



Source: 2016 Lane County GIS data.

## Plan Purpose

The Lane County Parks & Open Space Master Plan (the Master Plan) provides realistic guidance for managing existing assets and providing well-maintained parks and open spaces. It identifies where strategic improvements, community collaborations and partnerships will help position County Parks to more strongly support outdoor recreation and a vibrant local economy. Grounded in the community’s vision and priorities, it presents an investment strategy for enhancing parks and open space for the next 20 years.

## Planning Process

A community-supported parks master plan is a priority for the County. For over a decade, County staff made gradual progress in collecting information to update the 1980 Parks and Open Space Master Plan. In 2016, the County Administrator renewed efforts to create a more relevant and actionable Parks Master Plan. The County initiated a 23-member Task Force--representing different interests and areas in Lane County--to review technical documents, guide community input and help identify the Master Plan vision, mission, goals and strategies. From Summer 2016 to Fall 2018, the Task Force worked collaboratively with the Project Management Team (PMT), Parks Advisory Committee (PAC) and Board of Commissioners to consolidate best practices and insights from park staff, stakeholders, and community members. The planning process included three phases (Figure ii) to distill, refine and compile key findings into this new Master Plan.

### Community Engagement (2016-2018)

**Activities**

- Online questionnaire
- Series of community workshops
- Interactive activities at the County Fair

**Promotion**

- Dedicated webpage
- Social media
- Video
- Emails
- Newsletters
- Digital billboard
- Radio PSAs

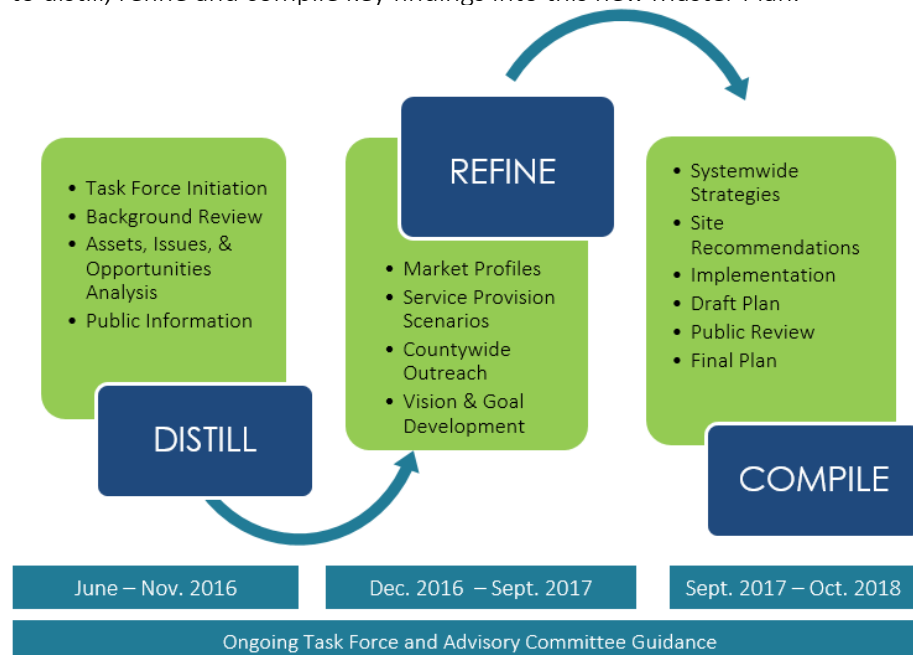


FIGURE ii: THE PLANNING PROCESS



## Community Priorities

Past and recent community input and a technical analysis revealed three priority areas—access to water, nature and trails—where focused investments will leverage County Park assets to enhance recreation in Lane County. These needs and priorities are described in detail in Chapter 3.

### An Accessible Water-Based System

Rivers, streams, wetlands, estuaries, reservoirs and coastlines are major public resources and a key part of Lane County’s identity. Residents noted that Lane County parks should continue to emphasize water access and water-based recreation opportunities.



### Nature-Based Recreation

Lane County parks provide an incredibly diverse range of natural resources. Community priorities for natural areas within County parks include habitat protection and restoration, as well as adding access, where appropriate, with campgrounds, cabins, nature play areas and picnic areas.





## Connected Trail-Based Recreation

County parks include more than 28 miles of land trails, largely concentrated in just a few sites. Residents would like to have a greater variety of trail opportunities, and if possible, an interconnected system of County parks, parks provided by other entities, and nearby community destinations.



## Community Vision, Mission and Goals

The aspirations for Lane County parks are the guiding forces for the Parks & Open Space Master Plan. These aspirations are summarized in the following vision, mission and goals, which are introduced in Chapter 4. The goals will guide Master Plan implementation.

### Vision

Our thriving parks and natural areas connect us to our rivers, reservoirs and natural features, showcase our heritage and natural diversity, and protect resources for future generations.

### Mission

We responsibly manage, sustain and enhance our parks and natural resources through partnership, stewardship and quality customer service.

## Goals

1. **Collaborate** Engage residents, volunteers, interest groups, educational providers, businesses and local, state, and federal agencies as partners in the coordinated effort to expand, enhance, interpret, provide, and protect parks, natural areas, trails and recreation opportunities across Lane County.
2. **Connect.** Attract people to nature, the outdoors and County parks by providing a variety of experiences, improving park and facility access, increasing stewardship, supporting environmental education/nature interpretation, and improving communication.
3. **Create vibrancy.** Re-invigorate and revitalize key parks as thriving, family-friendly outdoor activity hubs through redesign, renovation and programming to help position Lane County as the best county for outdoor recreation and play.
4. **Generate economic vitality.** Create a strategic and holistic park management approach that balances local needs with opportunities to create economic benefits in surrounding communities and/or to generate revenue to re-invest in parks.
5. **Protect resources.** Sustain and protect unique County assets, cultural and natural resources as our legacy for future generations.
6. **Reflect our values.** Emphasize our diverse, natural character and make high impact, low-cost moves to maintain sites, sustain infrastructure and improve the quality, safety and attractiveness of park amenities, landscaping and recreation facilities.

## Achieving the Goals

The Master Plan goals will be achieved by implementing strategies that provide systemwide direction for all County parks and open spaces. These strategies are contained in Chapter 4, organized by the six goals. This strategic guidance is incorporated into the site-specific recommendations found in Chapter 5, including high-level “site treatments” that describe the types of future investment and development appropriate for each site, based on the current function of the park and its desired future use. Several sites also include more detailed recommendations. The following pages present selected recommendations for three sites drawn from Chapter 5 to illustrate how potential projects are tied to community priorities (noted in Chapter 3), as well as Master Plan goals and strategies (noted in Chapter 4).

## Harbor Vista

Recommendations for Harbor Vista support the following Master Plan elements:



### Community Priority

Accessible water-based system

### Goals

Goal 1: Collaborate

Goal 2: Connect

Goal 4: Generate Economic Vitality

### Strategies

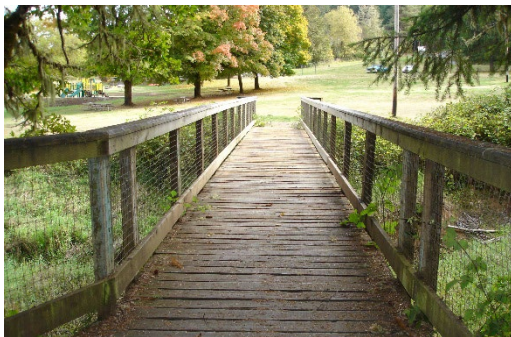
- Engage partners and community members to provide enhanced nature programming.
- Communicate needs and opportunities to community partners.
- Collaborate with partners to build projects.
- Improve connectivity and access.
- Enhance amenities.

### Selected Recommendations

- Collaborate with local partners to support educational/interpretive opportunities and camp programming.
- Expand partnerships and collaboration between the Park caretaker, friends group, schools, City of Florence and state and federal agencies.
- Explore joint use agreement for amphitheater use.
- Continue to support day use for local residents, providing access to the river and beach and support amenities such as restrooms.
- Reinvest in campground facilities, targeting this to be an RV-oriented campground catering to attracting out-of-town visitors to the Oregon Coast. Add yurts/cabins.

## Baker Bay

Recommendations for Baker Bay support the following Master Plan elements:



### Community Priority

Connected trail-based recreation and accessible water-based system.

### Goals

Goal 2: Connect

Goal 3: Create Vibrancy

Goal 4: Generate Economic Vitality

### Strategies

- Enhance function as community outdoor recreation destination.
- Identify potential partnerships and joint projects.
- Embrace ‘nature play’ approach for play areas.
- Provide different sizes of group picnic areas.
- Strengthen existing policies and procedures guiding events of different scales.
- Recruit program providers or host regular activities, events and programs.

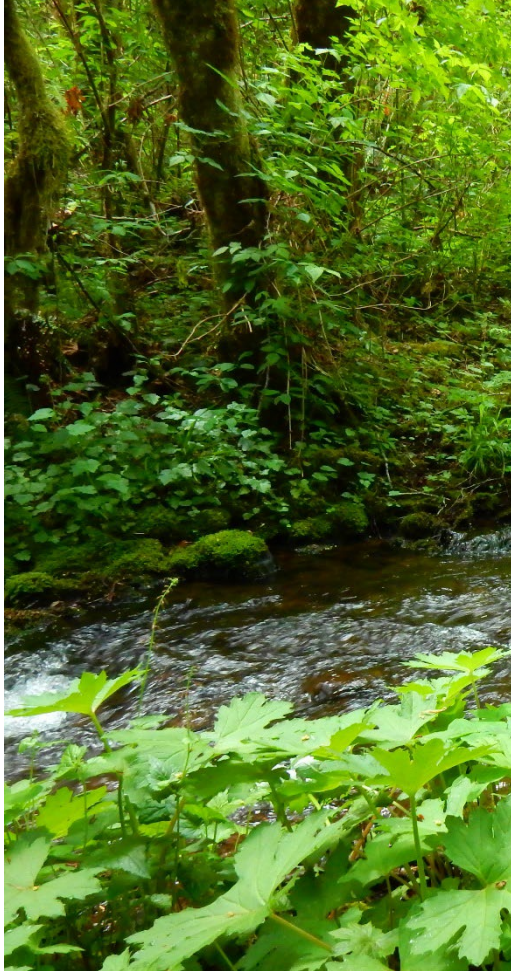
### Selected Recommendations

- Master plan and phase in site improvements.
- Explore opportunities to create regional trails hub.
- Retain and reinvest in lakefront facilities, including improving the beach area.
- Partner with the concessionaire to renovate the building and enhance its function.
- Add at least one covered picnic area near the lakefront.
- Remove the manufactured play structure at the end of its lifecycle and replace it with nature play elements.



## Old McKenzie Hatchery

Recommendations for Old McKenzie Hatchery support the following Master Plan elements:



### Community Priority

Nature-based recreation and accessible water-based system.

### Goals

Goal 1: Collaborate

Goal 4: Generate Economic Vitality

Goal 5: Protect Resources

### Strategies

- Support environmental education, nature interpretation and stewardship.
- Strengthen efforts to identify, designate, interpret and protect cultural resources and ensure that they are made available for public understanding and interpretation.
- Prepare site-specific resource management plans for protecting and enhancing natural areas while providing compatible public access for recreation.
- Provide sustainably-designed facilities and introduce resource conservation measures.



### Selected Recommendations

- Develop a formal agreement with Friends of Old McKenzie Fish Hatchery that allows them to proceed with their goal to develop and operate an interpretive center and museum at the site.
- Ensure the site is managed for natural resource and habitat value.
- Preserve public access to the river.



## Realizing the Vision

This Master Plan envisions a collaborative approach to improving and enhancing Lane County's parks and natural areas. Chapter 6 features three implementation tools designed to help Lane County staff and the PAC determine what projects are well-suited to advance the Master Plan's vision and goals.

- **Prioritizing Strategies.** Parks staff can use these evaluation criteria and matrix to create and annually update short-term (two year) Action Plans. The criteria help staff consider the feasibility, necessary resources and costs associated with capital projects and ongoing maintenance.
- **Process and Worksheet for Evaluating Community Proposals.** This worksheet will help County staff and PAC members review and evaluate projects proposed by residents, stakeholders, partners and others for Lane County's parks and natural areas. It will help identify what types of projects are a good fit and which ones are not.
- **Capital Projects Prioritization.** These criteria will help staff prioritize funding and sequence capital improvements.

The Master Plan's guidance and tools will support Lane County Parks in ushering in a new age. Working together, County staff, partners, stakeholders, other agencies, cities and volunteers can maximize the benefits of Lane County parks from sea to summit and preserve these resources for future generations.



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# CHAPTER 1

## Introduction



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# CHAPTER 1

## Introduction

From sea to summit, Lane County covers almost 4,800 square miles of diverse Oregon landscape. Stretching from the Pacific Ocean through the Coastal Range, the Willamette Valley to the Cascade Mountains, Lane County is home to approximately 366,000 people. The county's communities are as varied as its landscape, including agricultural, rural, suburban, and a few urban areas. Many of these communities grew around Oregon's thriving logging industry in the first half of the 20th century. Historically high timber sales from Federal lands provided income to local and regional governments and funding for high quality public services, including roads, schools, and parks. Low tax rates were standard in communities with healthy timber sales, and Lane County was no exception.

In this context, Lane County Parks acquired 4,364 acres of rich natural, recreational and cultural assets. County parks and open space today provide a variety of outdoor recreation experiences and important ecosystems that support wildlife habitat, biodiversity and clean air and water. The parks also provide residents and visitors access to fishable rivers, navigable and swimmable lakes, ocean beaches, historic covered bridges, old growth forests, and mountain trails.





However, nowadays, timber harvest revenues are at historic lows. When Statewide Ballot Measure 50 made the low tax rates permanent in 1997, and limited the annual growth of assessed values, Lane County lost much of its funding base for services. Federal and local revenues have not been replaced, and the County cannot provide desired service levels. Local revenues are also constrained, with nearly 90 percent of property taxes in Lane County going to fund services provided by schools, cities and other municipal services--not County services.

Although the County has started rebuilding its economy and balancing its budget, Lane County's per capita tax revenue is the third lowest in the State of Oregon (Figure 1). A greater investment in its parks and open space is needed, but General Fund dollars are not currently available to support County parks. Still, the resources and assets owned by Lane County are vast.

Opportunities exist to re-invest in County parks in a way that contributes to the local economy and protects the community's heritage. This re-investment requires a new vision and a new management strategy for Lane County parks. It also requires the collaboration of staff, stakeholders, partners and other agencies who must work together to leverage the resources needed to support parks and open space.

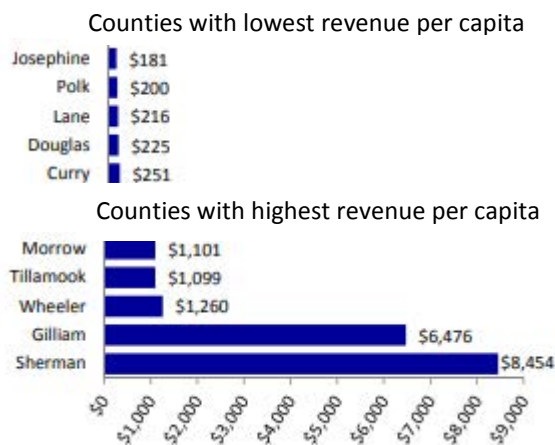
## Purpose of the Master Plan

The Lane County Parks & Open Space Master Plan (the Master Plan) will guide the County in navigating its funding challenges to provide well-maintained parks and open spaces. With strategic investments and collaborations with community members and partners County Parks is better positioned to support outdoor recreation and contribute to a sustainable and vibrant local economy. This Master Plan provides strategic and high-level guidance the County park system. For future park-specific capital investments or operational changes, community members will be engaged in a project-specific planning process.

## Planning Process

Lane County last completed a Parks and Open Space Master Plan in 1980. To provide direction for park system management and development, Lane County Parks initiated a Master Plan update in the early 2000's. This internal effort proceeded as staff had

FIGURE 1: LOCAL TAX REVENUE PER CAPITA 5-YEAR AVERAGE, FY 2011-2015



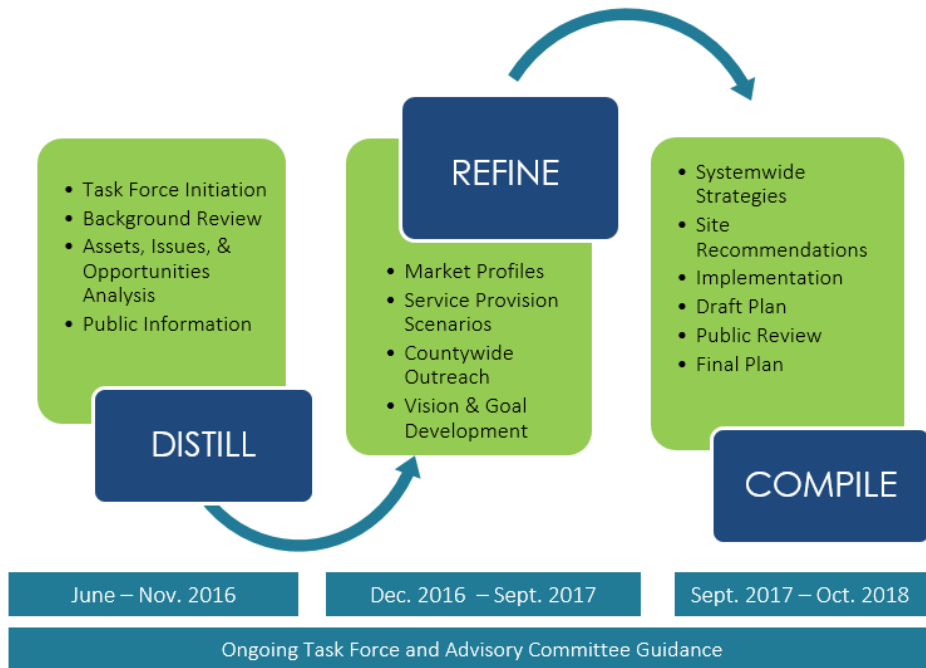
Secretary of State Audit Report, Oregon's Counties: 2016 Financial Condition Review

availability, continuing off and on for over a decade as staff faced the same budget and resource constraints that they also encountered in providing other park services.

In 2014, County staff pulled together years of past work to create a 2015 Preliminary Draft Master Plan. The Preliminary Draft was posted online and taken out to public meetings. County residents noted that the Preliminary Draft Master Plan, although detailed and technical, lacked overarching strategic guidance for park system management consistent with current funding realities. It also included some assumptions about future park development that were inconsistent with community preferences.

In 2016, the County Administrator committed to relaunching the planning effort, building on the foundation of information collected in past planning efforts. Bringing together Park staff, members of the Lane County’s Parks Advisory Committee (PAC) and added consultant support, the Project Management Team (PMT) created a new Task Force to guide the Master Plan process and ensure it reflected community priorities and the County’s fiscal realities. Figure 2 illustrates this renewed planning process.

FIGURE 2: PLANNING PROCESS



### Ongoing Master Plan Task Force and PAC Guidance

The planning process was guided by a Task Force of 23-members who were selected through an application process. The Task Force was structured to ensure that diverse geographies and interests were represented. Two Task Force members were selected from each of the County’s six regions including: Coast (Florence), Siuslaw (Mapleton),

North Valley (Eugene, Springfield, Fern Ridge, Veneta), McKenzie River/East Lane (Vida) and South Valley (Cottage Grove). Other Task Force members were added to represent County-wide interests. Members included City representatives, directors or board members of relevant nonprofits, community groups and broad-based recreation groups, as well as other representatives with recreation and natural resource knowledge. Members attended multiple meetings and reviewed technical documents and community input to develop the Master Plan vision, mission, goals and strategies. The PAC was also actively involved in the Master Plan process, participating in joint meetings with the Task Force and reviewing key documents.

### Three-Phased Planning Process

The Task Force, supported by the PAC, provided overarching guidance through three project phases. In Phase 1, the Task Force, PAC and PMT reviewed and distilled previous planning data and collaborated to identify issues, assets, and opportunities within the County’s parks and open space system. In Phase 2, the assets and opportunities were refined into three service provision scenarios. Members of the public considered the scenarios and provided input on their priorities through an online questionnaire, at a series of community workshops held across Lane County, and during interactive activities at the 2017 County Fair. The Task Force and Project Team incorporated these priorities into the Master Plan vision and goals. In Phase 3, this information was refined further into a series of strategies to enhance the park and open space system.

## Guiding Plans

Several relevant plans were consulted during Master Plan development. The Master Plan reflects the direction provided by the 2014-2017 Lane County Strategic Plan, which was updated in 2018 (see Figure 3). The Strategic Plan called on the County to focus on:

- Providing services that positively impact health, safety and quality of life;
- Stewarding Lane County’s environmental and cultural resources and building; and
- Maintaining smart and resilient infrastructure for today and future generations.

The Master Plan also supports the County in fulfilling Oregon’s Statewide Planning Goal 8: To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities.

FIGURE 3: LANE COUNTY STRATEGIC PLAN 2018-2021, STRATEGIC PRIORITIES



Other local and statewide plans and projects that were reviewed include, but are not limited to, the 2015 Findings and Recommendations of the Lane County Large Events Task Force, Oregon’s Statewide Comprehensive Outdoor Recreation Plan 2013-2017 (SCORP), park master plans and strategic plans for the City of Eugene and Willamalane Park and Recreation District, the 2003 Rivers to Ridges Metropolitan Regional Parks and Open Space Study, Travel Oregon’s tourism data and bicycle tourism initiative.

## Looking Forward

Now, almost 40 years after the County’s first adopted parks plan, this Master Plan sets forth a new path toward the future of Lane County parks. The Master Plan addresses the needs of the County’s evolving communities, the realities of the current local economy, the County’s current fiscal challenges, and the opportunities available to enhance the County’s park system.

This Master Plan describes County park assets, issues and opportunities in Chapter 2. Chapter 3 summarizes the community’s priorities and needs for parks and open space. These priorities inform strategic directions for the future parks system, as presented in Chapter 4, and for specific park sites, as noted in Chapter 5. Chapter 6 provides a plan for implementing the Master Plan goals and strategies.

Change is inevitable, and this Master Plan is well positioned to usher in a new age for Lane County parks, with greater financial support and alignment with the varied needs of residents across the County. However, it will take a collaborative effort—involving County staff, partners, stakeholders, other agencies, cities and communities—to maximize the benefits of Lane County parks and preserve these resources for future generations.



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# CHAPTER 2

## Assets, Issues & Opportunities



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# CHAPTER 2

## Assets, Issues & Opportunities

Lane County is located on the central-west coast of Oregon and southern end of Willamette Valley. The western part of the county includes ocean beaches and the Siuslaw National Forest. The eastern portion of the county encompasses the Cascade Mountain range, including parts of the Willamette National Forest, Umpqua National Forest and several significant Wilderness Areas. With population of approximately 366,000 people, Lane County encompasses about four times as much land as the State of Rhode Island, yet has about one-third as many people.

Given the expanse and diversity of Lane County, Lane County parks and community park needs also differ from one end of the county to the other. This creates some unique opportunities and challenges for park management. This chapter describes Lane County's unique park assets, along with the identified issues and challenges addressed in this Master Plan.

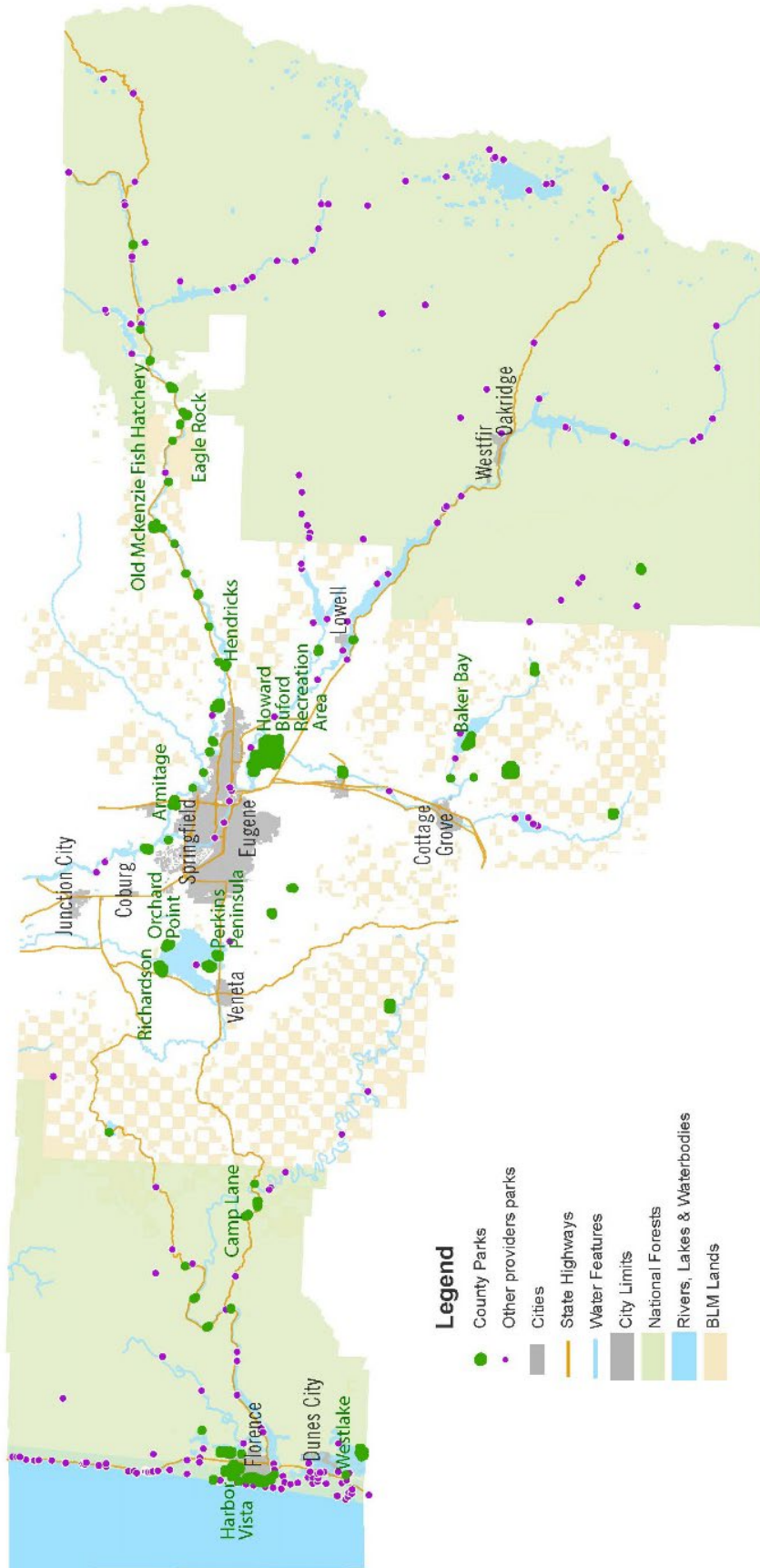
### County Park Assets

Lane County provides 4,364 acres of parks and open space at 68 sites across the county (Figure 5). County Parks are interspersed among parks provided by a variety of other jurisdictions, including towns, cities, park districts, and state and federal agencies. Many of the County's parks are clustered near water bodies, including the Pacific Ocean, rivers and reservoirs. Some of these sites are adjacent to public lands managed by the United States Forest Service (USFS) and Bureau of Land Management (BLM). National Forests and BLM lands also support open space and recreation opportunities.

FIGURE 4: LANE COUNTY, OREGON



FIGURE 5: LANE COUNTY PARKS IN CONTEXT



Note: Specific locations and boundaries for all local parks are designated in Lane County Parks & Waysides: Site & Directional Maps (2009) and in Lane County GIS data consulted for this plan

Source: 2016 Lane County GIS data.

## Management Issues and Opportunities

County parks and open space are managed by the Lane County Parks program (County Parks), part of the Parks Division (the Division), within the Public Works Department.

Managing a system of this size provides many opportunities and challenges, including:

- The variety of parks and facilities that the County manages, and the different roles and functions of sites across the system
- The need to balance recreation and natural resource protection
- Limited staffing and funding for resource management and maintenance
- The size of the County, its diverse communities and need to balance local and countywide needs
- Balancing visitor use, tourism, and other park needs

Each of these opportunities and challenges are described below.

### Park Variety and Function

The County's park and open space sites range greatly and are developed, maintained and used by the public to varying degrees. Some of the County's most valuable parks feature high quality natural resources and unique features such as waterfalls, sand dunes, rivers, trails, lake docks, forests and historic covered bridges. County parks range from large sites that attract tourists and visitors from Lane County and beyond to smaller isolated sites with short trails beloved by local residents. Many County park sites offer camping, hiking, and boating, among other experiences; yet, other County sites have limited recreational value, and some do not support public access at all. While most are County owned, some are not. A few parks are owned by other providers that contract with Lane County staff for long-term site maintenance.




The County's previous Parks Master Plan inventoried all sites alphabetically, making it difficult to understand and manage such a complex system of sites. Without a classification system that groups sites with similar functions and services, there was no at-a-glance reference that differentiated between developed and undeveloped, open and closed, high-use and no-use sites.


This Master Plan establishes a new classification scheme to support management decisions for park sites. Park classifications support County staff in implementing Master Plan policies by providing parameters for design and development standards, park and natural resource maintenance and operating levels, and guidelines for future funding and acquisition opportunities. The classifications are derived from Oregon Statewide Comprehensive Outdoor Recreation and Park Plan (SCORP) classifications but customized for Lane County according to industry standards and best practices.


The nine classifications are introduced in Figure 6. Appendix A classifies all park land by these categories.





FIGURE 6: PARK CLASSIFICATIONS


Regional Park	
<b>7 Regional Parks</b>	<b>2,628 Acres</b>
<p>Large park with specialized facilities and unique natural, cultural, historic, scenic or recreational features that attract visitors from the region, County or beyond.</p> <ul style="list-style-type: none"> <li>• Attracts visitors from an hour away or more</li> <li>• Includes a variety of recreation opportunities</li> <li>• Typically includes natural areas (for protection and/or outdoor recreation)</li> <li>• May support frequent visitation, high impact uses or overnight uses (where appropriate)</li> <li>• May be suitable for large group events</li> </ul>	
Examples: Armitage, Baker Bay, HBRA, Orchard Point, Perkins Peninsula, Richardson	
Recreation Resource Area	
<b>2 Recreation Resource Areas</b>	<b>288 Acres</b>
<p>Minimally-developed open space area managed primarily for outdoor recreation.</p> <ul style="list-style-type: none"> <li>• Site may be large and include a mix of developed uses, along with high and low-value natural resources; the majority of the site is undeveloped/natural</li> <li>• May include passive recreation and high-impact outdoor recreation activities, such as mountain biking, temporary camps/jamborees, etc.</li> </ul>	
Recreation Resource Areas: Blue Mountain Park, Hileman Park	
Water Access Park	
<b>29 Water Access Parks</b>	<b>324 Acres</b>
<p>Single-purpose site developed to provide water access (coastal, river or reservoir).</p> <ul style="list-style-type: none"> <li>• Primarily supports recreation activities such as boating, paddleboarding, swimming, fishing, clamming, wave-watching, etc.</li> <li>• May include minor supporting uses, such as picnic tables, paths, viewpoints</li> <li>• Typically a small, single-purpose site</li> <li>• May include natural areas at larger sites</li> </ul>	
Examples: Ada Park, Heceta Beach, Konnie Memorial, Linslaw, Wildwood Falls	

Special Use	
<b>11 Special Use Parks</b>	<b>111 Acres</b>
<p>Other single-purpose sites:</p> <ul style="list-style-type: none"> <li>• Includes a specialized facility or provides access to a specific cultural or natural resource (e.g., campground, wayside, covered bridge or interpretive viewpoint)</li> <li>• May be highly developed to support intended use</li> </ul>	
<p>Examples: Bohemia Saddle, Camp Lane, Dorena Covered Bridge, Old McKenzie Hatchery</p>	

Local Park	
<b>3 Local Parks</b>	<b>36 Acres</b>
<p>Small- or medium-sized park designed to support local access and meet recreation needs for nearby neighbors and the surrounding community.</p> <ul style="list-style-type: none"> <li>• Attracts local residents from 10-20 minutes away</li> <li>• Supports variety of small scale active and passive recreation activities</li> <li>• May support small group events (25-200 people)</li> <li>• Includes community/town parks; may include larger neighborhood parks</li> <li>• Typically provided in rural areas</li> </ul>	
<p>Local Parks: Deerhorn Landing, Hendricks Bridge, Unity Park</p>	

Natural Area	
<b>7 Natural Areas</b>	<b>844 Acres</b>
<p>Natural resource/open space area intended for resource protection. The site may or may not have developed public access.</p> <ul style="list-style-type: none"> <li>• Includes high- or medium-value natural resource areas</li> <li>• Primary purpose is protection of natural resources</li> <li>• Secondarily may be used for low-impact recreation that does not damage natural resources</li> </ul>	
<p>Examples: Big River, Clear Lake Dunes, Kinney Park, Siuslaw Falls, South Beach, Three Mile Prairie</p>	

Undeveloped/Closed Park	
<b>2 Undeveloped/Closed Parks</b>	<b>10 Acres</b>
<p>Land intended but not currently managed or maintained for park use.</p> <ul style="list-style-type: none"> <li>• Designated open space, but not currently functioning or managed as park or natural area</li> <li>• May or may not currently provide public access</li> <li>• Includes sites with no development and minimally-developed parks that are currently closed</li> <li>• Intended to be re-classified and developed as a park in the future (if access can be provided)</li> </ul>	
Example: Oakhurst Community Recreation Area	

Land Bank	
<b>2 Land Bank Sites</b>	<b>24 Acres</b>
<p>Land held for resource management, temporary holding or future uses yet to be determined.</p> <ul style="list-style-type: none"> <li>• May include resource/timber harvest areas with no recreation access or recreation access as a secondary use</li> <li>• May include tax-foreclosed properties and other lands held by Parks Division to sell for proceeds or to transfer to partners</li> <li>• May include sites currently in County ownership that are not suitable for management as park land or natural areas</li> <li>• May include sites in County ownership suited for transfer to other governmental or non-profit conservation organizations</li> </ul>	
Land Bank Sites: Blue Mountain Land Bank, Myers Tract	

Other Properties: Maintained Parks (Contractual)	
<b>5 Maintained Parks</b>	<b>97.5 Acres</b>
<p>Parks maintained by Lane County staff through a contracted maintenance agreement.</p> <ul style="list-style-type: none"> <li>• Contracted by an entity such as OPRD or EWEB to provide maintenance services</li> <li>• County is not responsible for site management, development or improvements</li> <li>• No parking fee charged at these sites</li> </ul>	
Examples: Goodpasture Boat Landing, Hayden Bridge, Lloyd Knox	

## Recreation/Natural Resource Protection

As noted in Appendix A, Lane County parks include many recreation amenities and facilities that provide access to water, nature, outdoor recreation, overnight camping, and resource interpretation (Table 1).

TABLE 1: HIGHLIGHTS OF RECREATION FACILITIES AND FEATURES IN LANE COUNTY PARKS

Facility Type	# of Park Sites Where Present
<b>Water Access</b>	
Marina	3
Dock/ Pier	7
Boat Ramp	35
Swimming Area	20
<b>Nature Access Facilities</b>	
Soft-Surfaced Trail	17
Hard-Surfaced Trail	5
Nature Viewpoint	13
Interpretive Feature	9
<b>Other Outdoor Facilities</b>	
Picnic Shelters	7
Picnic Area	32
Play Equipment	5
Sports/ Game Court	8
<b>Overnight Facilities</b>	
Cabins/ Yurts/ Treehouse	1
Campgrounds	5 (and Camp Lane)
<b>Other Buildings/ Features</b>	
Covered Bridge	4
Historic/ Cultural Feature	8
Interpretive Center	2

*Note: See Appendix A for additional amenities and facilities.*



Despite the numbers of recreation features, not all parkland is developed for recreation uses. The County's park system encompasses a variety of important natural resources ranging from river and creeks to forests and prairies. Substantial acreage is either undeveloped or protected as natural resources areas.

To better understand the value of natural resources in Lane County parks, thirty-three of the County's parks that include large amounts of land or otherwise appear to support significant habitat values were evaluated using criteria that address these broad categories: Habitat Values, Water Quality and Floodplain Function, and Public Use and Enjoyment. (See Appendix A, Natural Resource Evaluation Matrix.) These parks were scored on a scale of 1-100, which indicate a park's natural resource value. Scores for individual County Parks ranged from a low of 28.5 points to a maximum of 89 points. The median score was 44.5 points. Scores were further subdivided into high, medium and low ranges.

The natural resources scores were added to the park land and facility inventory to note sites requiring more extensive natural resource stewardship. The challenge the County faces is finding enough funding to maintain and steward its recreation assets and natural resources. Despite limited resources, the Parks Division has funded a Natural Areas Coordinator staff position. Additionally, volunteers support the stewardship of natural resources and environmental education at several of the County's sites including Howard Buford Recreation Area and Harbor Vista.

### Parks with High Natural Resource Values

- Howard Buford Recreation Area
- Hileman
- Vickery
- Konnie Memorial
- South Beach
- Blue Mountain
- Eagle Rock
- Siuslaw Falls
- Ben and Kay Dorris
- Big River
- Old McKenzie Hatchery
- Three Mile Prairie





## Funding and Staffing

The County must use a variety of approaches and areas of expertise in managing its diverse and expansive parks system. The County faces two significant hurdles in delivering the desired level of maintenance and service: a shortage of staff resources and funding.

### Staff Resources

The Parks Division is allocated only 15.8 Full Time Equivalent employees (FTE's) for total staffing (FY 2017-18). These positions include 6 FTE's for full-time park maintenance staff, who also serve as compliance/enforcement officers, and 5 FTE's for temporary park maintenance staff. That equates to nearly 400 acres per maintenance staff position, which is clearly insufficient to manage 4,363 acres of parks and open space areas. To use staffing and funding resources most efficiently, Lane County contracts out some of its maintenance services. The County also devotes staff to maintaining non County-owned park land. Staff and contractor efforts are also supplemented in some parks by the efforts of partners and volunteers. Without staff to manage partnerships and volunteer projects, the County cannot fully leverage these resources.

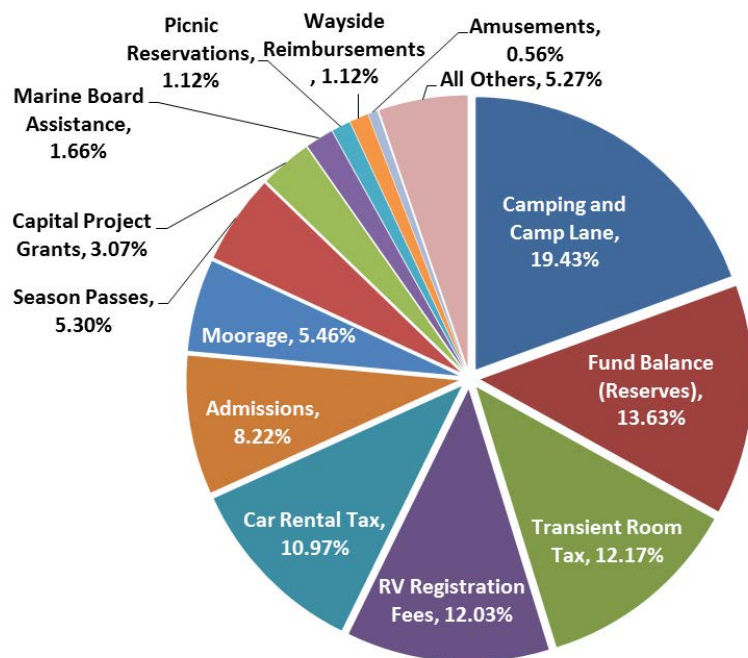
### Funding

Lane County Parks Division operates on an annual budget of approximately \$3.42 million (FY 2017-18). Historically, the Parks Division has been funded through a variety of sources. For examples, the distribution of funding sources in 2015-2016 are illustrated in the pie chart in Figure 7. Of this, direct park expenses (maintenance and materials) account for \$2.65 million.

The division does not receive any General Fund (property tax) support. The Parks & Open Space program operates on revenues collected from parking fees, moorage, and picnic reservation fees, camping and Camp Lane reservation fees, transient room tax, recreational vehicle fees, car rental tax, the Oregon State Marine Board, and fees from hosting large events.

Capital projects accounted for another \$148,000 in expenditures last year. In comparison, Parks continues to manage a deferred maintenance

FIGURE 7: FY 2015/16 Funding Sources



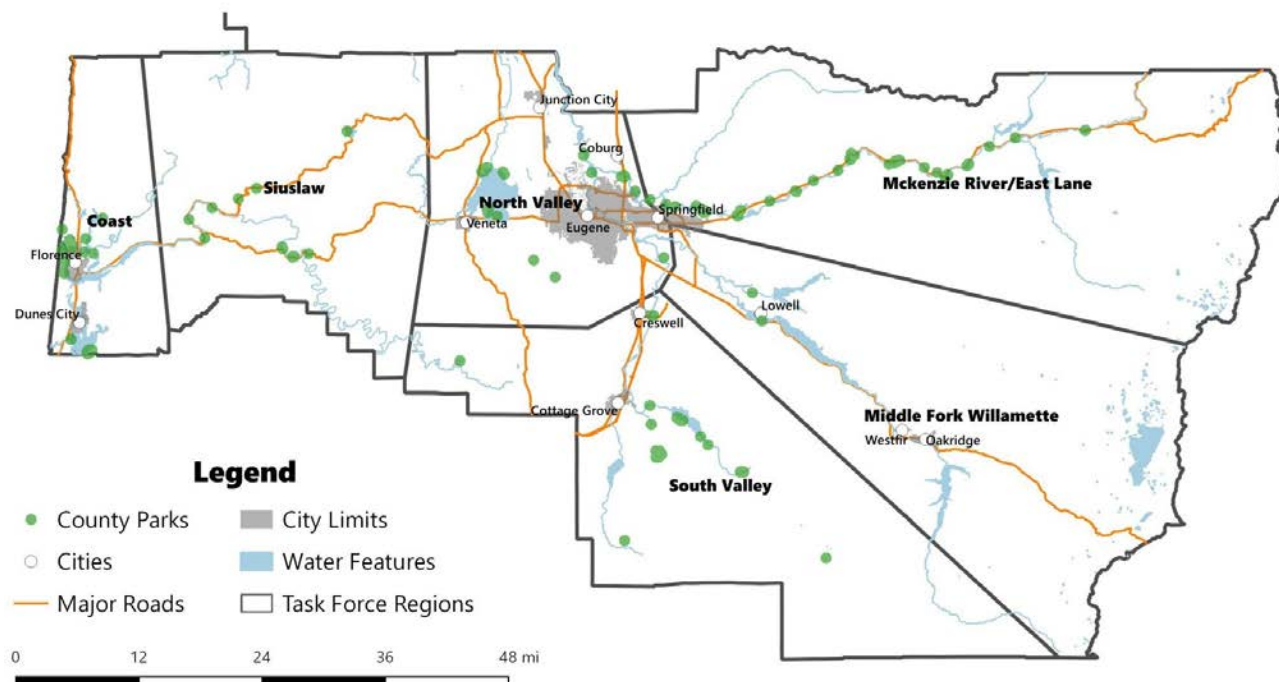
backlog of \$17 million<sup>1</sup> throughout the park system. As infrastructure continues to age, repairs are not sufficient and more expensive replacements are needed. Currently, some parks remain closed, undeveloped or lacking in amenities due to a lack of available funds.

### Local and Countywide Needs

The size of the park system, mix of natural resources and recreation assets, and limited funding and staffing resources introduces another challenge: the need to distribute resources to serve residents and across the county. To evaluate the provision of park services, Lane County parks were divided into six regions to better understand local needs. The regions are defined by landscape features such as watersheds and park clusters (Figure 8). Regions include:

- Coast
- Siuslaw
- North Valley
- McKenzie River/East Lane
- Middle Fork Willamette
- South Valley

FIGURE 8: LANE COUNTY PARKS BY REGION



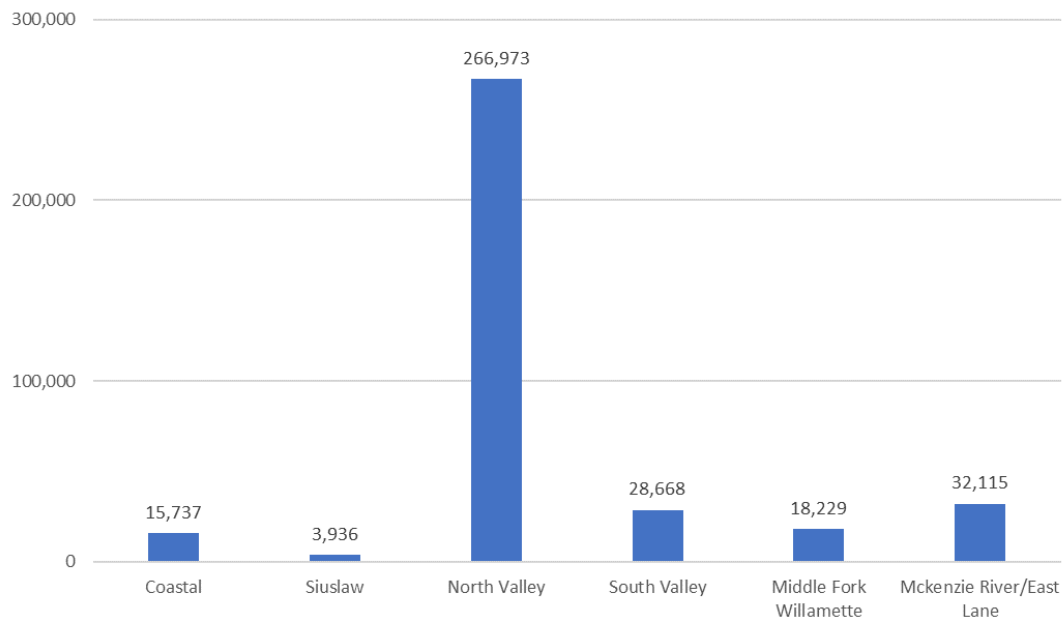
Source: 2016 Lane County GIS data.

<sup>1</sup> Lane County 2017-18 Adopted Budget

As shown in Figure 8, parks are not equally distributed within the six different regions. Reasons include:

- Maintenance & Management Agreements:** Lane County Parks and Oregon State Parks negotiated an agreement to increase maintenance efficiencies and park management. Lane County took over the maintenance of additional sites along the McKenzie River. It turned over site maintenance and management of several parks in the Middle Fork Willamette region. While both regions have many parks (compare Figure 5), Lane County has fewer managed sites in the Middle Fork Willamette region.
- Population Distribution:** The numbers of residents living in the six regions are not evenly distributed (Figure 9). Demands for park services are greatest in the North Valley, where most of the County’s population resides. Similarly, population within in each region is clustered as well. For example, most residents living in the Coast region are from Florence, where most of that region’s County parks are located.
- Assets and Opportunities:** Most of Lane County’s parks are situated to provide access to cultural or natural features or bodies of water. Parks are clustered along river corridors, near reservoirs, near the beach, adjacent to roadways (where they provide waysides), etc.

FIGURE 9: POPULATION BY REGION



Source: Lane County Parks Demographic Analysis. (See Appendix B)

When the Master Plan Task Force discussed the equitable provision of services, they recognized that the goal was not the equal distribution of parks, facilities and open space. Instead of evenly serving residents living in 12 incorporated communities and more than 80 unincorporated communities, more important was ensuring that local and regional needs were considered in park improvements and stewardship. The needs, preferences and resources across Lane County communities widely vary.

The demographic and socioeconomic characteristics of residents in each region of the County, as well as out-of-County visitors, were analyzed to understand recreation preferences and needs (Appendix B). Resident and tourist profiles are described below. ESRI's "tapestry segments" described customers' lifestyle choices, purchase options, and recreation preferences based on demographic and socioeconomic characteristics<sup>2</sup>. These characteristics were defined for each region (Figure 10).

FIGURE 10: DOMINANT MARKET IN THE SIUSLAW, SOUTH VALLEY, & MIDDLE FORK WILLAMETTE REGIONS



#### MARKET PROFILE (Consumer preferences are estimated from data by GfK MR)

- Satellite dishes and riding lawn mowers are familiar sights in these rural settings, along with multiple vehicles; four-wheel drive trucks are popular, too.
- Residents are members of AARP and veterans' clubs and support various civic causes.
- Technology is not central in their lives: light use of Internet connectivity for shopping and entertainment.
- Most households have pets—dogs or cats.
- Television channels such as CMT, History, and Fox News are popular.
- They enjoy outdoor activities such as hiking, hunting, fishing, and boating.

Source: Lane County Parks Demographic Analysis. (See Appendix B for the market analysis of other regions.)

<sup>2</sup> Esri supplies geographic information system (GIS) software.

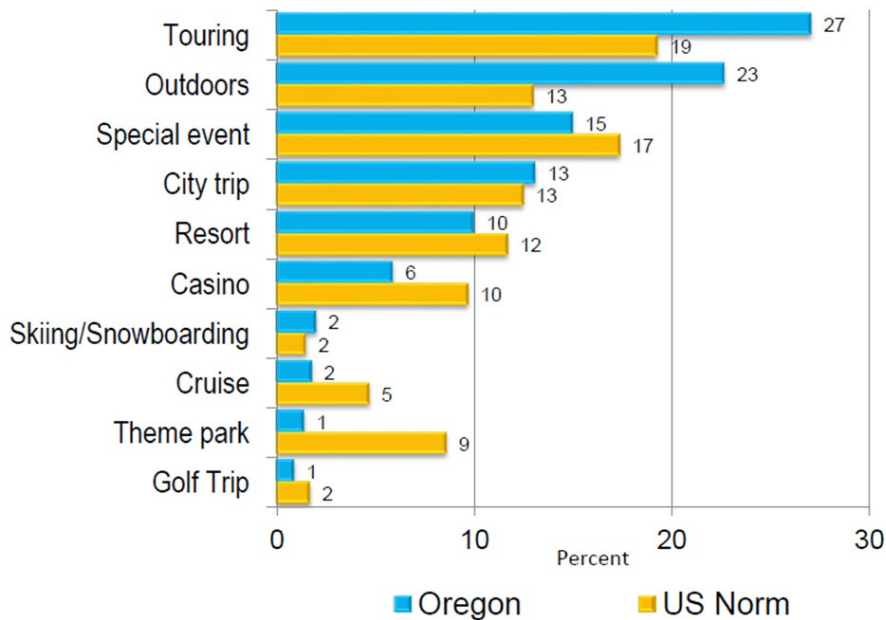
An analysis of natural and recreation assets coupled with the market segments pointed to the types of parks and recreation experiences that the County could consider in each region to better meet community needs (Appendix C). This strengthened the recommendations provided in this Master Plan.

### Visitor Use and Tourism

In addition to County residents, tourists are important Lane County Park users. Visitors contribute to the vibrancy of rural Lane County communities by spending money on lodging, food and other services. Travel Lane County promotes Lane County as an “adventure-driven destination,” highlighting outdoor recreation experiences ranging from biking to fly fishing. The agency integrates local culture and food with recreation experiences. Many of the natural features and activities promoted are available in County parks.

A snapshot of Travel Oregon’s 2015 Visitors Report describes the state’s thriving tourism industry. There is great potential for Lane County to attract more visitors to its parks and recreation facilities. In 2015, 13.4 million adults took overnight trips to Oregon and 25 million took day trips. Touring and outdoors are the most common purpose for both overnight and day trips to Oregon (Figure 11). Special events ranked third. Visitors to Oregon are more likely to go to national or state parks, visit historic sites, and hike or backpack than the average visitor to other U.S. destinations.

FIGURE 11: PURPOSE OF TRIPS IN OREGON & UNITED STATES



Source: Lane County Parks Demographic Analysis. (See Appendix B)



Recreation tourism offers many benefits to Lane County. Not only do vacationers and visitors pay to use County parks and facilities, but they also provide larger economic impacts to Lane County businesses. Also, approximately fifteen percent of the Division’s budget comes from the transient room tax, meaning County parks benefit directly from people staying in local hotels, motels, and lodging.

However, the challenge for Lane County is finding the right balance between meeting visitor and local needs. Many County parks are not intended to be recreation destinations or large event venues. Site characteristics, the need to protect natural and cultural resources, and the needs of nearby neighbors must be respected in decisions about site management, development and use.

### Advantages of Better Data

The Master Planning process uncovered both unique opportunities and challenges for Lane County’s park and open space system. However, it also provided new data to be able to better respond to those challenges through enhanced management and strategic site improvements. The new park classification, regional designations, park and habitat inventories, County demographic information, and market and tourism analysis together provided important information that allowed County staff, the Task Force, and PAC members to make key decisions about system management. This technical analysis, coupled with outreach findings presented in the next chapter, helped define a new vision, mission and goals for Lane County parks.



# CHAPTER 3

## Needs & Priorities



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# CHAPTER 3

## Needs & Priorities

The County's diverse and expansive parks and open space system serves a variety of users ranging from park neighbors to out-of-state tourists. County Parks must balance community and regional needs and priorities (ranging from stewarding natural resources to managing highly developed recreation facilities) and meet the needs and preferences of nearby neighbors and stakeholders. This requires County Parks staff to understand the unique needs of specific sites while also addressing the comprehensive needs of the entire parks and open spaces system with limited staff and funding.

This chapter summarizes the County's early outreach efforts, the service provision scenarios, and findings from recent community input.



### Background

For over 10 years, the County has used a variety of engagement techniques to receive input about the community's needs and priorities and to guide decisions about the provision of parks and recreation opportunities. The County used this decade of community input to support the recommendations proposed in the 2015 Preliminary Draft Master Plan.

When the Master Planning effort resumed in 2016, earlier community outreach findings were evaluated to see if older needs reflected current community and park system priorities. To test whether the previously identified community needs remained relevant, the PMT developed service provision scenarios based on early outreach findings and technical analysis. In the most recent round of community engagement, the community reviewed the scenarios to identify their priorities for investments in the County's parks and open spaces system.

## Early Community Engagement Findings and Needs

### Early Outreach Efforts

From 2000 – 2016, leading up and in response to the 2015 Preliminary Draft Master Plan, the County conducted several surveys, online and in-person questionnaires, meetings, and comment forums to understand community needs and priorities (see sidebar).

### Early Outreach Results

Community members identified the following recreation facilities as areas of high demand or where County Parks should expand or enhance their facilities.

- Campgrounds
- Trails
- Picnic and day use facilities
- Boating facilities (motorized and non-motorized)
- Swimming areas
- Fishing areas
- Interpretive facilities

In the development of the 2015 Preliminary Draft Master Plan, staff noted additional needs such as more extensive site development, site improvements and revenue-generating opportunities at sites where feasible. As a result, preliminary recommendations overemphasized site development to support recreation uses, which was not consistent with funding realities or the character of many Lane County Parks. Public comments on the Preliminary Draft Master Plan highlighted the need for a stronger investment strategy addressing several specific concerns, including:

- **Increased accessibility for people of all abilities:** Respondents noted the need to address the requirements of the Americans with Disabilities Act (ADA) in developed parks. People with disabilities comprise nearly 20% of the population<sup>1</sup> and the population includes more Baby Boomers (a large and aging segment of the population) than other Oregon counties. It will become increasingly important that ADA access and universal accessibility are integrated into Lane County's parks system. All renovated facilities will need to meet current standards.
- **Focus on high priority facilities (trails, picnic and day use facilities and interpretive facilities, etc.):** As community members reviewed the 2015 Preliminary Draft Plan,

### Community Engagement 2005-2016

- 5 online questionnaires and surveys (2004-2015)
- 1 community telephone survey (2010)
- 22 focus groups (2004-2005)
- Public comments on the 2015 Preliminary Draft Master Plan
- 1 staff visioning retreat (2004)

<sup>1</sup> 2012-2016 American Community Survey 5-Year Estimates



they highlighted community priorities that needed more attention and development.

- **Large events:** Respondents expressed a concern about the impacts that large events—with 1,000 attendees or more—would have on nearby neighbors, natural resources, park access for non-event goers, and County Park resources.
- **Maintenance of Existing Parks and Facilities:** Community members would like to see improved maintenance of parks and facilities. They noted the need for improved maintenance of existing assets should be addressed before acquiring new parklands and developing new facilities.
- **Natural Resource Protection:** Conservation and preservation issues were high priorities for park management. Respondents wanted park recommendations to address the needs of wildlife, tree and plant health, and biodiversity through park resources.
- **Human Health Benefits:** Members of the public called attention to the mental, emotional and spiritual benefits provided by parks. Community members underscored the need to preserve and protect nature and opportunities for solitude—rather than emphasizing park development at all sites.

## Service Provision Scenarios

The planning team used themes and findings from past public outreach as well as outreach findings from 2011 SCORP survey findings for the Lane County region (see sidebar) to inform a technical analysis of Lane County’s park system to test areas that are most suitable for Lane County park services. The analysis identified which sites were best positioned to support the desired recreation services using different investment scenarios.

Recognizing that funding is insufficient to address all competing demands and needs, there are three different service provision scenarios that could be emphasized through investment in County parks: 1) water access, 2) nature access and/or 3) trail connectivity.

### SCORP Data Echoes Outreach Findings

- SCORP data notes the top three priorities for park and recreation investments in Lane County: soft surface trails and paths, public access sites to waterways and nature and wildlife viewing areas.
- Walking, hiking, beach activities and picnicking were among the top 10 most popular activities for recreation participation in Lane County.

### An Accessible Water-Based System

Rivers, streams, wetlands, estuaries, reservoirs and coastline are all major public resources and a key part of Lane County's identity. About 54% of County parks provide water access facilities while 90% of parks and open spaces are adjacent to a body of water where there may be opportunities for access.



### Nature-Based Recreation

Lane County parks support an incredibly diverse range of natural resources. While protecting and stewarding natural resources, opportunities exist to enhance access to nature and nature-based recreation activities, such as wildlife viewing, nature play, hiking, camping, and environmental education. About 13% of County parks are undeveloped parks or natural areas. Some of these sites are not currently open or accessible to public, but access could be supported through appropriate and resource-sensitive improvements that support recreation and create opportunities to enhance or restore natural resources on site. Similar opportunities exist at other sites that currently intermix natural areas with other developed uses.



### Connected Trail-Based Recreation

County parks include at least 28 miles of land trails, largely concentrated in just a few parks. Trails and pathways support a variety of recreation uses (e.g., hiking, biking, horseback riding) and facilities support water trail use (e.g., kayaking and canoeing) could be added to several parks. In addition, approximately 30% of the County’s parks could be connected by new land or water trails to create a more cohesive, interconnected system of County parks, parks provided by other providers, and nearby community destinations.



### The Composite Model: Sites Addressing all Three Scenarios

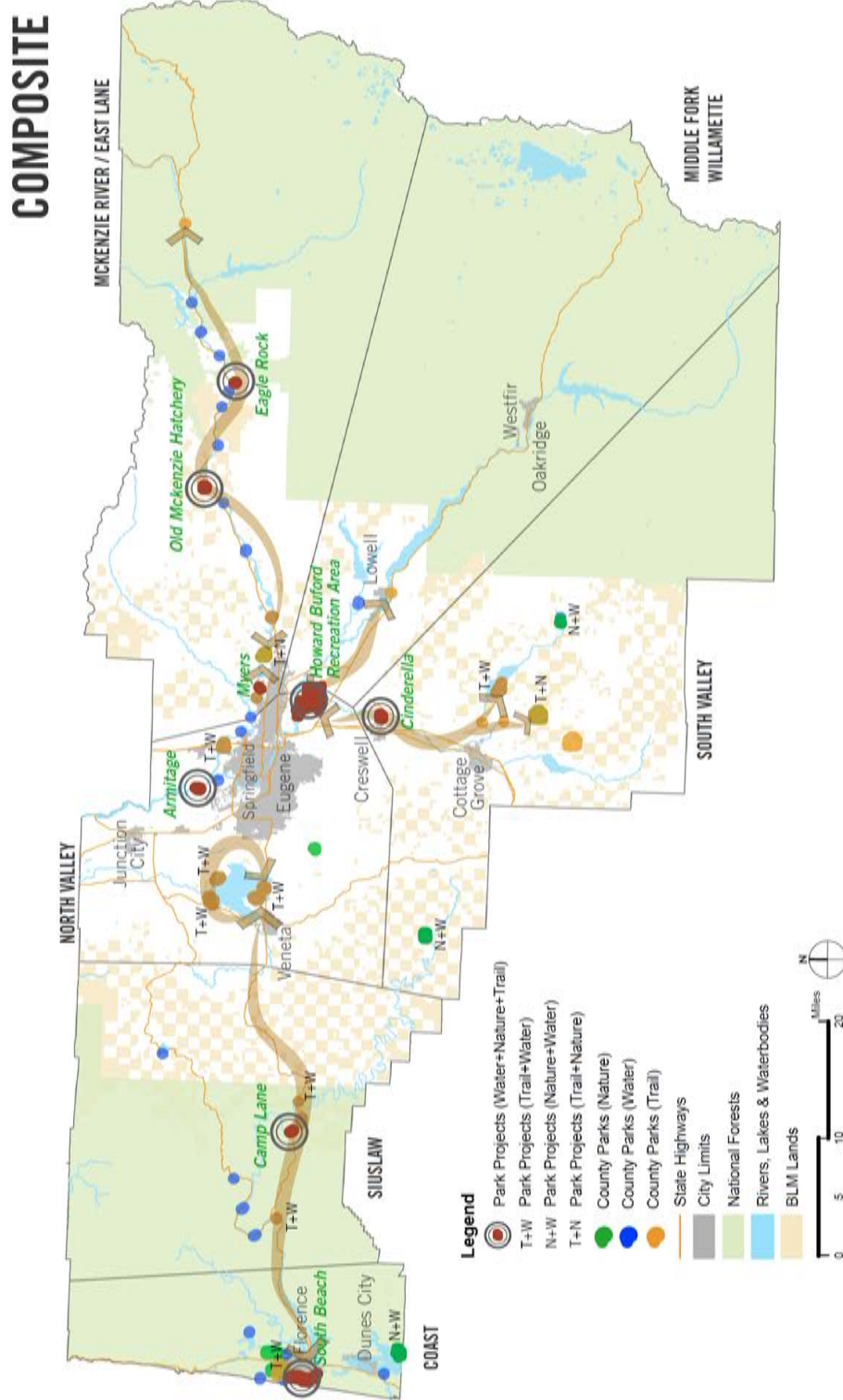
The analysis also showed locations with characteristics that could easily support water, nature and trail experiences together at one site, adding greater variety and opportunity to the primary focus of a park site. These experiences include: picnicking, camping, recreating with pets, and taking advantage of concessions and interpretative elements.

Instead of investing in one scenario, the County could selectively invest in parks that advance the three types of recreation opportunities most desired. Instead of smaller investments across many sites to support water access, this model suggested investing more heavily in fewer key sites in each region to create activity hubs. These activity hubs could be used for trails, water-based and nature-based recreation experiences, while park staff or volunteers actively steward the natural and cultural assets at these sites.

Figure 12 (the Service Provision Scenario Composite Map) is a conceptual model that helped illustrate which sites best support each of the different service provision scenarios.



FIGURE 12: SERVICE PROVISION SCENARIOS COMPOSITE MAP



Note: This map is a conceptual illustration and does not reflect Plan recommendations. It assisted in making decisions about system development and management.



## Community Needs and Priorities

Task Force and PAC members, as well as stakeholders and community members evaluated the service provision scenarios. Based on their evaluation, participants prioritized recreation opportunities and elaborated on needs across the parks system.

### Recent Outreach Efforts

The Project Team conducted three types of community engagement activities in 2016-2017, including an online questionnaire, a series of community workshops, and interactive activities at the County Fair. The online questionnaire was administered from April 14 through June 4, 2017, with 463 respondents providing feedback. Community workshops held across the county in Eugene, Mapleton, Leaburg, Cottage Grove, Florence, Oakridge and Springfield involved 106 participants. Interactive activities at the 2017 Lane County Fair solicited 80 responses. Details are noted in Appendix D.

To ensure that residents were aware of the planning process and opportunities to be involved, the County promoted engagement opportunities through many different platforms. Promotion included a dedicated webpage on the County website, video, emails, newsletters, social media ads, posts and videos, digital billboard and through radio PSAs.



### Recent Outreach Results

The current outreach results revealed themes related to community needs and priorities. Outreach results are provided in more detail in Appendix D. Although this input was provided by a relatively small number of community members, many of the themes are supported by the 2011 SCORP survey (see sidebar on page 23). Community engagement themes are summarized below.

- **Invest in a water, nature and trail-based recreation system:** Community input indicated that Lane County parks are best known for their water access, trail and



nature experiences, and residents look to County parks to support each of these. This suggested the need to further consider the composite model of the three service provisions scenarios.

- **Protect natural areas:** Top community priorities for natural area/habitat improvements included habitat protection and restoration areas, as well as adding campgrounds and cabins, nature play areas and picnic areas to support access in appropriate places. They also noted a need to balance open space and habitat protection in parks with little or no public access, with natural area stewardship in parks with extensive public use. These findings, along with the recently completed park habitat inventory, helped identify sites that could remain undeveloped or largely protected open space areas, plus underscore the need to support natural area maintenance in a stronger way.
- **Improve maintenance and stewardship:** Community members re-iterated that improving the maintenance and condition of existing facilities and infrastructure should be the top priority for County investments. While new acquisitions could be considered if the right opportunity emerged, and funding was available, respondents wanted existing parks improved and maintained and maintenance funding or resources identified before new acquisitions are pursued.
- **Add and enhance water-based facilities:** Access to the County's rivers, creeks, reservoirs and coast continued to be a top priority. Desired investment to enhance water access included providing more designated swimming areas and non-motorized boat launches (e.g., canoe, kayak, driftboat).
- **Invest significantly in targeted parks:** In the community workshop, where participants had an opportunity to design their ideal County park, it became clear that residents hoped to see a much higher investment at selected County parks. It was also clear that this level of investment would not be feasible at all sites. Feedback included guidance to select targeted sites by taking into account the distribution and equity of recreation options, respecting the unique character and assets at specific sites, and building on sites with existing access, infrastructure and opportunities to improve recreation experiences.
- **Increase the awareness of County parks and facilities:** Despite the County's effort to conduct a robust and extensive engagement effort reaching out to residents, stakeholders and partners, fewer people responded to the questionnaire than Task Force members expected. Also, many people who did respond were unaware of the significant funding challenges faced by Lane County parks. One of the takeaways from this outreach effort was the need for improved information and communication channels between the County and community members to

educate people about the need for greater resident, partner, volunteer and funding support to meet community expectations.

Together, with the early community input and the technical analysis, the recent community findings suggested clear strategic directions for County Parks. The Task Force evaluated the community needs and community priorities and parks system assets and developed a vision and goals for Lane County Parks. The vision and goals serve as the framework that guides the strategies and recommendations described in the following chapters.



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# CHAPTER 4

## Goals & Systemwide Strategies



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# CHAPTER 4

## Vision, Mission, Goals & Systemwide Strategies

The aspirations for Lane County parks are the guiding forces for the Parks & Open Space Master Plan. These aspirations are summarized in the following vision, mission and goals, which were developed and refined based on insights from the community, Task Force, Parks Advisory Committee (PAC) and County Board of Commissioners. This document also presents strategies that will provide guidance for staff and the community to work together to achieve Master Plan goals.

### Master Plan Elements

#### Vision

The vision reflects the aspirations for parks and open space in the future. It paints a picture of the desired park and open space system County residents want to achieve.

*Our thriving parks and natural areas connect us to our rivers, reservoirs and natural features, showcase our heritage and natural diversity, and protect resources for future generations.*

#### Mission

The mission statement describes the business or approach that County staff will take in providing parks, recreation facilities, trails and open space.

*We responsibly manage, sustain and enhance our parks and natural resources through partnership, stewardship and quality customer service.*

#### Goals

Goals are the desired outcomes to be achieved by implementing the Parks & Open Space Master Plan. Goals can be used to identify plan strategies, policies or recommendations to guide future decisions and ensure consistent long-term direction for service provision.

Six goals are proposed:

1. **Collaborate.** Engage residents, volunteers, interest groups, educational providers, businesses and local, state, and federal agencies as partners in the coordinated effort to expand, enhance, interpret, provide, and protect parks, natural areas, trails and recreation opportunities across Lane County.
2. **Connect.** Attract people to nature, the outdoors and County parks by providing a variety of experiences, improving park and facility access, increasing stewardship, supporting environmental education/nature interpretation, and improving communication.
3. **Create vibrancy.** Re-invigorate and revitalize key parks as thriving, family-friendly outdoor activity hubs through redesign, renovation and programming to help position Lane County as the best county for outdoor recreation and play.
4. **Generate economic vitality.** Create a strategic and holistic park management approach that balances local needs with opportunities to create economic benefits in surrounding communities and/or to generate revenue to re-invest in parks.
5. **Protect resources.** Sustain and protect unique County assets, cultural and natural resources as our legacy for future generations.
6. **Reflect our values.** Emphasize our diverse, natural character and make high impact, low-cost moves to maintain sites, sustain infrastructure and improve the quality, safety and attractiveness of park amenities, landscaping and recreation facilities.



## Strategies

Strategies are specific activities and initiatives that will achieve the stated goals. These strategies provide system-wide direction for all County parks and open spaces. They are organized by the goals that they support.

### Goal 1: Collaborate

Engage residents, volunteers, interest groups, educational providers, businesses and local, state, and federal agencies as partners in the coordinated effort to expand, enhance, interpret, provide, and protect parks, natural areas, trails and recreation opportunities across Lane County.

- 1.1 Create a volunteer, partnership and program coordinator position, whose responsibilities include:
  - Volunteer and partner recruitment
  - Contact list management
  - Friends group formation, operations and support
  - Recognition programs
  - Volunteer and partner contribution tracking
  - Intern recruitment and management
  - Program provider recruitment (see 3.6)
- 1.2 Develop and implement an engagement and communication plan focused on recruiting and retaining individuals, partners and non-profits to help implement the strategies in Goals 2-6. For example, recruit volunteers to offer nature walks and interpretive programs at specific parks.
- 1.3 Engage local businesses and outdoor recreation companies by organizing annual volunteer drives and investment opportunities (sponsorships, donations) to support park needs.
- 1.4 Designate a staff liaison/contact person from Lane County Parks to facilitate local agency collaboration (e.g., City of Eugene Parks, Willamalane PRD, City of Cottage Grove) and increase coordination with public and private entities that have an ownership stake in various County park sites. Make participation in local agency planning efforts part of the job description for this person.
- 1.5 Convene a regular cross-agency forum with other public landholders/land managers (Federal, state, non-profit) with the initial goal of developing a comprehensive countywide parks and open space vision. Explore options to build on the Rivers to Ridges partnership.

- 1.6 Involve an independent 501(c)(3) parks advocacy non-profit organization (see 4.2) as an umbrella group for non-profit for friends of parks groups, to support site specific advocacy and fundraising.
- 1.7 Identify and keep current a list of projects (both capital and stewardship) that can be completed or supported by volunteer groups, businesses, non-profit groups, interns, students and others.
- 1.8 Define and implement a review process for community-built and operated projects proposed at Lane County parks, with criteria to evaluate proposals when they are made. Proposed projects should:
  - Meet the goals and intent of this Master Plan
  - Be consistent with Lane County’s design and programming guidance for the park’s classification
  - Demonstrate feasibility for implementation, including addressing support amenities and infrastructure
  - Provide a maintenance plan to ensure funding and staffing are sufficient for its intended lifespan
  - Go through a staff evaluation process (including Director approval) and PAC review of staff’s recommendation
- 1.9 Develop a fillable intake form for vendors, concessionaires, and private/non-profit recreation providers to "Propose a class, event, meeting or activity in a Lane County Park" to guide the intake, evaluation, and tracking of activities hosted by others at County sites.
  - Identify the review and approval process, including applicable fees, clearly on the form (see 3.6)
  - Coordinate the approval process with current Special Use Permitting and Large Events Task Force (LETF) standards and processes (see 3.6)
  - Ensure the proposed use meets the goals and intent of this Master Plan
  - Ensure proposed locations are consistent with Lane County’s design and programming guidance for the park’s classification
  - Develop a fee structure for different scales/types of activities
  - Identify any use restrictions for sites for small and large group activities and events (see 3.6)
- 1.10 Develop conditions, criteria and procedures for in-kind sponsorships, where Lane County is recognized as a sponsor or formal partner for classes, events, meetings and programmed activities in Lane County parks or facilities.
  - Identify requirements for activities where fees may be waived or reduced
  - Ensure partner activities advance the goals and intent of the Master Plan
- 1.11 Leverage the PAC’s role as advisor to the Board of County Commissioners on parks needs and as a community liaison group. Also:



- Assign a Committee member to serve as the Lane County liaison to the 501(c)(3) parks advocacy non-profit organization
  - Encourage Committee members to serve as Lane County liaisons to other parks-related non-profits and planning efforts
  - As stated in the bylaws, review and make recommendations to the Board on matters related to land the transfers, acquisition and disposal of park lands and other policy decisions
  - Track and report progress on Master Plan implementation
  - Advise when ad hoc citizen advisory groups or task forces are needed to address specific issues
- 1.12 Develop formalized agreements with partners who manage or operate facilities on Lane County park lands, with entities that support site stewardship and with public and private entities that have an ownership stake in various County park sites.
- 1.13 Develop internship policies and procedures to guide the recruitment and management of interns.





## Goal 2: Connect

Attract people to nature, the outdoors and County parks by providing a variety of experiences, improving park and facility access, increasing stewardship, supporting environmental education/nature interpretation, and improving communication.

- 2.1 Develop a wayfinding program that identifies countywide trails and Lane County parks and major facilities. It should respect local brands and identities and be usable in conjunction with other signage.
- 2.2 Improve access to Lane County parks by clearly identifying access points, providing safe and well-marked park entries for pedestrians, bicyclists and vehicles, and enhancing connections to parks via bike routes and trails.
- 2.3 Coordinate and collaborate with other departments (e.g., Lane County Transportation) and agencies (e.g., the coalition of Rivers to Ridges agencies) to connect Lane County parks to the countywide network of on-street and off-street trails, including physical connections as well as wayfinding. This includes advocating for and helping advance planned State, regional and city trails and on-street bike routes that expand the network, even if they do not directly connect to a Lane County park.
- 2.4 Make Lane County parks more welcoming for people with disabilities (in addition to ADA compliance, which is required by law) by providing more information online about accessible facilities and challenge levels, reviewing and ensuring policies and procedures support inclusion, and reaching out to communities of people with disabilities and advocates for constructive feedback.
- 2.5 Improve connectivity and access within Lane County parks, by improving roads, paths and trails to key destinations and providing looped trails of different challenge levels, as well as better on-site wayfinding.
- 2.6 Enhance existing trailheads at designated parks throughout the system by developing amenities, such as permanent restrooms, adequate parking, potable water, wayfinding signage and accessibility accommodations. Consider support elements such as seating, shade, bike repair stations and racks, interpretive and directional signage, mileage markers from key destinations, etc.
- 2.7 Develop and actively maintain a user-friendly Lane County Parks webpage providing clear information on parks and park amenities, park passes, reservations and event planning, and volunteer opportunities, ongoing and planned projects. Refine and simplify existing online information if feasible to highlight the following on separate pages:

- Open parks and facilities (overview, map with ability to zoom in to each site, facility information)
  - Provide an email contact link on the Lane County Parks website (in addition to the address and phone number).
  - Parks Pass info
  - Water Access opportunities, including river, lake, and ocean access and information on boat ramps, marinas and moorage
  - Camping options, with descriptions of sites/special amenities and a link to reservations
  - Trails, distinguishing sites with trails suitable for hiking, mountain biking, and horseback riding
  - Covered Bridges in Lane County
  - Planning an Event, including Camp Lane, reservable picnic and day use areas, large events policies, insurance requirements
  - “How to get involved,” with information on volunteering, friends groups, donations and partnerships
  - Parks Advisory Committee
  - A Parks Planning page (capital Improvements information, information about specific planning efforts and task forces, library of adopted plans and documents)
  - Links to Lane County Tourism and local parks providers
  - Highlights of events occurring in Lane County parks (or a calendar if feasible)
  - Highlight native habitats found in Lane County parks and provide information on where to see them
- 2.8 Update Google Maps with information about each Lane County park site, so that all sites have information and photographs. See Richardson Park for an example of a Lane County park with a complete profile.
- 2.9 Develop and implement a social media campaign to raise awareness about parks, water access, activities in parks, and the contributions of volunteers and partners to Lane County Parks, using the Lane County Gov platform and a set of parks-specific hashtags.
- 2.10 Create and make available online self-guided activities in Lane County parks to increase awareness and community connections, such as:
- A parks “passport” where people take pictures of key park feature at different sites or photos at a specific number of parks to potentially receive a prize (free parks pass for the next year, a free camping night, parks swag)
  - Self-guided bike tours
  - Self-guided hikes and walks
  - Downloadable river access map

- Nature guides for key parks
- 2.11 Attend a selection of outdoor recreation and nature focused community events and activities hosted by other entities to provide Lane County parks information.
  - 2.12 Collaborate with other Lane County departments and divisions on activities in or related to parks.
  - 2.13 Implement a consistent public involvement protocol for parks capital improvements.
  - 2.14 Continue to empower rangers and maintenance crew members to act as ambassadors for Lane County Parks. Provide tools to help them make and report on visitor contacts.
  - 2.15 Support water trails<sup>1</sup> by managing parks with water access for appropriate public use of Lane County's rivers and lakes by collaborating with partners on water trail development, promotion and improvement efforts.



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<sup>1</sup> Water trails are routes on navigable waterway such as rivers, lakes, canals and coastlines for recreational use. They allow access to waterways for non-motorized boats and sometimes motorized vessels, innertubes, and other craft

### Goal 3: Create Vibrancy

Re-energize and revitalize targeted parks as thriving, family-friendly outdoor activity hubs through redesign, renovation and programming to help position Lane County as the best county for outdoor recreation and play.

- 3.1 Follow Master Plan recommendations to invest in targeted parks to enhance their function as community outdoor recreation destinations. Priorities for investment include parks with the following characteristics:
  - Includes a cultural or natural feature that provides identity
  - Provides a suitable location for educational, social or cultural events and activities
  - Attracts or has the potential to attract visitors for 2+ hours
  - Has permanent restrooms
  - Is located so it can draw people from throughout the planning region and potentially beyond
  - Is designed for universal access, including accessible trails
  - Has existing or potential partners, an active stewardship or friends group, or an interested person who can help incubate a park volunteer program
- 3.2 Re-envision and create master plans for targeted park sites with community and volunteer participation. Identify potential partnerships and joint projects to enhance these sites. Develop phasing plans with modest incremental implementation of planned projects, contributing to a more comprehensive site renovation over time.
- 3.3 Embrace 'nature play' as the preferred approach for play areas at Lane County Parks sites, providing a range of play experiences that reflect the local ecosystem and landscape and are tailored to the scale of the park.
- 3.4 Provide different sizes of group picnic areas in regional parks and other targeted sites to accommodate a variety of uses. Consider the character and type of picnic experience (e.g., sheltered and unsheltered, secluded and active settings), as well as opportunities to use or reserve these sites as group gatherings, activities and programs.
- 3.5 Recruit volunteers to provide education, interpretation and activities at key park sites.
- 3.6 Strengthen existing policies and procedures to host or facilitate events at different scales.
  - Revisit and apply the policies and procedures established by the Large Events Task Force (LETF) to identify sites with an existing capacity to host large events, as defined in Appendix E. Similar to the analysis conducted at HBRA, incorporate new habitat inventory data, park classifications,

newer information on existing park access and infrastructure, land use and site use restrictions, as well as development recommendations to further vet sites previously identified as “potentially suitable.” As part of this vetting, identify sites that may be better suited for smaller events based on access restrictions and infrastructure

- Continue to apply the large events evaluation process, policies and standards to sites listed as “potentially suitable for large events”. This will also be applied to all proposals for large and small high-impact events, as per the Large Events Task Force report (see Appendix E)
- Establish a new intake and approval process for all events (see 1.9)
- Identify any use restrictions for sites for small and large group activities and events (see 1.9)

- 3.7 Recruit program providers or host regular activities, events and programs at targeted sites throughout Lane County’s park system, striving to provide:
- An annual celebration day at a site within each planning region that takes inspiration from the site’s identifying features. For example, Richardson Park could include an event focusing on Fern Ridge reservoir with activities such as a bike ride around the reservoir, water-based activities (e.g., a regatta, a float, a milk carton derby) with food, exhibits and performance on the open lawn
  - An annually-occurring covered bridge festival that celebrates Lane County’s covered bridge history
  - Activities that reflect a variety of recreation interests, such as outdoor exercise, guided hikes, paddle tour, markets, concerts, environmental stewardship
  - Options for different times of the day and week
  - A variety of group sizes and activity formats to meet community needs
  - Options in every planning region
  - Activities at different parks to introduce people to a variety of sites and experiences
- 3.8 Encourage events organized by community groups, nonprofits and/or businesses that support physical activity, family-friendly social interactions, enjoying the outdoors and connecting to nature.
- 3.9 Maintain or strengthen connections with niche recreation enthusiasts and advocacy groups to determine how and where to best accommodate them in County parks.
- 3.10 Establish policies and identify permitted locations for recreation activities that make use of the physical environment but do not require permanent facilities. Examples include slack-lining, hang gliding, and rock climbing. Allow these activities where feasible and when minimal impact to habitat is likely.



## Goal 4: Generate Economic Vitality

Create a strategic and holistic park management approach that balances local/site needs with opportunities to create economic benefits or to generate revenue to re-invest in parks.

- 4.1 Collaborate with Travel Lane County and other regional tourism initiatives (e.g., Oakridge’s focus on mountain bike tourism).
- 4.2 Establish a Lane County parks advocacy non-profit that is a 501(c)(3). This non-profit can advocate for parks funding, conduct campaigns, apply for grant funding and receive donations for Lane County parks.
- 4.3 Evaluate and improve cost accounting to support decision-making regarding park management and operations.
  - Track operations revenues and expenditures by site, not separating out campgrounds, marinas, reservable facilities and maintenance funds. That will create a clearer picture of which sites are profitable, which break even, and which are subsidized. Note: some categories of revenues (such as annual passes) and expenditures (administration) apply to entire system and should be included as such
  - Track revenues by category to inform the evaluation of existing fees and revenue sources. Consider these categories: day use/parking fees (including annual passes or day passes purchased online or from a vendor), moorage/marinas, campgrounds/Camp Lane, picnic shelter reservations, event fees, wayside reimbursements, Oregon State Marine Board, maintenance funds for contracted sites, and other sources such as the transient room tax, recreational vehicle fees, car rental tax, etc. Note funding sources for any parks funding deficits not addressed by traditional revenue sources
- 4.4 Create a resource development manager position or reassign an existing employee to this role to proactively increase funding and resources for Lane County Parks. (See 4.5)
- 4.5 Develop additional resources and funding for Lane County parks.
  - Cultivate and grow relationships with local businesses, hospitality industry and private sector recreation providers, including outdoor recreation manufacturers and retailers headquartered or with significant presence in Lane County
  - Explore corporate sponsorships as well as volunteerism
  - Evaluate the Parks fee structure on an annual basis and consider new fee types, especially those related to new programs, facilities or events (see 4.6)
  - Monitor and apply for grants and outside funding

- Explore new sources of stable long-term operational funding for Lane County parks, such as operating levies or utility fees
  - Consider capital funding measures in conjunction with other Lane County infrastructure improvements
  - Explore ecologically appropriate harvest of forest products to generate revenue to reinvest back into the same park
  - Discuss options for investing General Fund monies or increasing the percentage of funding received from the transient room tax, recreational vehicle fees, car rental tax or other funding sources
- 4.6 Re-evaluate and update fees and fee structures for all passes, programs, events and reservable facilities.
- Restructure and simplify the fee structures for marinas/moorage and picnic shelter reservations
  - Adjust camping fees for sites with hook-ups and other amenities (see 4.8)
  - Add a short-term pass aimed at visitors (3-day or 1-week pass).
  - Increase the cost of a one-day pass
  - Reposition and market the Annual Pass as a membership to Friends of Lane County Parks Advocacy group or non-profit advocacy group
  - Consider providing a discount for Lane County residents purchasing annual passes, by increasing prices for non-resident annual passes purchased online
  - Consider incorporating peak and off-peak pricing
  - Annually reassess and increase fees based on market pricing
- 4.7 Evaluate transitioning to an independent online reservation system, such as Reserve America, that is more easily searchable by visitors.
- 4.8 Enhance and expand camping options throughout the Lane County park system to provide a range of lodging alternatives and maximize revenue potential:
- Provide more hike-in/bike-in campsites with charging stations and bring at least half into the reservation system. The price point should be the same as for walk-in tent-only sites
  - Provide walk-in tent-only campsites/camping lawns with a lower price point than drive-in campsites and sites with hook-ups
  - Increase the prices for sites with electric and water hookups, to create a bigger differential from sites that have none
  - Explore adding roofed camping structures (cabins, yurts, tiny houses on wheels, vintage trailers) at some sites at a higher price point
  - Add more group camp sites with different capacities and vary the pricing based on capacity

- Provide/improve support amenities where warranted to enhance camping comfort and the camping experience (cooking shelters, showers, group fire rings and grills)
- 4.9 Expand rental options for Camp Lane, including day use, partial site and winter rentals, as well as potential additional lodging options. Revisit pricing and develop a focused marketing plan for this facility.
  - 4.10 Facilitate non-profits, outfitters and businesses providing services ranging from food and lodging to white water rafting adventures in selected parks to expand services and increase local economic vitality. These efforts should not create net operating costs for the County.
  - 4.11 Prepare a feasibility study and business plan for any proposed new major facility development or renovation/expansion (marina, boat ramp, campground) prior to determining whether to proceed, or require one for partner-proposed facilities that will be located on Lane County sites.
  - 4.12 Support local and citizen-led efforts to bring additional funding resources to parks in Lane County.



## Goal 5: Protect Resources

Sustain and protect unique County assets, cultural and natural resources as our legacy for future generations.

- 5.1 Increase Lane County investment in park maintenance and natural resource stewardship to protect cultural and natural assets.
- 5.2 Conduct a countywide inventory of natural and cultural resources in the park system and identify significant resources.
- 5.3 Assess the condition and improvement needs and costs of significant natural and cultural resources noted on the countywide inventory.
- 5.4 Identify a deferred maintenance project list and facility lifecycle inventory. Prioritize projects for partnership investment and improvements when funds are available.
- 5.5 Conduct a trails inventory to track the locations, types, conditions and lengths of County trails.
- 5.6 Preserve and protect natural resources in parks and throughout the county to support wildlife, ecological functions and establish stronger connection to Lane County's natural environment, including:
  - Managing invasive species
  - Increasing riparian buffers
  - Replanting/seeding with native plants
  - Protecting nesting sites and rare plants
- 5.7 Strengthen efforts to identify, designate, interpret and protect cultural resources (such as cultural landscapes, public art, archeological resources and historic structures) and ensure that they are made available for public understanding and interpretation.
- 5.8 Prepare site-specific resource management plans for sites with significant natural or cultural resources. This should include a cultural resource management plan for Lane County's covered bridges.
- 5.9 Invest in protecting and enhancing Lane County's natural areas while providing compatible public access for recreation. Consider ecological, visual and noise impacts when evaluating compatibility.
- 5.10 Provide sustainably-designed facilities and introduce resource conservation measures in parks where feasible.
- 5.11 Adopt a planting palette, water conservation strategies and approach to landscaping in parks of all classifications that prioritizes native plants,

reduces turf grass area (where not supporting recreation uses) and considers long-term resiliency.

- 5.12 Avoid siting infrastructure such as cell towers or water lines in environmentally or visually sensitive areas.
- 5.13 Reduce the footprint and impact of parking facilities over time by siting and scaling parking lots carefully, supporting multiple modes of transportation, and using pervious surface materials where possible.
- 5.14 Involve partners and/or coordinate with existing programs to improve resource stewardship and potentially incorporate outside expertise and best practices.
  - Explore opportunities to coordinate with EWEB's Pure Water Partners program
  - Explore options to coordinate with Oregon Department of Environmental Quality guidelines regarding Total Maximum Daily Load and Water Quality Management strategies for waterbodies in the Willamette Basin to improve water quality and stormwater management
- 5.15 Support environmental education, nature interpretation and stewardship in Lane County parks.
  - Develop and offer interpretive tours and guided hikes
  - Collaborate and partner with friends groups and other community organizations to further educational programs on the natural habitat and environment at County parks
  - Host annual park clean ups in collaboration with partners, friends groups and other community organizations
  - Continue to support recycling in Lane County and educate people about the impacts of illegal dumping in parks. Address global-scale challenges, such as addressing impacts of climate change, by acting to reduce greenhouse gas emissions when replacing equipment, identifying maintenance strategies, etc.
  - Promote and support compatible self-directed wildlife-dependent recreation throughout the County's park system, including fishing, wildlife observation, photography, and interpretation



## Goal 6: Nurture Our Values

Emphasize our diverse, natural character and make high impact, low-cost moves to maintain sites, sustain infrastructure and improve the quality, safety and attractiveness of park amenities, landscaping and recreation facilities.

- 6.1 Develop, define and promote an identity for Lane County Parks.
  - Work with Lane County’s Public Information Officer and staff to develop language, images and communication tools that promote the role of Lane County Parks in providing vibrant parks that support access to water, nature, trails, while stewarding the county’s natural and cultural resources
  - Update park design and development guidelines to define the characteristics and identity of Lane County Parks as well as required amenities to ensure a safe, welcoming and inclusive park experience. Ensure that new park development and park renovations adhere to these guidelines and the goals of the Master Plan
- 6.2 Focus on the outdoor recreation character of Lane County Parks when making capital improvements:
  - Re-invest in facilities at existing parks that support trail activities, camping, water access, boating/paddling, nature interpretation and outdoor recreation
  - Focus on visitor amenities and facilities that can support multiple activities and are flexible enough to accommodate evolving trends
  - Emphasize the local environment and character of the park in material selection, plant palettes and site furnishings
  - Add amenities at parks to make parks visitor-friendly and comfortable (benches, potable water, shade, restrooms, bike parking)
- 6.3 Develop long-term asset replacement plans for major revenue generating sites, including a schedule for regular investment and volunteer stewardship.
- 6.4 Track deferred maintenance needs by site; include desired habitat and vegetation management needs (as noted in 5.4).
- 6.5 Consider shrinking the developed footprint in some parks through efforts such as reducing mowed turf grass areas, reducing paved areas, or not replacing aging and worn features incompatible with Plan goals, site character, park design guidelines and desired site uses.
- 6.6 Explore options to optimize local management of selected Lane County sites by working with other public agencies to transition ownership (e.g., Cinderella Park) or management responsibility (e.g., HBRA) of sites or selected facilities.

- 6.7 Explore options to formalize arrangements with friends groups, service groups and volunteers to support specific parks or facilities on an ongoing basis, rather than project by project.
- 6.8 Coordinate with countywide and statewide planning guidance, such as the Willamette River Greenway.
- 6.9 Evaluate functionally closed, inaccessible and landbanked parks and open space areas to determine if these sites should be opened or managed to support the goals of the Master Plan. Identify a long-term management strategy for each of these sites. Ensure parks have sufficient maintenance and operational resources, as well as development funding, before opening or encouraging access to these sites.
- 6.10 Build the capacity of Lane County Parks staff and programs to monitor impacts, integrate climate change preparedness, and improve resiliency.
- Reduce greenhouse gas emissions associated with facilities and operations
  - Protect coastal and inland buildings and infrastructure
  - Adapt landscaping plant palettes for resilience to climate change
  - Strengthen hazard response plans for fire and flooding in particular.
- 6.11 Consider long-term funding for maintenance and capital improvements prior to acquiring new sites if opportunities arise that are consistent with Master Plan goals or generate a profit that can be reinvested in that site and other County parks.



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# CHAPTER 5

## Site Recommendations



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# CHAPTER 5

## Site Recommendations

As the vision, goals and strategies from the previous chapter are implemented across the park and open space system, some parks will be improved and activated while others will be monitored as natural open space. In between, many sites will be maintained and stewarded to continue their existing level of use, and a few will be naturalized over the long term. This chapter summarizes recommendations for each Lane County park site, highlighting detailed recommendations for several parks.

### Site Treatments

The Master Plan recommends ten different potential “treatments” for each Lane County park site. These treatments provide high-level guidance on the types of future investment and development that are appropriate for each site, based on the current function of the park and its desired future use. These treatments are applied to Lane County’s park inventory, including sites owned or leased by Lane County, as well as several sites maintained by Lane County under contract. The site treatments can be applied to potential new sites when applicable.<sup>1</sup>

The potential site treatments are defined as follows:

- **Site Planning:** Prior to site renovation and new development, conduct public outreach, evaluate opportunities and identify ways to best meet local and regional needs and integrate best practices into site development. Develop site designs and/or master plans, along with business plans for any large revenue-generating facilities if proposed (e.g., nature center, programmed event space).
- **Park/Facility Investment (Renovation):** Increase the level of investment in this site by renovating existing assets and facilities and adding new facilities consistent with site master plans, the Parks & Open Space Master Plan, and County or partner financial resources. Consider site enhancements that expand use and activate the site.

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<sup>1</sup> New sites may be acquired on an opportunity basis where these advance Master Plan goals and are consistent with Master Plan strategies. No specific new sites are recommended at this time.

- **Park/Facility Stewardship (Replacement):** Sustain the existing use of the site by repairing and replacing existing facilities at the end of their lifecycle. The level of investment should be consistent with the current facilities on site.
- **Native Planting/Turf Reduction:** Reduce mowed turf not serving a recreation purpose, replacing it with native plants or lawn alternatives.
- **Maintenance:** Maintain the site for public use. Provide routine and preventative maintenance as needed (e.g., clean restrooms, mow grass, empty trash, pick up litter, maintain parking lot, manage trees and vegetation, remove nuisance/unsafe elements).
- **Nuisance Monitoring:** Monitor sites that are not receiving regular maintenance for dumping, encampments, or hazard trees on a periodic basis. (Note: This treatment typically applies to sites with minimal or no improvements. Developed sites will need regular maintenance.)
- **Collaboration:** Recruit, coordinate and manage volunteers, friends' groups and/or interest groups for involvement in temporary or periodic site projects.
- **Formalized Partnership:** Develop a Memorandum of Understanding or other formalized agreement with site partners defining their roles and responsibilities in ongoing site management, maintenance and/or improvements.
- **Historic Resource Stewardship:** Manage, maintain and/or restore the historic resources on the site to meet resource preservation goals.
- **Natural Resource Stewardship:** Manage, maintain and/or restore the natural resources and habitat to meet stewardship goals. Remove invasives, improve habitat, address wildfire hazards and protect the tree canopy and ecological function of the park.

Table 2 on the following pages identifies each site and its recommended treatment. Facilities at sites that are not noted for capital investment/renovation or stewardship/replacement will be maintained until the end of their lifecycle and then removed; the site will eventually be naturalized as open space. Some sites, currently undeveloped, will receive nuisance monitoring until they are developed as per the recommended site treatment.

On the table, sites proposed for a greater level of investment are noted by dollar signs to indicate the comparative amount of investment.

Table 2: Recommended Site Treatments

Site	Site Planning	Park / Facility Investment (Renovation)	Park / Facility Stewardship (Replacement)	Native Plantings / Turf Reduction	Maintenance	Nuisance Monitoring	Collaboration	Formalized Partnership	Historic Resource Stewardship	Natural Resource Stewardship
Lane County Parks										
Regional Parks										
Armitage	x	\$\$\$		x	x		x			x
Baker Bay	x	\$\$\$		x	x			x		x
Howard Buford Recreation Area	x	\$\$\$			x		x	x	x	x
Orchard Point	x	\$\$\$			x					
Perkins Peninsula	x	\$\$\$		x	x				x	
Richardson	x	\$\$\$		x	x			x		
Zumwalt	x	\$\$		x	x		x	x	x	x
Recreation Resource Area										
Blue Mountain	x	\$\$			x		x	x		x
Hileman	x	\$\$			x		x			x
Konnie Memorial	x	\$\$			x		x			x
Water Access Park										
Ada	x	\$			x					x
Austa Boat Ramp			x		x					
Bellinger Landing		\$			x					
Bender Landing		\$			x		x			
Deadmonds Ferry Landing						x				
Deadwood Landing			x		x					
Eagle Rock			x		x					x
Farnham Landing		\$			x		x			
Forest Glen Landing		\$			x					
Greenwood Landing			x		x					
Hamlin			x		x					
Heceta Beach		\$			x		x			
Helfrich Landing			x		x					
Lasells Stewart		\$			x		x			x
Leaburg Dam Boat Slide			x		x					
Leaburg Landing			x		x					
Linslaw			x		x		x	x		x

Site	Site Planning	Park / Facility Investment (Renovation)	Park / Facility Stewardship (Replacement)	Native Plantings / Turf Reduction	Maintenance	Nuisance Monitoring	Collaboration	Formalized Partnership	Historic Resource Stewardship	Natural Resource Stewardship
Mapleton Landing		\$			x		x	x		
Mercer Lake Landing			x		x		x			
Munsel Lake Landing			x		x		x			
Rodakowski Landing		\$			x					
Schindler Landing			x		x		x	x		
Tide Wayside			x		x					x
Tiernan Boat Ramp		\$			x		x	x		
Triangle Lake		\$			x		x			
Westlake					x		x			
Whitely		\$			x					
Wildwood Falls			x		x		x			x
<b>Special Use Park</b>										
Archie Knowles			x		x		x		x	x
Bohemia Saddle						x	x	x	x	x
Camp Lane		\$\$\$		x	x				x	x
Currin Covered Bridge			x			x	x		x	
Dorena Covered Bridge			x		x		x		x	
Harbor Vista		\$\$\$			x		x			
Howard J. Morton						x				x
Lowell Covered Bridge			x		x		x		x	
Old McKenzie Hatchery		\$\$\$			x			x	x	x
Rock Dock			x		x			x		
Stewart Covered Bridge		\$\$				x	x		x	
<b>Local Park</b>										
Deerhorn Landing		\$		x	x		x			x
Hendricks Bridge		\$		x	x		x		x	x
Unity		\$			x		x	x		

Site	Site Planning	Park / Facility Investment (Renovation)	Park / Facility Stewardship (Replacement)	Native Plantings / Turf Reduction	Maintenance	Nuisance Monitoring	Collaboration	Formalized Partnership	Historic Resource Stewardship	Natural Resource Stewardship
<b>Natural Area</b>										
Big River		\$				x		x		x
Clear Lake Dunes						x	x			x
Kinney						x	x			x
Peaceful Valley				x		x	x			x
Siuslaw Falls		\$				x	x	x		x
South Beach						x	x			x
Three Mile Prarie		\$				x	x	x		x
Vickery						x	x			x
<b>Undeveloped/Closed Park</b>										
Oakhurst Comm. Recreation Area						x				
<b>Land Bank</b>										
Blue Mountain Property						x				x
Myers Tract						x				
<b>Other Properties</b>										
<b>Maintained Parks (Contractual)</b>										
Ben and Kay Dorris					x					x
Goodpasture Boat Landing					x					
Hayden Bridge					x					
Jennie B. Harris					x					
Lloyd Knox					x					

Note: Sites proposed for a higher level of investment are noted by dollar signs to indicate comparative investment levels.



## Additional Site Recommendations

Within the overarching recommendations framework, the Master Plan provides additional guidance on regional parks, recreation resource areas, and park sites or categories of sites warranting special attention. These park sites are intended for additional investment in the future. Note: Any site targeted for capital projects and additional development will also need greater investment in maintenance and potentially operations in the future.

TABLE 3: ADDITIONAL SITE RECOMMENDATIONS

Regional Parks		
Site	Park Functions	Recommendations
Armitage	Campground (target market: visitors to Lane County) River access Trail access Community gathering	<ul style="list-style-type: none"> <li>• Master plan site to enhance overnight and day uses, while protecting environmentally sensitive riparian corridor.</li> <li>• Expand campground facilities, targeting this to be an RV-oriented campground catering to out-of-town visitors. Its location on I-5 makes it desirable for those visitors looking for a place to stay near Eugene or Springfield.</li> <li>• Improve ADA access in the campground, picnic area, overlook, trails and dog park.</li> <li>• Retain and enhance McKenzie River access and develop site as a stop on the water trail. Continue collaboration with McKenzie River Trust, City of Coburg and Willamalane PRD.</li> <li>• Retain Crilly Nature Trail, seek partners and volunteers to assist in stewardship.</li> <li>• Manage to improve habitat value, especially along the river.</li> <li>• Over time, reduce turf grass where not providing recreation value; plant more trees and integrate nature play elements.</li> <li>• Explore suitability of this site for concessionaire (e.g., paddle equipment rental) or to market as a beginning/ending point for events (river events, runs, bike rides).</li> <li>• Explore potential acquisition of adjacent property if site revenues cover additional maintenance costs.</li> </ul>

Regional Parks (continued)		
<p>Baker Bay</p>	<p>Campground (target market: families and bike tours)</p> <p>Lake access</p> <p>Community gathering</p>	<ul style="list-style-type: none"> <li>• Master plan and phase in site improvements.</li> <li>• Improve campground facilities and expand camping options to enhance the family-friendly vibe of this campground (e.g. bike-in campsites, tent only areas, yurts and cabins).</li> <li>• Explore opportunities to create regional trails hub, with connections and/or information about nearby USFS bike trails, other campgrounds, and scenic bikeway routes.</li> <li>• Retain and reinvest in lakefront facilities, including improving the beach area. Evaluate cost benefits of expanding fishing dock and marina slips; make ADA accessible.</li> <li>• Partner with the concessionaire to renovate the building and enhance its function. Consider an improved seating area/plaza adjacent to the concessions.</li> <li>• Add at least one covered picnic area near the lakefront. Remove the manufactured play structure at the end of its lifecycle and replace it with nature play elements.</li> <li>• Over time, reduce turf grass where not providing recreation value, and plant more trees to provide shade in developed areas of the park.</li> </ul>
<p>Howard Buford Recreation Area</p>	<p>Natural resource stewardship and interpretation</p> <p>River access</p> <p>Trail access</p>	<ul style="list-style-type: none"> <li>• Follow the guidance of the adopted HBRA Master Plan and Habitat Plan, including “to provide varied opportunities for primarily low intensity outdoor recreation and education activities while protecting, conserving, enhancing, and maintaining the natural, scenic, historical, rural, and recreational qualities of this... park.” Ensure all uses and facilities are compatible with this statement.</li> <li>• Collaborate with Mt. Pisgah Arboretum and Friends of Buford Park &amp; Mt. Pisgah on a comprehensive management approach for the public lands on and around Mt. Pisgah. Address management of the partner developed/operated facilities in the park.</li> <li>• Update master plan, in conjunction with site partners, to evaluate options to acquire Willamette Confluence Preserve, increase interpretive facilities and programs, and restore house/barn as nature center and rustic shelter.</li> </ul>

Regional Parks (continued)		
<p>Fern Ridge Reservoir Park Complex</p> <ul style="list-style-type: none"> <li>Orchard Point</li> <li>Perkins Peninsula</li> <li>Richardson Park</li> </ul>	<p>Campground (target markets: Lane County residents, regional visitors)</p> <p>Boating</p> <p>Paddling</p> <p>Lake access</p> <p>Community gathering</p> <p>Bicycling</p> <p>Trail access</p>	<ul style="list-style-type: none"> <li>Jointly master plan the three Fern Ridge Reservoir parks as a complex of parks, each one providing a different waterfront experience. Consider associated Zumwalt Park uses.</li> <li>Coordinate/partner with the USACE in planning/implementing access improvements.</li> <li>Develop a biking/pedestrian route around the reservoir that connects Richardson, Orchard Point and Perkins Peninsula. A connection to Zumwalt Park is desirable.</li> <li>Provide biking amenities, including bike repair station, information and wayfinding to adjacent bike routes.</li> <li>Reinvest in the campground at Richardson Park, sustaining quality sites and expanding camping options (e.g. bike in campsites, tent only areas, yurts or cabins). Improve the group camp areas and provide amenities to support group use.</li> <li>Reinvest in existing marina and boating facilities.</li> <li>Reinvest in the day use area of Richardson Park to serve as a trailhead for the reservoir loop trail or other road rides, and an outdoor event hub for activities such as triathlons, walks and paddling/water-oriented events.</li> <li>Provide a variety of picnic facilities at all three sites, including various sizes and group capacities, sheltered and in the open, and different settings (forested, waterfront, sunny). Add a shelter to Perkins Peninsula. Consider adding at least one enclosed picnic shelter, likely at Richardson Park, to allow year-round gatherings. Improve the restroom at Richardson.</li> <li>Improve swimming opportunities, especially a swimming beach at Perkins Peninsula or Orchard Point.</li> <li>Over time, plant more trees, replace play structures with nature play areas and reduce turf grass where not providing recreation value, leaving space for lawn games such as croquet, badminton, and Frisbee.</li> <li>Avoid additional sport field development; maintain existing sports field through collaboration with a partner group or phase out sports fields.</li> <li>Consider recreation alternatives during low-water times.</li> <li>Coordinate with park friends groups for collaborative projects.</li> </ul>

Regional Parks (continued)		
Fern Ridge Reservoir Park Complex (continued)		<ul style="list-style-type: none"> <li>Collaborate in the provision of events and activities with water sports providers, the Chamber of Commerce, US Fish and Wildlife, and nearby schools and cities, including Veneta and Elmira.</li> </ul>
Zumwalt Park		<ul style="list-style-type: none"> <li>Master plan as a unique site connected to the Fern Ridge Reservoir Complex via trails. Plan for more of a regional park function serving local residents and walk-in/bike-in visitors.</li> <li>Expand for picnicking, swimming, birding, trail connectivity, and historic resource stewardship. Consider for bike-in camping. Consider opening some parking on a regular basis. Add permanent restroom. Protect oak trees.</li> <li>Consider acquisition opportunity if site revenues and/or partnership contributions can address maintenance needs.</li> </ul>
Recreation Resource Areas		
Site	Park Functions	Recommendations
Blue Mountain	Trail access Outdoor recreation resource Community gathering place Environmental education	<ul style="list-style-type: none"> <li>In the long term, develop and manage as Recreation Resource Area.</li> <li>Master plan the site as a nature interpretation and trail hub for a variety of trail uses.</li> <li>Provide a variety of hard and soft-surfaced loop trails for hiking and biking. [Note: This may require a policy change to allow bikes on park trails.]</li> <li>Consider a trail bridge across Mosby Creek.</li> <li>Improve access road and park entry, as well as internal park circulation.</li> <li>Develop accessible day-use area consistent with activities, including parking, restrooms, picnic tables, picnic shelter, seating, interpretive kiosk, etc.</li> <li>Consider an outdoor classroom (shelter with storage, water, and support amenities) to support environmental education and nature interpretation, potentially in conjunction with fish habitat and forest management projects.</li> <li>Explore options to keep off-road vehicles away from and out of the creek and sensitive natural areas.</li> <li>Coordinate with the Coast Fork Watershed Council in fish habitat protection at Mosby Creek.</li> </ul>

Recreation Resource Areas (continued)		
Blue Mountain (continued)		<ul style="list-style-type: none"> <li>Discuss with nearby neighbors options to provide a rustic group camp/day use area to support on-site trail and nature programs, events or small group/scout jamborees (either consistent with current zoning or by considering a zoning change).</li> <li>Re-evaluate suitability for large group events in context of access challenges, zoning restrictions, habitat protection needs, development levels and intended small group use.</li> </ul>
Hileman	Trail access Nature interpretation Natural resource protection	<ul style="list-style-type: none"> <li>Develop and manage as Recreation Resource Area.</li> <li>Work with partners in the Upper Willamette Stewardship Partnership (McKenzie River Trust, Long Tom Watershed Council, OPRD and Lane County) to develop site to support nature interpretation/education amenities emphasizing the Willamette River.</li> <li>Add environmental education facilities, such as an outdoor classroom and interpretive elements.</li> <li>Consider low-impact recreation opportunities, such as non-motorized boating.</li> <li>Restore and enhance riparian and natural resources.</li> <li>Explore collaboration with City of Eugene.</li> </ul>
Konnie Memorial	Water access Nature/trail access Habitat, natural area	<ul style="list-style-type: none"> <li>Develop and manage as Recreation Resource Area.</li> <li>Master plan site considering opportunities to add camping, improve road and swimming area and expand trail network.</li> <li>Evaluate potential partnership for site to serve as a trailhead for adjacent US Forest Service lands.</li> </ul>
Special Use Parks		
Site	Park Functions	Recommendations
Archie Knowles	Campground (target market: Lane County residents) River access	<ul style="list-style-type: none"> <li>Maintain, and periodically update site catering to Lane County residents.</li> </ul>
Bohemia Saddle	Historic and cultural resource preservation	<ul style="list-style-type: none"> <li>Reach out to Bohemia Mining Days, Bohemia Mine Owner's Association, City of Cottage Grove regarding the future use and management of this site.</li> </ul>



Special Use Parks (continued)		
Camp Lane	<p>Campground (target markets: Lane County residents, regional visitors)</p> <p>Event venue</p>	<ul style="list-style-type: none"> <li>• Reinvest in campground and lodge facilities, improving and adding lodging options, refurbishing bathrooms and other amenities.</li> <li>• Add facility rental options that allow more than one group to rent the site.</li> <li>• Improve views and connections to the river.</li> <li>• Market as a wedding and event destination.</li> <li>• Consider connections to Konnie Memorial via Old Stagecoach Road.</li> </ul>
Harbor Vista	<p>Campground (target market: visitors to Oregon Coast)</p> <p>River and beach access</p>	<ul style="list-style-type: none"> <li>• Reinvest in campground facilities, targeting this to be an RV-oriented campground catering to out-of-town visitors to the Oregon Coast. Add yurts/cabins and a hiker/biker camping area.</li> <li>• Collaborate with local partners to support educational/interpretive opportunities and camp programming.</li> <li>• Continue to support day use for local residents, providing access to the river and beach and support amenities such as restrooms.</li> <li>• Maintain Chicken Point access and view; coordinate with other entities on trail to ocean.</li> <li>• Expand partnerships and collaboration between the Park caretaker, friends group, schools, City of Florence and state and federal agencies in improvements and programming. Explore joint use agreement for amphitheater use.</li> </ul>
Howard J. Morton	Picnic	<ul style="list-style-type: none"> <li>• Add park identification signage.</li> <li>• In the long term, evaluate options to improve the entrance and picnic area and maximize water views, or to naturalize the site.</li> </ul>
Old McKenzie Hatchery	<p>Historic and cultural resource preservation</p> <p>River access</p>	<ul style="list-style-type: none"> <li>• Develop a formal agreement with Friends of Old McKenzie Fish Hatchery that allows them to proceed with their goal to develop and operate an interpretive center and museum at the site. Within this agreement, ensure that the Friends are required to also manage the site for natural resource and habitat value.</li> </ul>

Special Use Parks (continued)		
Covered Bridges	Historic and cultural resource preservation	<ul style="list-style-type: none"> <li>• Seek partners to help preserve and interpret Lane County's covered bridges.</li> <li>• Develop a covered bridge preservation plan that addresses all covered bridges under the County's ownership or management. Identify bridges to be included in an asset preservation program that includes capital improvement costs.</li> </ul>

Other Parks		
Site	Park Functions	Recommendations
Ada	Local day use Water access	<ul style="list-style-type: none"> <li>• Improve as local day use area for local residents. Reinvest in picnic area, boat ramp, nature viewpoints.</li> <li>• Steward natural resources.</li> <li>• Re-evaluate suitability for large group events in context of access challenges, natural area protection needs, development levels and intended small group use.</li> </ul>
Natural Areas	Habitat, natural area Potential trail partnership	<ul style="list-style-type: none"> <li>• Pursue cooperative habitat restoration projects</li> <li>• Evaluate Big River, Siuslaw Falls, and Three Mile Prairie and others if applicable for potential partnerships with BLM, USFS, or nearby city for potential trails/trailheads connecting to adjacent lands.</li> </ul>
Maintained Parks (Contractual)	Not applicable	<ul style="list-style-type: none"> <li>• Continue or renegotiate maintenance contracts to ensure the contract fully supports the needed maintenance staffing and activities.</li> </ul>

# CHAPTER 6

## Implementation Strategies



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# CHAPTER 6

## Implementation Strategies

As noted in Chapter 2, Lane County's funding resources are constrained and staffing for parks is lean. This Master Plan envisions collaboration to improve and enhance Lane County's parks and natural areas. Lane County Parks needs an implementation approach that helps it focus efforts on moving toward the vision, yet is flexible enough to allow the County to take advantage of opportunities that arise in future years.

This chapter presents a set of tools designed to help Lane County staff and the PAC implement the Master Plan vision and goals.

- **Prioritizing Strategies.** Parks staff can use this evaluation criteria and matrix to create and annually update short-term (two year) action plans.
- **Process and Worksheet for Evaluating Community Proposals.** Lane County staff and the PAC can use this worksheet to review and evaluate projects proposed by residents, stakeholders and partners for Lane County's parks and natural areas.
- **Capital Projects Prioritization.** These criteria will help staff prioritize capital improvements.

### Prioritizing Strategies

Each year, Lane County Parks staff will develop an action plan that provides a two year work plan to carry out Master Plan strategies. The action plan will establish priorities for applying available staff and funding resources to capital projects, as well as ongoing systemwide maintenance and administration. The action plan will prioritize efforts and define a lead staff member for each item. It can also serve as a basis for reporting progress on the Master Plan.



## Evaluation Criteria

In implementing the Master Plan, Lane County Parks should strive to make measurable progress on all six Master Plan goals, giving attention to the different regions of the County, and maximizing limited staffing and funding where possible. To develop the action plan, Lane County staff should answer the following questions:

- 1. Does the project or action increase collaboration and partnerships?**
  - Y: Yes
  - N: No
- 2. How much staff time is required?**
  - H: High (Requires multiple individuals or cross-department or agency team, major focus for project lead)
  - M: Medium (More than one person, about > ¼ of project lead's time)
  - L: Low (Limited hours, a single individual)
- 3. Is it a recurring or one-time cost?**
  - O: One-time cost. This means that only one investment of budget or staff time is required.
  - R: Recurring. This means that implementation requires ongoing investment of dollars or staff time.
- 4. Is there a capital improvement cost for Lane County?**
  - H: More than \$500K
  - M: \$50K-\$500K
  - L: >\$50K
- 5. Is it a necessary first step (or preliminary action)?**
  - Y: Some longer-term projects have one or more steps that need to be accomplished before the project can be started, such as completion of a feasibility study or development of a Memorandum of Understanding.
  - N: No, this effort does not affect subsequent steps.
- 6. Can it be accomplished quickly?**
  - Y: Limited time opportunity, can be completed in under two years, relatively low cost/risk relative to impact
  - N: Longer term effort
- 7. Does it bring in new resources (funding or volunteers) or reduce Lane County costs (operating or staff time)?**
  - Y: Yes/Maybe
  - N: No/No Effect

The level of staffing and funding will directly impact how much Lane County Parks can include in each Action Plan. Table 4 presents an Action Plan matrix with an example action plan for the first year of Master Plan implementation. This is a sample format for a one-year action plan. As an example of a realistic and achievable plan, it includes a balance of project types: projects that require collaboration, a mix of CIP and non-CIP funded projects, and mix of reoccurring and one-time costs and a mix of staffing.

TABLE 4: ACTION PLAN MATRIX EXAMPLE

Ref #	Strategy	Collaboration	Staff Time Required	Recurring vs. One-	CIP Cost	First Step	Quick Win	Resources	Staff Lead
1.1	Create a volunteer, partnership and program coordinator position	Y	H	R	N	Y	N	Y	TBD
1.5	Convene a regular cross-agency forum with other public landholders/land managers	Y	M	R	N	Y	Y	Y	TBD
2.4	Coordinate with other departments and agencies to connect parks to the countywide trail network	Y	L	R	N	Y	N	N	TBD
2.10	Update Google Maps with information about each Lane County park site	N	M	O	N	Y	Y	N	TBD
3.2	Re-envision and create master plans for targeted park sites (prioritize one site)	Y	H	O	Y	Y	N	Y	TBD
3.3	Embrace “nature play” as the preferred approach for play areas at Lane County parks	N	L	R	Y	N	N	Y	TBD
4.2	Establish a Lane County parks advocacy non-profit that is a 501(c)(3)	Y	M	O	N	Y	Y	Y	TBD
4.5	Re-evaluate and update fees and fee structure for all passes, programs, events and reservable facilities	N	H	O	N	Y	N	Y	TBD
5.7	Prepare site-specific resource management plans for sites with significant resources (one site)	Y	H	O	Y	Y	N	N	TBD
6.3	Develop long-term asset replacement plans for major revenue generating sites	N	H	O	N	Y	N	N	TBD

## Evaluating Community Proposals

The Master Plan calls for partnerships and collaboration to enhance Lane County's parks and natural areas and leverage the County's limited resources. The County should encourage local organizations, interest groups and volunteers to make proposals to help carry out projects or initiatives in Lane County Parks in the coming years. However, not all proposals should be accepted. It is important to determine which ones are consistent with Master Plan recommendations and feasible for implementation.

The tool presented below provides an evaluation process for staff and the PAC to consider proposals and projects. Proposals or projects should be evaluated against the evaluation criteria, using the evaluation worksheet. All proposals should be evaluated against Step 1 criteria. Only those proposals that meet the Step 1 requirements should move to Step 2.

### Step 1: Screen Potential Projects and Proposals

Step 1 is a screen to make sure the proposal or project is consistent with the Master Plan vision, mission and goals.

- **Does it help achieve the Master Plan vision?**  
Describe in one sentence how the proposal or project will move forward the vision.
- **Is it consistent with the Lane County Parks mission?**  
Does it help Lane County manage, sustain or enhance parks and natural resources? Is it a partnership or will it result in stewardship or quality customer service?
- **Is it consistent with one or more of the six Master Plan goals?**  
Is the proposal consistent with at least one of the goals?

### Step 2: Further Evaluate Proposal and Project

The Step 2 screen occurs for those proposals or projects found to be consistent with the vision, mission and goals through the Step 1 screen.

- **Is the proposal or project water, nature or trail-focused or one of the project types called out in the Master Plan?**  
Community input indicated that Lane County parks are best known for their water, trail and nature experiences. Projects and proposals should relate to these areas or be called out in the Master Plan (e.g., group picnic areas, niche recreation groups).
- **Does it make efficient and effective use of existing resources?**  
Existing resources include Lane County's existing parks and natural areas, staffing levels, and financial resources. Proposals or projects should not increase Lane

#### Vision

Our thriving parks and natural areas connect us to our rivers, reservoirs and natural features, showcase our heritage and natural diversity, and protect resources for future generations.

#### Mission

We responsibly manage, sustain and enhance our parks and natural resources through partnership, stewardship and quality customer service.

County's staffing needs or negatively impact its financial picture. In addition, logistics and timing should be considered.

- **Does Lane County Parks retain flexibility and adaptability?**

This question considers whether a proposal or project would limit Lane County Parks' ability to respond to changing circumstances. If the situation changed in the future, would the proposal or project be detrimental to Lane County's parks and natural areas? For example, what would happen if the proposer was no longer able to operate the proposed facility or feature?

- **Does it increase the County's long term financial stability?**

The proposal or project should improve maintenance and operation efficiencies, include identified funding or partnerships and/or reduce or recover costs.

- **Does it bring new resources into the park system?**

Resources can be in a variety of forms: dollars, in-kind contributions, volunteers, programs and services, a reduction in costs for Lane County, and grants.

- **Is there synergy with local efforts?**

Lane County's parks and natural areas can support local economic vitality efforts. Is the proposal or project aligned with the direction or efforts of the local city or local community-based organizations?

TABLE 5: COMMUNITY PROPOSAL/PROJECT REVIEW WORKSHEET

Proposal/Project		
Step 1	Evaluation <sup>1</sup>	Comments
Helps achieve Master Plan vision		
Consistent with mission		
Consistent with one or more goals. If yes, specify which.		
<i>Move to Step 2?</i>	Y N	
Step 2	Evaluation	Comments
Water, nature or trail-focused proposal or project, or a project type called out in Master Plan		
Efficient use of existing resources		
Retains flexibility and adaptability for Lane County Parks		
Increases long-term financial stability		
New resources		
Synergy with local efforts		

<sup>1</sup> Evaluations: Y (Yes), (P) Potentially, or (N) No



## Capital Projects Prioritization

Lane County has a capital improvement plan that includes parks projects. The criteria in this section are intended to help staff prioritize Lane County's limited capital improvement funding to best align with the Master Plan.

### Criteria

- **Master Plan Consistency.** Is it consistent with the Master Plan? Is it water, trails or nature-related or a project type called out in the Master Plan? Examples: Camp Lane Master Plan, replacement of playground with nature play feature.
- **Reduce Lifecycle Costs.** Will the project reduce operating costs or lifecycle costs for Lane County over the long term?
- **Revenue Generating Assets.** Does it preserve or expand on revenue-generating capacity of existing recreation resources? Alternatively, does it create a new revenue generating resource?
- **Operational Impact.** What is the operational impact, once the improvement, initiative or project is in place? Is it likely to require additional operating funding (staff time or direct costs)? Does the County have the necessary funding and staffing available for maintenance and operations once the project is implemented?
- **Leverage.** Are there other funders or partners to advance this project, either internal to Lane County or external? This includes in-kind donations of labor or materials as well and outside funding.

### Measuring Progress

Each year, staff and the PAC will evaluate progress on achieving the Master Plan vision and goals. This evaluation should be completed in conjunction with the annual update to the Action Plan and should include:

- Report on Action Plan progress from the previous year;
- Review of progress on the six goals; and
- Key performance metrics that can be tracked from year to year such as number of passes sold, number of visitors or campground reservations, etc.

This progress report should be used to help staff and the PAC in making decisions on the Action Plan update. It should also be in a brief and digestible format suitable for sharing with the public.

## Afterword

This Master Plan is the culmination of years of work by Lane County staff, the PAC, the Task Force and many other volunteers. It comes almost 40 years after the County's first and only parks plan was developed. Much has changed since then and County Parks, more than ever, needs a guiding document to support the prioritization of investments in its parks and open space areas. Over the course of eighteen months, this planning process brought together Lane County residents, the Task Force, PAC, staff and stakeholders. Together they defined a shared vision and common goals to address the needs of the County's evolving communities, the realities of the local economy, the County's current fiscal challenges, and the opportunities available to enhance the County's park system.

This Master Plan provides the guidance and tools to usher in a new age for Lane County parks. Working together, County staff, partners, stakeholders, other agencies, cities and volunteers can maximize the benefits of Lane County parks from sea to summit and preserve these resources for future generations.



# APPENDIX A

## County Parks and Habitat Inventories



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Site	Acres	Region	Water Access				Nature Access Facilities			Other Outdoor Facilities					Overnight Facilities				Other Buildings/Features			Other Facilities	Habitat Score	Site Amenities				Ownership			Revenue - Supplemental Funding								
			Marina	Dock/Pier	Boat Ramp	Swimming Area	Adjacent Water Body	Soft Trail	Hard Trail	Nature Viewpoint	Interpretive Feature	Pavilion	Picnic Shelter - large	Picnic Shelter - small	Picnic Area	Play Equipment	Playfield	Sports/Game Court	Lodge	Cabins/Yurts/Treehouse	Group Camp Sites			Camp Sites (full or partial hookups)	Camp Sites (no hookups)	Covered Bridge	Historic/cultural feature	Interpretive/Visitors Center	Habitat Score	Caretaker/Host	Concessions	Parking (car = ●, car/trailer = *)	Restrooms (permanent = ●, portable = *)	Lane County	Public Agency	Private	Day Use Fee	Maintenance Agreement	Maintenance Assistance Program (OSMB)
<b>Special Use Park Cont.</b>																																							
Stewart Covered Bridge	0.1	4					Mosby Creek															●	●																
<b>Total = 11</b>	<b>111.3</b>		0	1	0	0		4	0	3	3	0	1	0	5	1	1	1	1	1	1	4	6	1		0		4	0	11	8	10	1	0	8	0	0	3	
<b>Local Park</b>																																							
Deerhorn Landing	6.5	4			●		McKenzie River	●					●	●	●	●																							
Hendricks Bridge	17.8	4			●	●	McKenzie River	●			●		●	●	●																								
Unity	11.3	5			●		Fall Creek	●					●																										
<b>Total = 3</b>	<b>35.6</b>		0	0	2	2		3	0	0	1	0	1	0	3	1	2	2	0	0	0	0	0	0	0	0	0	1	0	3	3	3	0	0	3	0	2	2	
<b>Natural Area</b>																																							
Big River	38.8	6																																					
Clear Lake Dunes	156.3	1					Clear Lake		●																														
Kinney	18.5	3																																					
Siuslaw Falls	78.9	6			●		Siuslaw & Russell Ck		●			●																											
South Beach	299.8	1					Siuslaw	●																															
Three Mile Prairie	160.8	1																																					
Vickery	91.3	4					McKenzie	●																															
<b>Total = 7</b>	<b>844.4</b>		0	0	0	1		2	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	7	0	0	2	0	0	0		
<b>Undeveloped/Closed Park</b>																																							
Oakhurst Comm. Recreation Area	0.5	4													●																								
Peaceful Valley	9.8	3													●																								
<b>Total = 2</b>	<b>10.3</b>		0	0	0	0		0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	2	0	0	0		
<b>Land Bank</b>																																							
Blue Mountain Property	24.0	6																																					
Myers Tract	3.3	4					McKenzie																																
<b>Total = 2</b>	<b>24</b>		0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0		
<b>SUBTOTAL all Lane County Parks</b>	<b>4266</b>	<b>0</b>	<b>3</b>	<b>7</b>	<b>31</b>	<b>20</b>		<b>17</b>	<b>3</b>	<b>13</b>	<b>9</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>30</b>	<b>5</b>	<b>8</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>2</b>		<b>13</b>	<b>3</b>	<b>53</b>	<b>47</b>	<b>46</b>	<b>16</b>	<b>1</b>	<b>51</b>	<b>0</b>	<b>18</b>	<b>12</b>	
<b>Other Properties</b>																																							
<b>Maintained Parks (Contractual)</b>																																							
Ben and Kay Dorris	86.0	4			●		McKenzie		●					●																									
Goodpasture Boat Landing	3.3	4			●		McKenzie																																
Hayden Bridge	3.0	4			●		McKenzie																																
Jennie B. Harris	4.2	4					McKenzie		●				●																										
Lloyd Knox	1.0	4			●		McKenzie																																
<b>Total = 5</b>	<b>97.5</b>		0	0	4	0		0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	5	0	0	5	1	0		
<b>TOTAL all Parks &amp; Properties</b>	<b>4364</b>	<b>0</b>	<b>3</b>	<b>7</b>	<b>35</b>	<b>20</b>		<b>17</b>	<b>5</b>	<b>13</b>	<b>9</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>32</b>	<b>5</b>	<b>8</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>2</b>		<b>13</b>	<b>3</b>	<b>58</b>	<b>52</b>	<b>46</b>	<b>21</b>	<b>1</b>	<b>51</b>	<b>5</b>	<b>19</b>	<b>12</b>	

- Key: Region  
1. Coast  
2. Siuslaw  
3. North Valley  
4. McKenzie River/East Lane  
5. Middle Fork Willamette  
6. South Valley

# APPENDIX A

## Natural Areas Assessment Methodology

The natural resource values of a subset of Lane County Parks – 33 of the 68 parks – was evaluated using a methodology developed by Oregon Parks and Recreation Department. This methodology is described in detail in the 2017 report, “Natural Resource Function and Value Assessment of OPRD Managed Lands in the Willamette Basin”, which can be accessed at this link: <http://www.oregon.gov/oprd/NATRES/pages/index.aspx>.

Lands managed by Lane County Parks exhibit a similar range of habitat conditions to the OPRD inventory in the Willamette Basin, so the methodology seems relevant to the LCP inventory. Included in the subset of parks that were evaluated were parks with larger acreages or otherwise appeared to support significant habitat values. In some cases, parks were evaluated even though they had not previously been identified as having natural area acreage.

The methodology includes a mix of off-site and on-site analysis, and involves assigning numerical scores to each park for a number of specific criteria or questions. The criteria address three broad categories: Habitat Values, Water Quality and Floodplain Function, and Public Use and Enjoyment. Many of the criteria in the Habitat Values category are tiered to ODFW’s Oregon Conservation Strategy, which is available at <http://www.oregonconservationstrategy.org/>.

When applying this methodology, the maximum possible score for a given site is 100 points. Scores for individual Lane County Parks ranged from a low of 28.5 points to a maximum of 89 points. The median score was 44.5 points. The scores are a general representation of a park’s natural resource values, and furthermore, scores might change as additional inventory data are collected.

## Appendix A: County Parks and Habitat Inventories

Because of this, it is important to not place too high an importance on minor differences in scores. For the purposes of the inventory each park has been placed in a broad category of High, Medium, or Low habitat value, based on the scores in descending order. Each category contains the same number of parks, except in the case of a tie.

Table A-2: Lane County Parks- Natural Resource Function Value Assessment (Evaluation Matrix)

Park Name	Total Acres	Lacks Developed Access	Total Score (100 points possible)	Total Score Rank	Habitat Value Score	Habitat only Value Rank	Habitat + Visitor Experience Score	Habitat + Visitor Experience Rank
Howard Buford Recreation Area	2212		89	H	84	H	102	H
Hileman	45		67	H	46	H	57	H
Vickery	91		66	H	52	H	59	H
Konnie Memorial	113		63	H	51.5	H	60.5	H
South Beach	300	Y	60	H	47	H	55	H
Blue Mountain	267		56.5	H	43	M	50	M
Eagle Rock	13		55.5	H	45	H	53	H
Siuslaw Falls	79		55.5	H	42	H	51	H
Ben and Kay Dorris	86		53.5	H	46	H	53	H
Big River	40	Y	50	H	46	H	53	H
Old McKenzie Hatchery	45		50	H	39	H	47	H
Three Mile Prairie	161	Y	50	H	38	H	45	H
Ada Park	100		46	M	43	M	47	M
Clear Lake Dunes	156	Y	45.5	M	36	H	42	H
Wildwood Falls	3		45.5	M	39	M	45	M
Howard J. Morton	15		45	M	43	M	47	M
LaSells Stewart	14		44.5	M	38	M	44	L
Kinney	19	Y	42	M	43	M	50	M
Armitage	64		41.5	M	24	L	33	M
Camp Lane	16		41.5	M	31	L	40	M
Deerhorn Landing	7		40	M	29	L	37	L
Unity	11		40	M	29	L	35	L
Hendricks Bridge	18		39.5	M	29	L	39	L
Linslaw	27		39.5	M	35	M	40	M
Tide Wayside	2		39.5	M	33	M	39	M
Richardson	115		38.5	L	28	M	36	M
Myers Tract	3	Y	37	L	32	M	34	L
Whitely	2		35.5	L	26	L	33	L
Baker Bay	80		35	L	31	M	39	M
Archie Knowles	?		34	L	30	L	38	L
Zumwalt	74		34	L	29	L	39	M
Peaceful Valley	10		29	L	22	M	26	L
Perkins Peninsula	42		28.5	L	25	L	34	L
Average Scores for each criterion	135		47					
Possible Points:			100					

# APPENDIX B

## Demographic Evaluation & Market Segmentation





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# Lane County Parks Master Plan Demographic Evaluation

PREPARED FOR



JANUARY 2017

PREPARED BY



## Goal

- Help Lane County Parks and MIG understand demographic differences in the regions that make up the county, in order to better plan for the types of recreational experiences that different types of residents and visitors may be looking for.



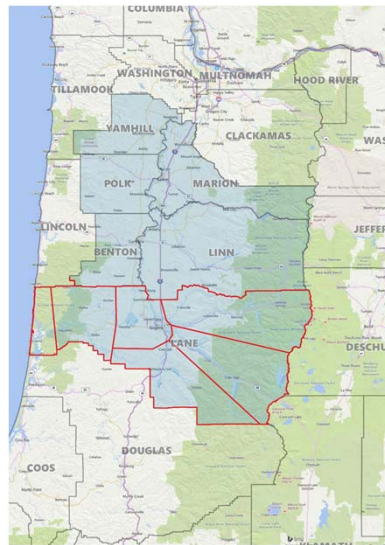
# Contents

- Context Maps
- Demographics
- Tapestry Segments
- Conclusions

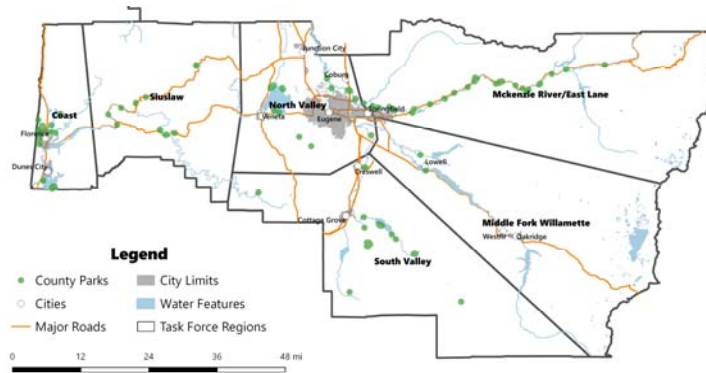


# Context

- **Geographical Areas surveyed for this report:**
  - Six regions within Lane County (shown at right in red outlines).
  - Willamette Valley—Region defined by Travel Oregon (shown at right in blue). Lane County's river basin and a potential source of visitors.
  - Visitors to the State of Oregon—based on Travel Oregon data.
- **Lane County**
  - Located on the central west-coast of Oregon
  - Southern end of Willamette Valley
  - Intersected by Interstate-5
  - Western Coastal region contains Siuslaw National Forest
  - Eastern region contains the Cascade Mountain range, including parts of the Willamette National Forest and Umpqua National Forest



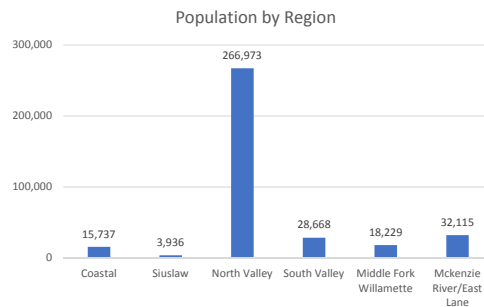
## Lane County Regions Defined by Taskforce



## Demographics

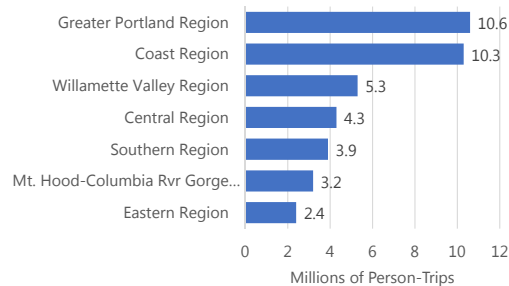
## Population

- Approximately 365,650 people live in Lane County as of 2016.
- The North Valley—which includes Eugene, Springfield, and Coburg—comprises almost three-quarters (73%) of the county's population.
- The Siuslaw region is the smallest.



## Oregon Regional Overnight Travel Volume

- The most popular destinations for travelers to the state are the Portland region and Coast.
- The Willamette Valley (which includes Lane County) is the third most popular and attracts 5.3 million person-trips per year. This is a large potential market for Lane County Parks.

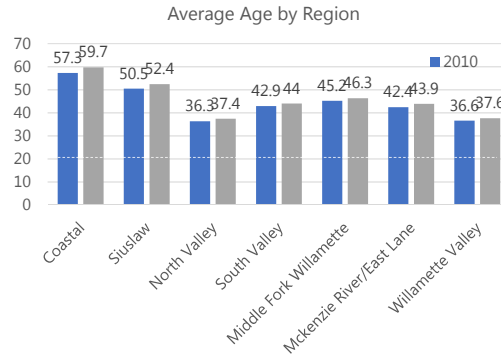


Source: 2015 Travel Oregon Visitor Report, Longwoods  
*\*Adds to more than total state overnight volume as people may visit more than one region on a trip.*



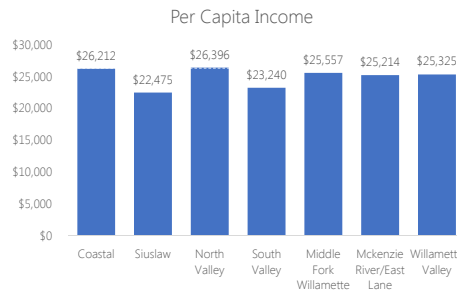
# Age

- The Coastal and Siuslaw regions are the oldest.
- North Valley is the youngest region.
- Residents of the other regions have an average age of between 44 and 46 years.
- More than half of visitors to the state are over 45 years-old, similar to the demographics of all regions except the North Valley.



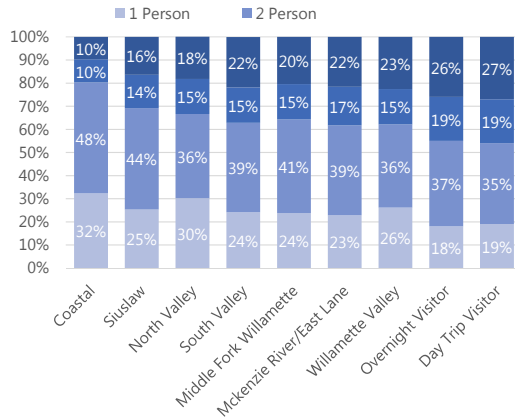
# Income

- The per capita income of most regions is similar—between \$25,000 and \$26,400.
- The exceptions are the Siuslaw and South Valley areas.



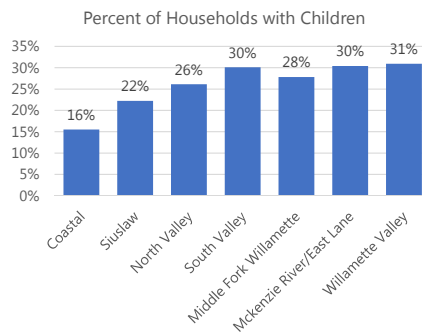
## Household/Group Size

- The Coastal region has the biggest share of one and two person households—80%—likely due to the number of older residents and retirees.
- Most of the other regions are relatively similar in terms of household size.
- Overnight and day trip visitor groups to the state tend to be slightly larger, with more 3 and 4 person households. Even so, over half of overnight visitors (55%) are 1 or 2 person households.



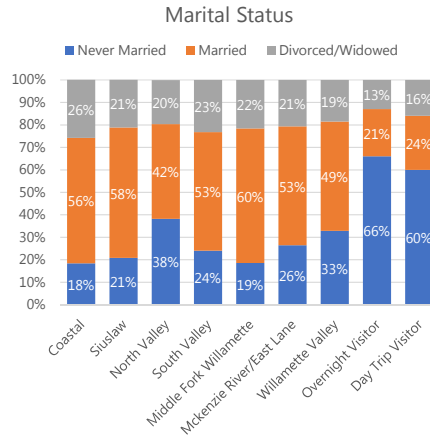
## Children in Household

- Few Coastal households have children.
- The South Valley, Middle Fork, and McKenzie River Regions, are the regions where households are most likely to include children.



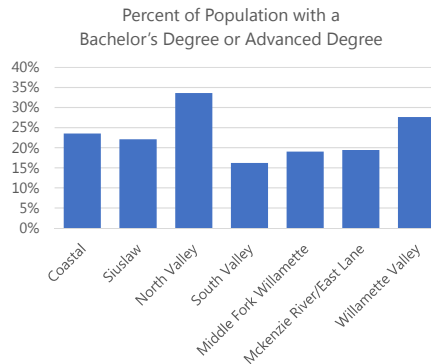
# Marital Status

- The marital status of most of Lane County's regions is similar, with between 53 and 60% married.
- The North Valley is the exception, where the percent of never married households is almost the same as married (38 versus 42%).
- A majority (66%) of visitors to the state are not married.



# Education

- North Valley residents are the most likely to have a college degree; South Valley residents are the least likely.
- The average overnight visitor to Oregon is highly educated: 61% have a bachelor's or advanced degree.



# Ethnicity/Race

- A majority of the population is white; white residents make up between 83 and 93% of each area reviewed.
- Of the six Lane County regions, the North Valley is the most diverse, with a larger share of Asian and individuals of other races, as well as the highest proportion of individuals of Hispanic origin.

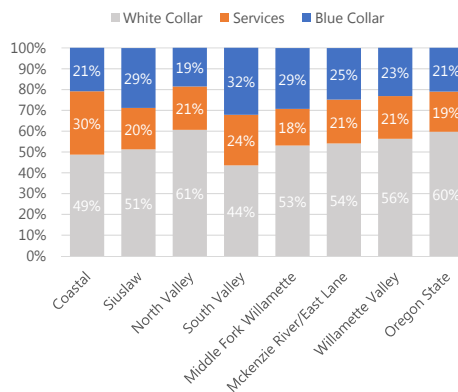
Population by Race/Ethnicity, 2016

	Coastal	Siuslaw	North Valley	South Valley	Middle Fork Willamette	Mckenzie River/East Lane	Willamette Valley
White Alone	92%	93%	85%	91%	90%	90%	83%
Black Alone	0%	0%	1%	0%	1%	1%	1%
American Indian Alone	2%	2%	1%	1%	2%	1%	1%
Asian Alone	1%	1%	4%	1%	1%	1%	3%
Pacific Islander Alone	0%	0%	0%	0%	0%	0%	0%
Some Other Race Alone	1%	1%	4%	3%	2%	3%	7%
Two or More Races	4%	4%	5%	4%	5%	4%	4%
Hispanic Origin	5%	4%	10%	7%	7%	8%	15%

# Occupation

- Residents of Siuslaw, South Valley, and Middle Fork regions are more likely than other regions to work in blue collar jobs.
- The North Valley has the greatest share of white collar workers.

Occupation



## Regional Industries

- Most prevalent Lane Co. Industries:
  - Services (healthcare, protective, food prep, other)
  - Retail
  - Manufacturing
- Coastal and Siuslaw Regions most different to comparisons
  - (Higher % Construction)

## Eugene, Cascades, and Coast

- Travel Lane County is the private, nonprofit “destination marketing organization” for Lane County.
- The brand and activities promoted to tourists places a strong emphasis on outdoor adventure and recreation, along with local food and beverage destinations.
- This brand should attract tourists interested in visiting and paying for access and amenities at Lane County Parks. Lane County Parks should work closely with Travel Lane County to make sure some parks are among the destinations promoted.



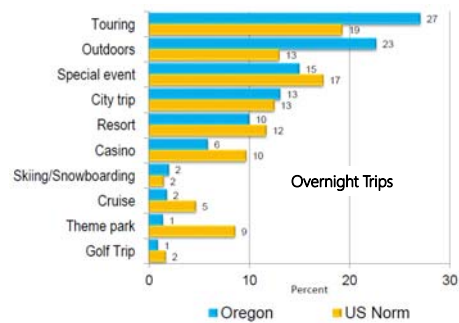
# Travel Oregon: 2015 Visitor Report

- Approximately 2% of all adult domestic trips made nationwide in 2015 were to Oregon.
- 13.4 million adult overnight trips to Oregon
- 25 million adult *day* trips to Oregon—nearly twice as many as overnight trips.



## Main Purpose of Trips

- Touring and outdoors are the most common purpose for both overnight and day trips to Oregon.
- They are also more common reasons to visit Oregon than other US destinations.
- Visitors who come for touring and outdoors reasons are natural potential visitors to Lane County Parks.

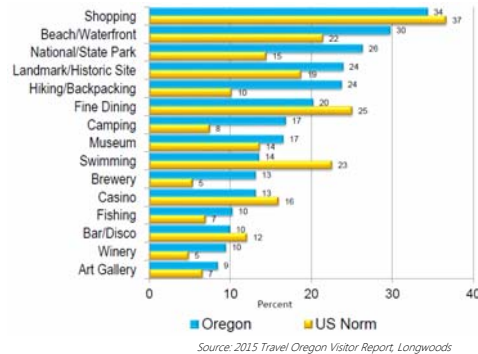


Source: 2015 Travel Oregon Visitor Report, Longwoods



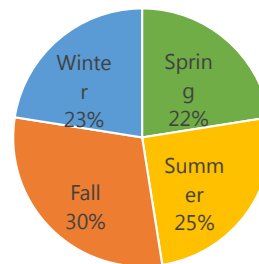
## Overnight Trip Activities

- Visitors participate in a wide variety of activities during their trips as shown at right.
- Visitors to Oregon are more likely to go to national or state parks, visit historic sites, and hike or backpack than the average visitor to another US destination. This represents a potential



## Season of Trips

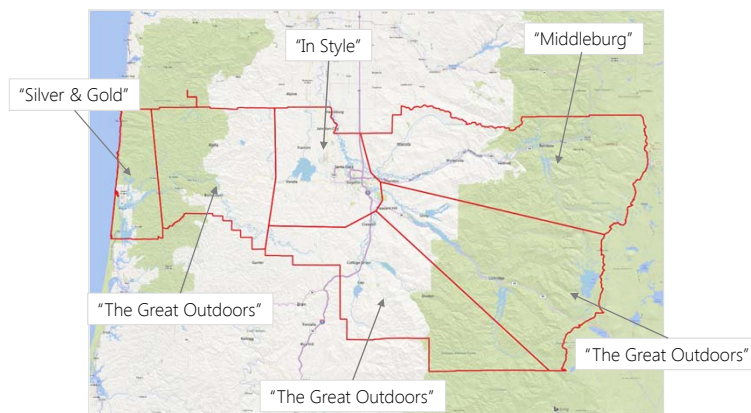
- Trips are relatively evenly split amongst the four seasons.
- However, fall is the most popular for both overnight and day trips to Oregon, followed by summer, winter, and then spring.



# ESRI Tapestry Segmentation

ESRI's "tapestry segments" describe customers' lifestyle choices, purchase options, and recreation based on demographic and socioeconomic characteristics.

## Top Tapestry Segments by Region



## Coastal Region: 9A “Silver & Gold”

- 2<sup>nd</sup> oldest senior market
- Affluent, well-educated, retired
- Prefer bucolic setting but close to cities
- Neighborhoods include seasonal or vacation homes (typically high vacancy rate)



## Coastal Region: 9A “Silver & Gold”

- Active population, desire regular exercise regimen
- Pursue active social life, travel, hobbies, and sports
- High home ownership
- Low population density



Siuslaw, South Valley, Middle Fork Willamette: 6C “The Great Outdoors”

- Educated empty nesters living active lifestyle
- Focus on land; active gardeners
- Prefer domestic travel



**LifeMode Group: Cozy Country Living**  
**The Great Outdoors** 6C

**Households:** 1,850,000  
**Average Household Size:** 2.43  
**Median Age:** 46.3  
**Median Household Income:** \$53,000

**WHO ARE WE?**  
 These neighborhoods are found in pastoral settings throughout the United States. Consumers are educated empty nesters living an active but modest lifestyle. Their focus is land. They are more likely to invest in real estate or a vacation home than stocks. They are active gardeners and partial to homegrown and home-cooked meals. Although retirement beckons, most of these residents still work, with incomes slightly above the US level.

**OUR NEIGHBORHOOD**

- Over 55% of households are married-couple families; 36% are couples with no children living at home.
- Average household size is slightly smaller at 2.43.
- Typical of areas with rustic appeal, the housing inventory features single-family homes (76%) and mobile homes (16%); a significant inventory of seasonal housing is available (Index 395).
- Residents live in small towns and rural communities throughout the West, South, and Northeast regions of the country.
- More than half of all homes were constructed between 1970 and 2000.
- Most households have one or two vehicles; average travel time to work is slightly higher (28 minutes) despite a disproportionate number that work from home (Index 155).

**SOCIOECONOMIC TRAITS**

- Nearly 60% have attended college or hold a degree.
- Unemployment is lower at 8% (Index 88), but so is labor force participation at 60%.
- Typical of neighborhoods with older residents, income from retirement and Social Security is common, but residents also derive income from self-employment and investments.
- Residents are very do-it-yourself oriented and cost conscious.
- Many service their own autos, work on home improvement and remodeling projects, and maintain their own yards.
- They prefer domestic travel to trips abroad.

**TAPESTRY SEGMENTATION**  
 east.com/tapestry

Note: The index represents the level of the population in the US, with 100 being the US average. Values above 100 indicate above average and values below 100 indicate below average.

Siuslaw, South Valley, Middle Fork Willamette: 6C “The Great Outdoors”

- Technology not central to lives
- Enjoy outdoor activities: hiking, hunting, fishing, boating
- High ownership rate
- Multiple vehicle households; 4WD trucks popular



**LifeMode Group: Cozy Country Living**  
**The Great Outdoors** 6C **TAPESTRY SEGMENTATION**  
 east.com/tapestry

**MARKET PROFILE** Consumer preferences are estimated from data by ESRI.

- Satellite dishes and riding lawn mowers are familiar sights in these rural settings, along with multiple vehicles; four-wheel drive trucks are popular, too.
- Residents are members of AARP and veterans' clubs and support various civic causes.
- Technology is not central in their lives: light use of Internet connectivity for shopping and entertainment.
- Most households have pets—dogs or cats.
- Television channels such as CMT, History, and Fox News are popular.
- They enjoy outdoor activities such as hiking, hunting, fishing, and boating.

**HOUSING**  
 Median home value is displayed for markets that are primarily owner-occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

**Home Ownership**  
 Own: 78.1%  
 Rent: 21.9%

**Typical Housing:** Single Family  
**Median Value:** \$189,000  
(US Median: \$171,000)

**POPULATION CHARACTERISTICS**  
Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.

**POPULATION** 10,850,000 (US Median: 10,850,000)  
**POPULATION GROWTH (Annual %)** 0.5% (US Median: 0.6%)  
**POPULATION DENSITY (Persons per sq. mile)** 21,000 (US Median: 117)

**ESRI INDEXES**  
 Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.

**Wealth Index:** 104  
**Socioeconomic Status Index:** 108  
**Housing Affordability Index:** 146

# North Valley: 5B "In Style"

- Professional couples/single HHs without children
- Time to focus on their homes and other interests
- Slightly older pop.
- Tech-savvy
- City dwellers of larger metro areas



LifeMode Group: GenXurban  
**In Style**

5B

Households: 2,675,000  
Average Household Size: 2.33  
Median Age: 41.1  
Median Household Income: \$66,000

### WHO ARE WE?

In Style denizens embrace an urbane lifestyle that includes support of the arts, travel, and extensive reading. They are connected and make full use of the advantages of mobile devices. Professional couples or single households without children, they have the time to focus on their homes and their interests. The population is slightly older and already planning for their retirement.

### OUR NEIGHBORHOOD

- City dwellers of large metropolitan areas.
- Married couples, primarily with no children (Index 112) or single households (Index 109); average household size at 2.33.
- Home ownership average at 69% (Index 108); more than half, 51%, mortgaged (Index 112).
- Primarily single-family homes, in older neighborhoods (built before 1980), with a mix of town homes (Index 133) and smaller (5-19 units) apartment buildings (Index 110).
- Median home value at \$213,500.
- Vacant housing units at 8.8%.

### SOCIOECONOMIC TRAITS

- College educated: 46% are graduates (Index 162); 75% with some college education.
- Low unemployment is at 5.6% (Index 65); higher labor force participation rate is at 68% (Index 108) with proportionately more 2-worker households (Index 112).
- Median household income of \$65,600 reveals an affluent market with income supplemented by investments (Index 143) and a substantial net worth (Index 179).
- Connected and knowledgeable, they carry smartphones and use many of the features.
- Attentive to price, they use coupons, especially mobile coupons.



Note: This index represents the sum of the segments for 5B and 5C, which is not included in the 5B market performance as an individual market for 5B.

# North Valley: 5B "In Style"

- Partial to SUVs or trucks
- Partially support the arts

5B LifeMode Group: GenXurban  
**In Style**

### MARKET PROFILE

- Partial to late model SUVs or trucks.
- Homes integral part of their style; invest in home remodeling/maintenance, DIY or contractors; housekeeping hired.
- Prefer organic foods, including growing their own vegetables.
- Financially active, from a variety of investments to home equity lines of credit.
- Meticulous planners, both well insured and well invested in retirement savings.
- Generous with support of various charities and causes.
- Actively support the arts, theater, concerts, and museums.

### HOUSING

Median home value is displayed for markets that are primarily owner-occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

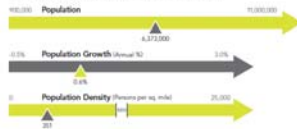


Typical Housing:  
Single Family  
Median Value:  
\$214,000  
US Median: \$177,000



### POPULATION CHARACTERISTICS

Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.



### ESRI INDEXES

Esri developed three indices to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.



Mckenzie River/East Lane: 4C "Middleburg"

- Semirural locations within metro areas
- Young couple, many with children
- Traditional values



LifeMode Group: Family Landscapes  
**Middleburg**

4C

Households: 3,319,000  
Average Household Size: 2.73  
Median Age: 35.3  
Median Household Income: \$55,000

**WHO ARE WE?**

Middleburg neighborhoods transformed from the easy pace of country living to semirural subdivisions in the last decade, when the housing boom reached out. Residents are conservative, family-oriented consumers. Still more country than rock and roll, they are thrifty but willing to carry some debt and are already investing in their futures. They rely on their smartphones and mobile devices to stay in touch and pride themselves on their expertise. They prefer to buy American and travel in the US. This market is younger but growing in size and assets.

**OUR NEIGHBORHOOD**

- Semirural locales within metropolitan areas.
- Neighborhoods changed rapidly in the previous decade with the addition of new single-family homes.
- Include a number of mobile homes (Index 152).
- Affordable housing, median value of \$158,000 (Index 89) with a low vacancy rate.
- Young couples, many with children; average household size is 2.73.

**SOCIOECONOMIC TRAITS**

- Education: 64% with a high school diploma or some college.
- Unemployment rate lower at 7.4% (Index 85).
- Labor force participation typical of a younger population at 64.7% (Index 106).
- Traditional values are the norm here—faith, country, and family.
- Prefer to buy American and for a good price.
- Comfortable with the latest in technology, for convenience (online banking or saving money on landline) and entertainment.



Note: The index represents the rank of this segment in the US. US data is based on US Census Bureau data as of 2010. US data is not available for 2011.

Mckenzie River/East Lane: 4C "Middleburg"

- Partial to trucks, SUVs
- Focused on family-oriented entertainment and recreation
- Sports include hunting
- High population growth
- Low population density
- High home ownership

4C LifeMode Group: Family Landscapes  
**Middleburg**

**MARKET PROFILE** (Consumer preferences are estimated from data by ESRI, 2010)

- Residents are partial to trucks, SUVs, and occasionally, convertibles, or motorcycles.
- Entertainment is primarily family-oriented, TV and movie rentals or theme parks and family restaurants.
- Spending priorities also focus on family (children's toys and apparel) or home DIY projects.
- Sports include hunting, target shooting, bowling, and baseball.
- TV and magazines provide entertainment and information.
- Media preferences include country and Christian channels.

**HOUSING**

Median home value is displayed for markets that are primarily owner-occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by ESRI. Housing type and average rent are from the Census Bureau's American Community Survey.

**Typical Housing:**  
Single Family  
**Median Value:**  
\$158,000  
US Median: \$177,359

**POPULATION CHARACTERISTICS**

Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by ESRI.

**Population**

10,000,000 (US Total) vs 9,950,000 (Market)

**Population Growth (Annual %)**

0.5% (US) vs 1.2% (Market)

**Population Density (Persons per sq. mile)**

0 (US) vs 25,000 (Market)

**ESRI INDEXES**

ESRI developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.

**Wealth Index**

0 to 350 scale, Market score: **89**

**Socioeconomic Status Index**

0 to 350 scale, Market score: **108**

**Housing Affordability Index**

0 to 350 scale, Market score: **185**



# Willamette Valley: 8E "Front Porches"

- Wider valley is characterized by young families or single households
- Greater number of renters in older homes
- Strong blue collar labor force with limited spending power; seek adventure



## LifeMode Group: Middle Ground Front Porches

8E

Households: 1,910,000  
 Average Household Size: 2.55  
 Median Age: 34.2  
 Median Household Income: \$39,000

### WHO ARE WE?

Front Porches blends household types, with more young families with children or single households than average. This group is also more diverse than the US. Half of householders are renters, and many of the homes are older town homes or duplexes. Friends and family are central to Front Porches residents and help to influence household buying decisions. Residents enjoy their automobiles and like cars that are fun to drive. Income and net worth are well below the US average, and many families have taken out loans to make ends meet.

### OUR NEIGHBORHOOD

- Nearly one in five homes is a duplex, triplex, or quad; half are older single-family dwellings.
- Just over half the homes are occupied by renters.
- Older, established neighborhoods; three quarters of all homes were built before 1980.
- Single-parent families or singles living alone make up almost half of the households.

### SOCIOECONOMIC TRAITS

- Composed of a blue-collar work force with a strong labor force participation rate, but unemployment is high at 11%.
- Price is more important than brand names or style to these consumers.
- With limited incomes, these are not adventurous shoppers.
- They would rather cook a meal at home than dine out.
- They seek adventure and strive to have fun.



Note: This index represents the size of the population in the US that is defined by 100. Consumer preferences are estimated from the US 8E.

# Willamette Valley: 8E "Front Porches"

- Tech-savvy
- Enjoy variety of leisure activities
- Low population growth, high density
- Lower-than-average income

## LifeMode Group: Middle Ground Front Porches



### MARKET PROFILE

- Go online for gaming, online dating, and chat rooms.
- Use their cell phones to redeem mobile coupons and listen to hip hop and R&B music.
- Drink energy and sports drinks.
- Participate in leisure activities including sports, indoor water parks, bingo, and video games.
- Watch Comedy Central, Nickelodeon, and PBS Kids Sprout.

### HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

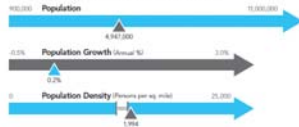


Typical Housing:  
 Single Family;  
 Multunits  
 Average Rent:  
 \$890  
 US Average: \$790



### POPULATION CHARACTERISTICS

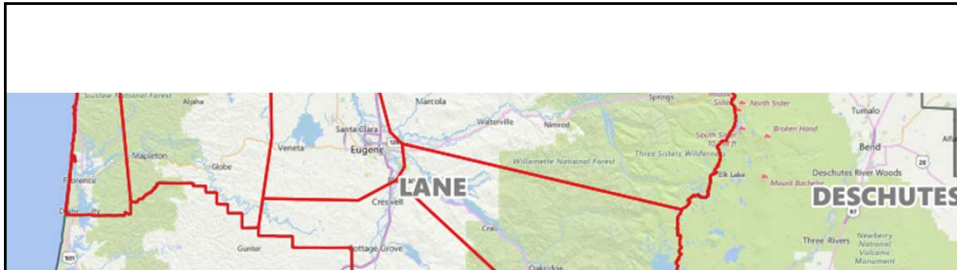
Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.



### ESRI INDEXES

Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.





## Conclusions/Recommendations

### Countywide

- Visitors to Oregon:
  - Generally single, in groups or families, well-educated
  - More likely to visit waterfronts, landmarks, and parks, and go hiking than national average
  - Take twice as many day trips as overnight trips
- Majority of county population in North Valley—will travel regionally for parks and recreation so heavily consider the preferences of this population in all strategies

## Coastal

- Within 2<sup>nd</sup> most popular region in state for visitors. Can leverage coastline, inland waterways, and national forest—opportunities to increase accessibility for both visitors and coastal residents
- Elderly but active population with higher-than-average spending power across all sectors
- Consideration for children not a priority (only 15% households contain children)
- Demand for accessible parks for light-to-moderate exercise and recreation and social interaction
- Consider guided tours and senior attractions



## Siuslaw

- Implement accessible, cost-effective programs, fee services, amenities
  - 2<sup>nd</sup> oldest region behind Coastal region, highest proportion of blue collar workers, low per capita income
- Moderate demand for child-friendly parks (22% of households have children)
- Residents more likely to travel domestically, and interact with land—opportunities for parks and features that promote hiking, fishing, hunting, boating



## North Valley

- Biggest population concentration, may visit surrounding regions
- Urban parks and amenities for recreation, social interaction
- Youngest, most active region with high spending power—can provide high-quality semi-urban parks
- Moderate demand for child-friendly parks (26% of households have children)
- Well-educated population – potential for interactive and interpretive park features
- Highest diversity among all regions—potential for cultural exploration, placemaking, etc.

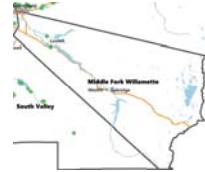


## South Valley

- Family-oriented and child friendly parks
  - 30% of households have children; single-occupancy households make up only one-quarter of total
- Lowest educational attainment levels across all regions
- Offer more cost-effective programs, fee services, amenities
- Residents more likely to travel domestically, and interact with land—opportunities for parks and features that promote hiking, fishing, hunting, boating



## Middle Fork Willamette



- Family-oriented and child-friendly
  - Majority family-households (only 1/4 single-person households; children in 28% of HHs)
  - 60% married
- Highest income profile – potential for more extensive programs, fee services, and amenities
- Residents more likely to travel domestically, and interact with land—opportunities for parks and features that promote hiking, fishing, hunting, boating

## McKenzie River/East Lane



- Semirural, low density population clustered on river
  - Some characteristics shared with North Valley in residential areas on western boundary
- Implement child-friendly and accessible parks and features near population clusters (population is mostly young couples and families; 30% households with children)
- Target residents with more cost-effective programs, fee services, amenities
- Low educational attainment level

# Appendix: Additional Data

## ESRI “Tapestry Segmentation”

- 4C: Middleburg
  - (3 regions)
- 5A: Comfortable Empty Nesters
  - (1 region)
- 5B: In Style
  - (1 region)
- 6C: The Great Outdoors
  - (5 regions)
- 8E: Front Porches
  - (4 regions)
- 9A: Silver & Gold
  - (1 region)
- 9C: The Elders
  - (1 region)
- 9D: Senior Escapes
  - (2 regions)
- 10B: Rooted Rural
  - (1 region)
- 10D: Set to Impress
  - (1 region)

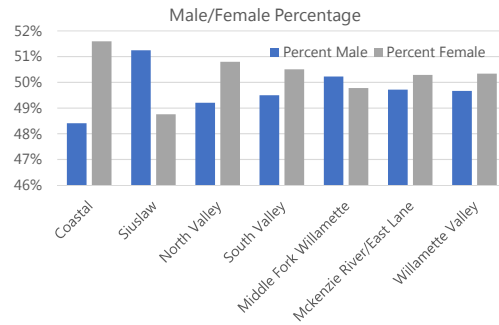
Tapestry #	Coastal	Siuslaw	North Valley	South Valley	Middle Fork Willamette	Mckenzie River/East Lane	Willamette Valley
1	Silver & Gold (9A)	The Great Outdoors (6C)	In Style (5B)	The Great Outdoors (6C)	The Great Outdoors (6C)	Middleburg (4C)	Front Porches (8E)
2	Senior Escapes (9D)	Senior Escapes (9D)	Front Porches (8E)	Middleburg (4C)	Senior Escapes (9D)	The Great Outdoors (6C)	Middleburg (4C)
3	The Elders (9C)	Rooted Rural (10B)	Set to Impress (11D)	Comfortable Empty Nesters (5A)	Front Porches (8E)	Front Porches (8E)	The Great Outdoors (6C)



## Gender

- **Travel Oregon Visitor Profile:**

- **Overnight:**
  - 48 % Male
  - 52 % Female
- **Day:**
  - 43% Male
  - 57% Female



## Travel Oregon

- **Oregon Tourism Commission**
  - Semi-independent agency est. in 2003
  - Develops biennial strategic marketing plan
  - Works with communities, industry, agencies, and private businesses to implement strategic plan
- **2015 Visitor Report (pictured right)**
  - Provides overview for Oregon's domestic tourism business in 2015
  - Describes demographic profile of visitors
  - Provides data on transportation, technology, trip planning, accommodations, etc.





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Strategic Advisors to Public and Private Development

# APPENDIX C

## Overview of Planning Regions



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# Appendix C: Overview of Planning Regions

Lane County parks were divided into six regions to understand with clarity and detail the different contexts and community needs across the county. Each region encompasses areas that are ecologically and culturally distinct. The regions are defined by landscape features such as watersheds and the cultures that developed around them (see Figure 8 in Chapter 2). Regions Include:

- Coast
- Siuslaw
- North Valley
- McKenzie River/East Lane
- Middle Fork Willamette
- South Valley

The demographic and socioeconomic characteristics of residents in each region of the County were analyzed to understand common lifestyle choices and recreation preferences (See Appendix B). An analysis of natural and recreation assets coupled with the market segments point to the types of parks and recreation experiences that the County should develop in each region. This overview is noted below.

## Coast

Dramatic Pacific Ocean coastline, rolling sand dunes, freshwater lakes and the Suislaw River estuary are defining features of the Coast region. The Coast region includes three natural areas, two special use parks, and six water access parks owned and managed by County Parks. Ada is an almost 100-acre County park on Siltcoos Lake, the largest coastal Lake in Oregon

Florence is the largest city in the region with approximately 8,600 residents. The town offers culinary, cultural and historic experiences that, in combination with surrounding outdoor recreation, attract tourists to the area. Beyond Florence, the coast region is sparsely populated. The Coast region has the County's highest proportion (80%) of one and two-person households, due to the concentration of older and retired residents.

Only 15% of households have children. It is an active population that desire regular exercise regimens and pursue active social lives, travel, and hobbies. Coastal residents are relatively high income as compared to other parts of the county.

### **Suislaw**

The Suislaw National Forest covers much of this region. The Suislaw River and its tributaries flow through the region, providing a variety of water recreation experiences. Ten of the County's 29 Water Access Parks are located in this region as well as two Special Use Parks. This region is home to Camp Lane, one of the County's most unique recreation assets.

Residents in the Suislaw region are also older and 22% of households include children. Compared to other Lane County regions, Suislaw has the highest proportion of blue collar workers and low per capita income. Residents tend to enjoy outdoor activities such as hiking, hunting, fishing and boating. Many community members support civic causes and are members of Veteran's Clubs, AARP. The population in this region is slightly declining (-.5%).

### **North Valley**

The North Valley is the most urban Lane County region and is home to most of the County's residents. The region also encompasses almost 2,650 acres of park land and six of the County's seven regional parks. The region includes the County's largest lake, Fern Fridge Lake, and the Willamette and McKenzie Rivers. However, the oak covered hillsides and grasslands are unique features of the park land in the North Valley.

The region's residents have lower rates of home ownership than in some of the other regions, but they are invested in the places they live. They support arts and culture and support charities and causes. As a college town, Eugene, and the surrounding area is home to young and active residents seeking the latest in recreation trends and activities. The North Valley is the most ethnically and racially diverse region in Lane County, which is a predominately White.

### **McKenzie River/ East Lane**

The McKenzie river is the spine of this region, flowing from the Cascade Mountains into the Willamette Valley. County parks in this region include Nine Water Access Parks along the McKenzie. McKenzie River/East Lane also encompasses old growth forests, waterfalls,

Many of the residents in this region live in small communities along the McKenzie River. Residents tend to seek family-oriented entertainment and recreation. They are interested in sports, including hunting. This region has experienced high population growth (12%), although remains sparsely



population and there is a high rate of homeownership. McKenzie River/ East Lane is a popular area for fishing, hiking and biking, and the communities cater to visitors with lodging, guided outdoor experiences and other services.

#### **Middle Fork Willamette**

The region stretches from the Willamette Valley to east of the Cascades. It is largely covered by the Willamette and Umpqua National Forests and includes numerous lakes, reservoirs and creeks. There are only two County parks in this region: one local park and one covered bridge.

The Middle Fork Willamette region has low population growth but is high density compared to other Lane County areas. Residents are concentrated in small towns including Lowell and Oakridge. The region is relatively high income and residents tend to be tech-savvy and enjoy a variety of leisure activities. A majority of households are family households-- 28% include children and 60% of residents are married.

#### **South Valley**

This southern region of the Willamette Valley is an agricultural area that also features wooded hills, waterways, lakes and the Umpqua National Forest. County parks in South Valley include two waterfalls-- Siuslaw Falls and Wildwood Falls and three of the County's four covered bridges are located in this region.

The region is home to Cottage Grove, the third largest city in Lane County. This region is also family oriented with 30% of households including children. Residents tend to be interested in hiking, fishing, hunting and boating.

# APPENDIX D

## Questionnaire and Workshop Summary



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# QUESTIONNAIRE AND WORKSHOP SUMMARY

This document summarizes the findings from the parks questionnaire and community workshops undertaken in Spring 2017 to update to *Lane County’s Parks & Open Space Master Plan*. The purpose of these activities was to identify preferred options for park improvements and the right level of investment. They included:

- **Parks Questionnaire:** An online questionnaire was administered from April 14 through June 4, 2017. A total of 463 respondents participated, resulting in 368 fully completed surveys and 95 partially completed surveys. Full results are presented in Attachment A. For all questions, the percentages are calculated based on the total number of respondents who viewed the question—whether an answer was selected. Where possible, the number of people who did not respond to individual questions is noted in the count.
- **Community Workshops.** Between April 24 and May 22, 2017, workshops were held in seven different locations throughout the county: Eugene, Mapleton, Leaburg, Cottage Grove, Florence, Oakridge and Springfield. Most workshops attracted a few attendees. A total of 106 people participated, including some representatives of the Parks Advisory Committee (PAC) and Parks Master Plan Task Force. Results from the group activities and worksheets are presented in Attachment B.

## Community Outreach and Notification

Lane County Staff conducted a broad outreach process to ensure that residents were aware of the planning process and opportunities to be involved. Table 1 below summarizes the variety of outreach techniques applied between April 28 and June 5, 2017, to invite people to participate in the online questionnaire and community workshops.

*Table 1: Outreach techniques applied to encourage public participation*

MEDIUM:	TACTIC:	RESULTS:
Website	Updated the <a href="http://lanecounty.org/parksplan">lanecounty.org/parksplan</a> page with the information visitors need to get involved	Analytics won't be available until next month.
First Press Release	Shared information regarding the survey, workshops and process with more than 70 media representatives across Lane County	Editorial coverage in the Register-Guard (4/21); letter to the editor in both the Register-Guard (4/24) and the River Reflections (4/27); article in River Reflections (4/27)

<b>MEDIUM:</b>	<b>TACTIC:</b>	<b>RESULTS:</b>
		Notice published in Outdoors section of the Register-Guard on 4/25.
Second Press Release	Shared a second press release highlighting the Springfield meeting	Coverage on KVAL and KMTR on 5/19
Video	Created a 30-second PSA to promote involvement in the process	136 views on YouTube and Vimeo (not the primary sharing point)
Network Emails	Sent three emails to a list with more than 230 individuals with details about the survey, workshops and process	
Lane County Staff Email	Sent an email to 1,500 Lane County staff members inviting them to participate in the survey and workshops	Two enquiries for more information
Lane County Staff Newsletter	Included a promotion for the process, including video, in the May newsletter	516 opens; 11 video clicks; 0 link clicks
Key Communicator Network	Sent an update to 326 community leaders with details about the survey, workshops and process	168 opens; 4 clicks on the video; 2 clicks on the Parks Plan page
Facebook Video Post	Posted the video outside of a separate ad campaign to make it easy for others to share the video on Facebook	746 people reached; 299 video views; 10 shares; 42 post clicks (2 PMP link; 40 other)
Facebook Ad Campaign	Posted a video ad targeting Facebook users in the Lane County region over 18 years of age who have expressed interest in nature, outdoor activities, parks, etc. The ad ran from April 19-May 11	19,895 impressions (11,260 reach); 128 link clicks (106 unique); 27 button clicks; 4,498 actions; 247 30-second video views; 1,109 10-second video views; 4,279 3-second video views
Other Facebook posts	Posted reminders specifically about the Springfield meeting	115 reach
Twitter Video Quick Promote	Promoted the video for two days to increase reach prior to the first workshop	6,520 impressions; 1,092 media views; 17 detail expansions; 14 media engagements; 1 retweet; 5 link clicks
Twitter Ad Campaign	Created 3 ads targeting Twitter users in the Lane County region over 18	30,788 impressions; 66 link clicks

MEDIUM:	TACTIC:	RESULTS:
	years of age are running from April 18-May 11	
Other Twitter Posts	Reminders specifically about the Springfield meeting	1,508 impressions; 4 detail expansions; 10 media engagements; 2 retweets (KVAL and KMTR); 1 reply; 1 link click
Flyers	Created a flyer for each of the rural workshops and for Springfield and shared with Task Force members, as well as the network email list; parks employees are posting them in regional parks	Unknown
Letters	Task Force members submitted 6 letters to the editor to regional newspapers	One letter appeared in the Register-Guard (4/24) and one in River Reflections (4/27)
Editorials	Shared the press release with local media, including editorial boards/editors	The Register-Guard included a positive editorial encouraging involvement on 4/21
Digital Billboard	Between May 11 and May 22 one of several ads for the Springfield meeting looped for 8 seconds every 64 seconds on the digital billboard on Highway 126 in Springfield.	Average of 202,435 views per week
Radio PSAs	Between May 19 and May 22, 100 30-second PSAs aired across 7 local radio stations	The PSA ran a total of 79 times between 5/18 and 5/22: KFLY ran the ad 14 times between 5/18 and 5/22; KZEL ran the ad 7 times; Sports Radio 95.3 ran the ad 7 times; KUGN ran the ad 7 times; KNRQ ran the ad 7 times; Star 102.3 ran the ad 7 times; KLCC ran the ad 4 times; KNND ran the ad 7 times; KORE Sports ran the ad 7 times; KRVM ran the ad 7 times; KMGE ran the ad 5 times



# Key Findings

- Despite the emphasis on outreach and notification, fewer people participated than expected. The lackluster response may suggest the lack of a strong personal connection between residents and County parks. Even among respondents, more people reported visiting State/Federal sites and city/local parks than visiting County parks.
- These results are not representative of Lane County overall. While an online questionnaire is not intended to be statistically-representative, it often will draw from a broader sample of the population than this questionnaire did. Most respondents are older, female long-term residents of Lane County. Most are from the Eugene-Springfield or Florence areas.
- Across all concepts, there is an interest in passive recreation opportunities, which may reflect the demographics of respondents more than overarching countywide priorities. The top reasons for visiting Lane County Parks include walking (77%), relaxing/quiet reflection (64%), hiking/backpacking (51%) and beach activities (40%). Walking and trail-related activities tend to be among the most popular of all types of recreation activities in the United States and in Oregon.
- Questionnaire and workshop results both illustrate a mix of priorities, including a desire to invest in all three concepts. While questionnaire responses noted a stronger emphasis on trail- and nature-based opportunities, three of the six top improvements desired in County parks are water-oriented (Table 1). These priority improvements show a striking similarity to the priority facilities to include in anchor parks, as noted in the workshop small group exercise (Table 2).

Table 1: Highest Priority Improvements for Lane County Parks

IMPROVEMENT	COUNT	PERCENTAGE
Nature trails (hikers only)	163	43.4%
Habitat protection/restoration areas (limited or no public access)	163	43.4%
Beach access	135	35.9%
Non-motorized boat launches (e.g., canoe, kayak, paddleboards)	132	35.1%
Trails that link with other regional trails	131	34.8%
Picnic areas/shelters	130	34.6%
Swimming areas	130	34.6%

Table 2: Most Popular Facilities Desired in Anchor Parks (Small Group Exercise)

DESIRED FACILITIES	# OF GROUPS SELECTING
Small picnic area (tables/barbecues)	16
Beach /water access	15
Non-motorized boat launches (e.g., canoe, kayak, driftboat)	15
Habitat protection and restoration	15
Nature trails in this anchor park	14
Designated swimming area	13

Note: Additional facilities selected by 10 or more groups include interpretive elements (12), viewpoints/seating (12), regional trails connecting to other destinations (12), preserved historic/cultural elements (fishing platform/pier (10), and nature play areas (10).

- In a small group exercise, workshop participants noted a desire for a higher level of investment at key park sites in each region. Although Leaburg groups on average desired lesser developed parks than groups in other areas, most groups designed parks requiring an investment of several million dollars.
- Questionnaires respondents suggest that there is limited support for increasing fees or passing a funding measure. Increased event fees for small or large group events showed the most support (55%). In comparison, only 25% were in favor of increasing day-use fees. Since the questionnaire is completed by people with an interest in County parks (91% have visited County parks), a voter poll typically would show less support.
- Residents may be willing to support parks in other ways. A total of 15% of respondents indicated that they would be interested in joining a one-time volunteer event in a park, with nearly 13% interested in joining an ongoing “friends of the park” group for a park in their area.

## Next Steps

The questionnaire and workshop findings will support work by the Master Plan Task Force to define goals and strategies for enhancing parks in the future. These goals and strategies will be cross-checked with the Parks Advisory Committee, Project Management Team and Board of County Commissioners in early Fall 2017 to identify recommendations for park improvements, management and operations.



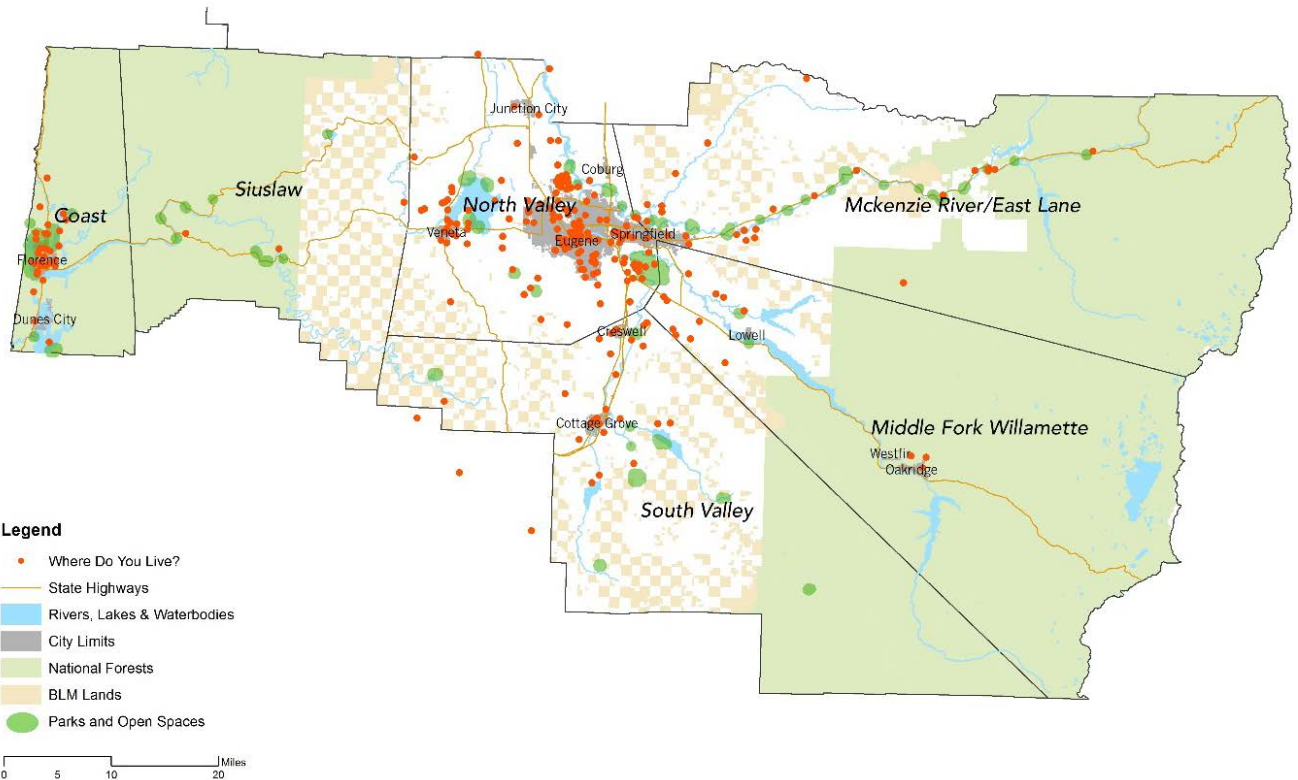


Please tell us about yourself.

Question 1: Do you live in Lane County? Choose one.

ANSWER	COUNT	PERCENTAGE
Yes	392	93.7%
No	4	1.0%
No answer	22	5.3%
<b>Totals</b>	<b>418</b>	<b>100%</b>

Question 2: Move the marker on the map to indicate the general location of your home.



Question 3: If you live in Lane County, how long have you lived there? Choose one.

ANSWER	COUNT	PERCENTAGE
25+ years	168	42.9%
10-25 years	127	32.4%
2-5 years	49	12.5%
6-10 years	39	10.0%
0-1 years	6	1.5%
No answer	3	0.8%
<b>Totals</b>	<b>392</b>	<b>100%</b>

Question 4: Do you work in Lane County? Choose one.

ANSWER	COUNT	PERCENTAGE
Yes	282	67.5%
No	83	19.9%
No answer	53	12.7%
<b>Totals</b>	<b>418</b>	<b>100%</b>

Question 5: What is your age? Choose one.

ANSWER	COUNT	PERCENTAGE
Under 18	1	0.2%
18-24	8	1.9%
25-34	31	7.4%
35-49	89	21.3%
50-64	144	34.5%
65-74	101	24.2%
75+	25	6.0%
No answer	19	4.6%
<b>Totals</b>	<b>392</b>	<b>0.2%</b>

Question 6: Please indicate your gender. Choose all that apply.

ANSWER	COUNT	PERCENTAGE
Female	253	60.5%
Male	135	32.3%
Transgender	1	0.2%
Prefer not to answer	13	3.1%
Other	5	1.2%



Question 7: Most people think of themselves as belonging to an ethnic or racial group. How do you identify yourself? Choose all that apply.

ANSWER	COUNT	PERCENTAGE
Caucasian/White	361	86.4%
Native American	15	3.6%
Hispanic/Latino	13	3.1%
Multi-racial	13	3.1%
Asian or Asian American	7	1.7%
African American/Black	2	0.5%
Other	15	3.6%

Next, tell us how you use parks and recreation areas in Lane County.

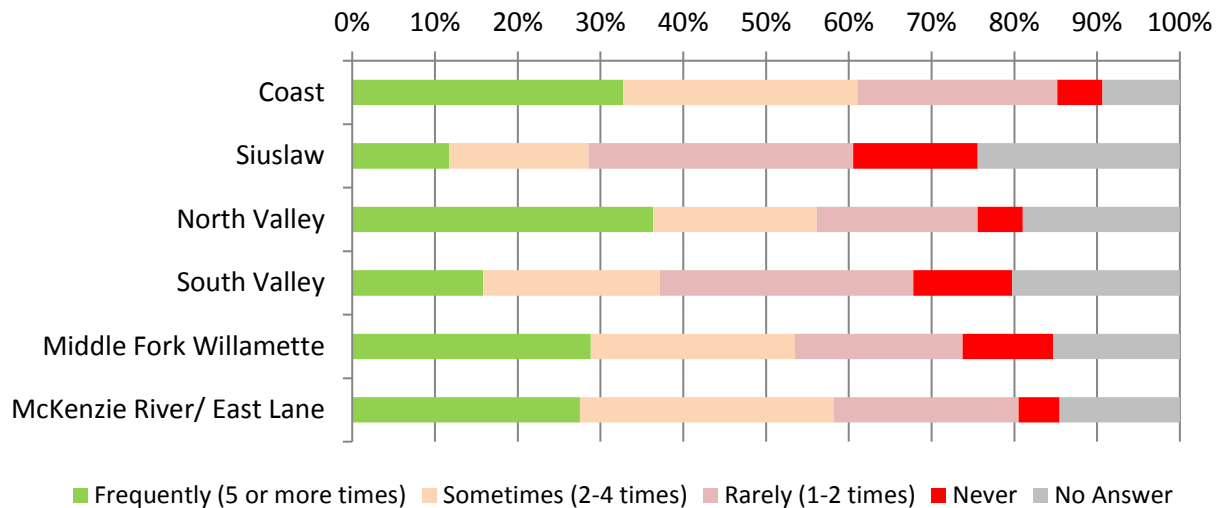
Question 8: Do you visit Lane County Parks? Choose one.

ANSWER	COUNT	PERCENTAGE
Yes	371	91.4%
No	5	1.2%
Maybe. I visit parks, but I'm not sure if any are Lane County Parks	14	3.5%
No answer	16	3.9
<b>Totals</b>	<b>406</b>	<b>100%</b>

Question 9: If you answered yes or maybe to Question 8, in what season do you visit Lane County Parks most frequently? Choose all that apply.

ANSWER	COUNT	PERCENTAGE
Summer	363	94.3%
Fall	308	80.0%
Spring	289	75.1%
Winter	172	44.7%
Fishing season(s)	41	10.7%

Question 10: If you answered yes or maybe to Question 8, how frequently do you visit **Lane County parks and recreation areas** during the peak summer season (or fishing season) in the following regions? For each row, check the column that best describes how often you visit parks in that region. Please refer to Question 2 for a regional map.



Question 11: What are the primary reasons that you visit/use Lane County Parks? (Please check your top two choices in each topic area)

ANSWER (WATER-BASED)	COUNT	PERCENTAGE
Beach activities	155	40.3%
Non-motorized boating such as sail boats and paddleboards	102	26.5%
Swimming	100	26.0%
Fishing	70	18.2%
Power boating	24	6.2%
Other	42	10.9%

ANSWER (NATURE-BASED)	COUNT	PERCENTAGE
Relaxing/quiet reflection	246	63.9%
Camping	142	36.9%
Bird/wildlife watching	135	35.1%
Picnicking	108	28.1%
Other	36	9.4%

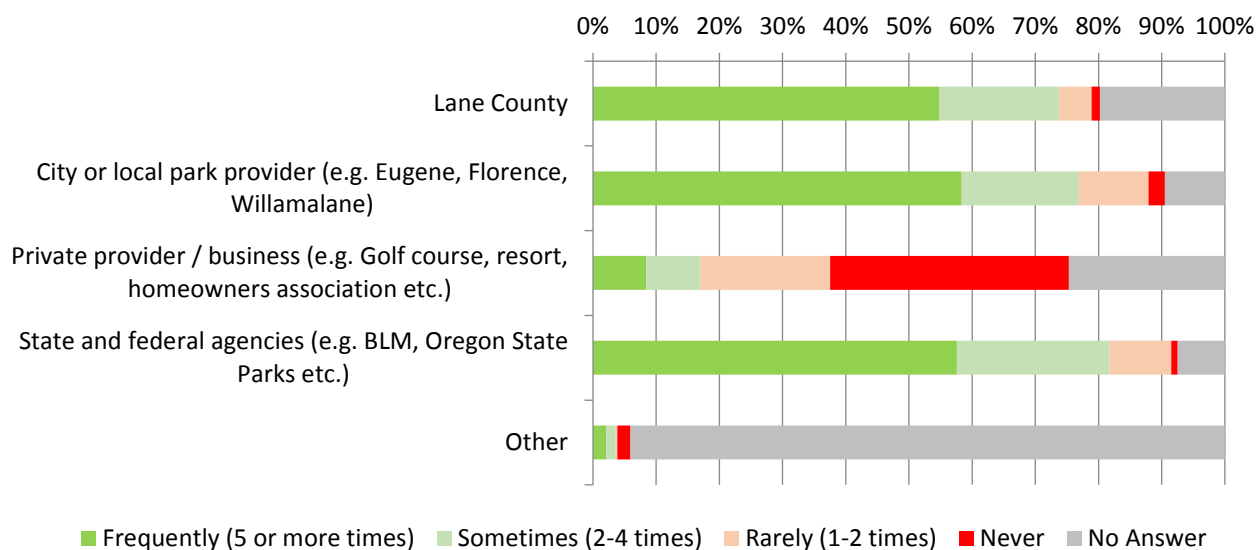
ANSWER (TRAIL-BASED)	COUNT	PERCENTAGE
Walking	296	76.9%
Hiking/Backpacking	196	50.9%
Bicycling	59	15.3%
Horseback riding	48	12.5%
Jogging/running	22	5.7%
Using off-highway vehicle (motorized)	11	2.9%
Other	14	3.6%

ANSWER (OTHER)	COUNT	PERCENTAGE
Answer	55	14.3%
No answer	330	85.7

Question 12: How would you rate the general upkeep and maintenance of existing Lane County parks?

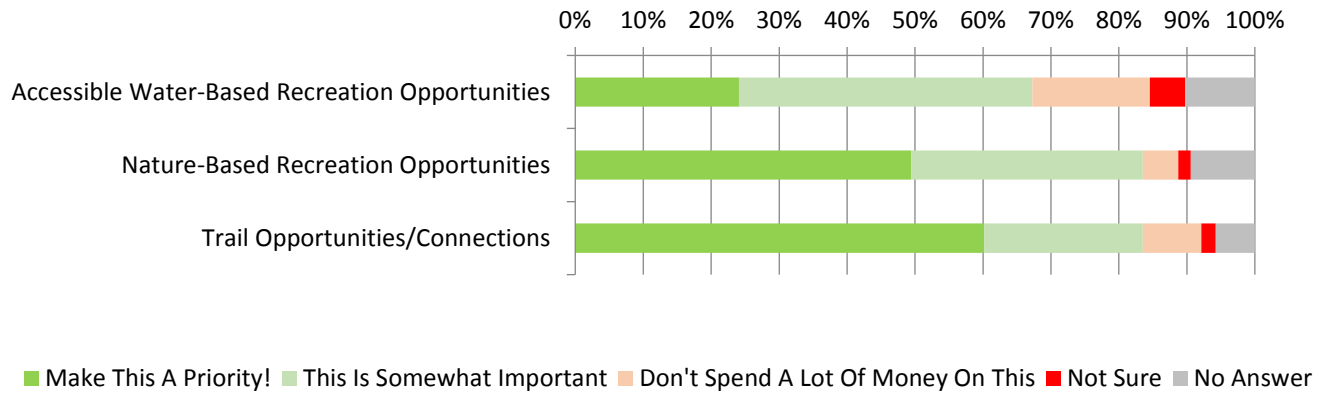
ANSWER	COUNT	PERCENTAGE
Excellent	31	8.0%
Good	172	44.2%
Neither good nor bad	78	20.1%
Poor	34	8.7%
Very poor	5	1.3%
Don't Know	6	1.5%
No answer	63	16.2%
<b>Total</b>	<b>389</b>	<b>100%</b>

Question 13: In Lane County, many public and private entities provide park and recreational facilities. Please mark the column that best describes how often you visit parks provided by the following entities during the peak summer season (or fishing season).



The next series of questions asks about potential different directions and levels of investment that the County could pursue for its parks and public lands.

*Question 14: Thinking about the three concepts, what level of investment should the County support for the future? (Please select one response for each concept)*



*Question 15: Where should the County focus its investments? (Please select your top two choices)*

ANSWER	COUNT	PERCENTAGE
On improving the maintenance and condition of existing parks	218	57.1%
On a mix of existing and new recreation opportunities	119	31.2%
Equally across the county	86	22.5%
On providing new trails	84	22.0%
On developing vacant park sites already owned by Lane County	75	19.6%
On providing new parks and open space	37	9.7%
On one or two large, popular parks within each region	27	7.1%
On parks near my home	21	5.5%

Thinking about the three general concepts, what types of improvements would you like to see?

*Question 16: What type of trails/pathways should have the highest priority in Lane County parks? (Please select your top two choices)*

ANSWER	COUNT	PERCENTAGE
Nature trails (hikers only)	163	43.4%
Trails that link with other regional trails	131	34.8%
Trails that accommodate multiple user types	113	30.1%
Trails that link neighborhoods with community destinations	112	29.8%
Paved trails for walking, biking, etc.	77	20.5%
Equestrian trails	44	11.7%
Mountain biking trails	20	5.3%
On-street bikeways	14	3.7%
Motorized trails (ATV, OHV, motorbike)	7	1.9%
None of the above	4	1.1%



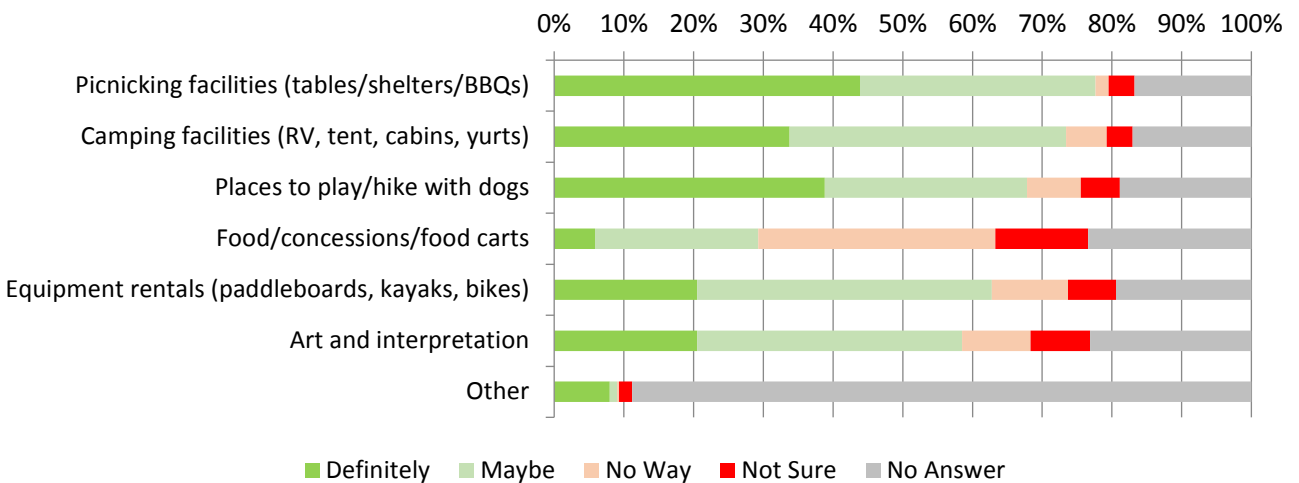
Question 17: What type of natural area/habitat improvements should have the highest priority in Lane County parks? (Please select your top two choices)

ANSWER	COUNT	PERCENTAGE
Habitat protection/restoration areas (limited or no public access)	163	43.4%
Campgrounds/cabins	117	31.1%
Nature play areas	90	23.9%
Picnic areas	88	23.4%
Environmental education signs and outdoor classrooms	62	16.5%
Community gardens/arboretums	60	16.0%
Interpretative elements	55	14.6%
Adventure facilities (e.g., zip line, climbing rock)	38	10.1%
None of the above	8	2.1%
Indoor nature center	7	1.9%

Question 18: What type of water-based/water access activities or improvements should have the highest priority in Lane County parks? (Please select your top two choices)

ANSWER	COUNT	PERCENTAGE
Beach access	135	35.9%
Non-motorized boat launches (e.g., canoe, kayak, paddleboards)	132	35.1%
Picnic areas/shelters	130	34.6%
Swimming areas	130	34.6%
Fishing areas	80	21.3%
Motorized boat launches	20	5.3%
Extended vehicle parking areas (boat trailers)	18	4.8%
None of the above	13	3.5%
Marina	11	2.9%

Question 19: What type of facilities, activities and/or experiences would you like to see more of in County parks (where appropriate)?



Reduction in federal timber funding and the recession have created a number of funding challenges for Lane County over the last few years.

*Question 20: What types of funding options would you be willing to support to fund your preferred level of park maintenance and improvements in the future? (Select all that apply.)*

ANSWER	COUNT	PERCENTAGE
Increasing events fees (fees to hold small or large group events in parks)	207	55.2%
Adding a new voter-approved funding measure dedicated to parks and recreation facilities	189	50.4%
Providing stricter enforcement of payment for current park day use fees	154	41.1%
Increasing reservation fees for camp sites	131	34.9%
Increasing reservation fees for picnic shelters and facilities	122	32.5%
Increasing Annual Parks Parking Pass fees	115	30.7%
Increasing parks day-use fees	96	25.6%
Cutting other services to shift funding to parks	41	10.9%
Other	45	12.0%

For those who selected funding options they were willing to support, follow-up questions asked what level of funding increase they would support (where applicable). The next seven tables indicate the supported level of funding increase.

*How much of an increase in events fees to hold small or large group events in parks would you be willing to support? Events fees to hold small or large group events in parks depend on the size of the event.*

<b>ANSWER</b>	<b>COUNT</b>	<b>PERCENTAGE</b>
Increase some: 15%	78	37.7%
Increase a little: 10%	59	28.5%
Increase more: 25%	51	24.6%
Don't know	11	5.3%
No answer	8	3.9%
<b>Total</b>	<b>207</b>	<b>100%</b>

*What level of additional taxes from a voter-approved funding measure would you be willing to support?*

<b>ANSWER</b>	<b>COUNT</b>	<b>PERCENTAGE</b>
\$25.00-50.00 per year	86	45.5%
Less than \$25.00 per year	48	25.4%
\$50.00-100.00 per year	22	11.6%
More than \$100.00 per year	18	9.5%
Don't know	9	4.8%
No Answer	6	3%
<b>Total</b>	<b>189</b>	<b>100%</b>

*How much of an increase in reservation fees for camp sites would you be willing to support? Reservation fees for camp sites currently range from \$30-35.*

<b>ANSWER</b>	<b>COUNT</b>	<b>PERCENTAGE</b>
Increase a little: \$3.00-3.50	58	44.3%
Increase some: \$4.50-5.25	50	38.2%
Increase more: \$7.50-8.75	18	13.7%
Don't know	3	2.3%
No answer	2	1.5%
<b>Total</b>	<b>131</b>	<b>100%</b>

*How much of an increase in reservation fees for picnic shelters and facilities would you be willing to support? Reservation fees for picnic shelters and facilities currently range from \$100-150.*

<b>ANSWER</b>	<b>COUNT</b>	<b>PERCENTAGE</b>
Increase a little: \$10.00-15.00	45	36.9%
Increase some: \$15.00-22.50	41	33.6%
Increase more: \$25.00-37.50	26	21.3%
Don't know	6	4.9%
No answer	4	3.3%
<b>Total</b>	<b>122</b>	<b>100%</b>

*How much of an increase in fees for Annual Parks Parking Passes would you be willing to support? Annual Parks Parking Passes are currently \$40.*

ANSWER	COUNT	PERCENTAGE
Increase more: \$10.00	50	43.5%
Increase a little: \$4.00	32	27.8%
Increase some: \$6.00	30	26.1%
Don't know	2	1.7%
No answer	1	0.9%
<b>Total</b>	<b>115</b>	<b>100%</b>

*How much of an increase in day-use fees would you be willing to support? Day use fees are currently \$4.*

ANSWER	COUNT	PERCENTAGE
Increase more: \$1.00	79	82.3%
Increase some: 60 cents	8	8.3%
Increase a little: 40 cents	6	6.3%
Don't know	2	2.1%
No answer	1	1.0%
<b>Total</b>	<b>96</b>	<b>100%</b>

*If you selected cutting other services, what services should Lane County cut to shift more funding to parks?*

ANSWER	COUNT	PERCENTAGE
Answer	28	68.3%
No answer	13	31.7%
<b>Total</b>	<b>41</b>	<b>100%</b>





Question 22: Would you be interested in joining (choose all that apply):

ANSWER	COUNT	PERCENTAGE
A one-time volunteer event in a park?	55	15.0%
An ongoing “friends of the park” group for a park in your area?	47	12.8%
All of the above	42	11.4%
A contact list of people interested in a specific park (info, volunteer activities, etc.)?	30	8.2%





Between April 24 and May 22, 2017, workshops were held in seven different locations throughout the county: Eugene, Mapleton, Leaburg, Cottage Grove, Florence, Oakridge and Springfield. Most workshops attracted a few attendees, although no one attended the Oakridge Workshop. A total of 106 people participated. The workshop included a presentation, large group activity, small group exercise, large group discussion, and worksheet to fill in throughout the meeting. Comments and results from these activities are noted below.

## Large Group Activity

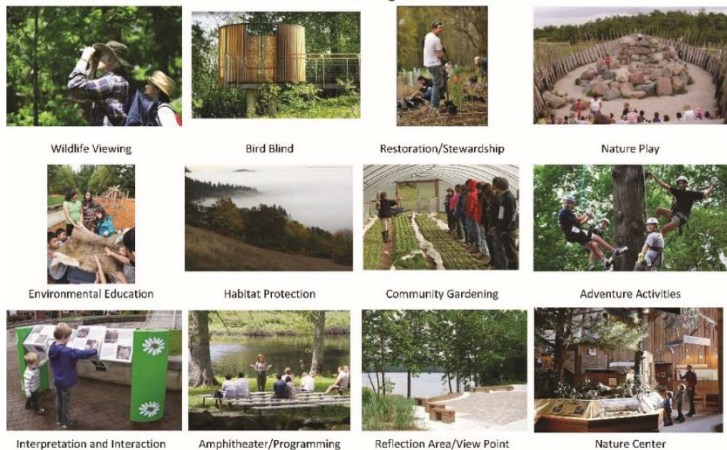
Participants were given eight dots each and directed to place dots next to the images that represent their favorite activities and/or experiences. Results were discussed at the meeting by noting whether more dots are on the water, nature or trails poster (or evenly distributed across all).

Figure 1: Photo collage posters used in the large group activity

### Water-Based Activities and Experiences

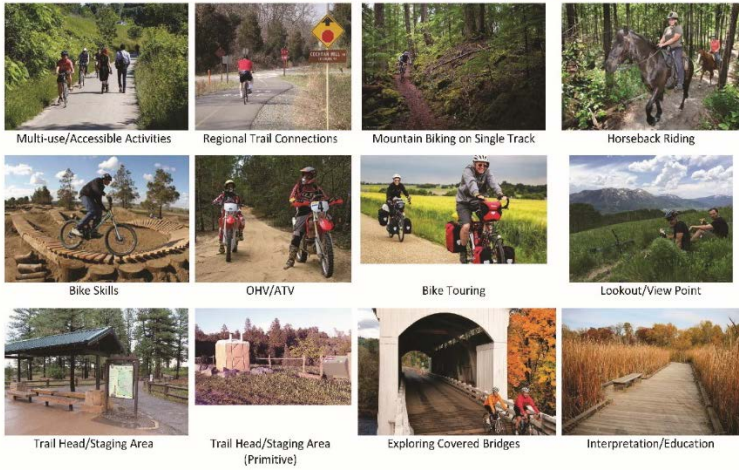


### Nature-Based Activities and Experiences





## Connected Trail-Based Activities and Experiences



Community members participating in the large group activity



## Large Group Activity Results

Photos of the poster collages capturing the number of dots participants placed on their favorite activities or experiences are presented below. They are organized according to the location where the workshops were held county-wide (Eugene, Mapleton, Leaburg, Cottage Grove, Florence, Oakridge and Springfield). Most workshops attracted a few attendees except for Oakridge which no one attended.

For workshops with fewer attendees, the format was modified from the intended agenda to be more spontaneous and relevant to the size of the participants (more small group discussions rather than the intended larger group activities). In such cases, the summary below will not include any photos from the large group activities from that particular location.

In some cases, participants added their favorite activity or experience that was missing from the poster. These additional activities are hand-written on the sides of the poster with other participants supporting them by placing additional dots next to the label.





Location 1: Eugene

### Water-Based Activities and Experiences



Fishing



Clamming



Swimming



Equipment Concessionaire



Non-Motorized Boating



Drift Boating



Motorized Boating



Guided Instruction/Tours



Picnic Areas



Extended Vehicle Parking



Marina



Sand Play

### Nature-Based Activities and Experiences



Wildlife Viewing



Bird Blind



Restoration/Stewardship



Nature Play



Environmental Education



Habitat Protection



Community Gardening



Adventure Activities



Interpretation and Interaction



Amphitheater/Programming



Reflection Area/View Point



Nature Center



## Connected Trail-Based Activities and Experiences



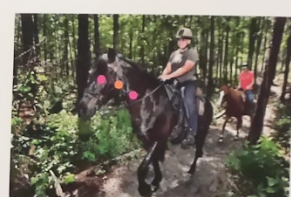
Multi-use/Accessible Activities



Regional Trail Connections



Mountain Biking on Single Track



Horseback Riding



Bike Skills



OHV/ATV



Bike Touring



Lookout/View Point



Trail Head/Staging Area



Trail Head/Staging Area (Primitive)



Exploring Covered Bridges



Interpretation/Education

## Location 2: Mapleton

## Water-Based Activities and Experiences



Fishing



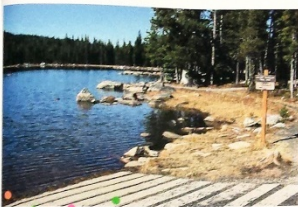
Clamming



Swimming



Equipment Concessionaire



Non-Motorized Boating



Drift Boating



Motorized Boating



Guided Instruction/Tours



Picnic Areas



Extended Vehicle Parking



Marina



Sand Play



# Nature-Based Activities and Experiences



Wildlife Viewing



Bird Blind



Restoration/Stewardship



Nature Play



Environmental Education



Habitat Protection



Community Gardening



Adventure Activities



Interpretation and Interaction



Amphitheater/Programming



Reflection Area/View Point



Nature Center

# Connected Trail-Based Activities and Experiences Camping



Multi-use/Accessible Activities



Regional Trail Connections



Mountain Biking on Single Track



Horseback Riding



Bike Skills



OHV/ATV



Bike Touring



Lookout/View Point



Trail Head/Staging Area



Trail Head/Staging Area (Primitive)



Exploring Covered Bridges



Interpretation/Education



Location 3: Leaburg

## Water-Based Activities and Experiences

**Fishing**      **Clamming**      **Swimming**      **Equipment Concessionaire**

**Non-Motorized Boating**      **Drift Boating**      **Motorized Boating**      **Guided Instruction/Tours**

**Picnic Areas**      **Extended Vehicle Parking**      **Marina**      **Sand Play**

## Nature-Based Activities and Experiences

*Dog Park*

**Wildlife Viewing**      **Bird Blind**      **Restoration/Stewardship**      **Nature Play**

**Environmental Education**      **Habitat Protection**      **Community Gardening**      **Adventure Activities**

**Interpretation and Interaction**      **Amphitheater/Programming**      **Reflection Area/View Point**      **Nature Center**



# Running Trails *Running Trails* *Camping*

## Connected Trail-Based Activities and Experiences



Multi-use/Accessible Activities



Regional Trail Connections



Mountain Biking on Single Track



Horseback Riding



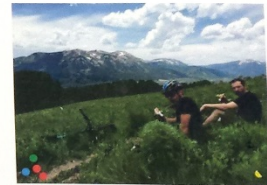
Bike Skills



OHV/ATV



Bike Touring



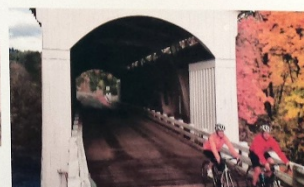
Lookout/View Point



Trail Head/Staging Area



Trail Head/Staging Area (Primitive)



Exploring Covered Bridges



Interpretation/Education

## Small Group Exercise

The small group exercise was designed to elicit feedback on the concept of a 'Regional Anchor Park'. Participants were given a hypothetical site approximately 100+ acres that attracts users from the entire region and the broader county. Anchor parks were intended to reflect the unique character of their region and include both natural areas and developed park uses. It would represent a large investment in parks for that region.

Participants were split into smaller groups of 5 to 8 people per table and were handed out the individual small activity worksheets (**Table 1**). Using that worksheet, participants had to check off the recreation facilities that they would like in their ideal park.

Subsequently, each group collectively filled out one scorecard per table and compared what facilities emerged in common across groups in the summary poster of small group results (**Tables 2 and 3**).

*Community members participating in the small group activity*





Table 1: Individual activity worksheet used in the small group activity

Potential Facilities		Your Ideal Park
General Park Features	Small picnic area (tables/barbecues)	
	Large-group picnic pavilion	
	Primitive camp sites (no hookups)	
	Full-service campground with RV hookups, showers, etc.	
	Camping cabins and/or yurts	
	Dog park/beach	
	Food carts	
	Full-scale food concessions	
	Equipment rentals (outfitters, tubes, bikes, kayaks)	
	Art / Historic interpretation	
	Small group activity/program space	
	Large group (1000+) event space	
Water-based/Water Access	Beach /water access	
	Destination playground	
	Designated swimming area	
	Fishing platform /pier	
	Non-motorized boat launches (e.g., canoe, kayak, driftboat)	
	Motorized boat launches	
	Marina	
Natural Area/Habitat Improvements	Interpretive elements (bird blinds, kiosks)	
	Nature play area	
	Viewpoint / seating area	
	Outdoor classrooms/environmental education space	
	Adventure facilities (e.g., zip line, climbing rock)	
	Community gardens	
	Habitat protection and restoration	
	Indoor nature center/environmental education center	
Trails/Pathways	Nature trails in this anchor park	
	Mountain biking trails in this anchor park	
	Equestrian trails in this anchor park	
	ATV/OHV /motorbike trails in this anchor park	
	Multi-use hard-surfaced trails in this anchor park	
	Regional bikeway: on-street bike route connecting this anchor park to other destinations	
	Regional trail: off-street trail connecting this anchor park to other destinations	
Other Specialized Features	Preserved historic/cultural element (covered bridge, historic house)	
	Other (write-in):	
	Other (write-in):	

Table 2: Summary scorecard to compare results across small groups

Potential Facilities		Group 1	Group 2	Group 3	Group 4	Total
General Park Features	Small picnic area (tables/barbecues)					
	Large-group picnic pavilion**					
	Primitive camp sites (no hookups)					
	Full-service campground with RV hookups, showers, etc.**					
	Camping cabins and/or yurts**					
	Dog park/beach					
	Food carts**					
	Full-scale food concessions**					
	Equipment rentals (outfitters, tubes, bikes, kayaks)**					
	Art / Historic interpretation					
	Small group activity/program space					
	Large group (1000+) event space**					
Water-based/Water Access	Beach /water access					
	Destination playground					
	Designated swimming area					
	Fishing platform /pier					
	Non-motorized boat launches (e.g., canoe, kayak, driftboat)					
	Motorized boat launches					
	Marina**					
Natural Area/Habitat Improvements	Interpretive elements (bird blinds, kiosks)					
	Nature play area					
	Viewpoint / seating area					
	Outdoor classrooms/environmental education space					
	Adventure facilities (e.g., zip line, climbing rock)					
	Community gardens/arboretums					
	Habitat protection and restoration					
Indoor nature center/environmental education center						
Trails/Pathways	Nature trails in this anchor park					
	Mountain biking trails in this anchor park					
	Equestrian trails in this anchor park					
	ATV/OHV /motorbike trails in this anchor park					
	Multi-use hard-surfaced trails in this anchor park					
	Regional bikeway: on-street bike route connecting this anchor park to other destinations					
	Regional trail: off-street trail connecting this anchor park to other destinations					
Other Specialized Features	Preserved historic/cultural element (covered bridge, historic house)					
	Other (write-in):					
	Other (write-in):					
Total Number of Facilities						Average:
Cost Scores						Average:

Table 3: Summary scorecard to compare costs of facilities across small groups

	Group 1	Group 2	Group 3	Group 4
Total number of \$ facilities selected:				
Total number of \$\$ facilities selected:				
Total number of \$\$\$ facilities selected:				
Total number of Other (write-in) facilities:				
Total facilities:				
Cost score:				

### Small Group Activity Results

**Table 4** provides a summary of the number of groups that selected each facility they would like to include in their ideal park. The table (last row) also provides an average cost score for each location based on the type of facilities selected by the small groups. The results show a range of investment desired across the seven workshop locations (scores ranges indicate a minimum of \$15 million to maximum of \$60 million of capital investment in parks).

Table 4: Summary Scorecard: Number of Groups Selecting Different Types of Facilities

Directions: Using the summary posters from each workshop, record the number of groups who selected each facility. For the last item on the list - Average Cost Score - provide the average of the cost scores.	4/24/17 Eugene	4/26/17 Mapleton	4/27/17 Leaburg	5/3/17 Cottage Grove	5/4/17 Florence	5/11/17 Oakridge	5/22/17 Springfield	Total
Small picnic area (tables/barbecues)	5	2	3	1	4		1	16
Large-group picnic pavilion**	2	1	0	1	1			5
Primitive camp sites (no hookups)	2	2	0	1	2			7
Full-service campground with RV hookups, showers, etc.**	0	1	0	0	1			2
Camping cabins and/or yurts**	0	1	0	1	0			2
Dog park/beach	3	2	0	0	2			7
Food carts**	0	0	0	0	0			0
Full-scale food concessions**	0	0	0	0	0			0
Equipment rentals (outfitters, tubes, bikes, kayaks)**	2	1	0	0	0			3
Art / Historic interpretation	5	1	0	1	1		1	9
Small group activity/program space	4	0	0	0	3		1	8
Large group (1000+) event space**	0	0	0	0	0			0
Beach /water access	5	2	2	1	4		1	15
Destination playground	0	0	0	0	0			0
Designated swimming area	5	2	2	1	2		1	13
Fishing platform /pier	4	1	2	0	2		1	10
Non-motorized boat launches (e.g., canoe, kayak, driftboat)	6	1	2	1	4		1	15
Motorized boat launches	0	1	0	0	0			1
Marina**	0	0	0	0	0			0
Interpretive elements (bird blinds, kiosks)	6	1	0	1	3		1	12
Nature play area	3	2	2	1	2			10
Viewpoint / seating area	5	1	1	0	4		1	12
Outdoor classrooms/environmental education space	4	1	0	0	1		1	7
Adventure facilities (e.g., zip line, climbing rock)	0	1	0	0	0			1
Community gardens/arboretums	1	0	1	0	2			4
Habitat protection and restoration	6	1	3	1	3		1	15
Indoor nature center/environmental education center	2	0	0	0	1			3
Nature trails in this anchor park	5	2	2	1	3		1	14
Mountain biking trails in this anchor park	0	1	0	0	0			1
Equestrian trails in this anchor park	1	0	0	0	0		1	2
ATV/OHV /motorbike trails in this anchor park	0	0	0	0	0			0
Multi-use hard-surfaced trails in this anchor park	2	1	0	0	2			5
Regional bikeway: on-street bike route connecting this anchor park to other destinations	5	1	0	1	1		1	9
Regional trail: off-street trail connecting this anchor park to other destinations	6	2	1	1	1		1	12
Preserved historic/cultural element (covered bridge, historic house)	4	1	1	1	3		1	11
Other (write-in):	3	2	1	0	1			7
Other (write-in):	4	0	2	0	1			7
<b>AVERAGE # of FACILITIES</b>	<b>17</b>	<b>18</b>	<b>9</b>	<b>15</b>	<b>14</b>		<b>16</b>	
<b>AVERAGE COST SCORE</b>	<b>24</b>	<b>28</b>	<b>13</b>	<b>23</b>	<b>21</b>		<b>23</b>	

## Large Group Discussion

At the end of the small group activity, all groups came together to have a larger discussion on the similarities in facilities all groups selected for their anchor group. Later, the large group discussion focused on funding options in relation to the level of capital and operations investment desired. For new facility development, the dollar signs from the small group activity represented these capital costs:

- 1 \$ = an investment of \$200K - \$500K
- 1 \$\$ = an investment of \$600K to \$2 million
- 1 \$\$\$ = an investment of \$2 million to \$5+ million

Facilitators called attention to the level of investment in anchor sites in addition to the operations investment compared to Lane County's annual budget of approximately \$3.5 million.

### *Large group discussion*



## Large Group Discussion Summary

The large group discussion focused on analyzing the summary scorecard and further explored funding options to address the gap between the level of investment desired compared to Lane County's existing annual budget. Notes from the large group discussion across the seven workshop locations are recorded below.

## Location 1: Eugene

### *Funding Discussion*

- A diversity of parts in the system
- Financial impact of “friends” groups
- Foster support/partnerships
- Consider what other agencies are providing
- Reach as much of the public as possible
- Never miss an opportunity to let people know what benefits parks give
- Think of parks as a piece of basic infrastructure
- Emphasize what a parks system is
- Parks as an economic engine
- Package maintenance and some low-cost improvements
- How do we craft a vision that is compelling for rural voters?
- Hibernation preferred over divestiture
- People do not know the difference between state, country, city, etc.
- Celebrate what county has to build public support

## Location 2: Mapleton

### *Funding Discussion*

- Not all features in one park
- Value in partnerships
- Volunteerism
- Sponsorships
- Contracting services (concessioners)
- Grants
- Use available facilities
- Siuslaw pool/Mapleton
- Forming a district

## Location 3: Leaburg

### *Funding Discussion*

- Special districts
- Bond measure (Mtc. Only – tax measure)

## Location 4: Cottage Grove

### *Funding and Outreach Discussion*

- Volunteers/Co-ops
- Use partner groups to message parks process & needs
- Make surveys available
- Meetings at public/meeting areas with other groups
- Use parks throughout the country as examples
- Marijuana/alcohol tax (state shared revenue)

### *Use/Development*

- Trails
- Upgrades/restoration (Blue Mountain)
- Trail connectivity & destination park



- Bond & grants for funding
- Use partnerships with other organizations
- Use CXT's

## Location 5: Florence

### *Investments and Raising Taxes Discussion*

- Yes
- Maybe
  - Taxes don't pass in Florence
- Florence fixed income comm.
- Fee increases?
- Grants
  - Require match
- Parks are important for quality of life
  - Seniors & youth
- Follow-up on survey question
  - Re: how much citizens will pay for taxes
- Usage fees may inhibit younger users or users with larger families
- Scholarships for families who can't afford fees
- Use volunteers
  - Harbor Vista-educational opportunities
- Marijuana tax

## Location 6: Springfield

- Designated for parks
- Take care of existing infrastructure
- Would support a bond measure to fix/maintain infrastructure
- Support funding a volunteer coordinator
- Support grant coordinator
- Partner with other groups/organizations to build facilities
- Can increase user fees, but not to the detriment of some users
- "Treasure hunt" cards for children/park users
- Reach out to schools/home school programs to get kids in the parks
- Host/publicize family events
- Some parks may be closed

# Scenarios Worksheet




Throughout the workshop presentation and activities, participants were encouraged to use a worksheet to record their comments and thoughts about the water, nature and trail-based recreation opportunities. The individual worksheets that were turned in are presented below (by location).

## Location 1: Eugene



### Scenarios Introduction




Comment Worksheet

 <b>Concept 1: Accessible Water-Based System</b>	 <b>Concept 2: Nature-Based Recreation System</b>	 <b>Concept 3: Connected Trail-Based System</b>	<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____
<b>What do you like?</b> <i>Non-motorized Boat Access Picnic Areas Fishing Controlled Swimming Areas Guided instructional tours</i>	<b>What do you like?</b> <i>Interpretation Outdoor Education Nature Play Recreation Area Programs</i>	<b>What do you like?</b> <i>Some multi-use Hiker only trails Trail Connectivity</i>	<b>Other Notes</b>
<b>What don't you like?</b> <i>motorized boating uncontained swimming areas</i>	<b>What don't you like?</b>	<b>What don't you like?</b> <i>motorized trails Too many bike/multi-use</i>	
<b>What parks should be improved?</b> <i>HORA Hawside Beach</i>	<b>What parks should be improved?</b>	<b>What parks should be improved?</b>	
<b>Questions/ comments</b>	<b>Questions/ comments</b>	<b>Questions/ comments</b>	



Scenarios Introduction




Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	Question
<p>What do you like?</p> <p>Natural beach access/ Sitting areas Picnic Areas</p>	<p>What do you like? <i>enviro. ed.</i></p> <p>Passive rec/trail use Community gardens Restoration + preservation</p>	<p>What do you like?</p> <p>Bike tour connections</p>	<p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p> <p>Accessible Water-Based System: _____            Nature-Based Recreation System: _____            Connected Trail-Based System: _____            Mix of All 3 Concepts: <u>  X  </u></p>
<p>What don't you like?</p> <p>Extended vehicle parking / more auto centric uses <i>eee</i></p>	<p>What don't you like?</p>	<p>What don't you like?</p>	<p>Other Notes</p> <p>Historic preservation</p>
<p>What parks should be improved?</p> <p>Fall Creek area connectivity to water</p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction




Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	Question
<p>What do you like?</p> <p>non-motorized boats on rivers, ponds, lakes. Swimming</p>	<p>What do you like?</p> <p>Protected habitats outdoor education - more interactive appropriate passive recreation Restored habitats Nature based activities</p>	<p>What do you like?</p> <p>Trail loops well-maintained trails in balance with surrounding nature Diversity of trail experiences Balance of trail experiences that alternate less and more structured / guided <i>connecting experiences</i></p>	<p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p> <p>Accessible Water-Based System: <u>  2  </u>            Nature-Based Recreation System: <u>  9  </u>            Connected Trail-Based System: _____            Mix of All 3 Concepts: <u>  1 2 3 4  </u></p>
<p>What don't you like?</p> <p>motorized boats on rivers &amp; small bodies of water Too little boat ramps or staging areas - garbage dumping</p>	<p>What don't you like?</p> <p>Too many protected habitats Conflicting user groups</p>	<p>What don't you like?</p> <p>Too many well-maintained trails conflicting with experience. Lots of user groups Impacted / trashed areas</p>	<p>Other Notes</p>
<p>What parks should be improved?</p> <p>Those that get the most use or those that are in heavily used corridors or populated areas</p>	<p>What parks should be improved?</p> <p>Those getting the most use - HBRH, board-out point, orchard point Need more information on other parks.</p>	<p>What parks should be improved?</p> <p>Those getting most use are in more populated areas</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction




Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like? A lot of non-motorized (drift boat) Access + motorized access.</p>	<p>What do you like? Support Outdoor School programs Campfire?</p>	<p>What do you like? Continuity of trails to local + regional Creating a world class corridor from cascades to coast Hiker, biker camps</p>	<p>Accessible Water-Based System: <u>1</u> Nature-Based Recreation System: <u>3</u> Connected Trail-Based System: <u>2</u> Mix of All 3 Concepts: <u>4</u></p>
<p>What don't you like? Eip Kap - concrete shore lines Erosion + invasive species Flood conditions at River access sites</p>	<p>What don't you like? Current access is a pain for all Areas that are loved to death</p>	<p>What don't you like?</p>	<p><b>Other Notes</b> Non-motorized boating should include drift boating  Habitat protection should include restoration + stewardship  D Take care of what we have!</p>
<p>What parks should be improved? Orchard Pt Zuñiga Pinn Rock landing Single deck boat access Richardson Park - Mast up Storage for sailboats - Burnie</p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction

Comment Worksheet




 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like? Non-motorized Clamming / crabbing</p>	<p>What do you like? Cuddles in water Habitat restoration Fish habitat</p>	<p>What do you like? All weather Trail maintenance Hike Horse Bike trails</p>	<p>Accessible Water-Based System: <u>3</u> Nature-Based Recreation System: <u>1</u> Connected Trail-Based System: <u>2</u> Mix of All 3 Concepts: _____</p>
<p>What don't you like? Camping motor boats large parking areas water skiing loud music large groups</p>	<p>What don't you like? Camping, except for children's camps Large groups</p>	<p>What don't you like? Mt. Bike (off road) Large groups Camping</p>	<p><b>Other Notes</b> Encourage + support USCA groups (like Zuñiga + FBP, MPA)</p>
<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	





Scenarios Introduction




Comment Worksheet

 <b>Concept 1: Accessible Water-Based System</b>	 <b>Concept 2: Nature-Based Recreation System</b>	 <b>Concept 3: Connected Trail-Based System</b>	<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____
What do you like? <i>Boat rentals (equipment cross-country)</i>	What do you like? <i>Ability to access nature near urban areas.</i>	What do you like? <i>Great trail network at Buford</i>	
What don't you like? <ul style="list-style-type: none"> <li>Lack of clarity of where to access water safely</li> <li>Many great spots (like Wildwood) are in poor condition due to vandalism &amp; lack of supervision</li> </ul>	What don't you like? <ul style="list-style-type: none"> <li>poorly maintained natural areas</li> <li>Lack of staff to maintain these areas</li> </ul>	What don't you like? <ul style="list-style-type: none"> <li>poorly maintained trails (mud/overgrown)</li> </ul>	<b>Other Notes</b>
What parks should be improved? <ul style="list-style-type: none"> <li>Add more formal outdoor swim/water play areas on McKenzie and Middle Fork</li> <li>Wildwood</li> </ul>	What parks should be improved? <i>Victory Park should have formal trails - Great views</i>	What parks should be improved? <i>Victory Parks</i>	
Questions/ comments	Questions/ comments	Questions/ comments	



Scenarios Introduction




Comment Worksheet

 <b>Concept 1: Accessible Water-Based System</b>	 <b>Concept 2: Nature-Based Recreation System</b>	 <b>Concept 3: Connected Trail-Based System</b>	<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: <u>2</u> Nature-Based Recreation System: <u>4</u> Connected Trail-Based System: <u>3</u> Mix of All 3 Concepts: <u>1</u>
What do you like? <i>rafting, paddle boarding, fishing (drift boat)</i>	What do you like? <i>wildlife; habitat protection restoration; stewardship viewpoints for birds reflection; environmental education</i>	What do you like? <i>regional trail connections viewpoints on road bike lanes soft, permeable trails</i>	
What don't you like? <i>motorized boats</i>	What don't you like?	What don't you like? <i>OHV-ATV hard-surface trails</i>	<b>Other Notes</b> <i>- no hookups - full service campground</i>
What parks should be improved?	What parks should be improved? <i>old McKenzie Hatchery</i>	What parks should be improved? <i>Eagle Rock Victory</i>	
Questions/ comments	Questions/ comments	Questions/ comments	



Scenarios Introduction




Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like? <i>Shaded areas/ river gazing Tobing, picnic ins picnic, fishing - wading - family</i></p>	<p>What do you like? <i>Hiking, areas to relax picnic areas Birding</i></p>	<p>What do you like? —</p>	<p>Accessible Water-Based System: <u>2</u> Nature-Based Recreation System: <u>1</u> Connected Trail-Based System: _____ Mix of All 3 Concepts: _____</p>
<p>What don't you like? <i>Trash people using stereo or loud music →</i></p>	<p>What don't you like? —</p>	<p>What don't you like? <i>don't spend money to try to connect parks —</i></p>	<p><b>Other Notes</b></p>
<p>What parks should be improved? <i>Hendricks Bridge picnic areas - trails</i></p>	<p>What parks should be improved? —</p>	<p>What parks should be improved? —</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction

Comment Worksheet




 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like? <i>Kayak access</i></p>	<p>What do you like? <i>Opportunities for educational activities where they exist</i></p>	<p>What do you like? <i>Trail access from parks to beach, lake and rivers</i></p>	<p>Accessible Water-Based System: <u>2</u> Nature-Based Recreation System: <u>1</u> Connected Trail-Based System: <u>3</u> Mix of All 3 Concepts: <u>flexa mix since many overlap</u></p>
<p>What don't you like? —</p>	<p>What don't you like? <i>Not enough activities for educational activities</i></p>	<p>What don't you like? <i>Some parks don't have above trail access. - Harbor Vista Park to North Jetty beach</i></p>	<p><b>Other Notes</b> <i>Support and create Friends of Parks Partnerships Volunteers</i></p>
<p>What parks should be improved? <i>Lake, river and ocean access for kayakers, canoes, etc</i></p>	<p>What parks should be improved? <i>Harbor Vista Park</i></p>	<p>What parks should be improved? <i>Union county road from Harbor Vista Park to access a trail to be created to reach ocean beach</i></p>	
<p>Questions/ comments <i>Kayaker tours?</i></p>	<p>Questions/ comments <i>nature hikes?</i></p>	<p>Questions/ comments <i>connections to state parks</i></p>	





Scenarios Introduction




Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	Question
<p>What do you like?</p> <p><i>I'd like to see a system of organized put-ins + take-outs along rivers such as the Coast Fork <del>use</del> for paddlers + floaters - (example is on Little Deschutes River in Central Oregon)</i></p>	<p>What do you like?</p> <p><i>opportunities to connect to nature</i></p>	<p>What do you like?</p>	<p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p> <p>Accessible Water-Based System: <u>3</u></p> <p>Nature-Based Recreation System: <u>1</u></p> <p>Connected Trail-Based System: <u>4</u></p> <p>Mix of All 3 Concepts: <u>2</u></p>
<p>What don't you like?</p>	<p>What don't you like?</p>	<p>What don't you like?</p> <p><i>the emphasis on hiking trails within parks. This would be far more important than trail connectors</i></p>	Other Notes
<p>What parks should be improved?</p> <p><i>More water access at HBRA → hiking/walking trail along river + safe swimming access</i></p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction




Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	Question
<p>What do you like?</p> <p><i>swimming non-motorized</i></p>	<p>What do you like?</p> <p><i>hiking wildlife viewing</i></p>	<p>What do you like?</p>	<p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p> <p>Accessible Water-Based System: <u>2</u></p> <p>Nature-Based Recreation System: <u>1</u></p> <p>Connected Trail-Based System: <u>4</u></p> <p>Mix of All 3 Concepts: <u>3</u></p>
<p>What don't you like?</p> <p><i>jet ski big motorboats boats in sensitive habitats</i></p>	<p>What don't you like?</p> <p><i>ohv mountain bikes</i></p>	<p>What don't you like?</p>	Other Notes
<p>What parks should be improved?</p>	<p>What parks should be improved?</p> <p><i>Hileman</i></p>	<p>What parks should be improved?</p> <p><i>parks near each other</i></p>	<p><i>very concerned about logging to generate revenue permit for big park like HBRA should also work at small parks like Hileman</i></p>
<p>Questions/ comments</p> <p><i>What percent of Lane County residents have boats?</i></p>	<p>Questions/ comments</p> <p><i>worried about weeds + long-term maintenance</i></p>	<p>Questions/ comments</p> <p><i>car shuttle or two-way trips? sharing the road w/ cars</i></p>	



Scenarios Introduction




Comment Worksheet

 <p>Concept 1: Accessible Water-Based System</p>	 <p>Concept 2: Nature-Based Recreation System</p>	 <p>Concept 3: Connected Trail-Based System</p>	<p>Question</p> <p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like?</p> <p>Sailing - non-motorized boating opportunities Access to lake/rivers for hiking/picnicking Wildlife habitat.</p>	<p>What do you like?</p> <p>Preservation &amp; protection of the natural environment &amp; wildlife. Educational opportunities. Community stewardship &amp; gardens. Habitat protection.</p>	<p>What do you like?</p> <p>Connecting parks with trails - pref. off-road for biking &amp; hiking.</p>	<p>Accessible Water-Based System: <u>4</u> Nature-Based Recreation System: <u>2</u> Connected Trail-Based System: <u>3</u> Mix of All 3 Concepts: <u>1</u></p>
<p>What don't you like?</p> <p>Motorized boats Screening over the lake.</p>	<p>What don't you like?</p> <p>Motorized bike/vehicle access on trails.</p>	<p>What don't you like?</p> <p>Cycling on roads.</p>	<p>Other Notes</p> <p>Should not be ONE "anchor" park with all amenities, BUT <u>diverse</u> parks, each offering just a few amenities, but together we have all the things we desire.</p>
<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction




Comment Worksheet

 <p>Concept 1: Accessible Water-Based System</p>	 <p>Concept 2: Nature-Based Recreation System</p>	 <p>Concept 3: Connected Trail-Based System</p>	<p>Question</p> <p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like?</p> <p>Non-motorized activity NATURAL AMENITIES. Sun, mountains.</p>	<p>What do you like?</p> <p>NATURAL HAVEN, WILDLIFE PROTECTION HIKING/PASSIVE RECREATION OPEN SPACE w/o STRUCTURE EDUCATION/INTERPRETATION</p>	<p>What do you like?</p> <p>See Concepts 1 &amp; 2</p>	<p>Accessible Water-Based System: _____ Nature-Based Recreation System: <u>1</u> Connected Trail-Based System: <u>1</u> Mix of All 3 Concepts: _____</p>
<p>What don't you like?</p> <p>ANY motorized or commercial activities.</p>	<p>What don't you like?</p> <p>ANYTHING THAT COMPROMISES THE ABOVE.</p>	<p>What don't you like?</p>	<p>Other Notes</p>
<p>What parks should be improved?</p>	<p>What parks should be improved?</p> <p>BOFORD - MT PUSMAN w/ THE ABOVE IN MIND</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction

Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like? many parks adjacent to water bodies</p>	<p>What do you like? This is an essential part of all parks</p>	<p>What do you like? exploring off-road trails for hikers &amp; bikers - regional trail connections</p>	<p>Accessible Water-Based System: <u>3</u> Nature-Based Recreation System: <u>2</u> Connected Trail-Based System: <u>4</u> Mix of All 3 Concepts: <u>1</u></p>
<p>What don't you like?</p>	<p>What don't you like? inconsistent development</p>	<p>What don't you like? hard to envision who solid information &amp; understanding of other public lands in the area</p>	<p><b>Other Notes</b> All three elements should be reflected Focus on less-developed parks, emphasis on habitat restoration - maintaining natural resources</p>
<p>What parks should be improved? Ben &amp; Kay Barrio Hendricks Bridge Old Mackenzie Trout Hatchery</p>	<p>What parks should be improved? Ben &amp; Kay Barrio Hendricks Bridge old Mackenzie Trout Hatchery</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments more interpretive/educational infrastructure</p>	<p>Questions/ comments</p>	






## Location 2: Mapleton



### Scenarios Introduction




#### Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____
What do you like?	What do you like?	What do you like?	<b>Other Notes</b>  It would be helpful to include a Lane County Map w/ county parks listed. I often do not know what park is maintained by State, County, Forest Service, etc. It would allow for a better analysis for this form.
What don't you like?	What don't you like?	What don't you like?	
What parks should be improved? Beat ramps in Mapleton, Fernan. - Clean out so they can be used. Add restrooms!	What parks should be improved?	What parks should be improved?	
Questions/ comments	Questions/ comments Camp Lane could be a great rental park - e.g. yurts, camp sites, etc. - seasons - improve egress, access, parking	Questions/ comments	



### Scenarios Introduction




#### Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____
What do you like? Siuslaw in the fall from Above Mapleton to Florence is a great fishery that has poor access Above Florence for launching boats.	What do you like?	What do you like?	<b>Other Notes</b>
What don't you like? Tidegaw Boat Ramp is "Very" poor -- needs some serious improvement	What don't you like?	What don't you like?	
What parks should be improved? Mapleton Boat Launch is NOT USEABLE except at High Tide -- silted in - needs dredged	What parks should be improved?	What parks should be improved?	
Questions/ comments Who's job is the maint. on Mapleton Boat Ramp?	Questions/ comments	Questions/ comments	



Scenarios Introduction




Comment Worksheet

 <p>Concept 1: Accessible Water-Based System</p>	 <p>Concept 2: Nature-Based Recreation System</p>	 <p>Concept 3: Connected Trail-Based System</p>	<p>Question</p> <p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like?</p> <p>Swimming River connections up the McKenzie</p>	<p>What do you like?</p>	<p>What do you like?</p> <p>Definitely should have a look at easy connections to state + fed</p>	<p>Accessible Water-Based System: <u>1</u></p> <p>Nature-Based Recreation System: <u>2</u></p> <p>Connected Trail-Based System: <u>3</u></p> <p>Mix of All 3 Concepts: _____</p>
<p>What don't you like?</p> <p>So much boat ramps with nothing else there</p>	<p>What don't you like?</p>	<p>What don't you like?</p>	<p>Other Notes</p>
<p>What parks should be improved?</p> <p>Heater Beach Ada needs swimming</p>	<p>What parks should be improved?</p> <p>Need more interpretive.</p>	<p>What parks should be improved?</p> <p>Harbor Vista Trail to the Jetty</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p> <p>Would like elder exercise pieces outdoors.</p>	<p>Questions/ comments</p>	



Scenarios Introduction




Comment Worksheet

 <p>Concept 1: Accessible Water-Based System</p>	 <p>Concept 2: Nature-Based Recreation System</p>	 <p>Concept 3: Connected Trail-Based System</p>	<p>Question</p> <p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like?</p> <p>Non-motorized boating Swimming Picnic areas</p>	<p>What do you like?</p> <p>Wildlife viewing Habitat protection Nature interpretation</p>	<p>What do you like?</p> <p>Bike touring Lookout/viewpoint Interpretive signage Walking trails</p>	<p>Accessible Water-Based System: <u>3</u></p> <p>Nature-Based Recreation System: <u>2</u></p> <p>Connected Trail-Based System: <u>4</u></p> <p>Mix of All 3 Concepts: <u>1</u></p>
<p>What don't you like?</p> <p>Motorized boating, unless it's where swimming is very limited</p>	<p>What don't you like?</p> <p>I liked everything we were shown!</p>	<p>What don't you like?</p> <p>OHV/ATV</p>	<p>Other Notes</p> <p>I agree with what one person brought up different parks have different offerings. @Meadow takes limited to only a few parks. Red ATVs accessibility at all 6. Interpretive signs at some locations. Concessions at some parks - Horse w/ P&amp;B for example, motorized boat that would help raise funds for the parks. / Sluicer, aquatic center - the swimming pool section on the Mapleton school lawn could be the anchor spot for the Mapleton area.</p>
<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction

Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:           Accessible Water-Based System: _____          Nature-Based Recreation System: _____          Connected Trail-Based System: _____          Mix of All 3 Concepts: _____</p>
<p><b>What do you like?</b>  <i> kayak access            kayak trails            swim access: Do not know where... map??</i></p>	<p><b>What do you like?</b>  <i> Lots of green spaces            I'd love to learn about birding into walks through the Park system</i></p>	<p><b>What do you like?</b>  <i> a variety of kinds of trails - some level or <del>flat</del> cleaned-up for seniors, others well-strewn &amp; rused for stronger hikers</i></p>	
<p><b>What don't you like?</b>  <i> Huge Clear info on where to get parking permits for a season... info in advance about parking</i></p>	<p><b>What don't you like?</b>  <i> When an area does not allow dogs out leashed even.</i></p>	<p><b>What don't you like?</b>  <i> Hard to find trail info. OPEN ITS by word of mouth. Many parks don't have info to indicate where to walk. Hard to get info on disabled safe hiking.</i></p>	<p><b>Other Notes</b>  <i> Regional Anchor Park - if you had 100 acres what would you have at it TREES TRAILS CLEAN WATER</i></p>
<p><b>What parks should be improved?</b>  <i> Harbor Vista synthetic soccer field 2 times I was there.            I've lived here 10 yrs and NEVER HEARD of ADA Park I read Summit News, they should work at the library... better.</i></p>	<p><b>What parks should be improved?</b>            :</p>	<p><b>What parks should be improved?</b>  <i> Bike connectivity that is SAFE</i></p>	<p><i> PLEASE considers partnerships that will help coordinate unique elements</i></p>
<p><b>Questions/ comments</b>  <i> swim skills</i></p>	<p><b>Questions/ comments</b>  <i> Would Lane County please consider partnerships w/ Lane County 4-H for reduced fees &amp; joint - educational opportunities? (Linnette Junior Master Naturalist Program)</i></p>	<p><b>Questions/ comments</b>  <i> What is 3rd line parking? Why have I not heard of it?</i></p>	<p><i> if Safety &amp; Health are part of the vision, where (in W Lane County) do kids learn to swim?? One of the ANCHOR Parks could be the</i></p>

*(public) 5-14-14  
 Suisun Regional Aquatics & Recreation Center (in map) 4-1-14  
 4-1-14 - 1/2 mile (8 elements) w/ lifeguards for kids & water...*






## Location 3: Leaburg



### Scenarios Introduction




Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:
What do you like?	What do you like?	What do you like?	Accessible Water-Based System: _____ Nature-Based Recreation System: <u>1</u> Connected Trail-Based System: <u>2</u> Mix of All 3 Concepts: _____
What don't you like?	What don't you like?	What don't you like?	<b>Other Notes</b> <i>Winter activities further up River</i>
What parks should be improved?	What parks should be improved?	What parks should be improved?	<i>It seems we need to maintain current parks at current levels &amp; deferred maint. before considering "improving" parks</i>
Questions/ comments	Questions/ comments	Questions/ comments	



### Scenarios Introduction




Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:
What do you like? <i>boat landing; parking; activity areas; picnicking</i>	What do you like?	What do you like?	Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____
What don't you like?	What don't you like?	What don't you like?	<b>Other Notes</b>
What parks should be improved? <i>Fall Creek</i>	What parks should be improved?	What parks should be improved?	
Questions/ comments	Questions/ comments	Questions/ comments	



Scenarios Introduction




Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
What do you like?	What do you like?	What do you like?	Accessible Water-Based System: <u>3</u> Nature-Based Recreation System: <u>4</u> Connected Trail-Based System: <u>1</u> Mix of All 3 Concepts: <u>2</u>
What don't you like?	What don't you like?	What don't you like?	<b>Other Notes</b>
What parks should be improved?	What parks should be improved?	What parks should be improved?	
Questions/ comments	Questions/ comments	Questions/ comments	



Scenarios Introduction




Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
What do you like?	What do you like?	What do you like?	Accessible Water-Based System: <u>2</u> Nature-Based Recreation System: <u>1</u> Connected Trail-Based System: <u>3</u> Mix of All 3 Concepts: <u>4</u>
What don't you like?	What don't you like?	What don't you like?	<b>Other Notes</b>
What parks should be improved?	What parks should be improved?	What parks should be improved?	
Questions/ comments	Questions/ comments	Questions/ comments	



Scenarios Introduction




Comment Worksheet

 <p>Concept 1: Accessible Water-Based System</p>	 <p>Concept 2: Nature-Based Recreation System</p>	 <p>Concept 3: Connected Trail-Based System</p>	<p>Question</p> <p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like?</p>	<p>What do you like?</p>	<p>What do you like?</p>	<p>Accessible Water-Based System: _____            Nature-Based Recreation System: _____            Connected Trail-Based System: _____            Mix of All 3 Concepts: _____</p>
<p>What don't you like?</p>	<p>What don't you like?</p>	<p>What don't you like?</p>	<p><b>Other Notes</b></p> <p>No RV PARKS            in McREAZIE            VALLEY until            HAVE COUNTY CAN            HAVE SHERIFFS            PATROLLING THE            AREA 2/1/7</p>
<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction

Comment Worksheet




 <p>Concept 1: Accessible Water-Based System</p>	 <p>Concept 2: Nature-Based Recreation System</p>	 <p>Concept 3: Connected Trail-Based System</p>	<p>Question</p> <p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like?</p>	<p>What do you like?</p>	<p>What do you like?</p>	<p>Accessible Water-Based System: _____            Nature-Based Recreation System: _____            Connected Trail-Based System: _____            Mix of All 3 Concepts: _____</p>
<p>What don't you like?  <i>MOTORIZED BOAT USE</i></p>	<p>What don't you like?  <i>ATV/OHV ACTIVITY            HARD SURFACE TRAILS            LARGE EVENTS</i></p>	<p>What don't you like?</p>	<p><b>Other Notes</b></p> <p><i>BETTER + MORE TIMELY NOTIFICATION            FOR THE PUBLIC - BETTER OUTREACH</i></p>
<p>What parks should be improved?</p>	<p>What parks should be improved?  <i>BLUE MOUNTAIN PARK - RESTORATION            + BASIC UPGRADES (NEW picnic            TABLES + PAVILLION)</i></p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	





Scenarios Introduction




Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	Question
What do you like?	What do you like?	What do you like?	What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____
What don't you like?	What don't you like?	What don't you like?	<b>Other Notes</b>  <i>please check what the "Virginia Creeper Trail" is like - a major trail can connect so much and connect to other trails</i>
What parks should be improved?	What parks should be improved?	What parks should be improved?	
Questions/ comments	Questions/ comments	Questions/ comments	



Scenarios Introduction

Comment Worksheet




 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	Question
What do you like?	What do you like? <i>Nature pay</i>	What do you like? <i>lookout/viewpoint</i>	What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____
What don't you like?	What don't you like?	What don't you like?	<b>Other Notes</b>  <i>There's a 4-H camp near Summerville Oregon that has great camping cabins that're relatively inexpensive to build/maintain. It might be worth a field trip. (I believe it's called something along the lines of "Blue Mountain 4-H Camp" or similar, and it's connected with OSU's extension service.)</i>
What parks should be improved?	What parks should be improved? <i>Camp lane - should have several "clusters" of cabins with space between.</i>	What parks should be improved?	
Questions/ comments	Questions/ comments	Questions/ comments	

Location 5: Florence



Scenarios Introduction




Comment Worksheet

 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	Question
What do you like? <i>South Jetty Water Sports Education &amp; Rentals Equipment Sailing, SUPs, Kayaks</i>	What do you like? <i>Amphitheater - Harbor Vista Interpretation-Education Day Camps for varying age &amp; interest groups</i>	What do you like? <i>Coast Guard monitoring of boating, scuba, swim activities from Harbor Vista to South Jetty</i>	What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: <i>Safety Education</i> Nature-Based Recreation System: <i>Preservation</i> Connected Trail-Based System: <i>Wildlife Respect</i> Mix of All 3 Concepts: <i>Preserve and encourage exploration of nature offer mentors to bridge transition from IT to Nature lifestyle</i>
What don't you like?	What don't you like?	What don't you like?	<b>Other Notes</b> <i>We need to encourage and promote virtual experiences that foster an appreciation for the preservation of our earth and its inhabitants.</i>
What parks should be improved? <i>Harbor Vista &amp; South Jetty Camping Non-motorized boating</i>	What parks should be improved? <i>Harbor Vista &amp; South Jetty Habitat Protection</i>	What parks should be improved? <i>Hiking &amp; Biking</i>	
Questions/ comments	Questions/ comments	Questions/ comments	



Scenarios Introduction

Comment Worksheet




 Concept 1: Accessible Water-Based System	 Concept 2: Nature-Based Recreation System	 Concept 3: Connected Trail-Based System	Question
What do you like?	What do you like? <i>nature play - great</i>	What do you like? <i>all of this play great play</i>	What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: <u>4</u> Nature-Based Recreation System: <u>2</u> Connected Trail-Based System: <u>1</u> Mix of All 3 Concepts: _____
What don't you like?	What don't you like? <i>No Motorized anything</i>	What don't you like?	<b>Other Notes</b>
What parks should be improved?	What parks should be improved?	What parks should be improved?	
Questions/ comments <i>Have an eye of the water items</i>	Questions/ comments <i>play area for quietness too</i>	Questions/ comments	





Scenarios Introduction




Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like?</p>	<p>What do you like?</p>	<p>What do you like?</p>	<p>Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____</p>
<p>What don't you like?</p>	<p>What don't you like?</p>	<p>What don't you like?</p>	<p><b>Other Notes</b></p>
<p>What parks should be improved?</p>	<p>What parks should be improved? <i>minimal trails to Ocean Woods</i></p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction




Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like? <i>non motor boats dog, swim swimming places</i></p>	<p>What do you like? <i>Nature play community garden environment education</i></p>	<p>What do you like? <i>Dike trails (I have a wild kite) Regional Park 1000's</i></p>	<p>Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____</p>
<p>What don't you like? <i>Motorized boats</i></p>	<p>What don't you like?</p>	<p>What don't you like?</p>	<p><b>Other Notes</b></p>
<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction




Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:             Accessible Water-Based System: _____            Nature-Based Recreation System: _____            Connected Trail-Based System: _____            Mix of All 3 Concepts: _____</p>
<p>What do you like? <i>non-motorized boating educational opportunities (signage)</i></p>	<p>What do you like? <i>Habitat protection education promotes protection</i></p>	<p>What do you like? <i>hiking trails</i></p>	
<p>What don't you like? <i>mixed usage</i></p>	<p>What don't you like?</p>	<p>What don't you like? <i>multi-use trails (bikers aren't always courteous)</i></p>	<p><b>Other Notes</b></p>
<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction




Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:             Accessible Water-Based System: _____            Nature-Based Recreation System: _____            Connected Trail-Based System: _____            Mix of All 3 Concepts: _____</p>
<p>What do you like? <i>CLAMMING FISHING CAMPING</i></p>	<p>What do you like?</p>	<p>What do you like?</p>	
<p>What don't you like?</p>	<p>What don't you like?</p>	<p>What don't you like?</p>	<p><b>Other Notes</b></p>
<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	<p>What parks should be improved?</p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	



Scenarios Introduction




Comment Worksheet

 <b>Concept 1: Accessible Water-Based System</b>	 <b>Concept 2: Nature-Based Recreation System</b>	 <b>Concept 3: Connected Trail-Based System</b>	<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:
What do you like?  	What do you like?  	What do you like?  	Accessible Water-Based System: <u>2</u> Nature-Based Recreation System: <u>1</u> Connected Trail-Based System: <u>3</u> Mix of All 3 Concepts: <u>4</u>
What don't you like?  	What don't you like?  	What don't you like?  	<b>Other Notes</b>  
What parks should be improved?  	What parks should be improved?  	What parks should be improved?  	
Questions/ comments  	Questions/ comments  	Questions/ comments  	



Scenarios Introduction

Comment Worksheet




 <b>Concept 1: Accessible Water-Based System</b>	 <b>Concept 2: Nature-Based Recreation System</b>	 <b>Concept 3: Connected Trail-Based System</b>	<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:
What do you like? <i>I love the entire Pacific Ocean don't need any more non-motorized boating.</i>	What do you like? <i>Observing the migration of wild life within a nature based system, picnicking.</i>	What do you like? <i>Ability to walk on trails observing animals, growth. Park connectivity via walking, bicycles etc.</i>	Accessible Water-Based System: <u>2</u> Nature-Based Recreation System: <u>1</u> Connected Trail-Based System: <u>1</u> Mix of All 3 Concepts: _____
What don't you like?  	What don't you like?  	What don't you like?  	<b>Other Notes</b> <i>THE COMMUNITY OF FLORENCE OR IS 90% VISITORS. NATURE BASED AND TRAIL BASED PARKS ARE A VERY HIGH PRIORITY.</i>
What parks should be improved?  	What parks should be improved? <i>OCEAN WOODS TO NATURE TRAILS</i>	What parks should be improved? <i>OCEAN WOODS TO NATURE WALKING TRAILS</i>	
Questions/ comments  	Questions/ comments  	Questions/ comments  	





Scenarios Introduction




Comment Worksheet

			<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____
What do you like? <i>CLAMMING FISHING CAMPING</i>	What do you like?	What do you like?	
What don't you like?	What don't you like?	What don't you like?	<b>Other Notes</b>
What parks should be improved?	What parks should be improved?	What parks should be improved?	
Questions/ comments	Questions/ comments	Questions/ comments	



Scenarios Introduction




Comment Worksheet

			<b>Question</b> What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:  Accessible Water-Based System: _____ Nature-Based Recreation System: _____ Connected Trail-Based System: _____ Mix of All 3 Concepts: _____
What do you like?	What do you like?	What do you like?	Accessible Water-Based System: <u>2</u> Nature-Based Recreation System: <u>1</u> Connected Trail-Based System: <u>3</u> Mix of All 3 Concepts: <u>4</u>
What don't you like?	What don't you like?	What don't you like?	<b>Other Notes</b>
What parks should be improved?	What parks should be improved?	What parks should be improved?	
Questions/ comments	Questions/ comments	Questions/ comments	



Scenarios Introduction

Comment Worksheet

 <p><b>Concept 1: Accessible Water-Based System</b></p>	 <p><b>Concept 2: Nature-Based Recreation System</b></p>	 <p><b>Concept 3: Connected Trail-Based System</b></p>	<p><b>Question</b></p> <p>What concept do you think should be the highest priority? On a scale of 1 to 4 (with #1 being your top priority #4 being the lowest), please rank the following:</p>
<p>What do you like?</p> <p><i>I love the entire Pacific Ocean don't need any more Non-motorized boating.</i></p>	<p>What do you like?</p> <p><i>Observes the importance of wild life within a Nature Based System, Picnicing,</i></p>	<p>What do you like?</p> <p><i>Ability to walk on trails observing animals, growth Park connectivity via walking, bicycles etc</i></p>	<p>Accessible Water-Based System: <u>2</u></p> <p>Nature-Based Recreation System: <u>1</u></p> <p>Connected Trail-Based System: <u>1</u></p> <p>Mix of All 3 Concepts: _____</p>
<p>What don't you like?</p>	<p>What don't you like?</p>	<p>What don't you like?</p>	<p><b>Other Notes</b></p> <p><i>THE COMMUNITY OF FLOWERS OR IS 90% NATIVES. NATURE Based and Trail Based Parks are a very high Priority</i></p>
<p>What parks should be improved?</p>	<p>What parks should be improved?</p> <p><i>OCEAN WOODS TO NATURE TRAILS</i></p>	<p>What parks should be improved?</p> <p><i>OCEAN WOODS TO NATURE WALKING TRAILS</i></p>	
<p>Questions/ comments</p>	<p>Questions/ comments</p>	<p>Questions/ comments</p>	







Attachment C presents additional feedback received from a Task Force member regarding the parks that were designated by the 2014 Lane County Large Events Task Force as sites that are “potentially suitable” for large events, based on size, zoning, ownership and space for potential parking. These comments will be reviewed, discussed and taken into consideration during Phase 3 of the planning process.

## Parks designated for Large Events: May 28, 2017

The policies contained in the Large Event Task Force Report would need to be included in a land-use document to be enforceable. However, Attachment B, the list of parks considered suitable for large events, includes individual parks whose characteristics are inconsistent with LETF criteria. This issue needs to be addressed before any individual park is so designated in any land-use document such as the Lane Parks Master Plan currently under development. Amending Attachment B could/should be done with no effect on the policies in the body of the LETF report. Attachment G (Oversight group) of the report has recently been amended by the BCC upon the request of the Parks Advisory Committee.

This word document references documents to be checked for policies governing individual parks. See excel file for summary of data from the LP spreadsheet. Both files are intended for LP, MIG, and TF DIY fact-checking and discussion.

**LETF report** p. 4 criteria to be a large event park: “10 acres, PR, F2, or RPF zone with parking available.” A large event is assumed to be 1,000 or more participants.

[http://www.lanecounty.org/UserFiles/Servers/Server\\_3585797/File/Government/County%20Departments/Public%20Works/Parks/Large%20Events%20Task%20Force/Large\\_Events\\_Task\\_Force\\_report\\_final\\_COMPLETE.pdf](http://www.lanecounty.org/UserFiles/Servers/Server_3585797/File/Government/County%20Departments/Public%20Works/Parks/Large%20Events%20Task%20Force/Large_Events_Task_Force_report_final_COMPLETE.pdf)

**Ada Park:** The LETF version of the inventory spreadsheet did not include combining zones, which the full version of the spreadsheet does. (See LP for copy) Ada Park is in Flood Plain, Prime Wildlife, and Natural Resources Conservation Combining Zones, which should exclude it from consideration for development to hold large events even if an emergency exit and adequate parking were available which they are not.

**Armitage Park:** One would need to check Metro Plan policies.

### **Blue Mountain Park:**

**a. From LP Inventory Spreadsheet:** The spreadsheet is very confusing with 24 acres across the (which?) road in a land bank and 243 acres in the park with all four tax lots and both zones F1 and F2 listed for each. The park may or may not be currently closed, and is only accessible from Blue Mountain School Road, which dead-ends in logging roads, so has no emergency exit. In any case, large events are not allowed in F1 by the LETF report, RCP and Lane Code.

**b. From Lane County interactive zoning map:**

<http://lcmaps.lanecounty.org/LaneCountyMaps/ZoneAndPlanMapsApp/index.html?esearch=2102190001000&slayer=0>

21-02-19 Tax lot 1000: 185.36 acres, F1

21-02-19 Tax lot 1800: 0.94 acres, F1

21-02-30 Tax lot 400: 36.78 acres, F2

21-02-30 Tax lot 500: 41.15 acres, F2

Large Events, p. 2

**c. From the Rural Comprehensive Plan:**

<http://lanecounty.org/common/pages/DisplayFile.aspx?itemId=6477350>

**Goal 4: Forest Lands:**

“9. Recreational activities in the Park and Recreation (PR/RCP) Zone District within resource areas that are outside lands for which a built or committed exception to a Statewide Planning Goal has been taken shall be limited to those uses consistent with Statewide Planning Goals 3 and 4.”

(See RPC and Lane Code 16.10 (F-1) 16.11 (F-2), 16.215 (PR).)

**d. Mosby Creek Project**

[http://www.coastfork.org/index.php?option=com\\_content&view=article&id=36&Itemid=190](http://www.coastfork.org/index.php?option=com_content&view=article&id=36&Itemid=190)

This is the summary of a habitat restoration project on Mosby Creek, a free-flowing Willamette Coast Fork headwater that runs through Blue Mountain Park.

**Howard Buford Recreation Area:** This is the only park the LETF examined in detail, with nature-based educational fundraisers for the Arboretum being fine. However, the North Bottomlands still has no emergency exit, no potable water, and no waste facilities, and large gatherings had negative impact on the farming operations next-door. Use of the park is expected to adhere to HBRA Master Plan.

[https://www.lanecounty.org/UserFiles/Servers/Server\\_3585797/File/Government/County%20Departments/Public%20Works/Parks/Large%20Events%20Task%20Force/HBRA%20Master%20Plan%201994.pdf](https://www.lanecounty.org/UserFiles/Servers/Server_3585797/File/Government/County%20Departments/Public%20Works/Parks/Large%20Events%20Task%20Force/HBRA%20Master%20Plan%201994.pdf)

**US Army Corps of Engineers Parks leased by Lane County:** (Baker Bay, Orchard Point, Perkins Peninsula, Richardson, Zumwalt)

[http://www.dfw.state.or.us/wildlife/management\\_plans/wildlife\\_areas/docs/FRWA%20Management%20Plan%20June%202009.pdf](http://www.dfw.state.or.us/wildlife/management_plans/wildlife_areas/docs/FRWA%20Management%20Plan%20June%202009.pdf)

Also check leases for policies and allowed uses, and other USACE management documents.

**Perkins Peninsula:**

**From Lane Parks Spreadsheet:** Base zoning: NR Natural Resource, so not suitable per LETF report. This park does not have a lot number on either the spreadsheet or the interactive zoning map. It appears to be an un-differentiated part of a large natural resource zone.

**Zumwalt Park:** This is a walk-in dog park with room for maybe 8 cars each outside the Jeans Road and Vista Drive entrances. A field at the end of Vista Drive can be mowed to hold 30 cars once a year for Country Fair camping in the park as contracted with the City of Veneta. The Friends of Zumwalt Park have opposed converting the park to hold large events.

## Parks Master Plan Inventory: Selected detail for parks considered suitable for large events.

*For discussion purposes of the Master Plan Task Force*

Large Event Park	Acres	Parking	Potable water	Emergency egress	Rest Room	Zones: Base	Zone: Comb	Plan: Compr	Township-Range-Section, Tax Lot-per LP
Ada	99.2	14 cars, 4 cars & trailers	no	no	portable	PR	FP/PW/NRC	FCP	20-12-01 TL 300, 400, 600, 800
Armitage	63.9	10 cars & trailers, 250 cars	yes		flush & portable	PR	FP	Metro	17-03-09-11 TL 200, portion of 400; 17-03-10 TL 1100, 1300, 1400
Baker Bay	80.4	53 cars & trailers, 84 cars	yes		flush portable & vault	F2		RCP	21-02-04 TL 201, 300, 500, 606, 900, 1001; portion of 1700
Blue Mountain Park	242.8	gravel area	no	no	no	F1; F2	FP	RCP	21-02-19 TL 101, 1000, 1800; 21-02-30 TL 400, 500
Blue Mountain Land Bank	24	gravel area	no	no	no	F1; F2?	FP	RCP	21-02-19 TL 101, 1000, 1800; 21-02-30 TL 400, 500
Howard Buford Rec Area	2212	approx. 350 cars	Arboretum yes, North Bottom lands no	not really	Arboretum flush; NBL portable	PR	FP/GW	was Metro, will be RCP	18-02-07 TL 300, 900, 901, 902; 18-02-17 TL 100; 18-02-18 TL 100, 200, 300; 18-02-19 TL 100, 2300; 18-02-20 TL 100, 1900; 18-02-21 TL 1201; 18-03-12 TL 100, 200
Orchard Point	57.7	437 cars + 70 cars & trailers	yes		flush	PR	FP	RCP	17-05-10-10 TL 1400; 170503 TL 30
Perkins Peninsula	41.6	32 cars & trailers; 129 cars	yes		flush	NR		RCP	17-05-33 TL #??
Richardson	114.8	572 cars, 85 cars & trailers (includes CG overflow, day use, and marina)	yes		flush & portable	PR	FP	RCP	17-05-05 TL 700, 1001, 1002, 1200, 3000
Zumwalt	58	60 cars & 12 cars & trailers **	no		portable	PR	FP	RCP	17-05-29 TL 900, 1001; 17-05-29-41 TL 2200

**Definitions:**

PR- Parks and Recreation  
 F2- Impacted Forest  
 F1- Non-Impacted Forest  
 NR- Natural Resource  
 FP- Floodplain Combining Zone

PW- Prime Wildlife Combining Zone  
 PW- Prime Wildlife Combining Zone  
 NRC- Natural Resources Conservation Combining Zone  
 GW- Willamette River Greenway  
 RCP- Rural Comprehensive Plan  
 Metro- Metropolitan Area Comprehensive Plan

\* See narrative for discrepancy between LP chart and interactive zoning map as to division between park and land bank.

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# APPENDIX E

## Large Events Task Force

### Findings



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# APPENDIX E

## Large Events Task Force Findings

The Lane County Board of Commissioners formed the Large Events Tasks Force (LETF) on March 11, 2014, as an administrative task force to develop and recommend operational policies and standards to be applied to special event contracts in all Lane County parks and to determine the appropriateness of such events throughout the park system. The 2015 LETF Findings and Recommendations are presented here in their entirety, with online references to selected appendices as noted in the original report. As directed by the Board, Lane County staff will incorporate these recommendations into regular administrative processes for acceptance, review, and approval of large event applications.

Large events, by definition, are single events “attended by 1,000 or more people; the event may occur within a single day or may be spread over several continuous days. It may be an event open to the public or by private invitation only, and it may be conducted by a commercial enterprise, not-for-profit organization, private individual, governmental agency, or public institution.” While this report is specific to large events, it also provides guidance that may be applicable for events of different scales.

Several sections of this report are critical to the Parks and Open Space Master Plan:

- **Section 5:** General Conclusions & Guiding Principles
- **Section 6:** Recommendations for Policies and Standards Regarding Large Events
- **Section 8:** Special Considerations for Howard Buford Recreation Area (HBRA)
- **Appendix G:** Parks Advisory Committee/Stakeholder Event Review and Oversight Group

These sections identify the guiding principles for decision-making, standards for the provision of large events, additional considerations for HBRA events, and directions for the ongoing review of events by an oversight committee. While the report identifies sites that may be “potentially suitable” for large events, it is most valued for establishing a process to continue to evaluate both potential sites and proposed events as circumstances and conditions change over time.

# Findings and Recommendations of the Lane County Large Events Task Force

September 28, 2015







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## 1. The Charge of the Lane County Large Events Task Force

- In the summer of 2013, large events were held in the Emerald Meadows portion of Howard Buford Recreation Area which generated concerns surrounding the events and the criteria used to approve events. As a result, the Lane County Board of Commissioners expressed interest in establishing “success criteria” for large events that must be met in order for an event to be approved.
- In June 2014, the Lane County Board of Commissioners directed the Lane County Administrator to create a Lane County Large Events Task Force charged with the responsibility of developing and recommending to the Board operational policies and standards to be applied in all Lane County Parks Special Event Contracts and to determine the appropriateness of such events throughout the Park System.
- Fourteen Lane County citizens were appointed to the Task Force representing the following interests: local tourism, lodging, Lane County Parks Advisory Committee, Friends of Buford Park and Mt. Pisgah, Mount Pisgah Arboretum, Sheriff’s Mounted Posse, outdoor events industry, the Seavey Loop neighborhood, young adults (18-34 years of age) and general park users. The Task Force was staffed by Lane County Parks Division personnel. (See Appendix A.)
- For purposes of the Task Force, a “large event” was defined as a single event attended by 1,000 or more people; the event may occur within a single day, or may be spread over several continuous days. It may be an event open to the public or by private invitation only, and it may be conducted by a commercial enterprise, not-for-profit organization, private individual, governmental agency, or public institution.
- The Lane County Parks Division proposed, and the Task Force concurred, that 10 county parks either are currently capable, or with improvements are potentially capable, of accommodating large events. The criteria used to select the parks included: the park is at least 10 acres in size; the land is zoned either Parks & Recreation (PR), Rural Parks & Recreation (RPR), Impacted Forest Land (F2), or Rural Public Facilities (RPF); the land is either in Lane County ownership, or it is leased on a long-term basis; and parking is available on-site. (See Appendix B.)
- Examples of large events which have occurred in recent years include:
 

<u>Large Event</u>	<u>Attendees</u>
Triton Yacht Club Boat Show at Richardson Park	1,000
Oregon Supported Living Pedal for People at Armitage Park	1,200
Triathlon Eugene at Richardson Park	1,600
Gear Heads Classic Car Show at Armitage Park	2,000
Wildflower Festival at Mount Pisgah Arboretum/HBRA	2,500
4 <sup>th</sup> of July at Richardson Park and Orchard Point	4,500
Mushroom Festival at Mount Pisgah Arboretum/HBRA	4,500
Faerieworlds at Emerald Meadows/HBRA	6,000
Kaleidoscope Music Festival at Emerald Meadows/HBRA	7,500
The Dirty Dash at Emerald Meadows/HBRA	10,000
- The Task Force met during 20 regularly scheduled meetings, each at least two hours in duration, from June 23, 2014 to September 28, 2015. Additionally, smaller working groups composed of Task Force members met on a number of occasions to study specific issues, the results of which were discussed with the entire Task Force.
- To inform the Task Force’s recommendations, expert testimony was obtained from “subject experts” versed in law, public administration, economics, land use planning, transportation, environmental analysis, law enforcement and public advocacy. (See Appendices C, D and E.)

Additionally, substantial efforts were made to engage the general public by providing opportunities for comment before and after each Task Force meeting, two widely advertised public workshops, an on-line web comment form, the “Engage with Lane County” web site, and a professionally conducted survey.

## **2. Reasons for Hosting Large Events in Lane County Parks**

- Lane County parks meet the needs of people seeking a wide range of outdoor activities, including opportunities associated with large events. Large events that are well managed can provide recreational, educational, physical, intellectual, spiritual and professional experiences to people of all ages.
- Large events can contribute to the local economy by generating tourism dollars in the form of gas, food, lodging and miscellaneous spending. While estimates vary, studies indicate that out of town visitors spend an average of \$57 to \$127 in a day trip to the area, and overnight visitors spend an average of \$166 to \$270 (*Lane County Travel Impacts and Visitor Volume, 2014*, by Dean Runyan & Associates for Travel Lane County; *Oregon Travel Impacts, 1991-2014*, by Dean Runyan & Associates for Oregon Tourism Commission). Overnight hotel stays generate transient room tax, of which approximately 9 percent is distributed to Lane County Parks, accounting for nearly 15 percent of the gross revenue of the Lane County Parks Division.
- Large events can contribute to revenue for the Lane County Parks Division by introducing new users to the parks.
- Large events can provide funding or volunteers for controlling invasive plants or improving wildlife habitat.
- Large events such as trail, obstacle course and “fun” runs can promote healthy living.
- Large events can promote community identity and foster cultural development by encouraging volunteerism, support of local non-profit and charitable organizations, enjoyment of the diverse offerings of local vendors, fellowship, and cooperation among groups that might otherwise have no opportunity to connect.

## **3. The Mission of Lane County Parks**

- The mission of the Lane County Parks Division is: To preserve and enhance parks and open space within Lane County in a manner that provides visitors outstanding customer service and a diverse, high-quality recreational experience that meets their needs and expectations.
- There are 70 recreational sites in the county parks system. The sites range from 0.1 acres to 2,260 acres in size, totaling 4,317 acres.
- Over 1.5 million people visit the county parks annually. Approximately 60 percent of day use visitors, 34 percent of campers and 72 percent of moorage holders are Lane County residents. Visits have grown by more than 70 percent since 2010.
- Visitors participate in a broad variety of park activities, ranging from individual or small group activities such as hiking, picnicking, weddings and horseback riding, to water-oriented activities such as swimming, fishing and boating, to large events such as festivals, athletic competitions and concerts attended by 1,000 or more people.
- Customer service is provided by the parks division staff consisting of 14.8 FTE. This ratio of 1 FTE to 291 acres of park land compares to the 2014 nationwide median of 1 FTE to 46 acres as reported in the National Recreation and Parks Association 2015 Field Report.

- The current annual budget for park operations and maintenance is \$3.2 million. Funding is derived primarily from camping and user fees, grants and special taxes, e.g., transient room, car rental and boater fees. No funding is derived from the county general fund, i.e., real property taxes are not used to support county parks.
- At present, the Lane County Parks Master Plan is being updated. This plan was adopted in 1980 with the purpose to “project and plan for the parks and open space needs of Lane County to the year 1995”. The plan contains two General Goals: 1. Provide a comprehensive and balanced park development program which offers a variety of park and recreational opportunities for Lane County residents and visitors consistent with the Statewide Planning Goal #8 [Recreational Needs]; and 2. Provide for adequate open space and protect important scenic and historic areas consistent with Statewide Planning Goal #5 [Natural Resources, Scenic and Historic Areas, and Open Spaces]. While the plan does not specifically address large events, it anticipated that “There appears to be a greater demand for more ‘active’ facilities near population centers, as opposed to ‘passive’ park and recreation areas” (Finding 9, page 19). It also contains policies that are still relevant today, for example: “... continue to show appropriate concern to adjacent land use when planning a park or recreational area. (Examples – lighting, noise, traffic in developed residential neighborhoods.) Buffer areas or other modifications might be considered in the planning process” (Policy 11, page 12); “... consider environmental quality with regard to recreation. Areas shall be developed to ensure a minimum damage to the environment, while still providing a recreational experience to the user” (Policy 15, page 12); and “... respond to requests for recreational areas and facilities by various organizations and special interest groups. Each request shall be reviewed on its own particular merit” (Policy 24, page 13).
- The use and development of one park, the Howard Buford Recreation Area, is guided by a specific master plan which was adopted in 1994. The plan’s goals support the stated purpose of this park to “provide varied opportunities for primarily low intensity outdoor recreation and education activities while protecting, conserving, enhancing and maintaining the natural, scenic, historical, rural, and recreational qualities of this large, strategically located regional park”. The park is subject to the requirements of Statewide Planning Goal 15 – Willamette River Greenway.
- The mission, plans and operations of the county parks system contain inherent conflicts and challenges. That is, by attempting to provide a wide variety of visitors with “a diverse, high-quality recreational experience that meets their needs and expectations”, the experience of some park users can be adversely impacted by the activities of others. Furthermore, adverse impacts can affect neighboring farm, forest and rural residential activities. In particular, impacts associated with some large events can create the most significant conflicts.
- Adverse impacts of most concern include: noise, traffic, environmental degradation, fire, trespass, vandalism, and negative economic impact on neighboring farms.
- Staffing shortfalls in both the county parks division and sheriff’s department limit the county’s ability to enforce nuisance and unlawful activities associated with these adverse impacts, thereby affecting the county’s ability to achieve its stated parks mission.
- The Oregon Resident Outdoor Recreation Demand Analysis Summary for Lane County (part of the Supporting Documentation for the 2013-2017 Oregon Statewide Comprehensive Outdoor Recreation Plan prepared by the Oregon Parks and Recreation Department and Oregon State University in 2012) identifies the types of outdoor recreation activities in which Lane County residents participate. Of those residents who responded to a survey, over 50% participated in each of the following activities: walking on local streets/sidewalks; sightseeing/driving or motorcycling for pleasure; relaxing, hanging out, escaping heat/noise, etc.; walking on local trails/paths; picnicking; attending outdoor concerts, fairs, festivals; and beach activities-ocean.

Preserving open space and the environment, improving physical health and fitness, making their community a more desirable place to live, and improving mental health and reducing stress received the highest value for benefits of parks and recreation services. According to the analysis, among the highest priorities in which park and forest agencies should invest in the future include: dirt/other soft surface walking trails and paths; public access sites to waterways; children's playgrounds and play areas made of natural materials (logs, water, sand, boulders, hills, trees); nature and wildlife viewing areas; and picnic areas and shelters for small visitor groups.

- A survey was conducted by the Lane County Parks Division in collaboration with an LETF subcommittee and ECONorthwest in January 2015 to assess whether Lane County residents think large events should be allowed in some Lane County Parks and, if so, under what conditions they should be allowed. Two thousand surveys were mailed and 736 (40 percent) were returned. Young adults, ages 18-35, were oversampled to ensure the comments of this particular demographic group were statistically represented. Some of the key conclusions of the survey are: Lane County residents value Lane County's parks and think that parks play an important role in the quality of life in Lane County; 21% of the respondents support allowing all large events, 71% support allowing large events under some circumstances, and 3% responded that no large events should take place (the level of support was relatively constant across respondent age groups and income levels); more than 60% of respondents indicated that mitigation measures would either address their concerns or that they had no concerns (this level of confidence in the ability to mitigate concerns about large events held for respondents living in neighborhoods closest to the Howard Buford Recreational Area and Armitage Park, two of Lane County's largest parks where events are more common); as Lane County Parks Division develops policies to manage large events in parks, it will be important to pay close attention to policies to mitigate key impacts on neighbors, such as noise, traffic, and concerns about public safety (Lane County already implements many mitigation measures); the results of this survey provide opportunity for Lane County Parks Division to educate the public about the mitigation measures already implemented by the County, new mitigation policies resulting from the work of the Large Events Task Force and this study, and the results of studies about the impacts of large events in key areas of concern. (See Appendix F)
- The Task Force conducted two workshops at which the general public was invited to share thoughts with the Task Force members. A total of approximately 75 people attended, largely from residential areas adjacent to Howard Buford, Zumwalt and Hendricks Bridge parks. The main concerns centered on the impacts that large events could have on the parks themselves as well as on the adjacent neighborhoods; there was also discussion of the recreational and financial benefits that managed control of various activities can provide.
- The Task Force also provided on-line opportunities for the general public to provide feedback. 523 comments were received (including some duplication) and according to LCP staff analysis, 38% of the respondents support allowing all large events, 41% support allowing large events under some circumstances, and 21% responded that no large events should take place.

#### **4. Existing Rules and Restrictions Regarding Park Use**

- The Lane County Parks Division has written rules "designed to help [visitors] have a safe and enjoyable visit while protecting our park resources and ensuring enjoyable use of the park by others."



- Exceptions to the park rules as well as requests to conduct special events and uses such as overnight use, amplified noise equipment, lawn parking, charging of admission or the sale of goods, services or alcohol, require a Special Event contract addressing matters such as environmental impact, transportation/access impact, noise, indemnification and usage fees.
- Most county parks are zoned for park and recreation purposes. Some parks are located within areas zoned for farm, forest, natural resource, watershed protection, rural residential or rural public facility purposes; these zones may limit the types of activities for which the parks may be used.
- The land for some county parks was granted with deed restrictions or is leased with provisions regarding the types of activities that may occur in the parks. In general terms, these restrictions and provisions limit the use of the parks to “recreational purposes.” For most, the types of activities that are considered to be “recreational purposes” are not specifically defined.
- Lane County Code Chapter 5.600 regulates noise by establishing maximum sound levels during certain hours of the day. LC 5.620 provides parks and other civic activities some exceptions to the standards, and LC 5.625 prescribes an administrative variance process to exceed the standards. Park rules require “sound producing devices” such as radios, tape decks and car stereos to “be operated so as not to be plainly audible from a distance of 50 feet”.
- Lane County Code Chapter 15.205 regulates the use of county roads through a Facility Permit process. The Lane County Parks Division coordinates with the Lane County Road Maintenance Division to ensure roadways are properly signed to prohibit parking and maintain smooth flow of traffic. The Parks Division also uses onsite mitigation measures such as temporary event, traffic and parking plans to control the flow and queuing distance of vehicles entering a site.
- The Lane County Board of Commissioners may adopt ordinances and/or policies that regulate the types of activities allowed in county parks and/or the rules by which visitors to county parks must abide.
- In December 2014, the Lane County Board of Commissioners adopted Lane County Code Chapter 3.995 regulating Outdoor Assembly License Review Procedures pertaining to large events held on privately owned property, which excludes Lane County parks and certain other potential venues.

## 5. General Conclusions & Guiding Principles

After reviewing and discussing preliminary information obtained from invited “subject experts” and the general public, the Task Force adopted the following five general conclusions and guiding principles to direct its efforts:

- Large events and the mission of Lane County Parks  
Large events can fit the mission of Lane County Parks if properly managed as to their frequency and impact on neighbors, environmental qualities, and other park uses.
- Revenue as a motivation for large events in Lane County Parks  
Lane County Parks are underfunded and we recognize that useful revenue can be generated by large events. This potential generation of revenue, however, does not supersede the need to follow a set of requirements regarding the type, frequency, duration and certain quality factors for these events.

- Legality and policy issues associated with large events in Lane County Parks  
Although the Large Events Task Force is not qualified to make legal judgments, the hosting of large events in Lane County Parks appears to be a legal activity that raises policy and management issues that need to be addressed.
- Appropriateness of large events in Lane County Parks  
Large events can be appropriate in some Lane County Parks, but only if requirements limit their frequency/duration and impact on neighbors, environmental qualities, and other park uses.
- Safety as the overriding factor associated with large events in Lane County Parks  
Safety considerations are based on objective criteria, and so must be the foundation of a comprehensive and functional management plan for every event, large or small. Each large event being considered should first be required to demonstrate its capacity and willingness to operate successfully within both safety policy and contractual operational requirements established by Lane County Parks.

With these guiding principles in mind, the Task Force divided into three working groups to study identified concerns and to make recommendations for consideration by the entire Task Force. Sixty-three proposed recommendations were submitted to and considered by the Task Force. After considerable discussion, votes were taken on the recommendations, and the final adopted recommendations are provided below, followed by the concerns and findings which provide background and context. It should be noted that while strong consensus was achieved on most recommendations, a small number of amendments or proposals were adopted or rejected on closely split votes. Although individuals had different perspectives on the issues under consideration, there was usually a broad middle ground supported by most or all task force members. The general cohesiveness of the task force is indicated by strong support for a final motion stating that “LETF approves the Findings and Recommendations of the Lane County Large Events Task Force” Each member of the task force was provided with an opportunity to comment as well as vote on this motion. The final vote was for unanimous approval (11-0) with three members absent.

## **6. Recommendations for Policies and Standards Regarding Large Events**

The Large Events Task Force recommends inclusion of the following policies and standards in the body of the Lane County Parks Master Plan.

### **Frequency and Duration of Large Events**

- The appropriate number of days per event could vary depending on the nature of the event and the park where it would take place. Therefore, no overall limit is recommended.

### **Noise**

- Enforce the provisions of Lane Code Chapter 5.600 Prohibited Noise.
- Prohibit the use of amplified sound, i.e., sound that is amplified electronically or by any other means, e.g., megaphones, air horns or explosive devices, between the hours of 10:00 p.m. and 7:00 a.m.

- Obtain a sound engineer’s report if needed to determine proper placement of sound producing equipment.
- Contracts with large event providers must delineate county noise restrictions and contain a mechanism for monitoring decibel levels as well as enforcing compliance.
- Advertise and establish a continuously monitored telephone number through which noise complaints can be channeled and acted upon in a timely manner, e.g., an on-site Park Ranger.

### Environmental Impacts

- The Lane County Parks Division should map “strategy habitats” within any park area considered for large events. Strategy habitats are defined in the Oregon Conservation Strategy (Oregon Department of Fish and Wildlife 2006; available online). In general, they are rare and significant habitat types within each region of Oregon.
- The Parks Division should obtain rare species documentation data annually from the Oregon Biodiversity Information Center, or similar source, for each park being considered for large events in the following season.
- The Parks Division should conduct invasive species surveys in each park being considered for large events. Surveys should be done in advance and in anticipation of event applications, i.e., the most likely parks to receive applications should be surveyed first. Treatments of priority invasive species should be undertaken as soon as possible.
- An impact assessment tool should be used to determine impacts from proposed events on the two environmental resources in each proposed park (strategy habitats and rare species). Habitat connectivity also should be considered.

### Traffic and Parking

- Require large event organizers to prepare traffic management plans which address criteria similar to that found in Lane Code 3.995. Submission of these plans to the Lane County Parks Department needs to occur well in advance of large events in order for adequate review and coordination with the Lane County Road Maintenance Division, Lane County Sheriff’s office, and other appropriate county departments and jurisdictional agencies, e.g., ODOT.
- Consider preparing master traffic management plans for roads used to access parks where large events are conducted. Such “template” plans could specify the types of mitigation measures required for various levels of traffic volumes. Depending on the size of the event and traffic generated, these measures could range, for example, from the use of signage to certified flaggers to traffic and/or parking monitors to requiring the use of shuttle vehicles during peak entrance and exiting hours, or for day use ticket holders only.
- Where they don’t currently exist, review and develop capital improvement projects that provide alternative or emergency access to parks that serve as venues for large events.

### Fire Safety/Emergency Response

- Require event organizers to conduct at least one meeting well in advance of an event to coordinate emergency response procedures. This meeting should include the event organizer, the event’s private security manager, all applicable emergency responders, and Lane County Sheriff and Parks Division officials. Radio frequencies, cell phone numbers, and 911 call procedures are among topics to be discussed. (Note: “well in advance” means that at least one

meeting with all involved parties should be held at a minimum of one week prior to the date when vendors load out and set up for the event to ensure all contractual obligations are in order; preferably, an initial meeting would be conducted several months in advance of the event, or whenever the special events contract is signed.)

- Ensure that emergency action procedures are communicated to those attending large events, e.g., location of refuge zones, evacuation routes. Color-coded maps outlining evacuation routes should be prepared and distributed to private security, traffic control, medical, fire and law enforcement personnel. Signage should be used to delineate these areas and routes. Helicopter landing sites should be designated for large events held in remote parks, where road access for emergency medical vehicles is constrained, and/or in anticipation of the need to evacuate large numbers of injured or ill event attendees.

### Public Safety/Security

- Require, well in advance of a large event, coordination among the event organizer, Lane County Parks Division and the Sheriff's office to determine responsibilities and chain-of-command procedures for maintaining public safety and security at the event venue, on neighboring properties, and on roads leading to the venue through adjacent neighborhoods. Additionally, ensure all other affected agencies, e.g., public works, public health, are notified of the nature of the event in a timely manner. (Note: "well in advance" means that at least one meeting with all involved parties should be held at a minimum of one week prior to the date when vendors load out and set up for the event to ensure all contractual obligations are in order; preferably, an initial meeting would be conducted several months in advance of the event, or whenever the Special Events contract is signed.)
- Limit the size, frequency and hours of operation of large events based on the anticipated availability of Lane County Parks Division and Sheriff's office personnel to adequately monitor and enforce the terms of special events contracts and ensure public safety and security.
- In addition to providing liability insurance coverage, require event organizers to provide adequate bonding or cash deposits to adequately cover the cost of contracted services and contingencies. The Lane County Parks Director needs to have copies of all contracts the event organizer has with service providers, e.g., Sheriff, sanitation, security, flaggers, medical, etc.
- Consider limiting the maximum number of attendees at events.
- Consider establishing "tiered" standards to adequately support the size and duration of large events, e.g., the amount of private crowd control and medical personnel, and water, sanitation and fire prevention requirements per 1,000 attendees and/or hours per day.
- Consider establishing legally defensible qualifying standards based on the experience, reputation and/or financial strength of event organizers.

### Alternatives to Large Events as Sources of Park Revenue

- Where appropriate, fees collected from organizers of large events should, at a minimum, cover all costs (including overhead) incurred by the Lane County Parks Division and any other county departments involved with the events.
- Consider increasing camping, parking and other user fees.
- Consider the construction and expansion of improved campgrounds in county parks where such facilities are appropriate and would generate net revenue for the Parks Division.

## Appropriateness of Large Events throughout the Parks System

- The purpose of a proposed large event must be compatible with the spirit of, and all specific provisions contained within any deed, lease, master plan or other approved guidance documents applicable to a given park.
- To encourage stakeholder involvement and provide transparency in the review of large events, the Parks Advisory Committee (PAC) should draw on experts and stakeholders to form a PAC/Stakeholder Event Review and Oversight Group. Membership would include individuals with expertise in event management, environmental and economic impact, neighbors, relevant nonprofit/volunteer groups, and a parks pass holder. Following a two-step process, the Parks Manager and staff would first review large event applications and either move an event application forward to step two, help organizers improve their application, or deny the application and remove it from further consideration. In the second step, the PAC/Stakeholder Group would use an assessment tool to analyze and score applications forwarded from Parks staff and recommend to the Board of County Commissioners the approval or denial of each application. The assessment tool would be developed by Parks staff and the PAC/Stakeholder Group based on appropriateness, impact, safety and other criteria included in this report. In addition to reviewing large event applications, the Parks Manager would also have the option to seek the help of the PAC/Stakeholder Group in reviewing selected smaller events. For example, this group might be asked to help Lane County Parks staff evaluate new events with unusual characteristics or those that, while small, might still have a high impact on the park. Due to the seasonal nature of applications, it is estimated that the PAC/Stakeholder Group could complete most or all reviews during a meeting early in the calendar year. The full PAC/Stakeholder Group recommendation is presented as Appendix G.
- “Occupant density” standards should be established by the Parks Division for parks capable of serving as venues for large events, and event organizers should be required to limit the maximum number of people and vehicles that will be admitted to the event at any time. (As a guideline, 10 people per 100 square feet of space should be used for events where attendees will primarily be standing; less than 10 people per 100 square feet should be used for non-standing events, e.g., dancing, running, picnicking. The calculation does not include space for uses such as roadways, vendor booths, stages, toilets, service areas.) Event organizers should be required to keep a count of persons and vehicles entering and leaving the event, and shall not be allowed to exceed the contracted amount. Additionally, event organizers should submit an emergency evacuation plan and document how they have calculated the exit capacity of their event.
- The Parks Division, PAC/Stakeholder Group, and event organizers should:
  - Establish and map an appropriate event footprint, and document how they have considered impacts on the environment, neighbors and other park users.
  - Evaluate the adequacy of plans for managing traffic, protecting the environment, controlling noise, providing for public safety, health, and security, and other requirements of the contract.
  - Serve timely notice (a minimum of 30 days) of proposed large events to general park users and neighboring property owners (such notice would be accomplished by posting on the Parks Division website, park information boards, parking areas and host stations, and should include the type of event, expected number of attendees, attendance fees and location within the park).



- Take public comments and suggestions from, and evaluate and consider concerns of, impacted park users, neighboring property owners, individual parks' non-profit or volunteer groups, or event organizers.
  - Determine appropriateness of the event for the park, and abide by deed/lease restrictions, individual park's master plans, and land use considerations.
- Using the assessment tool, Lane County Parks staff and the PAC/Stakeholder Group should evaluate, among other things, 1) noise impact, with lower assessment scores given to events focusing predominantly on amplified music; 2) lodging and extended stays, with higher assessment scores given to events which generate significant overnight stays in off-site lodging and camping facilities; 3) revenue to Lane County Parks, with higher assessment scores given to events whose revenue offsets expenses (with preference given to multi-year contracts); 4) outside spending, with higher assessment scores given to events which promote local spending and/or use of local vendors; 5) job creation, with higher assessment scores given to events which create or expand local temporary, seasonal or year-round jobs; and 6) opportunities for local non-profit or volunteer groups to earn revenue or fulfill their mission (e.g., education), with higher assessment scores given to events which promote "give-back" opportunities.
- Limit the size, duration and/or frequency of large events in a manner that is manageable by Lane County Parks Division personnel in order to ensure compliance with the provisions of a Special Event contract.
- Limit camping to parks with developed campgrounds in order to manage the impacts that camping associated with large events may have on parks, other park users and adjacent neighborhoods. (The one recognized exception to this policy is the arrangement between Lane County and the City of Veneta which allows camping at Zumwalt Park during the Country Fair; the contractual obligations that have made this arrangement successful should be reviewed by the LCPAC to determine the appropriateness of similar implementation at other parks.)

## 7. Concerns and Findings Regarding Large Events

### Frequency and Duration of Large Events

- Some large events last one day while others span two, three or more days in duration; some events occur during daylight hours, while others can last into late night or early morning.
- Some events, e.g., concerts, tend to generate "peak traffic" volumes within relatively short periods of time as attendees travel to and from the venue, while other events, e.g., festivals, generate a more consistent flow of traffic throughout the duration of the event.
- Impacts created by certain types of large events can disturb native vegetation, wildlife and people attending a park for other purposes. Additionally, such impacts can disturb people and domestic animals that live in close proximity to the parks. At some point, such impacts can become intolerable nuisances.
- In addressing the impacts that large events conducted on private property may have on adjacent land uses, in December 2014 Lane Code 3.995 was adopted. This code restricts large assemblies, i.e., 1,000 to 3,000 people gathered for 12 to 120 hours, to once "in any 90 day period and no two assemblies may be held closer than 90 days apart," and establishes standards and requirements pertaining to traffic management, public health, public safety, noise and other considerations. The code does not apply to "any assembly in a local, county or regional park authorized by the regulating authority".

## Noise

- A number of loudness comparison charts exist which provide information on typical ambient or background noise levels for various activities. One such chart prepared by the California Department of Transportation is especially informative to this study in that it identifies typical noise levels in various relevant settings: noisy urban area during daytime – 70-80 dBA; quiet urban area during daytime – 50-60 dBA; quiet urban area during nighttime – 40-50 dBA; quiet suburban area during nighttime – 30-40 dBA; quiet rural area during nighttime – 20-30 dBA; and rock band – 100 dBA.
- A report titled “Code of Practice on Environmental Noise Control at Concerts” prepared by The Noise Council in London, England in 1995 provides information on “large music events involving high powered amplification equipment held in sporting stadia, arenas, open air sites and within lightweight buildings”, and offers guidelines to minimize disturbance caused by noise. Highlights of the report include the following: assessment of noise in terms of dBA is very convenient but it can underestimate the intrusiveness of low frequency noise; topographical and climatic conditions can be such that music noise level can be lower at locations nearer to the venue; concerts can be accompanied by associated activities which can be noisy, e.g., audience applause can be a significant contributor.
- Lane Code Chapter 5.600 Prohibited Noise regulates noise emissions. It specifies that noise generated on one property cannot exceed a certain noise level across the boundary of another property that “is used for the overnight accommodation of persons”, e.g., a house, apartment, trailer or hospital. Between 7:00 a.m. and 10:00 p.m. the sound cannot exceed 60 dBA; between 10:00 p.m. and 7:00 a.m., the sound cannot exceed 50 dBA. Furthermore, between 10:00 p.m. and 7:00 a.m. such sound cannot be audible inside such a structure. There are exceptions to this rule; among them, group activities at parks are allowed to exceed the established noise levels between 7:00 a.m. and 11:00 p.m.
- Other jurisdictions regulate noise more-or-less in the same manner. Of particular note is that both the City of Eugene and Willamalane Park District have provisions disallowing “amplified music” to be played between certain hours, e.g., 10:00 or 10:30 p.m. to 7:00 a.m.
- Lane County Park Rules state: “Creating a Disturbance - Radios, tape decks, car stereos, *or other sound producing devices* [emphasis added] must be operated so as not to be plainly audible from a distance of 50 feet”.
- The Lane County Parks Special Event Application requires event organizers to provide information regarding “any anticipated noise issue and what your plan may be to reduce or control noise”.
- Enforcement of the Lane County Noise Ordinance and Park Rules is provided by Land Management Division and Parks Division personnel. Given current limited staffing, enforcement is complaint driven and it is often difficult for staff to respond to complaints in a timely manner. The Lane County Sheriff does not enforce noise violations in county parks.

## Environmental Impacts

- The 10 parks identified as suitable or potentially suitable for large events display a broad range of biological diversity, including coniferous and deciduous forests, savannas and meadows, lakes and rivers, and hills and low lands. These lands provide important habitat for a variety of wildlife.

- The 10 parks also exhibit various levels of improvements ranging from undeveloped, natural conditions to fully serviced campgrounds and moorage facilities.
- Farming and grazing have occurred in some parks, degrading native vegetation in some areas and allowing invasive plant species to grow.
- Improvements and excessive human use can degrade the natural, scenic and spiritual values of these parks.
- Potential impacts on terrestrial wildlife resulting from noise, proximity of humans and pets and trampling associated with short term, locally concentrated events include outright mortality, and impacts on mating, reproduction, feeding and movement.
- Potential impacts of short term, locally concentrated events on aquatic wildlife are less well known, but storm water runoff from parking areas can introduce toxins and sediments into water bodies, and proximity of humans and their pets can stress fish, turtles, frogs and other aquatic life.
- Potential impacts of short term, locally concentrated events on native plants and habitats include these general categories: reduction/loss of habitat, conversion of habitat from native to non-native by physical disturbance and introduction of non-native (sometimes invasive) species, alteration of hydrology, and degradation of soils by compaction, application of chemicals, and human or other contamination which affects ground dwelling organisms.

## Traffic and Parking

- Large events generate large volumes of automobile traffic which can approach or exceed the capacity of roads that provide access to the events. This can cause traffic congestion, inconvenience and safety issues, and parking concerns on the roads, in the parks and in neighborhoods adjacent to parks. Depending upon the type of event, these problems can occur within relative short “peak” times, e.g., before the start and at the conclusion of a concert, or over a relatively long period of time, e.g., a festival at which attendees come and go during the course of a few days.
- Access to and from some Lane County parks is limited to one road. While this may be adequate for normal park usage, traffic congestion can quickly become a problem during large events. Additionally, where only one road accesses a park, access by emergency vehicles or evacuation of park users could be significantly impeded or even dangerously precluded. It should be noted that the primary access to the west side of Howard Buford Recreation Area is a two-lane road, i.e., Seavey Loop Road, which includes a bridge across the Coast Fork of the Willamette River. A network of private gravel roads and one-lane bridge located west of this main park entrance can be used as a secondary emergency route, but the route is complex and access is contingent on the owners’ permission. No such alternative route is available east of the main entrance, potentially impacting event safety in the Arboretum area of the park.
- Roads are classified according to their design and construction, e.g., lane width, number of lanes, and they are categorized as local roads, collector roads and arterial roads. These “functional” classifications are indicators of the traffic volume or capacity that a road can carry safely and efficiently at designated speeds.
- The Lane County Road Maintenance Division is responsible for maintaining and regulating roads belonging to the county; the Oregon Department of Transportation is responsible for state highways; city public works departments are responsible for city streets.
- Whenever a permanent or temporary use is made of a county road right-of-way, e.g., driveway access, temporary sign placement, a Facility Permit must be issued by the Road Maintenance

Division in accordance with Lane Code 15.205. If an event will generate more than 50 additional traffic trips during peak demand on county roads outside of urban growth boundaries or more than 100 additional trips during peak demand on county roads inside of urban growth boundaries, a Special Events and Public Benefits permit is required. The types and placement of signs and the use of flaggers must meet certain legal standards. Standard signage, including reader boards advising locals of upcoming events, is available for rental through Lane County.

- The Lane County Parks Special Event Application requires event organizers to “provide a general Anticipated Transportation/Access Impact on roads”. This information is to “include any potential route conflicts, ingress/egress, or other possible conflicts”. It also asks if the event organizer has “a Transportation Access plan or can one be established?”
- There have been inconsistencies in the degree to which Lane County Parks personnel have coordinated with the Road Maintenance Division to determine the extent to which mitigation measures, e.g., temporary signage, flaggers, and parking plans, should be required in order to maintain an adequate and safe flow of traffic to and from a large event venue. It should be noted that while signage and flaggers may be used to warn or direct traffic, speed limits cannot be modified for large events.
- In late 2014, the Lane County Board of Commissioners adopted Lane Code 3.995 Outdoor Assembly License Review Procedures for large events conducted on privately owned land. This code section requires event organizers to provide a traffic management plan “demonstrating how traffic will be managed and parking will be provided” in greater detail than that currently required by the Special Event Application for events conducted at county parks. (Such a plan does not, however, involve as much technical detail as a Traffic Impact Analysis which is required for various land use proposals, e.g., housing subdivisions.)
- Although not required to be prepared by a registered traffic engineer or certified transportation planner, the cost of preparing a traffic management plan that satisfies the criteria of Lane Code 3.995 is estimated to be several hundred to a few thousand dollars. Traffic control measures, e.g., certified flaggers, and/or devices, e.g., signs, signals, which may be required by such a plan would add additional cost.
- For events such as University of Oregon football and basketball games in the City of Eugene, standard traffic management plans have been developed with requirements specified or “tiered” depending upon the anticipated volume of traffic that an event is expected to generate. The conditions imposed range from the use of temporary signage, to the use of certified flaggers or police officers, to the establishment of temporary directional lanes, to the use of shuttle buses. Such a “template” plan can cost several thousand dollars to develop, but it eliminates the need for individual event organizers to develop their own plans.

### Fire Safety/Emergency Response

- Hot summer temperatures, dry field and forest conditions, and human activity, e.g., smoking, cooking, parked vehicles and camp fires, can inadvertently result in wildfires in Lane County parks.
- Precautionary measures, limits on use, and coordinated emergency action plans and procedures are needed to manage fire hazards associated with large events.
- Most, if not all, county parks are regulated and covered against fires by local rural fire districts (for structural fires) and/or Oregon Department of Forestry fire control districts (for forest and rangeland fires).

- The Lane County Parks Department coordinates with rural fire districts and/or the Department of Forestry for fire protection.
- The Oregon Fire Code contains guidelines for fire prevention and life safety at fairs, trade shows, carnivals and common venue events that are applicable to large events in Lane County parks. ORS Chapter 477 prescribes regulations for fire protection of forests and vegetation that are also applicable to large events in certain Lane County parks.
- The Lane County Parks Division Special Event Contract requires large event organizers to abide by the Oregon Fire Code and interagency agreements, and to develop Emergency Action Plans for events.
- Some inconsistencies exist in the degree to which contract requirements are implemented or enforced, e.g., provision for two ingress/egress routes, fire extinguisher requirements, maintenance of adequate fire lanes.

### Public Safety/Security

- Some large events conducted in Lane County parks have the potential for creating a nuisance and/or criminal activity, both within the park and on neighboring properties. The likelihood of such activity is largely dependent upon the demographic composition of those attending the event, the nature and duration of the event, and the amount of planning and coordination involving affected agencies, other users of the park and neighbors adjacent to the park.
- Lane County Parks Division personnel are responsible for ensuring compliance with the provisions of special events contracts. To the extent staffing levels allow, they conduct on-site inspections and continuous enforcement. They have the legal authority to “shut down” an event for noncompliance.
- The Lane County Sheriff can be called upon to enforce laws pertaining to criminal activities, e.g., driving under the influence of intoxicants, sale of illegal drugs, assault and trespass, but the Sheriff does not enforce the provisions of special events contracts, e.g., adequacy of sanitation, hours of operation or noise standards. The Sheriff can also enforce parking violations along the roads leading into the event - a job made much easier if proper signage is posted along the primary access routes and at the entrance(s) to the venue(s).
- Based on a statewide standard for law enforcement in municipalities, a suggested ideal ratio for maintaining adequate public safety and security in cities is 2.2 officers per 1,000 population. For large events in Lane County parks, this standard is not achievable with the Sheriff’s office given the current low staffing level. As a result, it may be necessary for large event coordinators to contract with off-duty deputies or licensed and bonded private security contractors, but the availability of personnel for this service cannot be guaranteed.
- Unanticipated attendance of excessive numbers of people at large events can overwhelm the ability of the event organizer and Lane County Parks Division personnel to adequately manage the unintended consequences associated with such attendance, e.g., inadequate sanitation, parking and traffic control, and crowd control.
- While on-site or nearby camping associated with a large event can provide an additional recreational experience for participants and reduce the inconvenience and safety concerns of driving home after a late night event, camping sites themselves can create additional public safety and security concerns. If camping standards are not addressed in the special events contract, management of unintended consequences can create problems both within the camp and on neighboring properties.



- The lack of early coordination among the event organizer, Lane County Parks Division personnel, and the Lane County Sheriff can result in inadequate management of the event attendees and provision of emergency services. Notable problems in this regard include the “collapse” of emergency cell phone coverage if communication towers are overwhelmed by the use of cell phones by event attendees, and the inability of emergency vehicles to access the event site in case of an emergency.

#### Park Revenue

- The current Lane County Parks Division budget is \$3.2 million.
- The Parks Division does not receive any funding from the County general fund or property taxes.
- The Parks Division is funded from approximately 37 sources. These include: user fees, e.g., parking, moorage, picnicking and camping; state taxes and fees, e.g., hotel room tax, and recreational vehicle and boater registration fees; car rental tax; fees for hosting large events.
- For Fiscal Years 2009-10 through 2013-14, the top five sources of gross revenue for the Parks Department were: camping – 20.47%; transient room tax – 14.91%; recreational vehicle fee – 13.82%; car rental tax – 11.32%; admissions, i.e., parking – 8.75%. Fees collected from large event organizers ranked ninth on the list, providing 1.86% of the Park Department’s gross revenue during this time period.
- The Park Division’s experience with fees collected from large events suggests that net operational revenue to the department is negative for the first two to three years of such events’ use of county parks.

#### Appropriateness of Large Events throughout the Parks System

- The 10 Lane County Parks that can accommodate large events vary in size, natural features, available infrastructure and amenities, proximity to users, and proximity to farms, forests and rural neighborhoods.
- Because of the variability of the characteristics of the 10 parks, they each have a range of uses that are appropriate, as well as a range of uses that are not. Most, if not all, have the potential for more passive, lower intensity/lower impact activities such as hiking, picnicking and small weddings. Some of the parks may lend themselves to more active, higher intensity/higher impact activities which range, for example, from athletic competitions, e.g., cross country foot races, or “fun runs”, e.g., the Dirty Dash, to festivals, concerts, regattas, recreational vehicle jamborees, and radio-controlled model airplane events.
- While these parks, both individually and collectively, have the ability to accomplish the Lane County Parks mission to “preserve and enhance parks and open space within Lane County in a manner that provides visitors with a diverse, high-quality recreational experience that meets their needs and expectations”, increasing use of the parks – and in particular the conduct of certain types of large events – has the potential to degrade the natural and improved amenities that the parks provide, and to diminish the quality of the recreational experiences of visitors with differing needs and expectations when their uses interfere with each other. For example, a rock concert and a bird watching event in close proximity to each other would likely not be compatible.
- Furthermore, increasing use of parks has the potential to increase traffic, noise, fire hazard, trespass and vandalism in adjacent farm, forest and rural residential areas.

- At a number of parks, e.g., Howard Buford Recreation Area, Zumwalt Park and Hendricks Bridge Park, volunteers from the adjacent neighborhood and/or volunteer organizations have invested time and resources in varying degrees to maintain and/or make improvements to those parks. For example, in 2014 non-profit groups contributed the equivalent of 19 FTE or \$850,000 in service to Howard Buford Recreation Area. Such private/public partnerships are critical to the maintenance, development, and management of parks and have generated a strong knowledge of and interest in the types of activities which occur in those parks.
- One approach to managing the impacts associated with large events is to specify the types of large events allowed at each park. This would require prescribing the uses, or categories of uses permitted, and establishing operating policies. This approach would require a considerable expenditure of resources to develop management plans for each park. Additionally, with this approach it is possible to overlook and exclude certain uses that would be appropriate, or to create policies that result in unintended outcomes. Furthermore, as time progresses, policies established in management plans of this nature tend to become obsolete or irrelevant in the face of changing circumstances.
- Another approach to managing the impacts associated with large events is to specify standards eliminating, minimizing or mitigating the adverse impacts that can lead to conflicts among park visitors and between park visitors and land uses adjacent to the parks where such events may be held. This would entail establishing, or revising existing, standards for the frequency and duration of large events, noise, traffic, environmental impacts, public safety and emergency response. It may also entail the establishment of criteria for evaluating and selecting the large events that may be held; such criteria could include the experience and financial capability of the event promoter, and the benefit that the event may have on the economic, social and/or environmental values of the county.
- Some communities use an “assessment tool” to score and rank the costs and benefits associated with large events in order to determine their appropriateness. A number of criteria are evaluated and assigned “plus” or “minus” points based on impacts. The criteria include such categories as: “community impact”, e.g., effects on residents and businesses, utilization of public transportation, number of years event has been held; “economic impact”, e.g., lodging demand, outside spending, job creation; “social and cultural impact”, e.g., charity fund raising, wellness, citizen engagement, cultural understanding, urban place making; “environmental impact”, e.g., green initiatives, amplified sound, event containment, recovery time; “road impact”, e.g., time of day, duration of closure; and “impact on city services”, e.g., police, fire, park maintenance.

## **8. Special Considerations for Howard Buford Recreation Area**

### Recommendations

- Limit the frequency of large events to a maximum of four large events per year, with no more than two large events in any one calendar quarter.
- Large events should be limited to those with a primarily educational or nature based theme.
- Limit the duration of large events to no more than 10 hours per day, between sunrise and 7:00 p.m.
- Emergency access routes serving both the north and south portions of the HBRA should be evaluated within at least the contexts of safety and environmental impact, and improved if appropriate and cost-effective. Lacking such improvement, safety concerns should inform the

type, size, and time of year large events are held. For example, fire season may be an ill-advised time to hold large events.

## FINDINGS

- Of the 10 Lane County parks that are capable or potentially capable of serving as venues for large events, one park is subject to additional considerations in regard to such events. This is the Howard Buford Recreation Area (HBRA) for which a master plan was adopted by the Lane County Board of Commissioners in 1994.
- As stated in the HBRA master plan, “the purpose of Howard Buford Recreation Area is to provide varied opportunities for primarily low intensity outdoor recreation and education activities while protecting, conserving, enhancing, and maintaining the natural, scenic, historic, rural and recreational qualities of this large, strategically located regional park” (page 2). The HBRA is described as a place where people “can leave the noises, sights and crowds of the city behind and experience the peacefulness of the rural countryside” (page 7). Furthermore, “users believe that anything that requires large motors, bright lights, fire or that encourages loud, raucous behavior should take place elsewhere” (page 21).
- The intended use of the recreation area is best expressed by the following statement: “It is clear that all of the things that make the Howard Buford Recreation Area what it is today are the things people value about it – the rural character, a place to hike, a place to ride horses, a place rich in its diversity of plants and wildlife, a place which has drawn people to it for hundreds of years. These things should, at the very least, be preserved; at best, they should be enhanced by any changes which are made in the years to come” (page 23).
- Since the HBRA master plan was adopted, 1412 acres of land adjacent to the HBRA have been acquired by The Nature Conservancy and the Friends of Buford Park and Mt. Pisgah for the primary purpose of restoring and protecting fish and wildlife habitat, adding to the intended use of the park.
- In regard to large events, the HBRA master plan offers the following guidance:
  1. Goal 1, Management Objective E. Limit festivals and large gatherings to avoid disturbing visitors who are seeking a peaceful experience. (page 28)
  2. Goal 2, Management Objective A. Limit the location and type of festivals and large gatherings to those which do not damage sensitive botanical resources or wildlife habitat. (page 28)
  3. Goal 8, Management Objective A. Restrict overnight camping to organized group events and require a special permit for each event. (page 31)
  4. Goal 8, Management Objective B. Restrict overnight camping to areas which are easily accessible by emergency vehicles.
- A number of large events have been held in the HBRA. The Mount Pisgah Arboretum has held a mushroom festival annually since 2001 attracting an estimated attendance of 4500 people. In the Emerald Meadows portion of the HBRA, music, art and athletic events have drawn 4,000 to 10,000 attendees. At times, these events have generated noise, traffic, environmental and public safety concerns among both other park users and residents living near the park.
- Seavey Loop Road, a two-lane road with a bridge across the Coast Fork, is the primary access to the park. A gravel road with a one-lane bridge across the Coast Fork can serve as emergency access to events held north of the main entry, but no emergency route is available to access events held south of the main entry.

## 9. Overarching Observations

- It became clear during the Task Force’s deliberations that the mission of the Lane County Parks is challenging to accomplish. Concurrently preserving and enhancing parks and open space, providing visitors outstanding customer service, and offering a diverse, high-quality recreational experience that meets their needs and expectations while faced with growing demand, understaffed personnel, and budget constraints would stretch any park authority’s capability to satisfy all the maintenance and operational responsibilities expected of it.
- It also became clear from the public input opportunities provided by the Task Force that people are passionate about Lane County Parks – but often for different reasons. Some value the natural and spiritual amenities that open space provides, while others enjoy the chance to simply experience the outdoors while exercising, camping, boating, fishing or attending a festival or concert.
- When the Kaleidoscope Music Festival was held at Emerald Meadows, the Lane County Park Division’s ability to manage a large event was exceeded, the adverse impact of the event was felt by not only other users of Howard Buford Recreation Area but by the adjacent neighborhood as well, and the challenges noted above became noticeably apparent.
- Notwithstanding the recommendations included in this report, the members of the Task Force found that the Special Event application and example contracts used by the Park Division largely contain provisions that address the concerns that became a problem during the Kaleidoscope event. It is likely that better planning, coordination and communications could have alleviated or perhaps prevented the problems that arose. In any case, the lesson learned is that enforcement of contract provisions is essential if large events are to succeed.
- In this regard, the members of the Large Events Task Force encourage the Lane County Administrator and Board of Commissioners to provide the necessary resources that will enable the following to be accomplished:
  - **Effective screening of proposed events and event organizers**
  - **Active involvement of those who have a stake in Lane County parks and adjacent neighborhoods**
  - **Mindfulness about what types of events are appropriate in each of the parks**
  - **Engaged management by Lane County Park Division personnel**
  - **Strict enforcement of Special Event contract provisions**



**Appendix A**  
**Members of the Lane County Large Events Task Force**

**John F. Helmer, Chair**  
Seavey Loop Neighbor

**Jeff Gaulton, Vice-chair**  
Bicoastal Media

**Alan Murphy**  
Sheriff's Mounted Posse

**Anna Lawrence**  
Seavey Loop Neighbor

**Brad van Appel**  
Mount Pisgah Arboretum

**Bruce Newhouse**  
Friends of Buford Park and Mt. Pisgah

**Dale Stoneburg**  
18 – 34 Year Olds

**Don Hansen**  
Seavey Loop Neighbor

**Holly Stanley**  
InnSight Hotel Management

**Janis Ross**  
Travel Lane County

**Larry Dunlap**  
Parks Advisory Committee

**Leslie Scott**  
UO Events Management, Truffle Festival

**Mary Moore**  
Seavey Loop Neighbor

**Randy Hledik**  
Parks Pass Holder

**Mike Russell – staff support**  
Division Manager  
Lane County Parks & Animal Services



**Appendix B**  
**Lane County Parks Suitable or Potentially Suitable For Large Events**

**Ada Park**

82244 Siltcoos Station Rd., Westlake

**Armitage Park**

90064 Coburg Rd., Eugene

**Baker Bay Park**

35635 Shoreview Dr., Dorena

**Blue Mountain Park**

76135 Blue Mtn. School Rd., Cottage Grove

**Cinderella Park**

34293 E. Cloverdale Rd., Creswell

**Howard Buford Recreation Area**

34639 Frank Parrish Rd., Springfield

**Orchard Point Park**

27060 Clear Lake Rd., Alvadore

**Perkins Peninsula Park**

26647 Hwy 126, Veneta

**Richardson Park**

25950 Richardson Park Rd., Junction City

**Zumwalt Park**

Jeans Rd. MP 2.6, Veneta

## **Appendix C**

### **Subject Experts Who Provided Information to the Large Events Task Force**

**Andy Clark**

Assistant County Counsel, Lane County

**Becky Taylor**

**Lydia McKinney**

Lane County Transportation Planning

**Beth Goodman**

ECONorthwest

**Chris Cline**

Unit Forester, East Lane District, Oregon Department of Forestry

**Chris Orsinger**

Executive Director, Friends of Buford Park & Mt. Pisgah

**Lt. Cliff Harrold**

**Sgt Billy Halvorson**

Lane County Sheriff's Office

**Kelly Sandow**

Sandow Engineering

**Lauri Segel-Vaccher**

Board member, LandWatch Lane County

**Matt Laird**

Land Management Division Manager, Lane County

**Steve McCoy**

Farm & Forest Staff Attorney, 1,000 Friends of Oregon

**Thom Lanfear**

Land use consultant & retired Lane County planner

**Appendix D**  
**Biodiversity Inventory Update for Emerald Meadows**

<http://www.lanecounty.org/Departments/PW/Parks/Documents/Salix%20Associates%20Biodiversity%20Inventory%20Update%20Report.pdf>

**Appendix E**  
**Emerald Meadows Transportation Demand Management Plan**

[http://www.lanecounty.org/Departments/PW/Parks/Documents/Emerald%20MeadowsTDM\\_7\\_13\\_15.pdf](http://www.lanecounty.org/Departments/PW/Parks/Documents/Emerald%20MeadowsTDM_7_13_15.pdf)

**Appendix F**  
**Lane County Parks Large Events Survey**

<http://www.lanecounty.org/Departments/PW/Parks/Documents/Lane%20County%20Parks%20FINAL%20Public%20Opinion%20Survey.pdf>

## Appendix G

### Parks Advisory Committee/Stakeholder Event Review and Oversight Group

#### Goal

To encourage stakeholder involvement and provide transparency in the review of large events proposed to be held in Lane County Parks.

#### Charge

Parks Advisory Committee (PAC) draws on stakeholders to form the PAC/Stakeholder Event Review and Oversight Group. The PAC/Stakeholder Group reviews event applications, applies criteria developed by the Large Events Task Force and approved by the Board of County Commissioner (BCC) in order to recommend to BCC the approval or denial of all large events (those with 1,000 or more total participants) and selected smaller high-impact events proposed to occur in Lane County Parks.

#### Process

##### Step 1: Lane County Parks Manager & staff consider applications.

The LCP manager and staff consider applications and decide to move an event application forward to Step 2, or provide feedback to the event organizer for improvement of the application, or deny the application and remove it from further consideration. The manager and staff also exercise judgement to determine which smaller events should be reviewed by the PAC/Stakeholder Group. In making such a determination about smaller events, the LCP manager and staff are guided by the appropriateness of the event and its potential impact based on the criteria developed by LETF and approved by the BCC.

##### Step 2: PAC/Stakeholder Group considers applications

The PAC distributes applications along with master plans and any other relevant documents and schedules a meeting of the PAC/Stakeholder Group to consider applications and apply an assessment tool. Meetings are expected to occur at most 2-3 times each year and are scheduled well in advance to encourage participation. All relevant stakeholder groups are made aware of scheduled meetings and are provided an opportunity to comment. Members of the PAC/Stakeholder Group vote and discuss as equals, whether part of PAC or the stakeholder community. Decisions are reached via majority vote of a 2/3 quorum of combined PAC and stakeholder group. The PAC/Stakeholder Group's recommendations are forwarded to BCC for approval.

#### First year considerations

In the first year, the PAC/Stakeholder Group and LCP develop an assessment tool based on criteria developed by LETF and approved by the BCC. The assessment tool may need to be assessed and refined over time as experience is gained. In this first year, PAC makes a particular effort to include members of the Large Events Task Force since those individuals have useful background and experience.

#### Chair & Membership

PAC reviews applications from individuals interested in serving on the PAC/Stakeholder Group and recommends stakeholder appointments to BCC for approval. Stakeholders serve staggered two-year terms and may be reappointed. It is intended that this process be modeled after that used to recommend and appoint PAC members-at-large. When considering a park not already represented on the PAC/Stakeholder Group, two neighbors and up to two non-profits are invited to join as voting members for the consideration of that one park. For example, if Zumwalt is under consideration but nobody from



that area is on the PAC/Stakeholder Group, then two neighbors from the Zumwalt area are invited to join in discussion and voting concerning events at Zumwalt.

The Chair of the PAC also chairs the PAC/Stakeholder Group.

Membership

Parks Advisory Committee (full membership)

Stakeholders

- |   |   |                          |
|---|---|--------------------------|
| 1. Event expertise  | 1 representative  |                          |
| 2. Economic impact  | 1 representative  | (e.g., tourism, lodging) |
| 3. Environmental impact                                     | 1 representative  |                          |
| 4. At-large parks pass holder                               | 1 representative  |                          |
| 5. Neighborhood impact                                      | 2 representatives associated with each park under consideration |                          |
| 6. Non-profit organizations or volunteer stewardship groups | 2 representatives associated with each park under consideration |                          |

FILED

JUN 16 1994

IN THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

COUNTY CLERK

BY *a. Elaine Cole* ORDINANCE PA NO. 1056

- ) IN THE MATTER OF ADOPTING THE HOWARD BUFORD
- ) RECREATION AREA MASTER PLAN AS A REFINEMENT TO
- ) THE EUGENE-SPRINGFIELD METROPOLITAN AREA GEN-
- ) ERAL PLAN, AND ADOPTING A SEVERABILITY CLAUSE

WHEREAS, the Board of County Commissioners of Lane County has received a proposals from the Lane County Parks Division for the adoption of a master plan entitled the "Howard Buford Recreation Area Master Plan" (July 1993), which analyzes the need for new and improved facilities and proposes protection measures within the Howard Buford Recreation Area; and

WHEREAS, the Lane County Parks Advisory Committee reviewed and approved the Howard Buford Recreation Area Master Plan in June 1993 and forwarded the Master Plan to the Lane County Planning Commission for review and recommendation; and

WHEREAS, the Lane County Planning Commission, in regular meeting and public hearing of March and April 1992, did recommend approval of the request; and

WHEREAS, evidence exists within the record indicating that the proposal meets the requirements of Lane Code Chapter 12, and the requirements of applicable state and local law; and

WHEREAS, The Board of County Commissioners has conducted public hearings and is now ready to take action;

NOW, THEREFORE, the Board of County Commissioners of Lane County ordains as follows:

The Howard Buford Recreation Area Master Plan (July 1993), copy attached as Exhibit "A" and incorporated herein by this reference, is adopted as a refinement to the Eugene-Springfield Metropolitan Area General Plan.

Although not a part of this Ordinance, the Board of County Commissioners adopts the Findings set forth in attached Exhibit B, in support of this action.

If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not effect the validity to the remaining portions hereof.

ENACTED this 15th day of June, 1994.

APPROVED AS TO FORM

Date 5-25-94 Lane County

*Stephen J. Lockman*  
OFFICE OF LEGAL COUNSEL

*Janey Rust*  
Chair, Lane County Board of County Commissioners

*Beth McAllister*  
Recording Secretary for this meeting of the Board

# Howard Buford Recreation Area

*Master Plan*



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**Howard Buford Recreation Area**

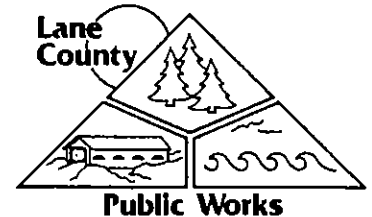
**Master Plan**

Prepared by:  
Lane County Parks Division  
3040 Delta Highway North  
Eugene, Oregon 97401

and

Cameron & McCarthy  
Landscape Architects  
1410 Oak Street, Suite 200  
Eugene, Oregon 97401

July 1993



September 1, 1993

The Howard Buford Recreation Area is a 2,300 acre regional park located within minutes of the Eugene/Springfield Metro area. The recreation area is an outstanding natural and recreational resource for our county. With park attendance now exceeding 40,000 visitors annually, it is evident that many of our Lane County residents have discovered the park. Many of the visitors either visit the Mt. Pisgah Arboretum, hike the summit trail to the top of Mt. Pisgah, or horseback ride throughout the park. As attendance has grown, so has the challenge of protecting the park from overuse. To insure that future generations can enjoy the serenity and beauty of the park, the Lane County Parks Division commissioned the preparation of a Conceptual Master Plan for Howard Buford Recreation Area (HBRA). The enclosed Master Plan is a revision of the Conceptual Master Plan and it will be the first master plan for the park since its acquisition in 1973.

Prior to authorizing the development of the Conceptual Master Plan, the Parks Division completed a Management Plan for the site with the assistance of the HBRA Task Force. The Lane County Parks Advisory Committee has reviewed and approved the Management Plan. The guiding principle for the Management Plan, the Conceptual Master Plan and this Master Plan is the Management Statement for the HBRA which was developed by the Task Force and Parks Division staff. The Management Statement is as follows:

"The purpose of the Howard Buford Recreation Area is to provide varied opportunities for primarily low intensity outdoor recreation and education activities while protecting, conserving, enhancing, and maintaining the natural, scenic, historical, rural and recreational qualities of this large, strategically located regional park."

On November 18, 1992, the Lane County Parks Advisory Committee reviewed and approved the Conceptual Master Plan. The Conceptual Master Plan was further refined and revised after the Parks Division received public comment on the Plan from February 1 through March 31, 1993. As part of that public comment period, Parks Staff and the Parks Advisory Committee held two public input sessions. Both sessions were well attended and comments from those sessions, along with written testimony, were considered in the final draft of the Plan. On June 16, 1993, the Parks Advisory Committee reviewed and approved the Master Plan as submitted within this document.

The HBRA Master Plan will now be submitted to the Lane County Planning Commission as a refinement to the Eugene/Springfield Metropolitan Plan. After review by the Planning Commission, the Plan will be forwarded to the Lane County Board of County Commissioners for their review and approval.

As the Parks Manager for Lane County, I sincerely wish to thank the members of the HBRA Task Force, and the Lane County Parks Advisory Committee for their dedication to this project. In addition, I express my gratitude to Brian McCarthy and Jane Henderson of Cameron and McCarthy, Landscape Architects, for their genuine concern for the park and the special effort they placed on insuring that the Plan was in compliance with the Management Statement. And finally, I wish to thank the Parks Division staff, Jake Risley, Alisa Cobb, Susan Bittle, and University of Oregon intern Emily Carroll, for their support and assistance with the project.

I look forward to completing the Master Plan for the Howard Buford Recreation Area and to working with staff and volunteers in implementing the Plan.

Sincerely,

*Bob Keefer*  
Bob Keefer  
Parks Manager

EXHIBIT D

**Howard Buford Recreation Area Task Force**

Susanne Twight-Alexander  
Jennifer Dimling  
Santee Force  
Dan Gleason  
Randy Hledik  
Tom LoCascio  
Joyce Lorenz  
Dennis Lueck  
John McWade  
David Wagner

***Acknowledgments***

**Parks Advisory Committee**

Rich Aaring, Chairperson  
Susanne Twight-Alexander, Vice Chairperson  
Roger Delles  
Robert Emmons  
Linda Fischer  
Nena Lovinger  
Jackie Scott  
Dan Gleason  
John Rosselli

**Lane County Parks Division Staff**

Bob Keefer, Parks Manager  
Jake Risley, Parks and Planning Supervisor  
Alisa Cobb, Administrative Assistant  
Susan Bittle, Office Assistant  
Emily Carroll, Intern

**Consultants**

Cameron & McCarthy, Landscape Architects  
Ron Cameron, Principal  
Brian McCarthy, Principal  
Jane Henderson, Associate  
Carol Schirmer, Associate



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*Executive Summary*

*Executive Summary*

*Introduction*

Howard Buford Recreation Area is a regional park of almost four square miles at the southern end of the Willamette Valley in Oregon and is located on and around Mount Pisgah. The park land is bounded on the west and southwest by the Coast Fork of the Willamette River and on the north and east by privately owned lands. It is the only regional park within the Eugene-Springfield Metropolitan Plan boundaries.

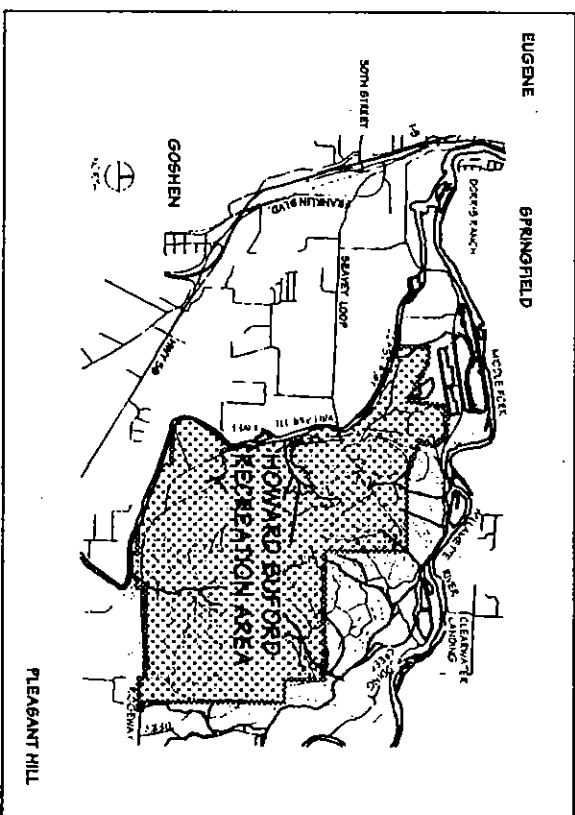


Figure 1: Vicinity Map

Regional parks differ from neighborhood, community or metropolitan parks in their size, character and facilities. They are defined by the National Recreation and Park Association as areas of natural quality for nature oriented outdoor recreation. According to the State Comprehensive Outdoor Recreation Plan, regional parks should provide low density outdoor recreation opportunities in a natural setting; facilities and activities should be compatible with the park environment.

This regional park is used extensively by residents of Eugene and Springfield and to a lesser degree by people from other places in Lane County. They come to hike, to visit the Arboretum, to observe plants and wildlife, to exercise, fish, swim and to ride their horses. In recent years, the Park has become increasingly popular and conflicts have arisen over how the land should be used.

In 1991, in response to citizen concern about overuse of the Park, a decision was made to develop a new master plan for the Howard Buford Recreation Area. A Task Force was formed to develop a Management Plan for the Recreation Area and to monitor and assist in the development of the Master Plan.

The entire Recreation Area will continue to be dedicated to low intensity recreational use. The Plan has four main areas: the North Bottom Lands; the Mount Pisgah Arboretum; the South Meadow; and The Mount Pisgah Trail System (see *Figure 2: Recreational Use Zones* and *Figure 3: Conceptual Site Plan*). The most active uses, those which generate the highest amount of traffic and require infrastructure and structures to support them, are concentrated on the west side and on the periphery of the Park.

*North Bottom Lands*

Some of the highest level of activity will occur on the north bottom lands. Here an expanded equestrian center is proposed which features ample parking for vehicles and horse trailers, a mounting ramp, additional competition courses, watering facilities for horses, and restrooms and drinking water for riders. A park maintenance facility which supports both the Howard Buford Recreation Area and Mount Pisgah Arboretum is sited close by. A multipurpose recreation/interpretive center is also proposed for this portion of the Park. It is envisioned that the existing dairy barn located south of the Kienzle residence could be remodeled to accommodate various recreational, educational, and social activities (i.e. picnics, dances, weddings, educational displays and meetings, and day camps).

*Mount Pisgah Arboretum*

The activity levels will diminish as you move south into the Mount Pisgah Arboretum. The Arboretum is a museum of living trees and shrubs. The organization, Friends of Mount Pisgah Arboretum, has been in existence for nearly 20 years. They are in the final phases of developing their own master plan which is expected to be completed in the fall of 1993. Work done through Phase II of the Mount Pisgah Arboretum's master planning process is reflected in this Master Plan. Its boundaries are expanded by approximately 90 acres to accommodate the facilities and collection they plan to develop.

*South Meadow*

New trails in the previously undeveloped south meadow and along the Coast Fork will be accessible to people in wheelchairs. A number of exhibits interpreting the cultural and natural landscape are proposed.



*Mount Pisgah Trail System*

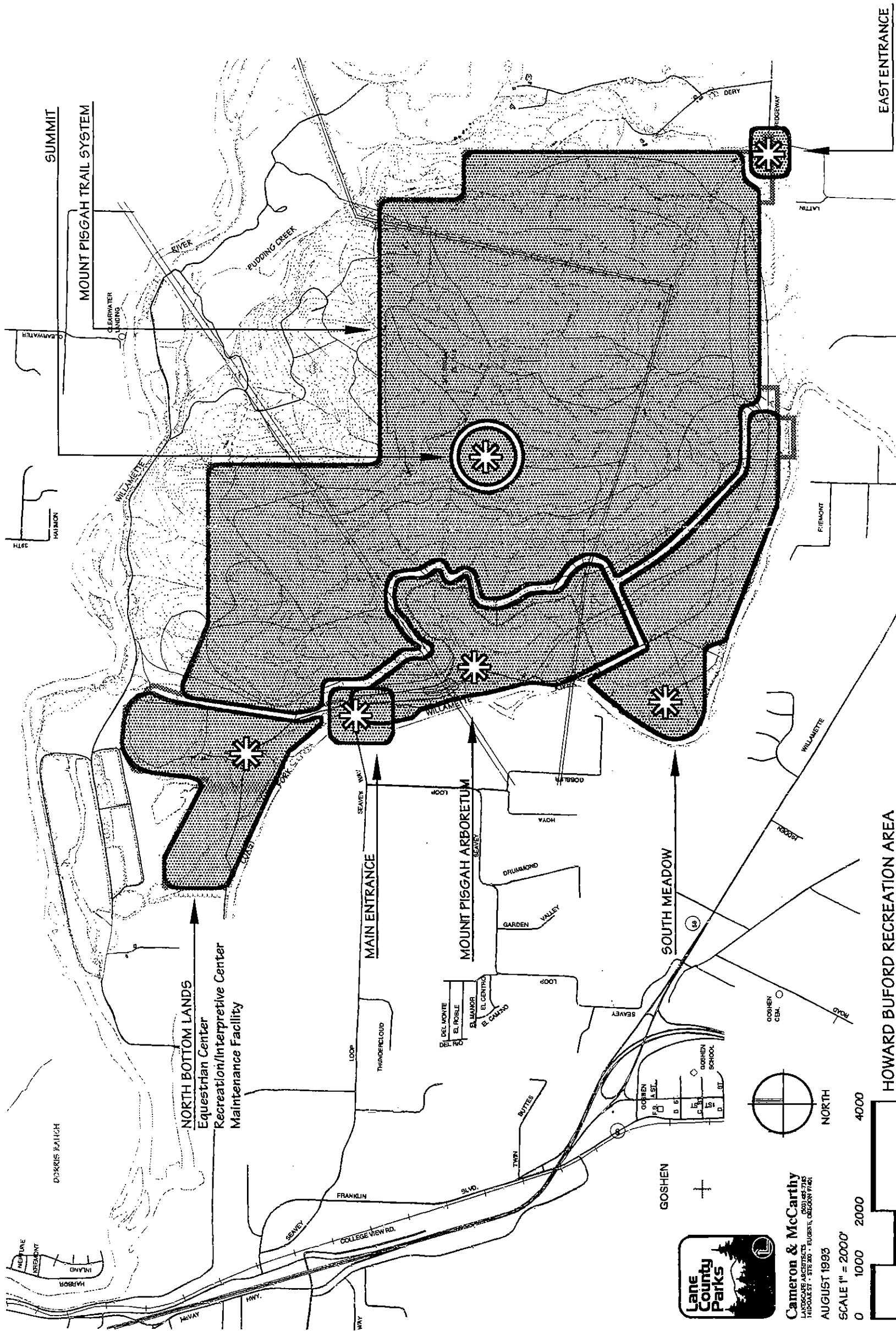
The hillside is reserved for the use of hikers and horseback riders. A system of trails has been designed to allow them extensive access to the Park. Both hikers and horseback riders can choose among trails that range from steep to gently sloping, and loops that vary in length from one to several miles. At the same time, if the Park is to escape the fate of being loved to death, people need to be encouraged to stay on designated trails; some of the existing trails need to be abandoned and the site repaired. Recommendations are made about phasing in the remodeling and new construction of trails.

Throughout the Park, public use of bicycles and motorized vehicles will be confined to public roads.

Many, many people care deeply about the Howard Buford Recreation Area and are willing to contribute their time and energy to see that it remains a valuable resource for years to come. Efforts to bring different factions together could result in a formidable volunteer force contributing to conservation, construction, maintenance and educational efforts in support of the Park.

Figure 2:  
Recreational Use Zones

- Legend
-  Interpretive / Informational Element
  -  Recreational Use Zones (boundaries are schematic)



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AUGUST 1993

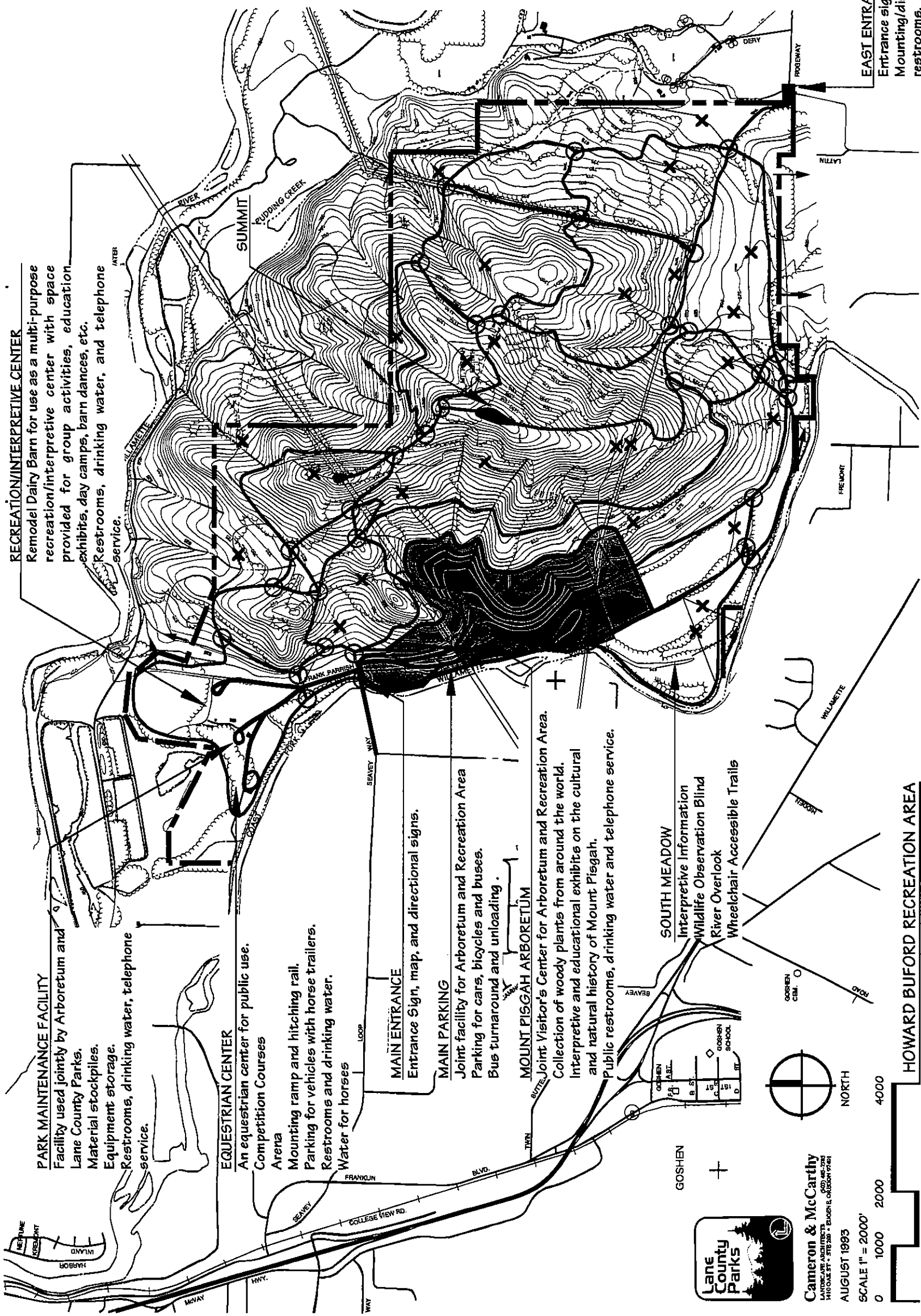
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HOWARD BUFORD RECREATION AREA





**RECREATION/INTERPRETIVE CENTER**  
Remodel Dairy Barn for use as a multi-purpose recreation/interpretive center with space provided for group activities, education exhibits, day camps, barn dances, etc. Restrooms, drinking water, and telephone service.

**PARK MAINTENANCE FACILITY**  
Facility used jointly by Arboretum and Lane County Parks. Material stockpiles. Equipment storage. Restrooms, drinking water, telephone service.

**EQUESTRIAN CENTER**  
An equestrian center for public use. Competition Courses Arena Mounting ramp and hitching rail. Parking for vehicles with horse trailers. Restrooms and drinking water. Water for horses

**MAIN ENTRANCE**  
Entrance sign, map, and directional signs.

**MAIN PARKING**  
Joint facility for Arboretum and Recreation Area. Parking for cars, bicycles and buses. Bus turnaround and unloading.

**MOUNT PISGAH ARBORETUM**  
Joint Visitor's Center for Arboretum and Recreation Area. Collection of woody plants from around the world. Interpretive and educational exhibits on the cultural and natural history of Mount Pisgah. Public restrooms, drinking water and telephone service.

**SOUTH MEADOW**  
Interpretive Information Wildlife Observation Blind River Overlook Wheelchair Accessible Trails

**HOWARD BUFORD RECREATION AREA**

Figure 3:  
Conceptual Site Plan

Legend

- Trails for hikers
- Trails for horseback riders and hikers
- Southwest Trail Corridor  
Trail location to be determined.
- Public roads
- Trail intersections are marked by signs with trail names and information on trail users and trail etiquette.
- Trails to be abandoned
- Indicates areas which could be utilized for recreational purposes if they were within Park boundaries.
- HBRA Boundary
- Mount Pisgah Arboretum Boundary (proposed)
- Mount Pisgah Arboretum Boundary (existing)

**EAST ENTRANCE**

Entrance sign, map, and directional signs. Mounting/dismounting ramp, hitching rail, and restrooms. Watering facility for horses nearby.

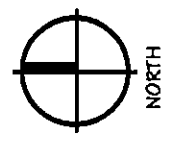


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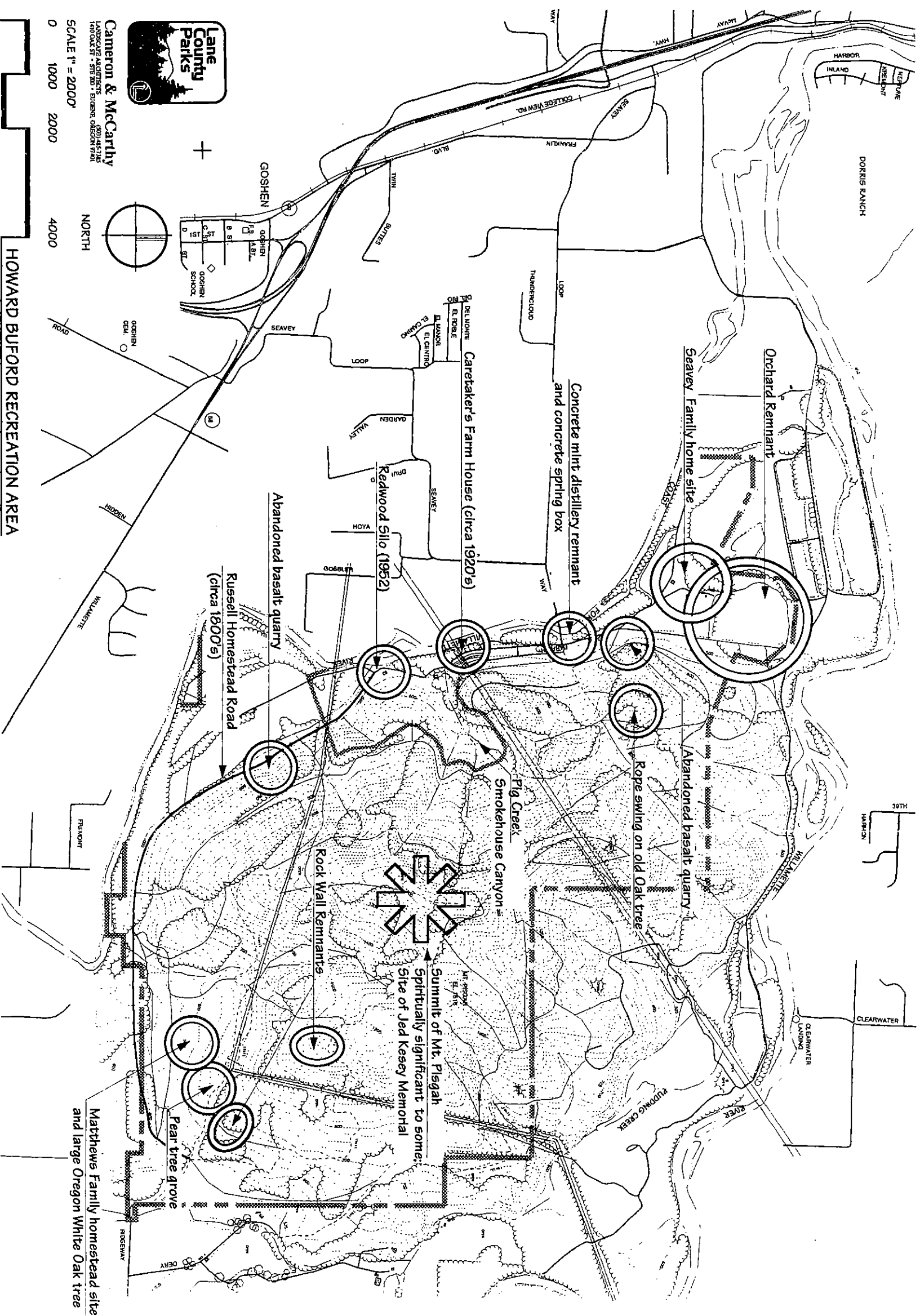


Figure 5 :  
Cultural Resources

This map shows some of the places that have been important to people over the history of the site. It also shows places where there are remnants of previous uses which tell us something about the human history of Mount Pisgah.

Several places on the site attest to its use by indigenous people either as a seasonal encampment or as a stopping place en route to other places.



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*Site and Needs Assessment*

*Site and Needs  
Assessment*

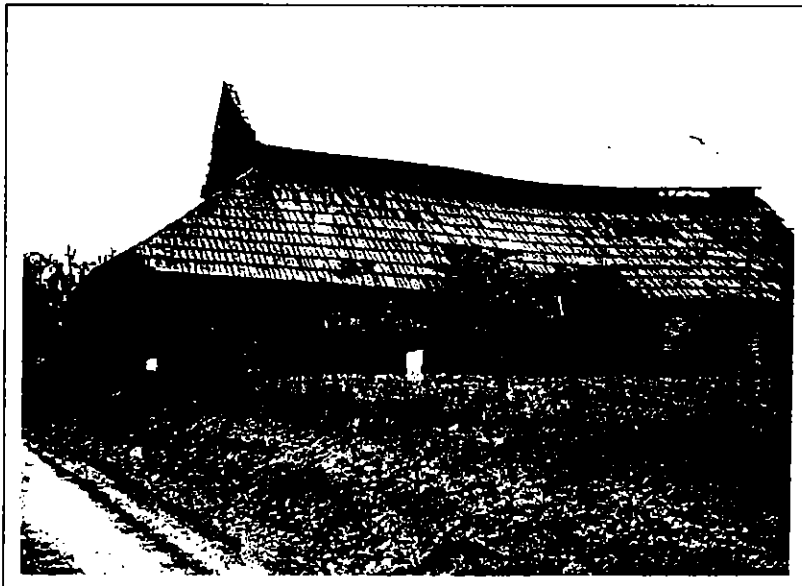
Mount Pisgah rises between the Coast and Middle Forks of the Willamette River southeast of Springfield, Oregon. It is a place with a long history of human habitation and use.

*Cultural History of  
Mount Pisgah*

Mount Pisgah was given its name by early Euro-American settlers who likened their experience of looking from this mountain top across the Willamette Valley to Moses looking from the biblical Mount Pisgah to the promised land of Goshen. Homesteads were established on the lowlands around the mountain in the mid-1850's. Reminders of these early homesteaders and the farmers who followed them can still be found. (see *Figure 5: Cultural Resources*).

It is believed that before these settlers arrived, Calapooya Indians used the mountain and the land around it for seasonal encampments or as a place to stop en route to other destinations.

Hazel Seavey Kienzle, a daughter of John Seavey for whom Seavey Loop was named, still lives on the site her family originally chose for their home in the early 1900's. The farmstead remnants include three houses, an old barn, several out-buildings and an old orchard of walnuts and filberts. Among Mrs. Kienzle's childhood memories are harvesting hops with members of the Warm Springs Tribe who came each year to help, seeing wild pigs in the forest feeding on acorns, and having to walk around the mountain to Pleasant Hill or cross the river in a boat each time floodwaters washed away the Coast Fork Bridge.



*Figure 4: Seavey Family Barn*

*A Regional Park for  
Lane County*

At the urging of Howard Buford, the planning director for the Central Lane Metropolitan Area, Oregon's Governor Tom McCall approved using 1.5 million dollars of Federal Land and Water Conservation Funds to purchase over 2300 acres of this land for Mount Pisgah State Park in early 1970. The park land was turned over to Lane County Parks through a 99-year lease on May 16, 1972 and was renamed the Howard Buford Recreation Area. Ownership was conveyed to Lane County on April 20, 1982.<sup>1</sup>

The Howard Buford Recreation Area is a special park in a number of ways. Less than fifteen minutes by car from Springfield or Eugene it is possible to experience the river's edge, a grassy hillside, meadows with wildflowers, scattered oak trees, forests lush with ferns, vine maples and Douglas Fir, and a view from the summit which encompasses the southern Willamette Valley contained on either side by the Cascade and Coast Ranges. If one were to watch the Park in time-lapse from a bird's-eye view, the day might begin quietly with a lone runner heading for the summit as the sun begins to warm the east side. As the sun moves higher, a school group is being guided through the Arboretum while people in ones, twos and threes begin leisurely hikes. Someone is in the meadow on the south side studying wildflowers. As the day warms, people arrive to swim while others hike through the still-cool evergreen forest of the Arboretum. The day becomes quiet again as a pair of horseback riders cross the skyline at sunset.

Aspect, elevation and the presence of water are woven together in dozens of relationships around the hillside to create distinctly diverse ecosystems. Streams, their riparian edges, wetlands, grasslands, oak savannas, deciduous and mixed woodlands, and coniferous forests include a wide range of dwindling native Willamette Valley plant communities and provide habitat for hundreds of wildlife species.



*Figure 6: Grassy hillside on  
the west face of Mount Pisgah*

Unlike city parks, which function as islands of open space in the midst of urban development, this regional park is connected both by water and by land to other relatively undeveloped areas. Wildlife is able to move in and out of the Park as needs dictate. This results in a higher diversity of wildlife species.

The varied topography, the size of the Park and its accessibility all work together to make this Park a treasure of recreational opportunity.

People who come to Mount Pisgah over and over again do so because it is a place they can reach easily and quickly, a place where they can leave the noises, sights and crowds of the city behind and experience the peacefulness of the rural countryside. They value coming upon a field of wildflowers in bloom, glimpsing a deer in the distance, or listening to the quiet as they hike or ride along. They are protective of the rural and undeveloped character of the Recreation Area.

*Today's Users : Who They Are, What They Value, What They Do*



*Figure 7: Hikers on the west trail to the Summit*

People with horses additionally value the Park as one of only two parks in the immediate vicinity where they are allowed to ride; the other is Elijah Bristow State Park which is located approximately 17 miles south of Eugene.





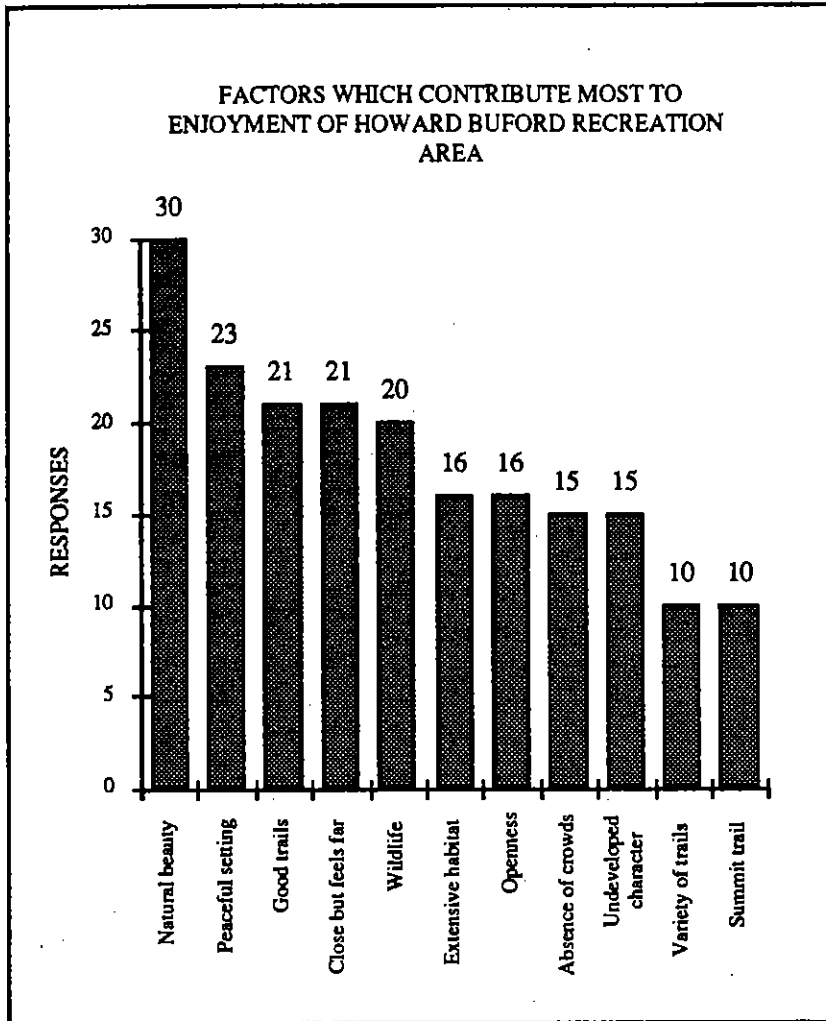
*Figure 8: Horseback riders on the west side of Mount Pisgah*

As a part of the master planning process, Park users were asked in a number of ways to share their knowledge and opinions about the Howard Buford Recreation Area. Meetings were held with the Task Force. Two meetings were held for the purpose of listening to and documenting the concerns and wishes of the general public. Over 350 people were contacted on site and asked to complete a written User Survey; 155 people responded. Others submitted written comments, photographs and maps documenting their concerns.

These users' opinions are consistent with the Management Statement for the Howard Buford Recreation Area which says that the Park should be reserved primarily for low intensity outdoor recreation and education. In general, comments reflected the sentiment that improvements should be minimal, low in cost and in keeping with the Recreation Area's rural character. Concern was almost universal regarding the impact of increasing use and the negative effect which would result from over-development of the Recreation Area.

When asked on the User Survey to name the best thing about the Recreation Area, the largest percentage responded with some statement relating to the natural habitats and natural setting. Others mentioned the trails, the closeness to town, the peace and quiet, views, wildflowers, horse facilities, and low level of development.

In a similar question, people were asked to name the factors which contribute most to their enjoyment of the Park. They responded with comments about how the Park feels to them--peaceful, open, remote, uncrowded; the things they see there--the natural beauty, the wildlife, the plants; and the trails that allow them access to those experiences. Many made comments to the effect that the Recreation Area is a place which is easy to reach but which feels as though it is many miles away from the city.

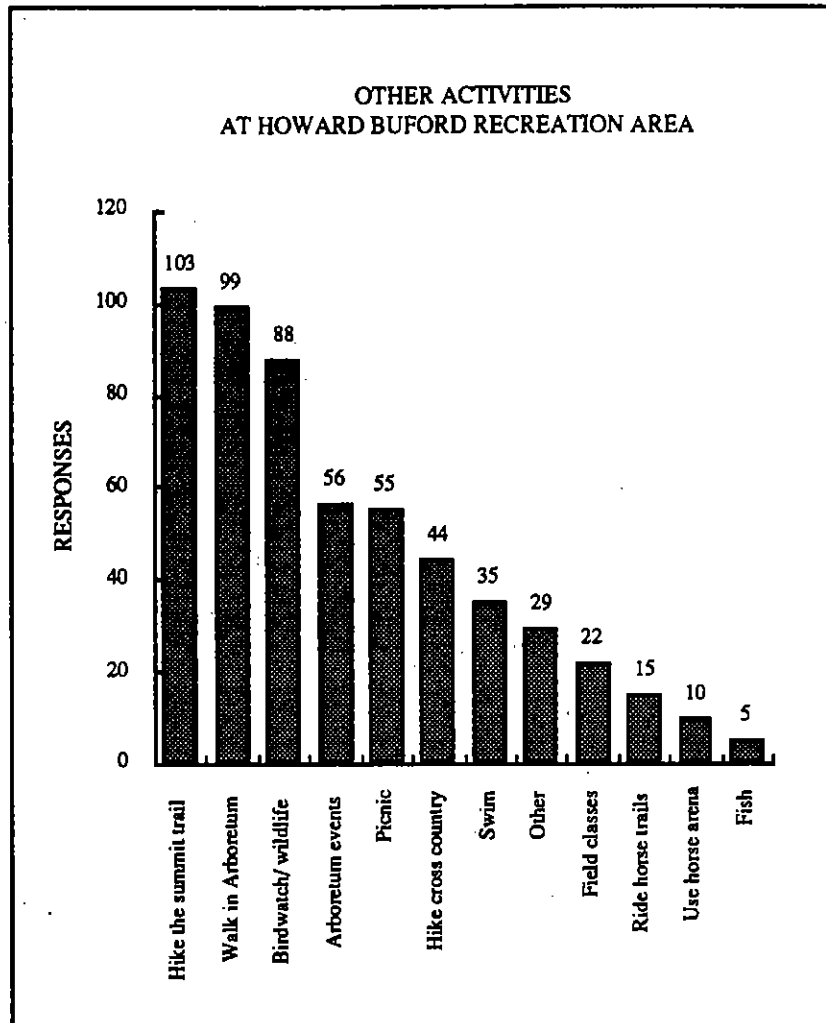


*Figure 9: Factors Which Contribute Most to Enjoyment of Howard Buford Recreation Area*

According to population forecasts, the Eugene-Springfield area will experience significant growth within the next 50 years. As urbanization spreads around it, one can anticipate that the Park will become even more precious because of these very qualities.

When asked to name their primary activity in the Park, most people (75%) listed hiking or walking. About 10% engage in equestrian activity as their primary activity. Other activities named by 5% or more of the people responding included activities having to do with nature appreciation, swimming, and jogging or other vigorous exercise.

In response to a question about other things they like to do, most people indicated a range of activities that they engage in on visits to the Recreation Area. Many of the frequent users (those who visit over 25 times per year) checked all of the activities listed on the survey as something they do at least occasionally.



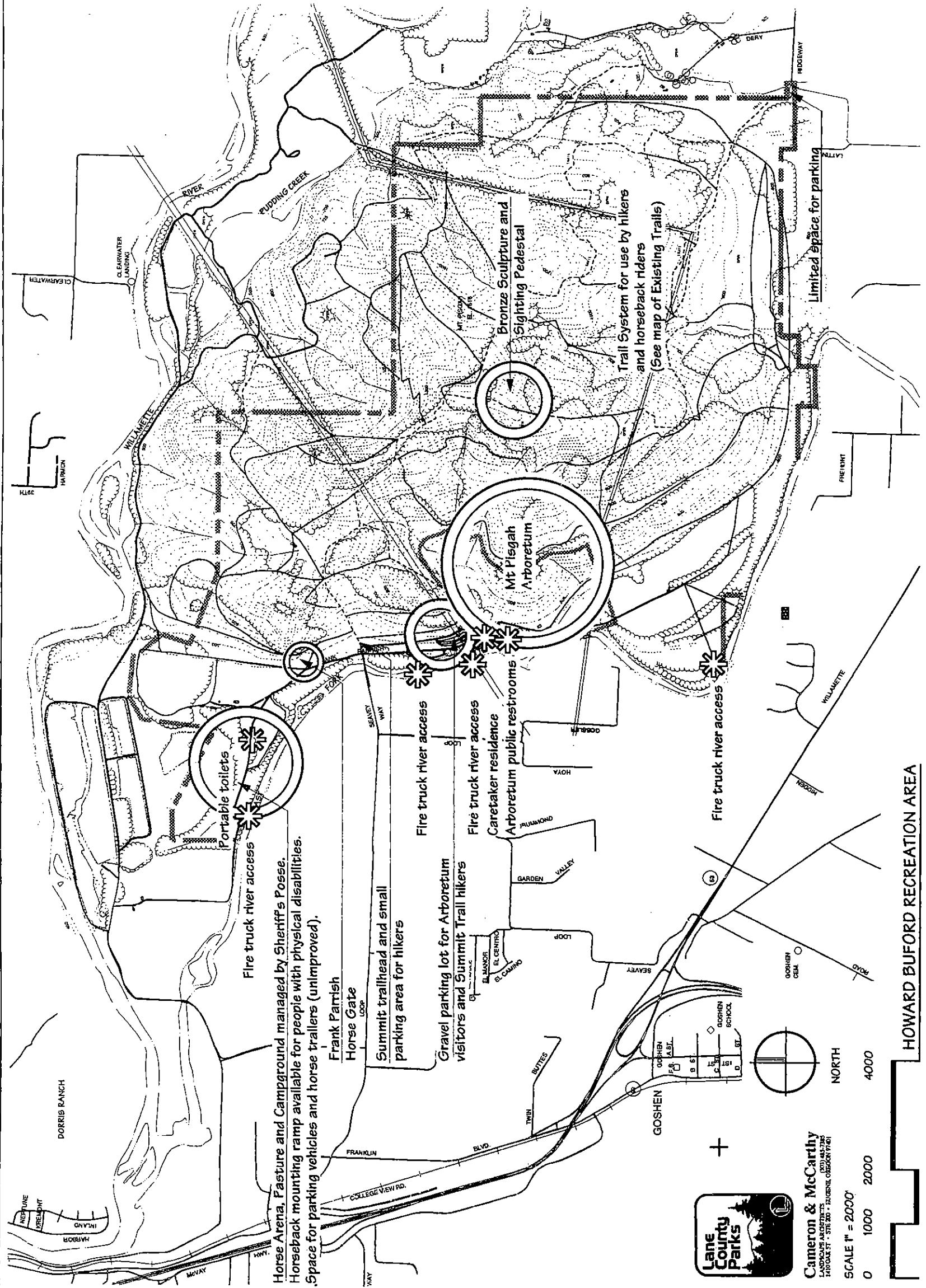
*Figure 10: Other Activities at Howard Buford Recreation Area*

These responses are consistent with those contained in The Buford Area Recreation Report prepared by the University of Oregon Landscape Architecture Department in 1986. During that study, when people were asked about activities, they listed hiking, picnicking, visiting the Arboretum, bird watching, environmental education and swimming as the activities they most liked to do and as the activities in which they would be most interested in the future.

Of the people completing the User Survey for this report, most live in Eugene (62%). One in five live in Springfield or Glenwood, 5% live in the nearby communities of Goshen or Pleasant Hill, 7% came from other places in Lane County and 6% were from outside Lane County. They are almost equally divided between male and female. Most are between 35 and 55 years of age and come to the Recreation Area both alone or in small groups. Many are frequent users, including a surprising 41% who say they visit the Park more than twice a month on average. Of those, half come to the Park over 100 times per year. As might be expected, the Park is used most

Figure 13 :  
Existing Facilities

This shows facilities that currently exist within the Recreation Area. See Also Figure 15: Existing Trails.

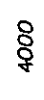


HOWARD BUFORD RECREATION AREA



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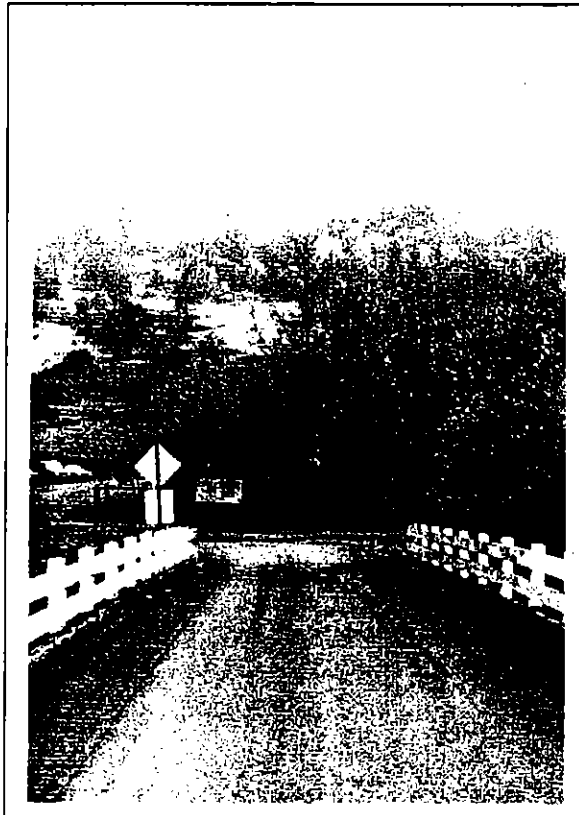
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heavily in the summer and least in the winter; but two-thirds of the people say they come to the Park in all seasons.

At the Howard Buford Recreation Area, the improvements which facilitate a visitor's enjoyment of the Park are few and minimally maintained. For many people, this is part of its charm. (see *Figure 13: Existing Facilities*).

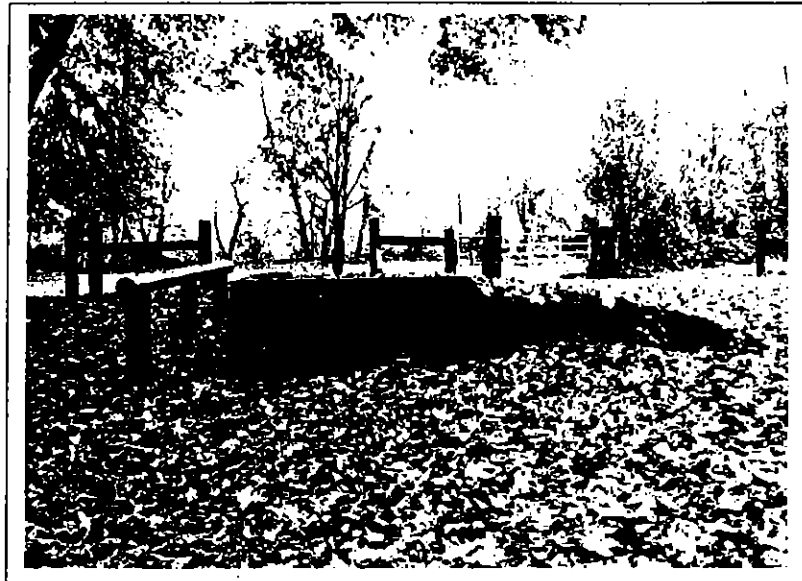
### *The Facilities*



*Figure 11: Coast Fork Bridge and Park Entrance*

Approach to the Park is across a one-lane bridge over the Coast Fork of the Willamette River. Once across the bridge, a battered and bullet-riddled sign announces the Park entrance. Gravel roads offer three confusing choices.

North and west of the main Park entrance are the horse arena and a fenced pasture. This is the only place in the Park that can accommodate several vehicles with horse trailers. Maintenance and management of this area has recently been turned over to the Sheriff's Posse on a two-year trial basis. The Posse has renovated the arena (where some of the fastest barrel racing times in the state have been recorded) and constructed a mounting ramp for riders with physical difficulties. They have built new fencing around the pasture to prevent its use (and subsequent damage) by people driving all-terrain or four-wheel drive vehicles. Fire rings have been established in the grove of trees adjacent to the road to keep campfires localized during special overnight events. Portable restrooms have been placed nearby. People using this area must bring drinking water with them; horses are watered in the river which forms the southern boundary of this portion of the Park.



*Figure 12: Mounting ramp near the horse arena*

North and east of the Horse Arena are the remnants of a farmstead including three houses, several out-buildings and an old orchard of walnuts and filberts. Hazel Kienzle continues to live in her family home under a month to month lease arrangement. The other house near the Kienzle residence is also leased on a month to month basis.

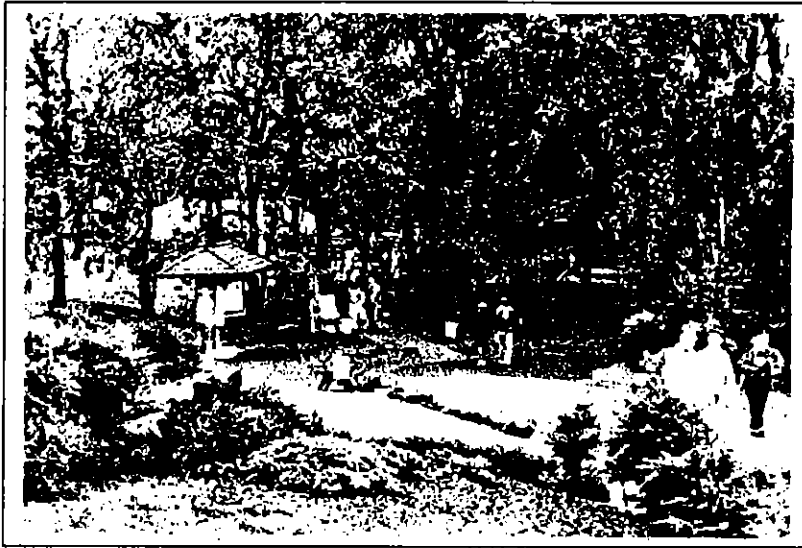
South of the entrance is the Mount Pisgah Arboretum. Since 1979, the Friends of Mount Pisgah Arboretum have held a 30-year lease with Lane County Parks for 118 acres of the Howard Buford Recreation Area.

The Arboretum has a growing education program which introduces thousands of schoolchildren each year to the plants, animals and natural processes that can be observed within the Arboretum boundaries. A kiosk at the Arboretum entrance has a changing seasonal display which usually focuses on things that might be observed in the Arboretum. A small Visitor's Center with educational exhibits is open on weekends. Currently, the Arboretum holds two festivals each year: the Fall Festival and the Spring Wildflower Show. Each one-day event attracts over 2500 visitors.

Under the terms of their lease, the Friends of Mount Pisgah Arboretum are responsible for all development, operation and maintenance costs arising from their use of this property. They are required to submit an annual development, operation and maintenance plan to the County for review and approval, and to obtain written approval from Lane County prior to any new development.

In the past 13 years, Arboretum volunteers have cleared the area of blackberries and have constructed and maintained over five miles of all-weather trails, causeways and bridges. Picnic tables have been built in an Oak grove near the entrance. A drinking fountain and chemical toilets, which are used by all Park visitors, are within the Arboretum. The main parking lot, which accommodates approximately 150 cars, was constructed primarily through the efforts of Arboretum members, though the largest portion of it lies beyond the Arboretum boundaries.





*Figure 14: Mount Pisgah Arboretum during Fall Festival*

The Friends of Mount Pisgah Arboretum are beginning the final phases of a master planning process for the Arboretum. The master plan, which will describe the general size, shape, location and character of all major improvements, is expected to be ready within the next year. They envision constructing a visitor's center with administrative offices, a pavilion, facilities for plant propagation, and beginning a well-conceived planting program. Goals and objectives adopted by the Arboretum during Phase II of their master planning process include statements about cooperating with the Lane County Parks Division in the areas of restroom, parking lot and road maintenance, and vegetation management; designing programs which complement existing programs of other organizations and encouraging the development of programs which are complementary to those of the Arboretum; and protecting the Arboretum from conflicting uses in the Howard Buford Recreation Area and from future adjacent land use changes.

Above Mount Pisgah Arboretum on the west slope is a Map and Compass Course which was established by the University of Oregon Outdoor Pursuits Program in the late 1970's under a special use permit from Lane County Parks. The course of 34 marked points is used one weekend each term by students in the U of O Outdoor Pursuit Program. Eugene Mountain Rescue, various military units and Oregon State University also use the course. All in all, approximately 550 people use the course each year. The Outdoor Pursuits Program provides orientation to groups using the course and monitors the condition of the course to prevent overuse.

The Recreation Area's most important facility is the trail system (see *Figure 15: Existing Trails*). Excluding those within the Arboretum, the Park has over 10 miles of trails which criss-cross the hillside. They range from gravel trails that will accommodate a four-wheel drive vehicle to horse trails that are so narrow and faint that the uninitiated would have difficulty finding them.

Boundary fences encircle the hillside prohibiting access of unauthorized traffic and containing grazing cattle. On the west side, horseback riders enter through a gate off Frank Parrish Road opposite an abandoned basalt

quarry. Hikers enter by crossing a stile just inside the main entrance or through a pass-through gate just above the parking.

Unimproved jeep trails that were constructed by utility companies in the process of putting up power lines are unfortunately some of the best trails available in the Recreation Area (see *Figure 30: Utility Plan*). While they are generous in width and have been surfaced with gravel at least once, these trails follow the route of the utility lines very closely regardless of topography or soil conditions. In many places this has resulted in trails that are exceedingly steep and eroded. The west side trail to the summit above the parking lot receives the most concentrated use. This trail is one that was constructed by a utility company and is very steep and rutted in some places. The gravel surface makes it usable as a service road but makes footing difficult for some, especially in the very steep areas.

Other trails have been created through repeated use by hikers, horseback riders or cattle. None of these have been adequately graded, drained or surfaced. In many places, the trails become so muddy in wet weather that parallel trails are created, damaging the vegetation for several feet on either side (see *Figure 23: Conflicts*). When the trails are both muddy and steep, they are also dangerous to hikers and horseback riders.

In short, the system that now exists is not a designed system. To preserve the site while affording users a wide range of hiking and riding experiences, a new system is warranted for improving existing trails and for siting and constructing new trails.

At the summit, a sculpture by Peter Helzer teaches a course in geography and geologic history. Approved by the Board of County Commissioners, it was commissioned by Ken and Fay Kesey in memory of their son Jed and his teammate Lorenzo West who were killed in an automobile accident while traveling to a wrestling meet in 1984. The Keseys, who live near Pleasant Hill within view of the summit, wanted the memorial to be something people, especially children, could use. The sculpture is, in its form, representative of columnar basalt. Images of over 300 fossil specimens are arranged on three bronze columns illustrating the geologic history of Oregon. They are placed so that children can easily take rubbings. Atop the columns is a relief map of the area visible from the summit showing mountains, rivers, towns and other landmarks. Slots formed by the three columns are oriented to frame the first light of summer and winter solstices.

The east entrance has, in the past, been designated for horseback riders. However, the parking lot there is so small that it poses maneuvering and parking problems for more than one or two vehicles with horse trailers. Horseback riders and hikers enter the Park through a swinging gate where there is another battered sign with a map of the Recreation Area. The main trail to the Summit from this side is another utility road. Other east side trails are unsurfaced. They are used primarily by horseback riders, although hikers also use them. In heavily forested areas, trails remain wet and mucky well into the dry season.





Although mountain bikes are not allowed in the Park, tire tracks indicate they have also been using this area.

**Figure 15:  
Existing Trails**

This shows trails that currently exist within the Recreation Area. Some trails were documented on the aerial survey prepared by Intermountain Photo. Other trail locations were mapped by people who use the park frequently.

All trail locations are approximate.

**Legend**

-  Hiking Trails
-  Horse Trails
-  Four-Wheel Drive Jeep Trails
-  Public Roads

Trails are not currently designated for horseback riders or hikers except within the Arboretum where only foot traffic is allowed. Symbols indicate the observed or reported uses of each trail.



HOWARD BUFORD RECREATION AREA

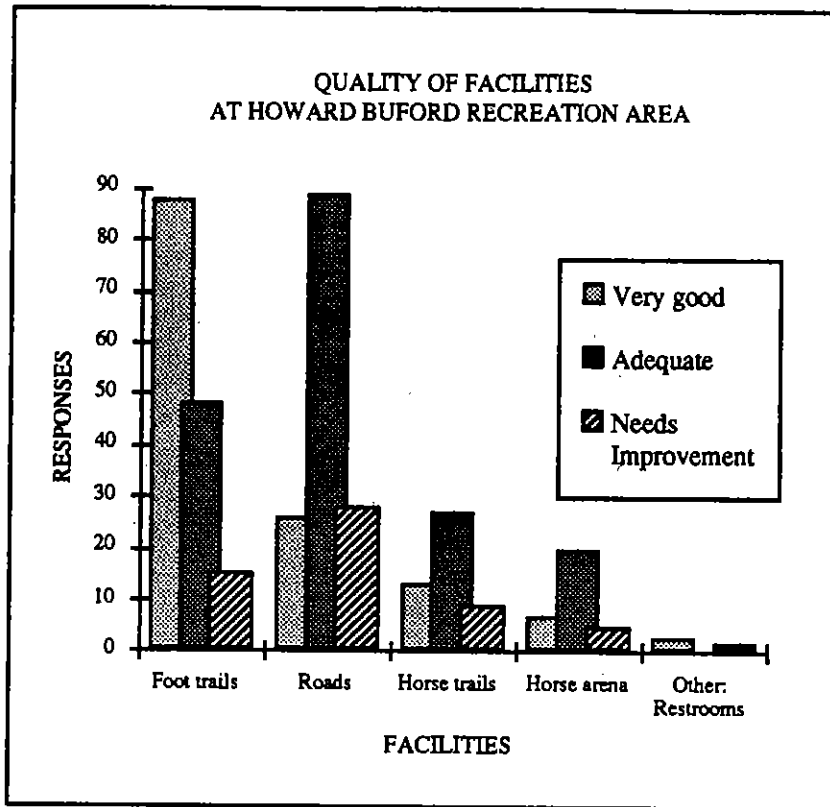


Figure 16: Quality of Facilities at Howard Buford Recreation Area

Despite the problems, most people responding to the User Survey rated the existing foot trails as very good or adequate; horseback riders say the trails are only adequate for their purposes. In terms of new/improved facilities, people particularly support expanded and improved trail systems that are usable during all four seasons. Improvement of the middle summit trail and expanded access to both forks of the river were specifically mentioned. Trails linking this Park to other parks in the area were also suggested. Watering facilities for horses, designated trails for horseback riders, expanded accessibility for handicapped users (mounting/dismounting stands, for example), additional restrooms and drinking fountains, and additional east entrance parking for horse trailers were all requested. Horseback riders requested that all unnecessary interior fencing be removed and that gates which are necessary be repaired. Several expressed concern that emergency vehicles should have access throughout the Recreation Area. Clearer signs were suggested regarding the facilities and allowed uses.

Since the first National Park was established in this country in the early 1900's, people have recognized the need to set aside land for the use and enjoyment of the general public, and as a preserve for species which require undeveloped lands for their survival. As development continues to spread, these parks, whether they be national, state or regional, become both more precious to those who use them and more important for the habitat they provide.

***Sensitive and Significant Natural Features***

As a whole, the Howard Buford Recreation Area offers a wide range of wildlife and plant habitat. It is very nearly an entire mountain with different things happening on each face. On the hillside, grasslands turn into oak savannas, oak savannas drift into oak woodlands, and oak woodlands fade into mixed forests which disappear into coniferous forests.



Figure 17: Bigleaf Maples near the Coast Fork

Near the river, a thick band of riparian woodland with ash, cottonwoods, bigleaf maples and oaks curves around from the south into the Arboretum.

This collection of ecosystems is rich in plant and animal species. 116 birds, 10 amphibians, 13 reptiles and over 40 mammals have been identified.<sup>2</sup> A plant list for the entire Park has not been compiled, but in the Arboretum alone hundreds of native plant species have been identified. The Park is prized for its diversity by instructors of ornithology and native plant identification. One would need to travel many miles, stopping at a number of different places, to find public land with the range of habitats present within the boundaries of the Howard Buford Recreation Area. (see Figure 18: Sensitive and Significant Natural Features)

*Rare and Protected Species*

Among the many species which inhabit Mount Pisgah, several are rare and two have been listed under the Endangered Species Act of 1973. For a species to be listed as endangered it must be in imminent danger of extinction throughout all or a significant portion of its range. A status of threatened indicates that a species is being reduced in numbers so significantly that it appears to be approaching endangered status.<sup>3</sup>

*Plants*

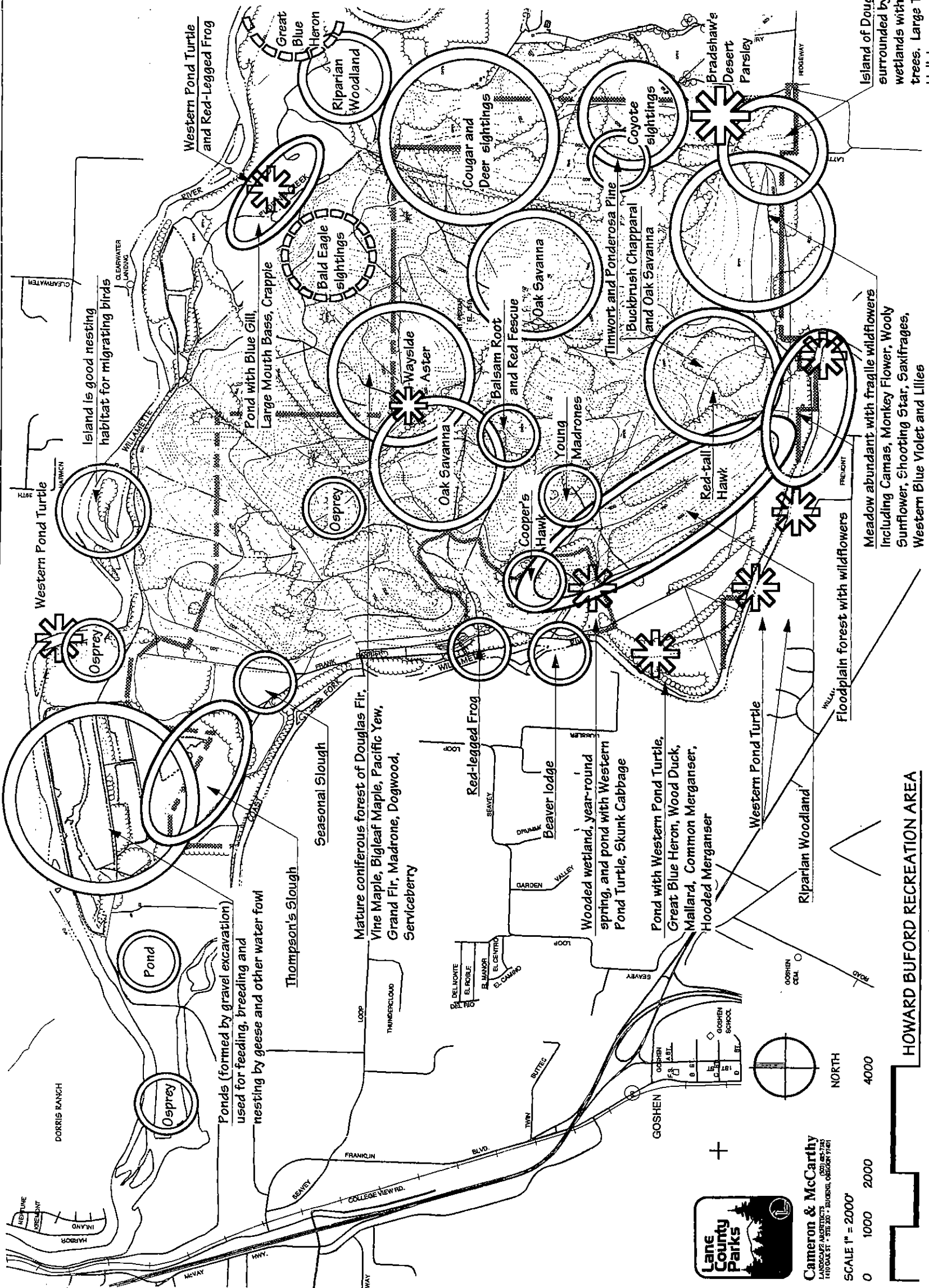
Bradshaw's Desert Parsley (*Lomatium bradshawii*) is known to grow only in the Willamette Valley between Creswell and Salem. It was first collected in 1916 near Salem. There were no sightings of the species for twenty-eight years between 1941 and 1969 when it was collected again at the Finley

Figure 18:  
Sensitive and Significant Natural Features

This map includes areas which have been identified as sensitive or important by botanists, ecologists, fish & wildlife experts, and other naturalists intimately familiar with the site.

It also includes areas which people have indicated they value for the display of wildflowers or other natural beauty.

In addition to the areas mapped, numerous in-stream gravel beds on both the Coast and Middle Forks of the Willamette River serve as spawning areas for anadromous fish.



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Wildlife Refuge between Eugene and Salem. This single known site was destroyed by fire in 1976. When no plants reappeared the following season, an extensive search was conducted by botanists. Populations were found near Fern Ridge Reservoir, Rickreall and Corvallis. In 1986 the plant was proposed for listing as an Endangered species and was listed two years later in 1988.<sup>4</sup>

A member of the Parsley (Apiaceae) family, Bradshaw's Desert Parsley is found at low elevations in grassy swales, wet meadows and along waterways. It grows in association with Tufted Hair Grass (*Deschampsia caespitosa*), Gumweed (*Grindelia integrifolia*), Foxtail (*Hordeum brachyantherum*), Western Buttercup (*Ranunculus occidentalis*) and Blue grass (*Poa pratensis*).<sup>5</sup> Once common in the low wet prairies of the Willamette Valley, it has become endangered due to the loss of habitat, often through the draining of wetlands for housing or industrial development and agricultural activities. It is also threatened by invading shrubby species which at one time would have been controlled by fires or flooding. This plant is not showy or particularly attractive to wildflower collectors. It has a small yellow flower which blooms in April or May. Its seeds are dispersed by running water or by wind. Soils in the Bradshaw Desert Parsley habitat are shallow, acidic clay.<sup>6</sup>

Today a sizable population grows in the Howard Buford Recreation Area near the east entrance. A large area has been fenced to protect it from trampling by hikers, horses and cattle. This is a fairly straightforward means of plant protection which allows for continued use of the remainder of the site.

The Wayside Aster (*Aster vialis*) is known to exist only in the southern Willamette Valley in Douglas and Lane Counties and is a candidate for listing under the federal Endangered Species Act. It was first identified on Skinner's Butte in 1918. Prior to 1980, when the plant was rediscovered on Mount Pisgah, the last known specimen had been collected in 1934 on Spencer Butte.<sup>7</sup> The Wayside Aster grows in association with Douglas Fir (*Pseudotsuga menziesii*), Madrone (*Arbutus menziesii*), Chinquapin (*Castanopsis chrysophylla*), Vine Maple (*Acer circinatum*), Snowberry (*Symphoricarpos albus*), and Poison Oak (*Rhus diversiloba*). Unlike its closest relative which grows along the backbone of the Cascade Mountains, this Aster is adapted to the drier hills and buttes of the Willamette Valley. In general, its primary threats are increasing urbanization and agricultural development, roadside spraying and clearing.

This perennial grows from two to six feet tall and bears yellow flowers which resemble dandelions about to open. The plant is not attractive to the general public and so is not threatened by over-collection.

Two patches of Wayside Aster grow on the northeast side of a ridge on Mount Pisgah where it was rediscovered in 1980. Each patch is approximately 50' x 100' and together they contain around 100 plants. This population has been browsed heavily by deer since the early 1980's when hunting was banned on Mount Pisgah. Although none of the Asters are known to have been destroyed by the deer, all plants are becoming less vigorous. Seeds from the plants have proven to be sterile and no juvenile plants have been observed.<sup>8</sup>

Near the Wayside Aster grows a native Groundsel (probably *Senecio macounii*), which is rare in the Willamette Valley. The Cinnabar moth,

which was introduced to control non-native Tansy Ragwort, is also taking a toll on this native *Senecio* species.<sup>9</sup>

Near the summit on the western and northwestern slopes is a remnant of Red Fescue (*Festuca rubra*) grassland. This was once the dominant native grassland species in the Willamette Valley. Native grasses have, in large part, fallen victim to the more aggressive grasses introduced by farmers up and down the Willamette Valley over the years. This particular patch of Red Fescue is at risk from hikers. Once people reach the summit, they generally spread out and move around over a large area, trampling vegetation and compacting the soils as they do.<sup>10</sup>

Like the Red Fescue, Balsam Root (*Balsamorhiza deltoidea*) is also at risk from hikers wandering around the summit area. This plant is uncommon in the Willamette Valley and can be found on the west-facing slope of Mount Pisgah just below the summit.<sup>11</sup>

Going down the southern face of the hill, Grass Widow (*Sisyrinchium douglasii*) is found growing near the trail by a seasonal stream. Although this plant is common elsewhere, it is rare in the Willamette Valley. Nearby is a stand of Wedge-leaved Buckbrush (*Ceanothus cuneatus*) chaparral. This shrub community is close to its northern limit here in the Recreation Area. The browse line of deer is apparent on these 6' to 8' tall plants.<sup>12</sup>

Timwort (*Microcala quadrangularis*) grows adjacent to the main trail to the Summit on the east side of the Recreation Area. It is a member of the Gentian family which has small yellow flowers that open only when exposed to light. It is considered to be threatened in Oregon, although it is more common elsewhere.<sup>13</sup>

#### Animals

The Bald Eagle (*Haliaeetus leucocephalus*) is a threatened species. As a result of the eagle's protected status, their numbers are now increasing in many states, including Oregon. Sightings have been reported near the Recreation Area along the Middle Fork and occasionally along the Coast Fork. At this time, the Department of Fish & Wildlife has not documented a nest on Mount Pisgah. Nests upstream may account for the presence of adult eagles in this area.

The Western Pond Turtle (*Clemmys marmorata*) is a candidate for listing under the federal Endangered Species Act. These turtles, one of only two native turtles, can live to be 40 or 50 years old. They reach maturity at about 12 to 15 years of age. Although they breed in the water, new research shows they travel up to one-quarter of a mile away to lay their eggs. They choose a spot on dry land in the late spring through mid-summer to build their nests. This turtle is being threatened on a number of fronts. Bullfrogs, which were introduced to the northwest about 50 years ago and have few natural predators, feed on the turtle eggs. And increasing development is taking a toll. Eggs are plowed under in agricultural areas. If eggs survive until fall when the baby turtles hatch, the babies are vulnerable to predators due to decreasing vegetation and natural cover. Turtles are often hit by cars during the twice-yearly migration from land to water and back again. Western Pond Turtles inhabit the Arboretum water garden and are found in sloughs off the Middle and Coast Forks of the Willamette River. The number of adult turtles in the entire Willamette Valley today is estimated to be less than 250.<sup>14</sup>

Great Blue Herons (*Ardea herodias*) and Osprey (*Pandion haliaetus*) are protected under the Migratory Bird Act. A heron rookery exists in the vicinity of Pudding Creek on privately owned property. Herons have also been observed on and around a pond on the southwest portion of the site. Numerous Osprey nests are located in the vicinity of the Recreation Area.



Figure 19: Coast Fork of the Willamette River

The Red-legged Frog (*Rana aurora*) and Sharp-tailed Snake (*Acontia tenuis*) are on the Oregon sensitive species list. Red-legged frogs are associated with streams and wetlands in areas wooded with ash and maples. Individuals have been observed near the intermittent stream which runs by the caretaker's house.

There are also a number of reptile and rodent species which are dependent upon the open Willamette Valley grassland for their survival.<sup>15</sup>

Red-eyed vireo (*Vireo olivaceus*), common in the eastern United States but unusual here, can sometimes be observed along the River on the west side of Mount Pisgah among the cottonwoods and other tall trees.

Wetlands have become an increasingly important issue in recent years as we have come to understand more about them. Once considered almost worthless, wetlands were filled for agricultural uses and for building developments. Today only about five per cent of our nation's lands remain in wetlands. We now understand that wetlands are important in a number of ways. They are important to water quality, filtering sediments that would otherwise enter lakes and streams. They trap and use organic debris and chemical nutrients that would otherwise pollute ground and surface water. And they play an extremely important role in the food chain. Wetlands are one of the most productive ecological systems in the world; they produce ten tons of food materials per acre. Many bird, mammal, reptile, amphibian, and invertebrate species depend on the wetlands for feeding, breeding, nesting, and other habitat needs. About one third of all plants and animals

## Wetlands

on the federal list of threatened and endangered species are located in wetlands or depend upon them for their survival.

Because they are so important to our health and the health of the planet, wetlands are now protected by federal, state and local regulations. It is now necessary to obtain a permit before significantly altering a wetland.

Three indicators are considered when determining whether or not an area is a wetland: the soils (is the soil hydric, one which indicates the periodic or regular presence of water?); the vegetation (are the plants those that grow only under wet conditions?); and the hydrology (is it an area into which water drains and is held?).

The Howard Buford Recreation Area contains a number of areas with hydric soils. Some areas are also included on the National Wetlands Inventory compiled by the Fish & Wildlife Service, U.S. Department of Interior (see *Figure 20: Potential Wetlands*). Neither the presence of hydric soils nor inclusion on the National Wetlands Inventory means that an area is absolutely a wetland; they are both indicators of potential wetlands. On the other hand, it is possible that an area which is not identified in either place is a wetland. Any area which is suspected of being wetland should be investigated more thoroughly before any construction, filling or dredging takes place.

***Compatibilities and Conflicts***

Regardless of how each person prefers to experience the Park--on horseback, on foot, alone or with friends, people seem to have a tolerance for other activities provided those activities do not infringe upon the experience they came to the Park to enjoy. People do, however, resent intrusions to the experience they are seeking. For horseback riders, the intrusion may come in the form of an errant mountain bicyclist or a remote control aircraft. For hikers interested in the natural environment, the intrusion may be an off-leash dog which startles a deer or it may be cattle trampling a special patch of wildflowers.



*Figure 21: Wildflowers along a trail*




Figure 20 :  
Potential Wetlands

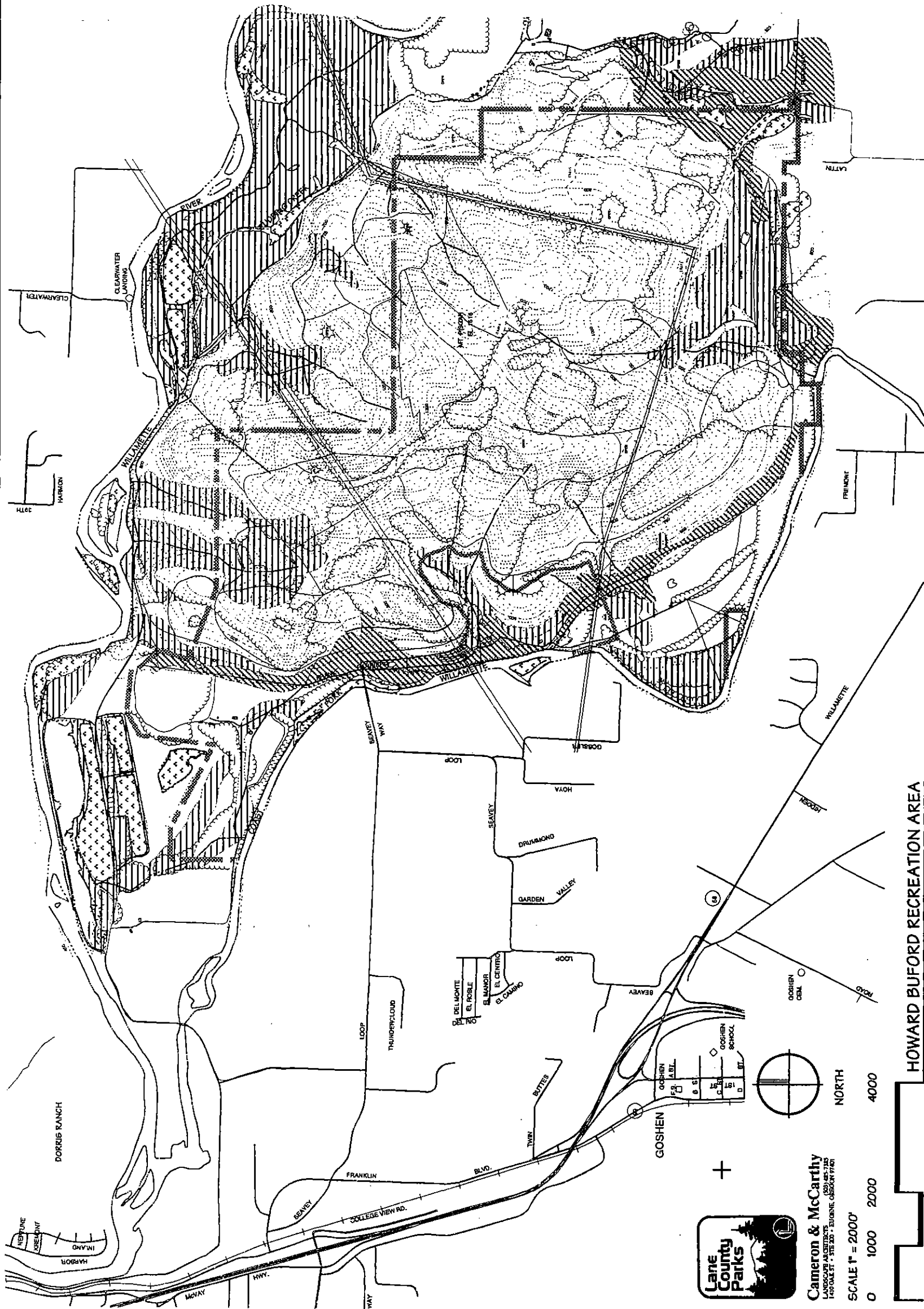
The places shown on this map have either been mapped on the National Wetland Inventory or have hydric soils according to the Soil Survey of Lane County.

Hydric soils are formed under the periodic or regular presence of water. The presence of hydric soils is one of three indicators used to determine whether an area is a wetland which is regulated by state and federal laws.

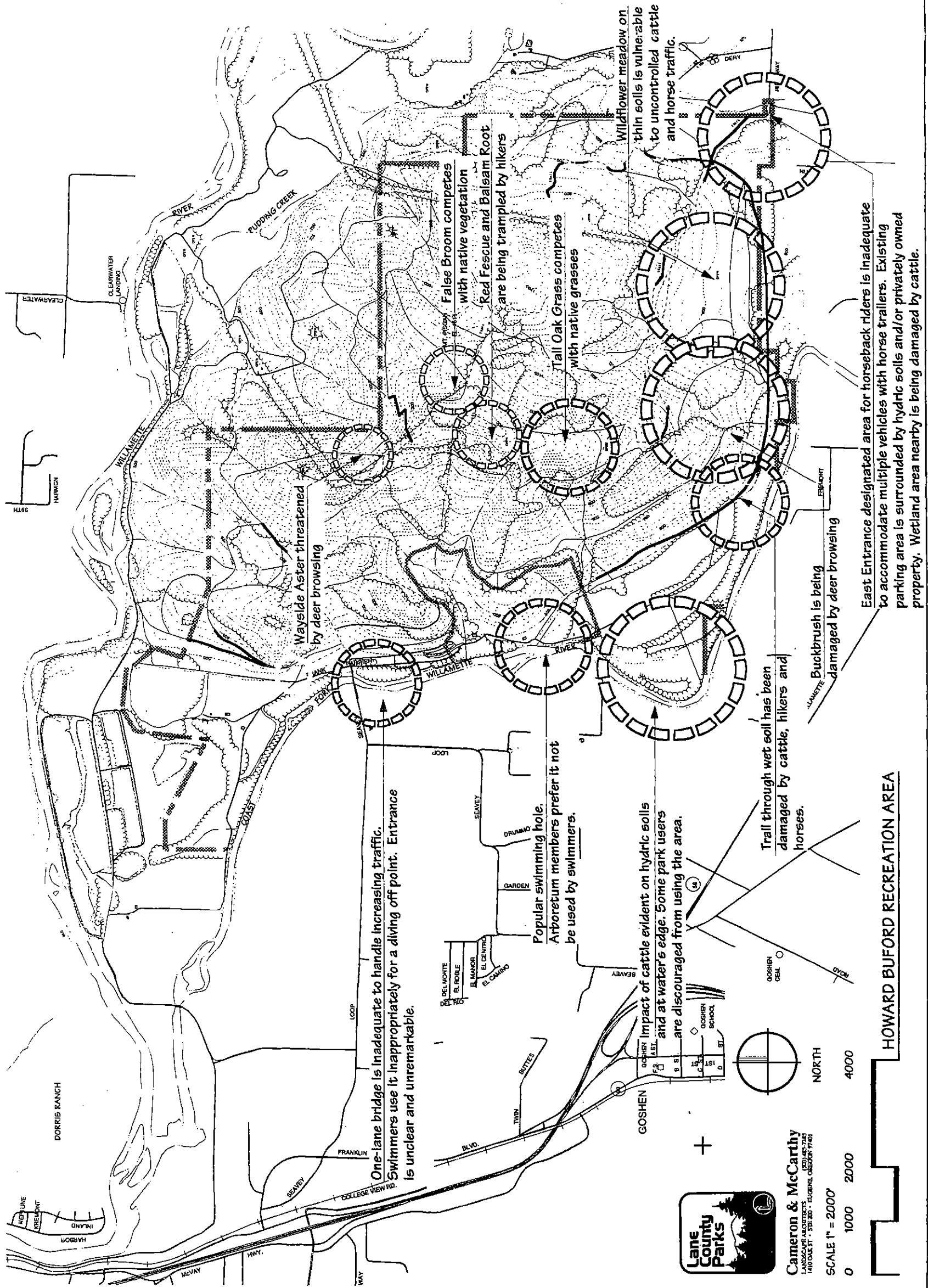
Further investigation should be conducted prior to filling, dredging or construction in any of the areas shown on this map or on other areas with wetland characteristics.

Legend

-  Hydric soils
-  Soils complexes which have hydric components
-  Included on National Wetlands Inventory



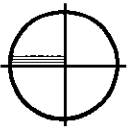
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Figure 24: Stile on west side

Use of the Park can be expected to continue to grow in the coming years. As urbanization spreads, people in increasing numbers will feel the need to get away to a place that is wide open, a place that is less complicated, a quieter place. For many people, parks may provide the only opportunity to renew a sense of connection with the countryside.

Even at the current level of use, the site has suffered. Unorganized desire paths created by hikers and horseback riders appear all over the hillside. In addition to the pressure of increased numbers, less land is available to Park users (practically, if not legally) than in the past. Private land on the north side of the mountain was, until recently, widely used because fencing had fallen into disrepair. Although it constituted trespassing, horseback riders especially admit they enjoyed using this part of the mountain. The loss of the use of private trails has resulted in pressure for new trails on the north side within the Recreation Area boundaries.

In face of these pressures, it is important that measures be taken to protect this valuable resource. The primary focus should be the construction and refurbishing of trails that work with the topography of the hillside, are drained properly and surfaced appropriately. A coordinated signage system should indicate which uses are accommodated on each trail, inform users about the hazards of leaving the trails, and educate them about the need for protecting vegetation and wildlife

On-site analysis and Soil Conservation Service data indicate that natural limitations for trails range from slight to severe with most areas in the Park falling within the moderate and severe categories; limitations for roads are severe (see Figure 25: *Limitations for Trails and Roads*). These ratings are due to a number of different conditions ranging from steep slopes and rocky soils to clay soils with poor drainage. Severe ratings, however, do not mean that the development or upgrading of roads and trails is impossible. It means that the least expensive, most common methods will probably not be adequate and that alternative methods will need to be employed.

Essentially all soils within the Park present complications to developing a traditional low-cost septic drain field. The availability of water is also an

with Mount Pisgah and would not be concerned as long as the camping is not taking place on the butte itself.

In addition to the problems mentioned at the public meetings and on the User Surveys, the site itself is also testimony to conflicts. At the summit, patches of Red Fescue and Balsam Root are being trampled and the soils compacted by hikers. Many other plants found throughout the Park are quite beautiful and seem to invite gathering. Because of their beauty, these special wildflowers are more likely to be destroyed by gathering than by inadvertent habitat destruction.

Many areas of the Park have wet shallow soils over bedrock which provide growing conditions for several fragile plant species. In other places, the soils are high in clay content and drain very poorly. Wherever poor soils exist, the land and the plants that grow there are more susceptible to damage whether it be by heavy foot traffic, mountain bikes, horses or cattle. An area can be devastated by one season of abuse; it may take years or even decades for the same area to recover.

Invasive plant species are causing problems. False Broom (*Brachypodium sylvaticum*) is an invasive introduced species which grows in open forests and open grassland. It spreads by rhizomes and seeds (possibly aided by the deer through their droppings) and is very aggressive. It currently grows on the east side just below the summit. Tall Oak Grass (*Arrhenatherum elatius*) grows along the ridge directly south of the summit. It is not as aggressive as False Broom but is a threat to the native vegetation as are the more familiar blackberries and Scotch Broom. As mentioned earlier, the Cinnabar Moth threatens to damage the native Groundsel population.

And even indigenous species are causing problems for each other. Since the cessation of hunting on Mount Pisgah, the deer population has increased significantly. Their browsing threatens the populations of Wayside Aster and Buckbrush.

It is clear that all of the things that make the Howard Buford Recreation Area what it is today are the things people value about it--the rural character, a place to hike, a place to ride horses, a place rich in its diversity of plants and wildlife, a place which has drawn people to it for hundreds of years. These things should, at the least, be preserved; at best, they should be enhanced by any changes which are made in the years to come.

The Park today is a valuable educational resource. In addition to the Arboretum's well-established education program for elementary school-children, the Park is used informally by classes from the University of Oregon, Lane Community College and the Eugene Parks and Recreation Department. It has the potential to become an even more valuable recreational resource. Due to the extent of land included in the Park and its varied topography, it is one of the best areas in the southern Willamette Valley for re-establishing some of the native plant communities. Its long history of human settlement could provide the basis for interpretation of settlement patterns and cultural history.

### ***Assessment of Park Lands for Recreational Needs***

Figure 25 :  
Limitations for Trails and Roads

The map and legend show, in general, the degree of limitation based on soil and slope conditions that can be expected when constructing trails. Limitations can be due to a number of variables ranging from mucky soils to severe slopes.

Essentially all soils on the site have severe limitations for roads.

Legend

- Unrated
- Slight Limitations
- Moderate Limitations
- Severe Limitations



changes (along with creative trades) might provide new opportunities for public and private development of recreation facilities and opportunities appropriate for the area's twenty-first century needs.

Several parcels of adjoining land are worth consideration by Lane County Parks for acquisition in the future (see *Figure 27: Adjacent Lands with Recreational Potential and Habitat Value*).

Beginning at the southwest corner of the Park, a small piece of land is still owned by the Staffordshire subdivision. Further east is an even smaller parcel also in private ownership. This is land that, if acquired, would allow an uninterrupted river walk along the Coast Fork.

Just east of the point where the river bends to the south, there are two roads which come within about one-quarter mile of the current Park boundary. Although a more thorough investigation of the area is necessary, it appears the soils would be suitable for engineering a road and parking lot. A new south entrance and parking area at this point might provide ample room for a number of vehicles or several vehicles with horse trailers. Use of the current parking area and related impacts to the adjoining wetland areas could be decreased, or the area might be closed and allowed to regenerate.

Members of the public seem to be nearly unanimous in wanting to see the Wildish land in public ownership. Hikers and horseback riders have both expressed a desire for access to the Middle Fork of the Willamette River to the north of the Park. At the northernmost section of the Park, the river is very close, yet lands are not within public ownership. Access to this section of the river would increase the range of experiences to Park users in general, and would open up opportunities for fishing, swimming and boat launching that are not possible now given the current boundaries of the Park. If outright acquisition is not possible, applying for easements through the land should be considered.

Adding the northeast corner of the mountain to Park land would offer people the total range of experiences the mountain offers. It would increase the value of the Park both from an experiential and an educational point of view.

The Pudding Creek area on the east is known for its particularly rich habitat. Several people have suggested acquiring the land for a wildlife sanctuary. While that use is not a recreational use and does not fall within the purpose of the Lane County Parks Division, it would be worthwhile to approach other agencies or organizations about acquiring the land.

Although the land north of the horse arena is valuable in its potential for recreational activities and revenue production, having the entire mountain within the Park is more critical to the recreational needs of Park users. If any lands were to be negotiated, the Park land north of the horse arena would be the most logical land to be considered for trade.

issue. Both to minimize costs and to concentrate rather than disperse the majority of users, it is advisable that a single visitor's center with restrooms and drinking water be developed to serve both the Arboretum and the larger Howard Buford Recreation Area. The expense of a sand-filtered or other alternative septic filtering system could be limited to this site. Composting toilets could be used for restrooms at dispersed sites and chemical toilets brought in on a seasonal basis.

The lands adjacent to the Park and their related uses have significant existing and potential impact upon the experiences of Park users. At the public meeting, people expressed concerns about preserving the character of the land around the Park. They want the view from the mountain to continue to be one of farm lands and natural areas. They want the sounds they hear to be only those of animals and the river.

### ***Assessment of Adjacent Lands for Recreational Needs***

There are five land use zones on the properties adjacent to the Howard Buford Recreation Area (see *Figure 26: Ownership and Zoning of Adjacent Lands*). The zones and their allowed uses are as follows:

Zones F1 Non impacted Forest Lands or F2 Impacted Forest Lands  
 forest operation or forest practices;  
 temporary on-site structure;  
 physical alterations to the land auxiliary to forest practices;  
 uses to conserve soil, air and water;  
 farm uses;  
 exploration for mineral and aggregate resources;  
 tower and fire station for forest fire protection.

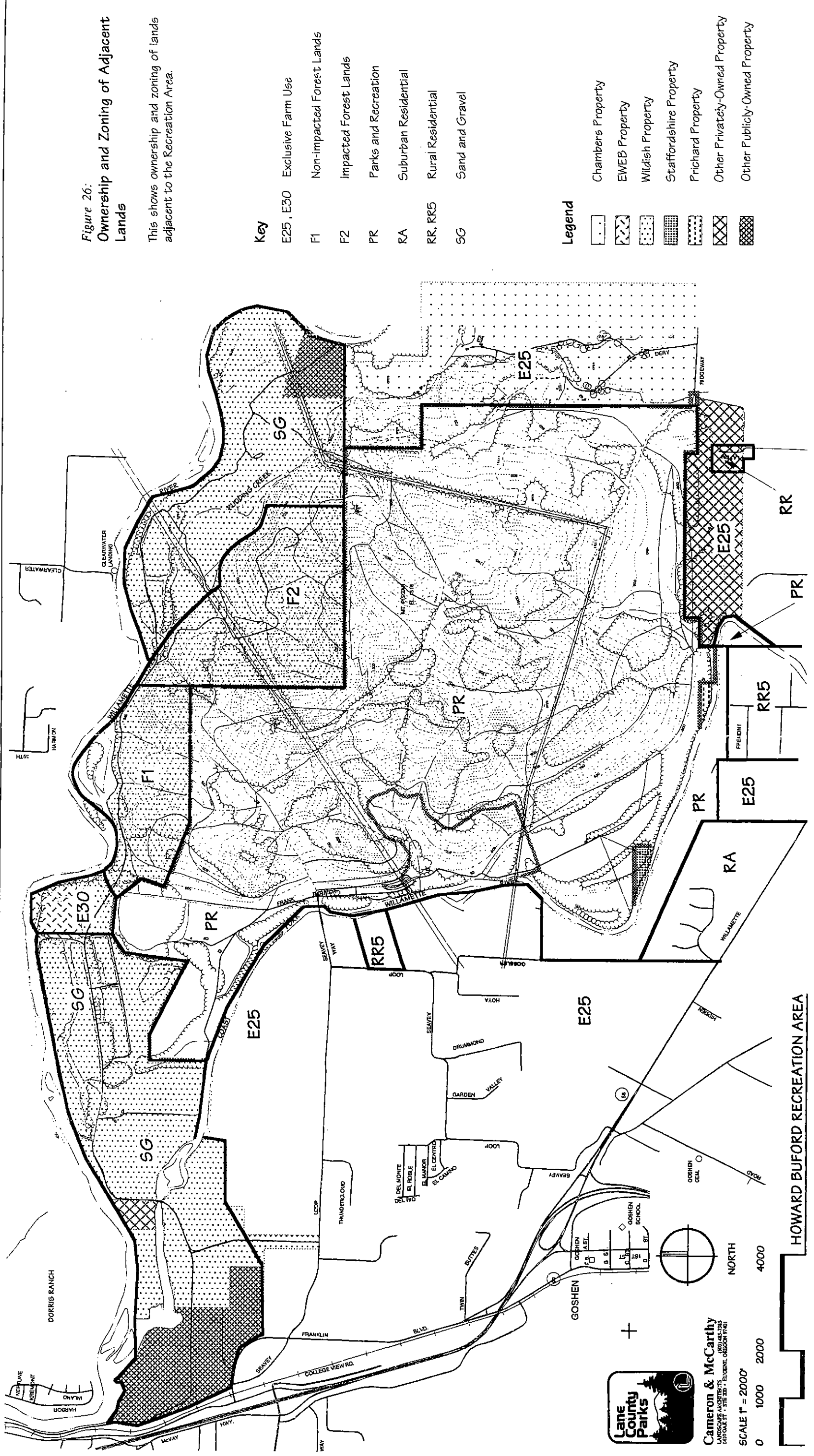
Zone SG Sand Gravel and Rock Products Zone  
 Sand and Gravel operations  
 Sand and gravel related ventures (offices, mix plant, concrete batching plant)

Zones E25 and E30 Exclusive Farm Use  
 Farm Use  
 Propagation or harvest of a forest product  
 Public or private schools  
 Churches

Zones RR and R5 Rural Residential  
 Single family dwelling  
 Bed and breakfast accommodation  
 Farm use  
 Rock, sand, gravel excavation  
 Family day care facility

The allowed activities on adjacent lands in land use zones F1, F2 and SG could have obvious, severe negative effects upon the experiences of some Park users in the future. Uses in zone E25, E30, RR and R5 would probably have little or no negative impact upon the Park.

Given these desires and conditions, consideration should be given to some acquisition, trade and/or cooperative zone change application arrangements with adjacent land owners. Acquisition or trade would bring land of recreational value into the Park. Appropriate recreation-oriented zone



**Figure 26:**  
**Ownership and Zoning of Adjacent Lands**

This shows ownership and zoning of lands adjacent to the Recreation Area.

**Key**

- E25, E30 Exclusive Farm Use
- F1 Non-impacted Forest Lands
- F2 Impacted Forest Lands
- PR Parks and Recreation
- RA Suburban Residential
- RR, RR5 Rural Residential
- SG Sand and Gravel

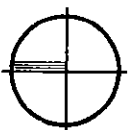
**Legend**

- Chambers Property
- EWEB Property
- Wildish Property
- Staffordshire Property
- Prichard Property
- Other Privately-Owned Property
- Other Publicly-Owned Property



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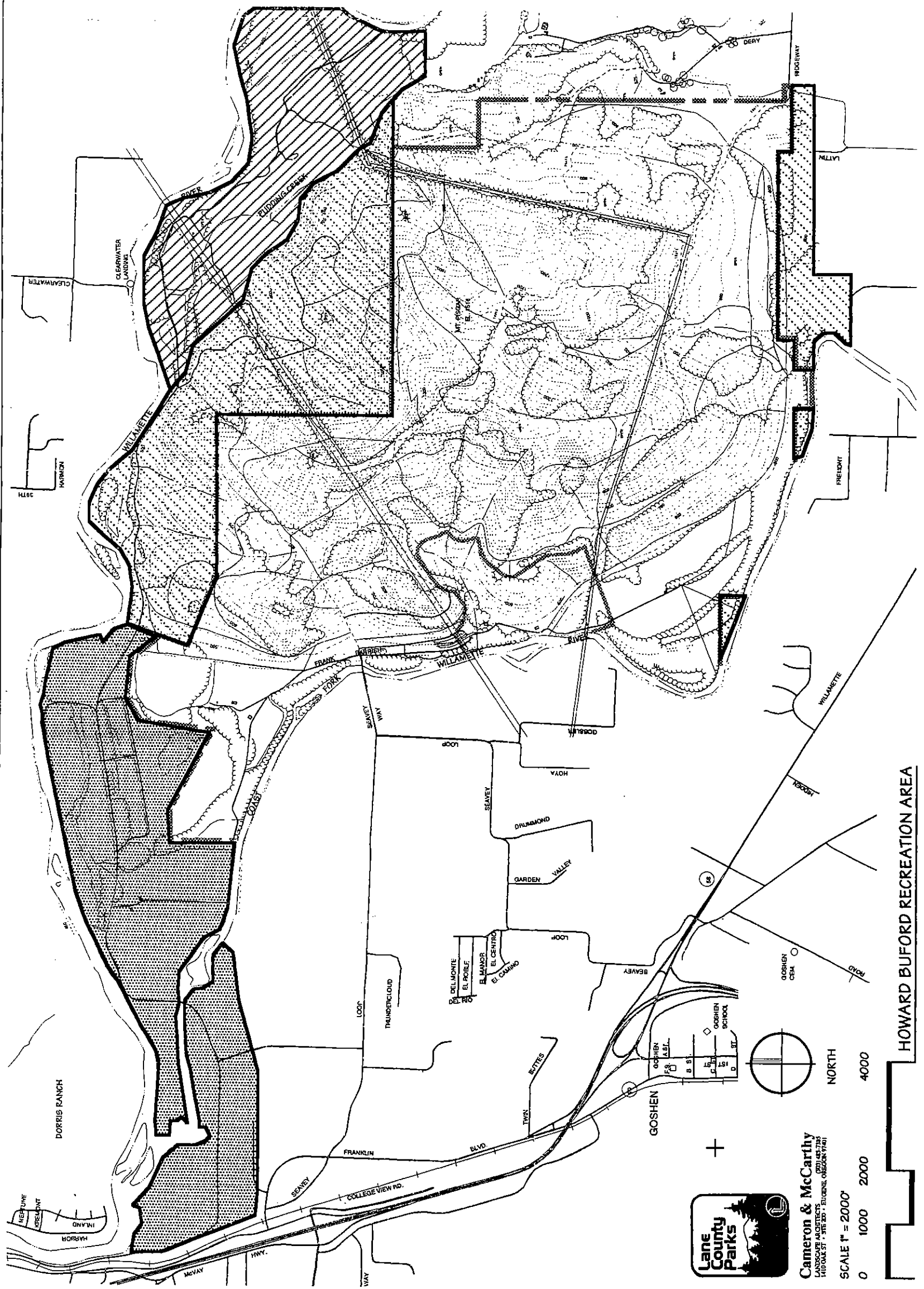





Figure 27:  
Adjacent Lands with Recreational  
Potential and Habitat Value

Legend

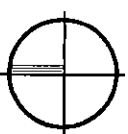
-  Adjacent Lands with Recreational Use Potential (explore acquisition for Howard Buford Recreation Area expansion)
-  Adjacent Lands with Habitat Value (recommended for public acquisition and management)
-  Adjacent Lands with Recreational and/or Habitat Value



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*Design and Implementation*

## ***Design and Implementation***

### ***Goals & Objectives***

The Site Assessment and User Needs Assessment have been synthesized to develop the following set of Goals and Objectives for the Master Plan. Goals provide the overall, general direction for the Recreation Area, and the objectives are actions which contribute to achieving those goals. Design Objectives most often address physical changes while Management Objectives deal primarily with administrative changes. Some objectives are repeated when they support more than one goal. The listing order is not intended to indicate priority.

#### ***Goal 1***

Accommodate increased use while protecting the resource, minimizing development, and preserving the natural and rural character of the Howard Buford Recreation Area.

#### ***Design Objectives***

- A Realign, regrade, drain, and surface existing trails to be retained as necessary to withstand existing and increased traffic and to minimize future erosion.
- B Design and construct new trails which are aligned, graded, drained and surfaced to withstand increased user traffic.
- C Design and develop new trails along the river and through the meadow south of the Arboretum.
- D Through signage and other educational efforts, foster a Park ethic which encourages users to remain on trails and to respect the Park's varied and sensitive natural habitats.
- E Create a surfaced area around the memorial sculpture at the summit which is designed to withstand increased volumes of user traffic.
- F Develop a palette of materials for site furnishings, signage, trail surfacing, and for use in the construction of structures, which is in keeping with the rustic character of the Park.
- G Coordinate efforts with the Mount Pisgah Arboretum to build a visitor's center which serves both the Mount Pisgah Arboretum and the larger Howard Buford Recreation Area.
- H Develop restroom facilities utilizing sand-filtered or other appropriate septic systems for visitor's center and composting or vault toilets at dispersed sites; utilize chemical toilets on a seasonal basis as necessary.
- I With the exception of emergency and service vehicles, restrict bicycles and motorized vehicles to existing public roadways.
- J Increase efficiency of east entrance parking through signage and other permanent markings.

#### ***Management Objectives***

- A Review proposals for the development of new trails or other facilities for compliance with this Master Plan and with the Howard Buford Recreation Area Management Plan.

- B Approve the development of new trails and other facilities only after thorough on-site investigation has been completed.
- C Establish seasonal trail designations for foot and equestrian trails based upon trail conditions and the capability of each to support traffic in wet weather.
- D Advocate the expansion of Seavey Loop Bridge to two lanes to safely accommodate increased traffic.
- E Limit festivals and large gatherings to avoid disturbing visitors who are seeking a peaceful experience.
- F Explore the acquisition of additional land adjacent to the Buford Recreation Area which would significantly enhance the recreational potential of the property. Pursue funding for those parcels deemed appropriate for acquisition.

*Goal 2*

Protect sensitive and significant natural resource areas and restore degraded habitat.

*Design Objectives*

- A Abandon and revegetate trails which are redundant or which cannot be renovated to carry heavy user traffic.
- B To the extent possible, support volunteer efforts in restoring habitat which has been degraded by grazing or overuse.
- C Through signage and other educational efforts, foster a Park ethic which encourages users to remain on trails and to respect the Park's varied and sensitive natural habitats.
- D Restrict use in sensitive areas to light traffic.
- E Use signs to remind people that they are required to keep their dogs on leash and to explain the importance of following the rule in terms of habitat protection and respecting the rights of other Park users.
- F Develop healthy watering facilities away from the river for horses in order to minimize impacts to riparian areas.

*Management Objectives*

- A Limit the location and type of festivals and large gatherings to those which do not damage sensitive botanical resources or wildlife habitat.
- B So long as cattle remain on site, require their owner to develop watering facilities away from the river to minimize impacts to riparian areas.
- C Approve the development of new trails and other facilities only after a thorough on-site investigation has been completed.

- D Facilitate explorations into using federal, state and local funds to acquire adjacent land with significant natural resource values. Encourage federal and state agencies to manage these lands in cooperation with Lane County.
- E Work with the Native Plant Society, the Nature Conservancy, Division of State Lands and others to develop a vegetation management plan.

*Goal 3*

Minimize conflicts among Park users.

*Design Objectives*

- A To the degree possible, provide separate recreational opportunities for horseback riders and people on foot.
- B So long as cattle remain on site, manage grazing in such a way as to allow Park users more complete use of valuable recreational area.
- C Restrict bicyclists to public roads to avoid conflict with horseback riders and hikers.
- D Develop a signage system which designates trail uses and indicates right of way etiquette when trails are used by more than one group.

*Management Objectives*

- A Work with The Oregon Department of Fish & Wildlife and the Audubon Society to develop a wildlife management plan for the Howard Buford Recreation Area to reduce conflicts between deer and fragile vegetation and between adjacent landowners and predators living on Mount Pisgah.

*Goal 4*

Improve access to trails and other facilities for people with special needs.

*Design Objectives*

- A Provide mounting stands for horseback riders.
- B Provide fully accessible restrooms and drinking fountains.
- C Provide trails which are accessible to wheelchairs on land that is flat to gently sloping.
- D Allow horseback access to the summit for people of all abilities.
- E Provide Braille signs for people with sight impairments.

*Goal 5*

Develop and maintain HBRA in a way which minimizes costs and the need for scarce tax revenues.

*Design Objectives*

- A Concentrate major development, including the visitor's center, interpretive and educational facilities, a maintenance facility and parking areas, near the west entrance.
- B Coordinate the development of a visitor's center and maintenance facilities with the Mount Pisgah Arboretum.

*Management Objectives*

- A Explore the creation of a private, non-profit, advisory organization(s) which would function under the guidance of the Parks Division and provide support to HBRA in terms of fundraising, coordination of volunteer efforts, and development and maintenance of trails.
- B Whenever possible, utilize work parties, individual volunteers, and volunteer groups for construction, maintenance and research.
- C As practical, provide support for volunteers and volunteer groups in the form of access to information, tools and equipment.
- D Where necessary and appropriate, charge fees to offset the cost of developing and maintaining facilities.
- E Explore the feasibility of leasing the filbert orchard located on the north bottom land.

*Goal 6*

Maximize the value of the Park as an educational resource. (See also Goal 2.)

*Design Objectives*

- A Develop educational and interpretive programs and information about the history and natural history of the Park and the surrounding area.
- B Coordinate efforts with the Mount Pisgah Arboretum to offer educational programs and design interpretive exhibits about the plants, animals and natural processes of Mount Pisgah and the surrounding areas.
- C Use soft surfacing on foot trails where possible to reduce noise and facilitate listening for birds and other animals.

*Management Objectives*

- A Explore the creation of a private, non-profit, advisory organization(s) which would function under the guidance of the Parks Division and provide support to HBRA in terms of fundraising, coordination of volunteer efforts, and development and maintenance of trails.



- B Utilize student interns or volunteers to establish a system for storing data collected by volunteers and volunteer groups about the site and to document and interpret cultural resources.
- C Encourage groups such as the Audubon Society, the Native Plant Society and others to systematically sample the Recreation Area and record their findings for others to use.

*Goal 7*

Help coordinate efforts and cooperate with groups whose goals are complementary to those of the Howard Buford Recreation Area.

*Design Objectives*

- A Design facilities and programs which are complementary to the neighboring Dorris Ranch Living History Farm and Mount Pisgah Arboretum.

*Management Objectives*

- A Cooperate with other organizations and agencies in providing a bike trail connection from the Eugene-Springfield System to the Howard Buford Recreation Area.
- B Allow trails within the Park to be used as part of the Pacific Crest Trail System so long as Pacific Crest Trail users comply with all Park regulations.

*Goal 8*

Protect the Park and its users from damage and injury and prepare for emergency needs.

*Design Objectives*

- A Identify existing roads and trails that can accommodate emergency and service vehicles.
- B Develop trails wide enough that hikers and horseback riders can avoid poison oak and blackberries.
- C Develop signage to warn Park users of the dangers of poison oak and other hazards when leaving trails.
- D Set up test areas to study the impact of no grazing and alternatives for fire suppression including mowing and small prescribed burns, tethered and/or herded animals.

*Management Objectives*

- A Restrict overnight camping to organized group events and require a special permit for each event.
- B Restrict overnight camping to areas which are easily accessible by emergency vehicles.
- C Formalize agreements for Park lands fire protection .
- D Formulate emergency response plans for the Park.

- E Explore alternatives to grazing such as mowing, prescribed burns, tethered and/or herded animals.
- F Remove unnecessary fencing; repair and improve gates where fencing remains necessary.

*Goal 9*

Encourage the use of alternative modes of transportation to minimize increased traffic into the Park.

*Design Objectives*

- A Provide secure bicycle parking facilities.
- B Provide convenient turnaround for transit bus.

*Management Objectives*

- A Advocate the expansion of Seavey Loop Bridge to two lanes to accommodate transit buses, horseback riders and bicycle riders safely.
- B Work with Lane County Public Works to provide safer access to the Park for those entering on horseback.
- C Pursue getting early, mid-day and late Lane Transit District bus service to the Park.
- D Cooperate with other organizations and agencies in providing a bike trail connection from the Eugene-Springfield System to the Howard Buford Recreation Area.

The following descriptions are proposals for the Howard Buford Recreation Area. The entire Recreation Area will continue to be dedicated to low intensity recreational use. (see *Figure 2: Recreational Use Zones*.) The most active uses, those which generate the highest amount of traffic and require infrastructure and structures to support them, will be concentrated on the west side near the main entrance. The highest level of activity will occur on the north bottom lands and diminish as you move south through the Mount Pisgah Arboretum and into the south meadow. The hillside will continue to be reserved for the use of hikers and horseback riders.

## ***Park Zones and Elements***

### ***North Bottom Lands***

An expanded equestrian center could be located near the current horse arena. The almost level topography, fairly well-drained soils, and the proximity to existing roads and equestrian facilities make this an excellent area for expansion. Adequate parking can be made available for vehicles with horse trailers. In addition to the horse arena, the equestrian center can include other competition courses for western and English style riding. Proposed new trails would originate from this area and make a loop to the summit and back.

#### ***Equestrian Center***

The dairy barn, located south of the Kienzle residence, could be remodeled for use as a multipurpose recreation/interpretive center. It is envisioned that this facility and surrounding grounds could be used as an area for social events such as picnics, parties, dances, meetings, weddings, and family reunions. The facility could also be used as the base for day camps sponsored by local parks and recreation agencies, the YMCA, Boy Scouts and Girl Scouts. The facility could house interpretive information about the Park and the local natural areas and could provide space for weekly or monthly exhibits and how to demonstrations. The Kienzle residence would be utilized as a park caretaker residence.

#### ***Recreation/ Interpretive Center***

Additional improvements may be necessary to accommodate future uses in this area.

A maintenance facility could be located near the existing barns and other farm buildings. Existing roads, plenty of level ground, and buildings which might be converted all make this area well-suited for a maintenance facility which can be used jointly by the Mount Pisgah Arboretum and the Howard Buford Recreation Area. The new maintenance facility would include storage space for maintenance equipment and tools, and space for material stockpiles such as gravel and bark. The maintenance facility should be designed and constructed with the same palette of materials used for other Park improvements, and in a style that harmonizes with the rural character of the area.

#### ***Park and Arboretum Maintenance Facility***

The main entrance proposal includes a widened bridge across the Coast Fork at Seavey Way and a redesigned entrance to the Park. Signs would provide clear directions to the equestrian center, the recreation/interpretive center, the Mount Pisgah Arboretum, trailheads, and to parking facilities for bicycles, cars, buses, and vehicles with horse trailers. The road to the main parking area could be surfaced with asphalt to reduce dust and more easily accommodate buses and bicycles.

#### ***Main Entrance***

The main parking area would continue to be located south of the main entrance and adjacent to the Mount Pisgah Arboretum, serving both the Mount Pisgah Arboretum and the larger Howard Buford Recreation Area. Asphalt surfacing, striping and signage would allow for more efficient use of the space and easier access for transit buses. The parking area could be reconfigured to include parking for additional vehicles and a turnaround for buses.

*Mount Pisgah Arboretum*

The boundaries of the Mount Pisgah Arboretum are shown to include approximately 90 additional acres. The new boundaries are an outgrowth of the Arboretum's master planning process. On the north or entrance edge, the expanded boundary would bring a grassy hillside into the Arboretum. The proposed boundary along the north and northeast is beyond the edge of an oak woodland so the entire area of a grassy bowl can be included within the Arboretum boundaries. On the east side, the boundary would be moved to include a plateau which has its edges defined on three sides by a coniferous forest. The boundary to the south would include an entire wetland area and a section of meadow which is defined by the pattern of vegetation.

According to its plan at this stage, the Arboretum Collection will be organized by seven major ecosystems. Woody plants from around the world will be introduced into the area of the Arboretum which is most similar to the ecosystem in which the introduced plant or plant grouping naturally occurs. A visitor's center, administrative offices, nursery, propagation facilities and a maintenance facility are proposed to support the Arboretum's collection and its educational programs. The Friends of Mount Pisgah Arboretum would continue to have primary responsibility for the development and maintenance of the Mount Pisgah Arboretum.

*South Meadow*

New trails are proposed for the meadow south of the Arboretum and along the Coast Fork. The almost flat terrain is excellent for trails which are accessible to people in wheelchairs, to elderly people and to people with other mobility difficulties. Wildlife observation blinds could offer opportunities to observe the birds and animals which use the pond and wetland area in the midst of a riparian woodland. Interpretive information at the blinds could change seasonally and show some of the things to look and listen for. An overlook at the water's edge would allow people to get close to the river without causing erosion and unnecessary damage to the vegetation. These important additions would expand the amount of Park area usable by hikers and offer opportunities to people whose access to such experiences are limited.

An educational exhibit which provides an historical perspective on the cultural and natural history of the pasture could be developed along the quarry road (the old Russell Homestead Road) overlooking the meadow. Information about historic uses of the pasture for growing hops, growing beans and pasturing cattle could tie into other educational exhibits or programs at the recreation/interpretive center and the Mount Pisgah Arboretum.

*Mount Pisgah Trail System*

A system of trails has been designed which would allow extensive access to the Park for both hikers and horseback riders, while at the same time protecting the Park from overuse. The trails identified on the site plan are sited in their approximate location. Final siting of trails will be based upon field inspection. Existing trails would be utilized wherever feasible. In some cases, rerouting is proposed to allow badly eroded or damaged areas to be restored, to reduce erosion in the future and to minimize redundant trails (see *Figure 3: Site Plan* and *Figure 15: Existing Trails*). New trail developments would be minimized. Horseback riders and hikers would share most of the hillside trails and access to the summit. Both hikers and horseback riders could choose among trails that range from steep to gently sloping, and loops that vary in length from one to several miles.

The Lane County Parks Division will be responsible for the overall management, maintenance, and development of the trail system. The Division has the authority to change trail design, location, construction specifications and practices, and trail use designations based upon site conditions, visitor use, environmental impacts, and other factors of a management nature.

Bicyclists are restricted from using the Park trails because of the severe impacts they can create on soft-surfaced trails on sloping terrain and because of the potential conflicts between users. It is possible that at some point in the future, a bicycle bridge will be constructed across the Middle Fork. At that time, a multi-use trail which includes bicyclists might be developed around the north and east base of the mountain to connect to other regional bicycle paths.

A new ethic about how to use the Park should be fostered through education--an ethic which says that the site and other users are to be respected. Interpretive information about the plants, animals and natural processes of the area should be available at major trailheads. Signs at trailheads could provide information about the location of drinking water and restrooms and discuss trail etiquette for the different users. Through signs and other interpretive information, park users should be encouraged to stay on designated trails and to refrain from shortcutting, creating new trails or following livestock or deer paths. They should be reminded to keep dogs on leash at all times to avoid poison oak, to minimize damage to native plants and habitat, and to avoid disrupting the experience of others. Every trail intersection should have a sign which shows visitors where they are, where they're headed, and what other Park users they will encounter on that particular trail.

For more information about the trail system, please see pages 39-40.

Signs just below the summit should alert people that they are approaching a sensitive area which suffers from compaction and trampling. At the summit, the area that has shown the heaviest use would be surfaced with stepping stones to define the area and to encourage hikers and riders to minimize their wanderings.

*Summit*

The east entrance will remain much smaller and quieter than the main entrance. A sign would inform visitors that the main entrance, with ample parking, is located on the west side of the Park. A sign could also provide a

*East Entrance*

diagram for parking cars and vehicles with trailers to promote the most efficient use of the small space.

A mounting/dismounting stand and accessible composting toilet would be located away from the entrance, but in this general area of the Park.

### ***Financing Improvements and Maintenance***

Financing even very modest improvements and maintaining trails and facilities at the Howard Buford Recreation Area present problems for the Parks Division in a time of shrinking revenues. Comments from many Park users indicated a general lack of understanding about the level of funding and the sources of funding for Lane County Parks. Some stated that, by paying their County taxes, they believe they have already contributed enough to the operation and maintenance of the Park. In fact, a very small portion of the budget for Lane County Parks currently comes from the General Fund and the amount will continue to decrease. This was not always the case.

### ***County Parks Funding 1950's through 1980's***

From the 1950's through the 1970's, the Lane County Parks Division was financially solvent with financial support coming from the General Fund, gasoline tax, and state and federal grants. By the mid-1970's, the Parks Division had the equivalent of 35 full-time employees. They had developed recreational facilities at Fern Ridge, Dorena and Dexter Reservoirs, and in a large portion of Alton Baker Park. And they had acquired the Howard Buford Recreation Area.

But in the early 1980's, the situation changed dramatically. An amendment to the Oregon Constitution specified that gasoline taxes could no longer be used for parks. That eliminated one major funding source entirely. In addition, a severe economic recession decimated the County General Fund. In 1982, what had been a staff of 35 was reduced to zero and all County Parks were closed.

In 1983, Lane County enacted a 5% car rental tax (a large share of which is paid by visitors to the area) and dedicated the funds to the park system. This allowed the County to reopen a few of the most highly used parks. In 1987, the County raised the car rental tax to 9%, raised many of the user fees, and received a small amount of funding from the General Fund which allowed the Division to reopen approximately 50% of its parks. In 1989, solid waste funds were made available to the Parks Division on a temporary basis for capital improvements and renovations; this funding is scheduled to end with the fiscal year 1993-94.

### ***County Parks Funding in the 1990's***

In 1991, the General Fund was again in trouble. The response of the Parks Division was to develop a financial plan which minimized its reliance on General Funds. Today the Parks Division receives only 14% of its operating budget from the General Fund.

Over the next three years, support from the General Fund will be completely phased out. In other words, by fiscal year 1994-95 none of the money people pay in Lane County property taxes will go to Lane County Parks.



1992-93 Operating Budget for Lane County Parks

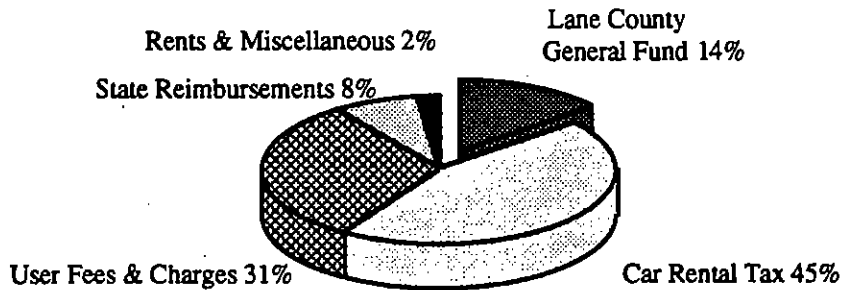


Figure 28: Current Operating Budget

Today the Parks staff is still operating at a level drastically reduced from that in the 1970's. With only 14.5 full-time equivalent staff people, an operating budget of approximately \$1 million and a capital improvement budget that is limited to grants and solid waste funds, there are many limitations to what can be accomplished without charging fees of people who use the County Parks, including the Howard Buford Recreation Area.

Over the last three years, the County has spent approximately \$15,000 per year to minimally operate, manage, and maintain the HBRA. The County has not allocated staff to the Park and does not perform routine maintenance at the site. The County has contracted with the Mt. Pisgah Arboretum to perform minor maintenance and surveillance at the site. Additional work on the site will require additional financial, labor, and volunteer resources.

Without being given any background information, about half of the people responding to the User Survey said they would pay a nominal fee to visit the Park each time; 45% said they would not. Only one-third of frequent users (over 25 visits per year) said they would be willing to pay a \$1 to \$3 fee per visit. Several of them commented that because they visit so often they would not be able to afford such a fee and suggested an annual permit as an alternative to a daily fee. In response to an open-ended question about funding sources for improvements, user fees were mentioned the most often, followed by County taxes.

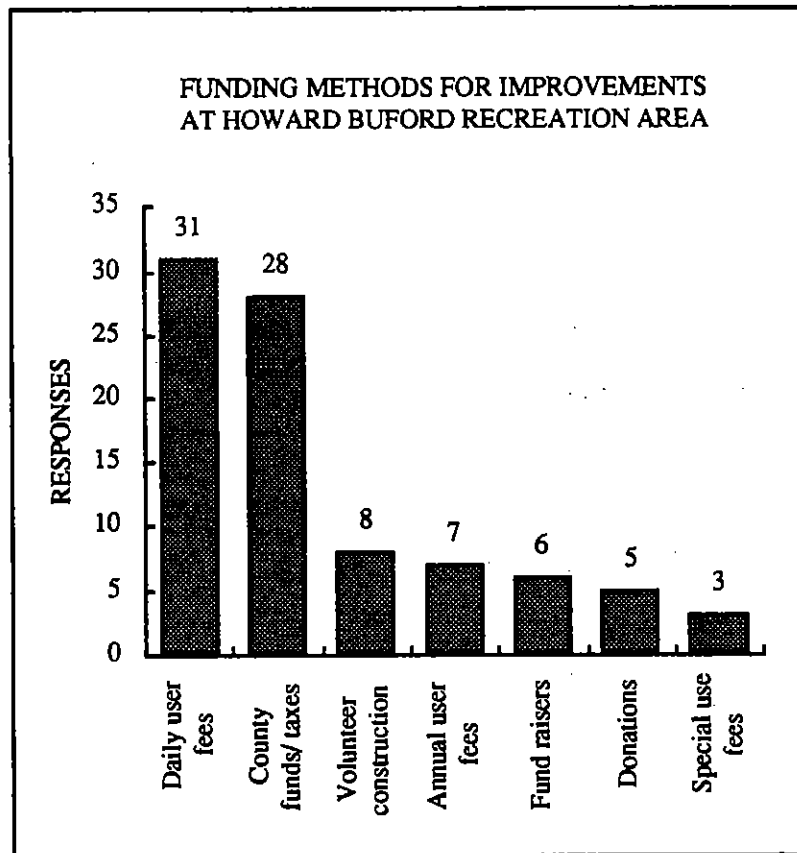


Figure 29: Funding Methods for Improvements

In several other County Parks (Richardson, Orchard Point, Jasper, Winberry, Baker Bay) between Memorial Day and Labor Day, users are required to buy an annual or daily pass. As improvements are made to trails and parking areas at the Howard Buford Recreation Area, fees are likely to become necessary. Special use fees could reasonably be required for group events.

Any type of fee structure will need to be coordinated with the Mount Pisgah Arboretum, since some facilities, existing and proposed, are shared. People who visit the Park use both the Arboretum and the Park trails, sometimes without distinguishing between the two.

At public meetings, in User Survey responses, and increasingly at Task Force meetings, people suggested organizing volunteer efforts to help with the maintenance of trails, fencing and other facilities.

**Recommendations for Implementation and Further Investigation**

This plan is a general plan and is not intended to be site specific. Various maps show general locations of potential wetlands, sensitive natural areas, cultural resources and soil types. However, when alteration of a specific area is planned, a closer look is warranted. In many parts of the Park, botanists, ecologists and archaeologists should be involved. Specific proposals will need to be examined more thoroughly and additional design work completed. The expertise of an engineer will be needed, for example,

to determine exactly what type of septic system will work for the visitor's center. Water rights will need to be explored prior to pumping water from the river for irrigation and watering horses and other livestock. The recreation/interpretive center will require development of a program and site plan, and an investigation into its economic feasibility. Trail construction and surfacing options will need to be explored more thoroughly for each stretch of trail.

Municipal water and sewer services are not available in the Park and are not expected to become available. In almost all parts of the Park, the soil types pose problems for the development of traditional septic systems. For that reason, a septic system designed for the site by an engineer is recommended only for the visitor's center and caretaker's residence (see *Figure 30: Utility Plan*). Composting toilets have been used successfully in other parks and should be seriously considered for the equestrian center and the east entrance. Chemical toilets can be used if seasonal demand exceeds the capability of permanent restrooms.

### *Utilities*

Domestic wells currently serve the caretaker's residence and the three existing residences on the north bottom land. Additional wells will be needed to provide drinking water to the visitor's center, the recreation/interpretive center, the maintenance facility, the equestrian center and for watering horses near the east entrance.

Water rights should be clarified and/or secured for irrigation at the recreation/interpretive center and Mount Pisgah Arboretum, and for watering horses and other livestock at the equestrian center.

Telephone and electric service will need to be extended to the visitor's center, the recreation/interpretive center, the equestrian center and the maintenance facility.

The trail system is the most highly valued facility in the Park and is currently under the most pressure from users. Upgrading existing trails and constructing new ones should be the first priority for the Park.

### *Trail Renovation and Construction*

In upgrading the trail system, we recommend phasing the work as follows:

1. Upgrade existing trails to remain.
2. Close trails marked for abandonment beginning with those in the worst condition.
3. Construct new trail sections as necessary and as budget and labor levels allow.
4. Develop plans for expanding the trail system beyond what is recommended in the Master Plan only after improving the trails shown and when use patterns and volumes indicate a need for park trail expansion, or when additional lands are acquired.

Before beginning work on the trails, a more detailed on-site inventory and analysis of existing trails to remain should be undertaken. Trail conditions should be documented on a reach by reach basis (from intersection to intersection) including width, slopes, adjacent vegetation, soil types and existing drainage characteristics.

Whether an existing trail is being upgraded or a new trail is being constructed, the design of each trail needs to respond to the number and

type of users anticipated, the terrain, drainage, vegetation and soils encountered in any given area. Trails need to be wide enough to handle the types of uses specified for that trail, and the slope of the trail needs to be appropriate to the use and the site conditions. Slopes and soil types on Mount Pisgah make trail and trail-side drainage critically important. Trail surfacing, again depending upon the type of uses and the site conditions, should be incorporated to further improve trail accessibility and durability.

Federal and state agencies, as well as private organizations, have established standards for the design and construction of trails. These standards should be reviewed for their applicability to the conditions on Mount Pisgah. By building upon the experience of other agencies and organizations, a high quality trail system can be developed here that will be in keeping with the character of the Park, handle increased traffic and help protect the rest of the site.

Following an analysis of existing trail conditions and a review of existing standards for trail construction, it will be possible to determine which trails should be developed to what standards. Time frames for renovation and new trail construction can be developed based on capital, material, labor and other resources available.

The following information identifies and describes the proposed trail system for HBRA (see *Figure 31: Trail Map*). The exact location of the trails will be determined after on-site investigation and review. Existing trails should be used when practical and feasible.

- |           |  |
|-----------|--|
| Trail 120 | This trail will be a new trail that will provide an essentially flat surface for walkers and horses. It is envisioned that the trail will be utilized by novice horseback riders for training and learning purposes.   |
| Trail 180 | This trail is the main summit trail. The trail currently exists and is heavily used. The lower one half of the trail will be restricted to walkers only. Many of the other trails in the Park intersect this trail.  |
| Trail 190 | This riverside trail will be primarily new. The trail will be hard surfaced and will be able to accommodate wheelchairs. The trail could also be used for environmental interpretation. Special consideration should be given to the location, design, and engineering of this trail to minimize the impacts to the riparian areas and specifically the western pond turtle. |
| Trail 200 | This trail is located along the south boundary of the Park. It will be a major link between the west and east sides of the Park. Two other trails in the vicinity will be abandoned.   |
| Trail 210 | This trail is the main east side trail to the summit of Mt. Pisgah. Most of the trail is in place and it originates at the east parking lot. Portions of the trail will need to be redeveloped to provide safer access to the summit.  |
| Trail 700 | This trail is the longest of all the trails and follows primarily the northern boundary of the park. It originates at the Frank Parish Road and Campground Road  |

intersection and terminates at Trail 210 on the east side of Mt. Pisgah. Most of the trail is in place. Approximately 3600 feet of additional trail will need to be developed to complete the trail.

- Trail 1801 This trail will be located along the southwest side of Mt. Pisgah. Two other trails currently exist in this area, but both are considered inadequate. The exact location of this trail will be determined after a close examination of the area, discussions with park users, and consultations with professional trail developers. Portions of the existing trails may be used.
- Trail 1802 This short trail is located north of Trail 180 and leads to the summit of a small hill with vistas to the north and west. The trail terminates at the hilltop and will be for walkers only.
- Trail 1901 This trail is located along the old quarry road at the base of Mt. Pisgah. It begins at the Arboretum and runs generally southeasterly to the south boundary trail - Trail 200. The trail will be limited to walkers only and may be surfaced to accommodate wheelchairs. Hard surfacing the trail in conjunction with Trail 190 would allow for the development of a loop trail for the physically disabled.
- Trail 1902 This trail is currently a service road through the middle of the South Meadow. The road primarily serves the grazing contractor as access to the meadow and barn. The trail will provide an alternate route for walkers who do not want to use Trails 190 or 1901. Trail 1902 will also provide a link between Trails 190 and 1901.
- Trail 1903 This trail will link Trails 190 and 1901 to Trail 2101. A portion of the trail may need to be redeveloped.
- Trail 2001 This trail will provide a link between Trails 200, 2101 and 1801. A portion of the trail may need to be redeveloped.
- Trail 2101 This trail primarily follows the south power lines and links the southeast portion of the Park with the rest of the Park. Most of the trail is in place.
- Trail 2102 This trail connects the southern portion of the Park to the summit of Mt. Pisgah along the east ridge of the mountain. The trail also intersects with Trails 180 and 210, thereby forming a west and east side loop trail.
- Trail 2103 This is an old trail that has been underutilized. Currently, the trail looks abandoned. Based on future user input, it could be reopened. If the trail is reopened, it is recommended that Trail 2102 be utilized for walkers only.
- Trail 7001 This trail will provide a low level loop trail for walkers by connecting with Trail 180. The trail also provides a

- low level link between Trails 180 and 700. Most of the trail is currently built. However, approximately 1000 ft. of trail will need to be constructed to replace a section of trail to be closed due to erosion problems.
- Trail 7002 This short, northwest trail provides a link between Trails 7001 and 700. The trail currently exists.
- Trail 7003 This trail links Trail 180 with Trails 7001 and 700. The trail currently exists.
- Trail 7004 This short trail links Trail 700 to Trail 210. The trail currently exists.
- Trail 7005 This trail links Trail 700 to Trails 210 and 2101. The trail follows the east power lines and currently exists.

### *Volunteers and the Park*

It is clear that there are many things people are willing and eager to do for the good of the Park on a voluntary basis. Just within the time frame of this project, people have spent significant time, energy and resources documenting trail locations and conditions. They have shared, on maps, in conversations, and through written comments, their knowledge about the rare, the unusual and the special things they have seen in the Park. They have expressed a desire to help make the Park better--to build trails, maintain fences, and participate in habitat restoration--and have suggested many areas where volunteers or students could be involved. For example, to increase the value of the Howard Buford Recreation Area as an educational resource, students and special interest groups could be encouraged to study the Park and share their findings. The Native Plant Society and the Audubon Society might be willing to spend a year systematically sampling the mountain. A student intern could be used to establish a computer-aided geographic information system database to record the information and make it usable by others. The University of Oregon departments of Archaeology and Historic Preservation could very well be interested in doing a thorough survey of the site. The ideas are very exciting and one good idea seems to generate several others.

At this point in time, individuals and various groups are working separately to achieve their own goals for the Park. Sometimes they are at odds with each other. The HBRA Task Force demonstrated that people from diverse backgrounds and with very different interests in the Park can find common ground. The contributions people made during the course of this process reinforce that notion. An organization which includes in its membership people from all the different groups that use and care about the Park, which works in cooperation with and under the guidance of the Parks Manager, could be amazingly effective. It could coordinate and help focus the efforts of various volunteer individuals and groups, establish a repository for data collected and studies done about Mount Pisgah, and support the improvement of trails and other facilities with labor and with funds collected through memberships or donations. If all the different people who care about this Park worked together in an organized effort, their energy could be a formidable force in shaping new and enhanced recreational opportunities for area residents and visitors while protecting the valuable resource that is Mount Pisgah.



**EQUESTRIAN CENTER**

**Existing Service**  
 Electrical: The horse arena is currently served by a 20.8 KV double phase line.  
 Water: Horses are currently watered in the Coast Fork of the Willamette River.

**New Service Needs**  
 Telephone: A pay phone should be provided for public use.  
 Water: A well will be needed to provide water for drinking; as use increases, water for horses should be supplied by the well or pumped from the river.  
 Restrooms: Composting or vault toilets are needed.

**RECREATION/INTERPRETIVE CENTER**

**Existing Service**  
 Three existing residences have wells, septic fields, telephone and electrical service.

**New Service Needs**  
 Telephone: Business service would be required; a pay phone may be desirable for public use.  
 Water: Additional water may be required for irrigation and watering livestock.  
 Restrooms: Existing septic fields may be adequate; however, use of composting toilets could also serve an educational purpose.

**PARK MAINTENANCE FACILITY**

**Existing Service: None**

**New Service Needs**  
 Telephone: Business service will be needed.  
 Electrical: Service level to be determined by Lane County Parks and Mount Pisgah Arboretum.  
 Water: Potable water will be needed for employees and volunteers.  
 Restrooms: Composting toilets will be needed for employees and volunteers.

**MOUNT PISGAH ARBORETUM**

**Existing Service**  
 Electrical: The Caretaker's Residence, Visitor's Center, quonset hut and barn are currently served by 12 KV single phase service.  
 Telephone: The Caretaker's Residence and existing Visitor's Center each have a single line. A pay phone is available outside the Visitor's Center.  
 Water: A well supplies potable water to the Caretaker's Residence, restrooms and drinking fountain. Water is pumped from the Coast Fork to irrigate the entrance gardens, wildflower garden, and caretaker's vegetable garden.  
 Restrooms: The Caretaker's residence has a septic system; chemical toilets are available for public use.

**New Service Needs**  
 Electrical: Service will need to be extended to a new visitor's center, a new pavilion, and to propagation and nursery facilities.  
 Telephone: Multi-line business service will be needed for a new visitor's center as well as a pay phone for public use.  
 Water: Potable water will be needed in the new visitor's center sufficient to serve 500 visitors per day on average. Additional irrigation water will be needed as the Arboretum begins its planting program.  
 Restrooms: A septic system designed to meet specific site constraints will need to serve 500 visitors per day on average; portable chemical toilets will be needed for festivals and other special events. Additional vault or composting toilets may be necessary at remote locations within the Arboretum.

Figure 30:  
 Utility Plan

This shows proposed additions for water, telephone, power and sewage treatment/disposal. (Refer also to Appendix D, Existing Electrical Lines.)

Information on existing electrical lines was furnished by Emerald People's Utility District (EPUD). Information on other utilities was furnished by Lane County Parks.

**Legend**

- ..... EPUD 20.8 KV Single Phase (existing)
- EPUD 20.8 KV Double Phase (existing)
- EPUD 12 KV Single Phase (existing)
- Ⓜ New Water Service
- Ⓣ New Telephone Service
- ⚡ New/Upgraded Electrical Service
- Ⓢ New Septic System
- Ⓤ New Composting or Vault Toilets
- Ⓜ HBRA Boundary
- Ⓜ Mount Pisgah Arboretum
- Ⓜ EPUD map boundary

**EAST ENTRANCE**

**Existing Service: None**

**New Service Needs**  
 Water: Potable water and water for horses.  
 Restrooms: Composting or vault toilets.

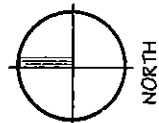


**Cameron & McCarthy**  
 LANDSCAPE ARCHITECTS  
 1100 OAK ST. - STE 201 - EUREKA, OREGON 97132

AUGUST 1993

SCALE 1" = 2000'

0 1000 2000 4000



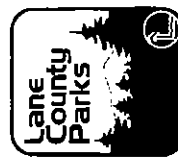
**HOWARD BUFORD RECREATION AREA**



Figure 31:  
Trail Map

Legend

- Trail Number
- Trails for hikers
- Trails for horseback riders and hikers
- Southwest Trail Corridor  
Trail location to be determined.
- Public roads
- HBRA Boundary
- Mount Pisgah Arboretum  
Boundary (Proposed)

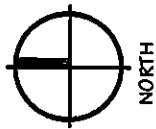


**Cameron & McCarthy**  
LANDSCAPE ARCHITECTS  
1100 OAK ST. - STE 300 - BUEHLER, OREGON 97616

AUGUST 1993

SCALE 1" = 2000'

0 1000 2000 4000



HOWARD BUFORD RECREATION AREA



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*Notes and References*

<sup>1</sup>Lisa D. Nell, Recreation Resource Inventory of the Howard Buford Recreation Area. Lane County Parks Division, Eugene, Oregon. September 1991, p. 3.

<sup>2</sup>Nell, pp. 17-18.

<sup>3</sup>Meinke, Robert J. Threatened and Endangered Vascular Plants of Oregon: An Illustrated Guide. U.S. Fish and Wildlife Service, Office of Endangered Species, Region 1, Portland, Oregon. 1982., Introduction, p.x.

<sup>4</sup>Division of Endangered Species and Habitat Conservation. "Endangered Species Technical Bulletin" Vol XIII Nos. 9-10 (1988).

<sup>5</sup>Meinke, pp. 208-209.

<sup>6</sup>James Scott Kagan, "The Biology of Lomatium bradshawii (Apiaceae), a Rare Plant of Oregon.." Master's Thesis, University of Oregon, September 1980.

<sup>7</sup>Dan Wyant, "Beauty on the butte: A species reborn." Register-Guard 26 July 1980.

<sup>8</sup>Leighton Ho, "Summary of Extensive Search for Aster vialis." Summer 1985.

<sup>9</sup>Ed Alverson, Personal Interview

<sup>10</sup>Alverson.

<sup>11</sup>Alverson.

<sup>12</sup>Alverson

<sup>13</sup>David Wagner, Personal Interview.

<sup>14</sup>Harry Esteve, "Pond turtle in trouble, group says". Register-Guard. 2 September 1992. Page 1, Section 3.

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*Appendix A**Public Meetings and  
Public Comments*

Two public meetings were held. The first on June 3, 1992 at 7:00 p.m. in the Community Room of the Eugene Water & Electric Board was only sparsely attended and an input session was not conducted.

The second meeting on June 24, 1992 at 7:00 p.m. in the McNutt Room of the Eugene City Hall was attended by about 25 people. At this meeting, after an introduction to the process and the site, five topics were suggested. People were asked to make a positive statement about things they would support for the Howard Buford Recreation Area regarding any of the topics. A card was written for each idea and placed under the appropriate topic. At the end of almost two hours, people were given a strip of seven adhesive dots and were told to place one or more dots on the cards they felt were most important. The numbers alongside comments are the number of dots each suggestion received.

A preliminary draft of the Conceptual Master Plan was made available for public comment in early October, 1992. A summary of the comments received during this two-week period follows the Public Meeting Comments.

# Cameron & McCarthy

LANDSCAPE ARCHITECTS

June 24, 1992

## Howard Buford Recreation Area

## Public Meeting - Group Input

### PLACES / FACILITIES THAT YOU VALUE

- 13 Park free of grazing cattle
- 5 Minimal improvements for rural park
- 2 Special protection for all intermittent streams
- 1 Protect scenic view shed from Park
  - Protect Ceanothus community around the base of south drainage

### USES COMPATIBLE WITH MANAGEMENT STRATEGIES

#### Uses Listed in Management Plan

- 8 Horseback riding
- 4 Native plant and wildlife sanctuary
- 1 Wildlife observation
  - Bird watching
  - Camping
  - Cultural Events
  - Educational Activities: archaeological interpretive areas, compass orientation classes, conservation/research programs, living farm/forest, natural environment
  - Festivals
  - Hiking
  - Jogging
  - Meditation
  - Mountain biking
  - Photography
  - Picnicking
  - Running
  - Scenic viewing

#### Additional Uses Suggested by Public

- 1 Arboretum
  - Develop emergency strategy plan for whole Park
  - Develop swimming safety plan
  - Passive/historic approach to living farm
  - Use interpretive signs to recognize historical uses

### NEW / IMPROVED FACILITIES NEEDED TO SUPPORT USES

#### Facilities Listed in Management Plan

- 3 Expanded trail system
- 2 Remove unnecessary interior fencing
  - Additional toilets near east and west entrances
  - Bicycle trails (possibly)
  - Expand east entrance parking
  - Improve south perimeter road for emergency access
  - Park entrance signs
  - Repair fencing and gates
  - Signs: trails, dangers (poison oak, swift water)
  - Widen Seavey Loop Bridge

**Additional Facilities Suggested by Public**

- 3 Improve trails for winter use
- 3 Watering facilities for horses (particularly at southeast entrance)
- 2 Designated trails for bikes
- 1 Designated trail for horseback riders
- 1 Expanded accessibility for handicapped park wide
- 1 Hiking trail on north bank of coast fork
- 1 Reroute/improve middle summit trail
- 1 Use parking on east side more efficiently (culvert, stripe)
- Explore other swimming areas
- Look at access alternatives for security purposes
- Reclaim south meadow (river frontage) for hiking/riding
- Right of way signs on trails
- Self-composting toilets
- Trails linking to those outside Park

**ADJACENT LANDS NEEDED TO SUPPORT USES**

- 11 acquire all Wildish lands
- 4 Prioritize values of pieces of adjoining lands
- 2 Acquire Pudding Creek area for wildlife sanctuary
- 2 Lands to allow linking trails
- 1 Acquire north slope of mountain through trade
- Acquire confluence for wildlife sanctuary

**FUNDING STRATEGIES****FOR FACILITY IMPROVEMENTS AND LAND ACQUISITION**

- 10 Continuation of grazing leases
- 8 Develop alternative use plans, i.e., no grazing, existing costs and benefits, interim compromise
- 6 Low cost/minimal improvements
- 1 Consider other funding sources/ownership for wildlife sanctuary lands
- 1 Volunteers: construction, maintenance, group/organization/individual
- Periodic work parties

**OTHER (MANAGEMENT ISSUES)**

- 3 No developed camping facilities
- 2 Aircraft-free Park ( remote control)
- 2 Develop strategy for maintaining trails
- 2 Prohibit motorized recreation within Park
- 1 Document predator problem prior to control
- 1 Leave wildlife management to God
- 1 Park for day use only
- Charge user fees for large groups
- Document security problems/issues
- Full access to all Park lands for all human users
- Have cattle owners pay for watering facilities (for people, horses, cows)
- Limit development of night lighting
- Made shady hillside areas available for informal picnicking (free of cattle manure)
- Monitor adjacent land uses
- No fees - free park use
- No festivals (outside arboretum)
- Predator control (coyotes, dogs)
- Prevent noise pollution
- Restrict vehicular access to existing public roads
- Work with ODFW to develop overall wildlife management plan

**HBRA Conceptual Master Plan  
Public Comments  
October 1 - 16, 1992  
Evaluation of Initial Draft**

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**General Consensus of Response:**

- Leave the park as it is.
- Acquire the Wildish property.
- There was approximately a 50% split as to whether or not fees should be charged. However, if a decision is made to charge fees, they should be dedicated to trail and park improvements.
- Most respondents felt that camping should be allowed during special events and in a designated area (such as the horse arena). A fee for camping was considered acceptable, although there was some opposition. The fees should be dedicated to the park.
- The east entrance is too small and parking along Ridgeway Road is unsafe. It was suggested that the current lot be enlarged.
- Most of the horseback riders did not feel there was a conflict between horses and hikers. There is no need to separate the trail usages because of a user conflict.
- Horses should not be excluded from the summit. Tying up the horses below the summit is not a good idea.
- Water for horses must be running water, since stagnant water is unhealthy for them.
- Most respondents felt that mountain bikes should be prohibited. A few responses indicated that mountain bikes could use the park in designated areas.
- Rental stables are not necessary.
- No burning should be allowed.
- Contradictory statement: Both horses and hikers are compatible if they are on separate trails.
- Horses should be allowed throughout the park and not be limited to one side. Limiting the trails could cause erosion problems through overuse of the remaining trails.
- Many respondents expressed that the planning process should be more open, and that the survey did not reach enough people.
- Grazing was an issue, with the equestrian people approving of continued grazing and the other groups expressing concern about its impact on the site.

*Appendix B*

*User Surveys*

155 park users participated in our User Survey by completing written questionnaire forms. Volunteers were stationed on-site on Saturday, June 13, Sunday, June 28, and weekdays on a random basis throughout the months of July and August to hand out User Survey Forms. In addition, the forms were available at public meetings held on June 3 and June 24, and could be picked up at the office of Cameron & McCarthy.

People were asked to either complete the first page of the survey on the spot and hand it back to a volunteer or to take the survey home to complete and mail at their convenience.

LOCATION:  80 West Entrance     12 Summit Trail     23 Arboretum Entrance     10 East Entrance  
 7 Horse Arena     0 Frank Parrish Horse Gate     23 Other/Unknown

**HOWARD BUFORD RECREATION AREA**

**USER SURVEY**

The Lane County Parks Department has begun the process of developing a new Master Plan for the Howard Buford Recreation Area (Mount Pisgah). Learning what you think about the park is an important part of that process.

1. Is this your first visit to the Howard Buford Recreation Area?     9 yes     146 no
2. About how many times a year do you come to this park?     24 1-4     24 5-12     33 13-24     63 25-99     31 100-199     22 200-365     10
3. When do you come?     102 winter     135 spring     144 summer     126 fall
4. Are you alone on this visit?     53 yes     97 no    If no, how many are in your group?     2     66  
 3     13  
 4     7  
 5     2  
 6     4  
 group of 10 or more     5

5. What is the best thing about Howard Buford Recreation Area?    see Survey Comments
6. What is the worst thing about Howard Buford Recreation Area?    see Survey Comments
7. What is usually your primary activity at Mount Pisgah?    see Survey Comments

8. What other things do you like to do here?
- 103 a hike the summit trail     88 j birdwatch/observe wildlife
- 99 b walk through the Arboretum     56 j attend special Arboretum events
- 44 c hike cross country     22 k participate in field experience for academic or recreational classes. Who sponsors the class and what is the subject?    See Survey Comments
- 15 d ride the horse trails
- 10 e use the horse arena
- 55 f picnic     29 i other    See Survey Comments
- 35 g swim
- 5 h fish



9. Which activities are compatible with the things you like to do? Which activities do you believe should be separated from those you like to do? Which activities do you believe should not be allowed?

- |                                     |  |   |   |
|-------------------------------------|--|---|---|
| a. horseback riding                 | 63<br>1 <input type="checkbox"/> compatible  | 70<br>2 <input type="checkbox"/> okay if separate | 10<br>3 <input type="checkbox"/> should not be allowed  |
| b. mountain bike riding             | 18<br>1 <input type="checkbox"/> compatible  | 51<br>2 <input type="checkbox"/> okay if separate | 76<br>3 <input type="checkbox"/> should not be allowed  |
| c. car camping                      | 16<br>1 <input type="checkbox"/> compatible  | 38<br>2 <input type="checkbox"/> okay if separate | 99<br>3 <input type="checkbox"/> should not be allowed  |
| d. backpack camping                 | 39<br>1 <input type="checkbox"/> compatible  | 32<br>2 <input type="checkbox"/> okay if separate | 68<br>3 <input type="checkbox"/> should not be allowed  |
| e. boating (non-motorized)          | 95<br>1 <input type="checkbox"/> compatible  | 34<br>2 <input type="checkbox"/> okay if separate | 14<br>3 <input type="checkbox"/> should not be allowed  |
| f. boating (motorized)              | 6<br>1 <input type="checkbox"/> compatible   | 19<br>2 <input type="checkbox"/> okay if separate | 110<br>3 <input type="checkbox"/> should not be allowed |
| g. hiking                           | 136<br>1 <input type="checkbox"/> compatible | 5<br>2 <input type="checkbox"/> okay if separate  | 0<br>3 <input type="checkbox"/> should not be allowed   |
| h. other <u>see Survey Comments</u> | 1 <input type="checkbox"/> compatible        | 2 <input type="checkbox"/> okay if separate       | 3 <input type="checkbox"/> should not be allowed        |

10. How would you rate the facilities you use?

- |                                     |  |   |   |
|-------------------------------------|--|---|---|
| a. roads                            | 26<br>1 <input type="checkbox"/> very good | 89<br>2 <input type="checkbox"/> adequate | 28<br>3 <input type="checkbox"/> need improvement |
| b. foot trails                      | 88<br>1 <input type="checkbox"/> very good | 48<br>2 <input type="checkbox"/> adequate | 15<br>3 <input type="checkbox"/> need improvement |
| c. horse trails                     | 13<br>1 <input type="checkbox"/> very good | 27<br>2 <input type="checkbox"/> adequate | 9<br>3 <input type="checkbox"/> need improvement  |
| d. horse arena                      | 7<br>1 <input type="checkbox"/> very good  | 20<br>2 <input type="checkbox"/> adequate | 5<br>3 <input type="checkbox"/> needs improvement |
| e. other <u>see Survey Comments</u> | 1 <input type="checkbox"/> very good       | 2 <input type="checkbox"/> adequate       | 3 <input type="checkbox"/> need improvement       |

11. What other facilities would you like to have available within the Howard Buford Recreation Area?  
see Survey Comments

12. Would you pay a nominal fee (\$1 to \$3 per visit) to help offset improvements to trails, signage, trash collection, restrooms and parking?

76  
a  yes

70  
b  no

13. Please circle the range below which includes your age; if you are with others, please indicate how many in your group fit each age range.

1/11      1/12      12/13      19/17      56/29      32/29      16/10      16/15  
b  1-12    c  13-18    d  19-24    e  25-34    f  35-44    g  45-54    h  55-64    i  65+

14. Please indicate your sex.      76  
a  female

77  
b  male

15. Do you feel safe at Mount Pisgah?      144  
a  yes

7  
b  no      Why or why not? See Survey Comments

16. In what town, county and state do you live?

Eugene      96  
Springfield/Glenwood      31  
Pleasant Hill/Goshen      8  
Other Lane County      11  
Other Oregon      4  
Other USA      5

To have your response included in our official tabulation, please sign your name and print your name and address. Thank you!

Signature \_\_\_\_\_ Name \_\_\_\_\_

Address \_\_\_\_\_

If you have time, please answer additional questions on the back.

17. What factors contribute most to your enjoyment of the park and why?

**See Survey Comments**

18. What factors detract most from your enjoyment of the park and why?

**See Survey Comments**

19. Who should pay for improvements to the park (specific users, all county residents) and how (permits, use fees, taxes)?

**See Survey Comments**

20. What areas of the park do you value most highly and for what reason? Please use the map attached to mark the areas. Use the space below to write your comments.

**See Survey Comments**



Survey Comments

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5	native habitats/natural setting /natural beauty	46
5	hiking trails	28
5	close to town	25
5	peacefulness/solitude	17
5	low development	13
5	horse trails/facilities	8
5	lack of use	7
5	wildflowers	7
5	view	7
5	summit trail	7
5	availability/accessibility	6
5	Arboretum	5
5	good place to work out	5
5	openness	5
5	river	3
5	relatively safe	3
5	birding is great	2
5	size	2
5	easy trails	1
5	nice place to walk dogs	1
5	can walk dog off leash	1
5	picnicking	1
5	existence of park	1
5	mountain	1
5	variety of people	1
5	dry south facing slope	1
5	soft walking trails	1
5	no admission fee	1
5	cattle	1
6	poison oak	19
6	cattle	11
6	too many people/increasing use/abuse	11
6	dogs running free	11
6	animal feces	9
6	litter	6
6	gravel road/dust	5
6	powerlines	4
6	possibility of development	3
6	mud in winter/spring	3
6	nursery stock, exotic trees	2
6	rocky trails	2
6	mountain bikers	2
6	lack of restrooms	2
6	Arboretum plants poorly marked	1
6	freeway noise	1
6	incompatible uses	1
6	lack of mountain bike trails	1
6	small	1
6	lack of signage	1
6	tall grass in picnic area	1
6	parking	1
6	snakes	1
6	maintainance	1

6	ticks	1
6	poor river access	1
6	Arboretum	1
6	well at Arboretum and access roads	1
6	horses	1
6	closure during fire season	1
6	water shortage for pond life	1
6	closure of drinking fountain in winter	1
6	closure/development of Wildish lands	1
6	increasing rules and regulations	1
6	low summer stream flows	1
6	lack of benches to sit on	1
6	rocks in river	1
6	lack of drinking water	1
6	no backs on benches	1
6	not enough trails	1
6	smokers	1
6	monument at summit	1
6	machine noise	1
7	hiking/walking	98
7	hiking summit trail	19
7	nature appreciation	14
7	equestrian	15
7	swimming	9
7	jogging/workout	7
7	bird-watching/birding	5
7	meditation	4
7	botanizing	3
7	picnicking	3
7	sitting/relaxing	4
7	volunteering at Arboretum	3
7	walking /running dogs	3
7	area expert (daughter of John Seavey)	1
7	photography	1
7	viewing from Mt. Pisgah	1
7	volunteering-general	1
7	sketching	1
8 K	guide work	8
8 K	Arboretum	3
8 K	University of Oregon	3
8 K	various	2
8 K	Lane County Sheriff's Posse	1
8 K	ornithology	1
8 K	ROTC	1
8 K	LCC	3
8 K	elementary schools	1
8 K	Eugene Mtn Rescue	2
8 K	Native Plant Society	1
8 K	hike up Pleasant Hill side	1
8 L	observe plants	3
8 L	run my dog (off leash)	3
8 L	lead nature walks	2

Survey Comments

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8 L	write	2
8 L	orientteering	2
8 L	jog up the back side	1
8 L	mountain bike	1
8 L	to be alone in nature	1
8 L	trespass on wildish property	1
8 L	observe wildlife	1
8 L	run	1
8 L	sex	1
8 L	walk dog	2
8 L	equestrian events	1
8 L	training for mtn rescue and back country first aid	1
8 L	pick blackberries	1
9 H2	cattle grazing	1
9 H3	cattle grazing	4
9 H2	celebrations, weddings, etc	2
9 H1	dogs off leash	1
9 H1	dogs off leash-enclosed area	1
9 H2	dogs off leash-enclosed area	1
9 H3	exercising dogs	1
9 H3	fairs/festivals	1
9 H3	golfing	1
9 H1	hangliding	1
9 H2	hangliding	2
9 H3	hangliding	1
9 H1	jogging	1
9 H2	jogging	1
9 H3	large concerts	1
9 H3	motorcycling/ATV's/Dirtbikes	2
9 H1	nature study	2
9 H1	picnicking	1
9 H1	swimming	2
9 H3	toy airplanes	3
9 H3	war games	1
9 H1	wildlife viewing	2
9 H3	work with loud machine tools	1
10 E3	water availability	2
10 E3	beach access	1
10 E1	bathrooms	3
10 E3	bathrooms	2
10 E3	parking	1
10 E2	bicycle access	1
10 E3	gate at arena entrance	1
10 B3	need water blocks to prevent trail erosion	1
11	perfect as is/none	27
11	more restrooms	9
11	more foot trails	8
11	more drinking fountains (one at summit)/water	5
11	more complete trail maps	2
11	improve, widen trails	2



11	further development of Arboretum	2
11	Wildish property added to park	2
11	small snack and juice bar	2
11	better swimming/cleaner water	1
11	mountain biking	1
11	more parking	1
11	improved day use horse facilities for 10+ trailers	1
11	more picnic tables by river	1
11	storm shelter at top of Pisgah	1
11	more trash cans	1
11	playground for children	1
11	signage for dog owners about poop	1
11	improve arena	1
11	more access to river	1
11	foot wash trough at base, exit or Arboretum.	1
11	wheelchair accessible trail	1
11	Arboretum pavilion	1
11	alternate routes to summit	1
11	better nature trails	1
11	small observatory	1
11	small bookstore	1
11	larger educational facility	1
15 A	people are pretty good here	4
15 A	hike in pairs/don't hike alone	4
15 A	cattle sometimes intimidating	3
15 A	never been bothered	2
15 A	don't see sleazy/weird people there	2
15 A	lots of same people/regulars	2
15 A	not many people in daytime	2
15 A	always on horseback	1
15 A	know it well	1
15 A	meet/see friends/acquaintances	1
15 A	people here to do the same thing-exercise	1
15 A	good management	1
15 A	walk with dog	1
15 A	see young people/families mostly	1
15 B	cattle intimidating	2
15 B	except in groups	1
15 B	weird scary people	1
15 B	park intimidating with few people around	1
17	natural beauty	30
17	peaceful, serene setting	23
17	good trails	21
17	close to town but feels far from town	21
17	wildlife	20
17	extensive habitat	16
17	openness	16
17	absence of crowds	15
17	undeveloped character	15
17	variety/number of trails	10
17	summit trail	10

Survey Comments

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17	absence of noise	5
17	size	5
17	able to let dog run free	5
17	Arboretum	5
17	view from summit	5
17	diversity	4
17	good educational outreach	4
17	horse arena area/horse facilities	3
17	convenient location for good workout	3
17	accessibility	3
17	minimal use regulations	3
17	ease of hiking trails	2
17	free--no admission	2
17	absence of motorized vehicles	1
17	taking part in volunteer activities	1
17	cleanliness	1
17	recent improvements to visitor's center	1
17	diversity of activities	1
17	friendly people	1
17	sculpture at summit	1
17	open to horses	1
17	absence of camping	1
17	blackberries	1
17	changing colors of scenery throughtout the year	1
17	sense of safety	1
18	dogs off leash	18
18	cattle and the damage they cause	17
18	dog/other animal doo-doo on trails	11
18	large number of people	7
18	poison oak/blackberries	7
18	power lines	6
18	noise of others	4
18	gravel roads/road dust	4
18	litter	4
18	careless/disrespectful users	4
18	monument at summit	3
18	overuse	3
18	horses	3
18	mountain bikers	3
18	bikes on Arboretum trails	2
18	motors	2
18	isolation/unsafeness	2
18	closure of Wildish lands	2
18	potential for development	2
18	gravel paths distract when listening for birdsong	1
18	horses on Arboretum trails	1
18	freeway noise	1
18	inaccessibility of middle fork due to Wildish	1
18	trail erosion/disrepair	1
18	alterations of ecosystems by introduced species	1
18	weeds taking over trails	1
18	trails not well marked	1
18	interior fences/T-posts	1

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18	high speed traffic on gravel roads	1
18	limited parking on east side	1
18	overgrowth in water garden in summer	1
18	caretaker and family	1
18	leash law	1
18	limited number of trails	1
18	lack of picnic accessibility	1
19	County funds/County taxes	50
19	user fees	49
19	annual/monthly/seasonal fee	17
19	permits	10
19	volunteer help	8
19	fund raisers	6
19	donations	6
19	state funds/taxes	1
19	Arboretum funds	1
19	concession stand	1
19	severance tax on cattle grazers	1
19	fines for unleashed dog owners	1
19	individual/group/family permits	1
19	pragmatic mix depending on use	1
19	economic devo. funds--state lottery	1
20	Arboretum	24
20	the entire park	21
20	summit trail	18
20	nature walk trails	9
20	summit	8
20	river side trail	7
20	hiking trails	7
20	all trails	5
20	native prairies	3
20	Eastern half/east side from Ridge Top Road	3
20	Western Half	1
20	water gardens	4
20	spring wildflowers	3
20	picnic areas	3
20	wetlands	2
20	all trails open to horses	2
20	river edge/beach	2
20	oak savannahs	1
20	sunrise/sunsets/star-gazing at summit	1
20	restrooms, water fountain	1
20	southern half of park-S of Arboretum	1
20	special events	1
20	horse trails/arena	1
20	coast fork of river	2
20	back side-fairy creek	1
20	the quarry	1
20	swimming holes	1
<b>OTHER COMMENTS</b>		
	Wetlands need to be protected from increasing	1

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crowds	
Cattle grazing necessitates fencing which discourages public access to a public area.	1
Development to site should be minimal. Don't ruin a good thing.	5
Cattle grazing in the woodlands by the river have seriously damaged that sensitive area.	1
I value the Arboretum most highly because of the well-maintained trail system.	2
Value the Arboretum for its peaceful, wilderness orientation.	1
Cattle block trails, cause erosion and cow piles detract from serenity	1
Responsible mountain bike riding along with proper signing and regulations makes mountain biking and other activities compatible. I have ridden in many other recreation areas where this has been accomplished and it is enjoyable for all.	1
respect and try to work with volunteer availability better	1
would discontinue use if user fees were imposed	2
leave as is-unimproved, natural	8
Current summit trails are very inadequate, park needs to be expanded to include areas around middle fork and confluence.	1
The gardens at the entrance to the arboretum are rather uninspired	1
I would hate to see too many rules put up for the use of this park--also only one of two equestrian parks in the county (one in Cottage Grove.)	1
Mt. Pisgah's summit may well have been a sacred area for the Kalapooia Indians, according to Bill Burwell. I feel it is a very special place...the Kesey memorial at the summit is a sore intrusion of arrogance by men in an area I consider sacred. The caretaker is also a real caring and capable asset for us all. Dogs off leash not a problem	
Low impact human use should be the guiding principle with opportunities for both handicapped and off-the	1

beaten-path types.

Cattle damage trails, get in my way , compact soils, pollute water, eat and trample wildflowers. spread noxious weeds. compete with deer for forage, eliminate hiding cover for small mammals, reptiles, amphibians, look stupid, don't belong in natural area, benefit only one person (the permittee), distract my dog, damage riparian areas, alter hydrology.

Services and funds from cattle grazing could be replaced by volunteers. Make Arboretum pay for improved water supply.

SE corner of park along Coast Fork particularly damaged by cattle- often wet-trails ruined by grazing in this area. See map and comments

Likes that trail has gravel-doesn't get muddy in winter. 1

Dislike horseman's attitude 1

Tax money should go only for absolute necessities--cut administrative salaries and benefits for more park funding. 1

Goats would be good for poison oak control 1

Dislike gravel on summit trail--makes walking difficult. 1

Dislike dead fish in water 1

Improve arena and have shows, playdays for \$\$ 1

I prefer the wilder sections as opposed to the groomed areas, so for my money, other than the roads, it doesn't need much improvement/maintenance. 1

The wildlife preserved is invaluable 1

Every effort should be made to obtain Wildish property. Also, park should have more wildlife--might support Elk if cattle removed. 1

South side often becomes impassible due to cattle damage--mud knee deep which you can't walk through until late summer.. Areas of small streams or seeps are nothing but mudholes. A park is no place for cattle. 1

Cost of fee collection would exceed income except in special events. Organized volunteerism is the best hope for the immediate future. 1

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Dislike congestion around Arboretum entrance area. Also use by uneducated users and vehicular traffic by non-users cruising the area. Fence around horse parking area results in limited horse parking by groups not involved in specific events by trying to ride and visit with each other. 1

Let cattle and horsemen maintain long distance trails to their specifications. Charge users of any fancy landscaped picnic areas day use fees for those specific areas. Minimize improvements--leave primarily a rural rustic park--utilize rural type solutions i.e. grazing management--do not compete with metro-parks or actively encourage use by city residents. 1

Arboretum is valued--I just wish it was at Wayne Morse Ranch or some city park. Alton Baker would be good. 1

Only feels unsafe on flatland areas near road and Arboretum 1

At this time it is difficult to reach the summit from either side without using portions of the road/hiking trail. At the same time, we should not be taking off cross country and damaging new territory. Rules should be more clear as to where horses are allowed. 1

The diversity of landscape types accommodates a wide range of uses--from the isolated hike to the social event. This range of options in one tract so close to Eugene/Spfd. is, I believe, the single most valuable feature of Pisgah. 1

The more the park is developed, the more use it will get. The more accessible it becomes, the more people will come. It's inevitable that it be managed, but I would like the development/management to proceed slowly as use increases rather than have it develop rapidly and thus increase or stimulate use. 1

SW rocky landscape allows for year-round visitation The park is large enough as it now exists. We don't need more if only a small fraction of it is being used by a small number of people. 1

Mt. Pisgah is an essential resource for Outdoor Pursuits program at U of O. We would not be able to afford entry fees as a result of Ballot Measure 5. Would enjoy being able to access the area at night but understand the security issue. Improvements should be limited to elimination of elements that de- 1

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grade the area--i.e. degradation of trails. Limits on mtn hiking, horse use, and CATTLE GRAZING and continued prohibitions of camping should allow the area to retain its character.

Use west half of hill especially for Wilderness Survival training, other areas for first aid training for rescue, personnel, ski patrol, and outdoor leaders. Also use area for environmental studies/interpretation courses.

Per generation of funds--possibly subcontract the process to Friends of the Arboretum and split the revenue between the Parks Dept. and the Arboretum. The park should absolutely remain a day use area. Mr. Downing should either withdraw his cows (preferred), pay a reasonable grazing fee, or be required to document his "improvements". Consider using inmate work crews for simple maintenance work. Mostly it's a nice park as it is. Fine tuning is probably all it needs.

1

Cattle grazing a concern

1

There is more horse use recently and there probably should be special trails for horse people...What really disturbs me is cattle grazing, especially during the rainy season. Mt. Pisgah is fragile re its soil and the springs that become active during the winter and spring. The cattle people like Downing etc. think it is their right to graze cattle because they have done it for generations. Nothing stays the same and I believe cattle grazing should be prohibited!! These guys have had a 'free ride' all these years. The park belongs to everyone.

1

Also enjoy seeing coyote and other wildlife. I would recommend to the park committee that they recommend to the County Commissioners that Tom (LoCascio) be hired as a County employee to head up any changes and improvements that will come from this study.

Please don't "landscape" this park out of existence! Its current makeup is what makes the park so attractive. There's enough "English Garden" landscape to go around now. Leave this one a bit wild.

1

We should acquire the remaining private land on the map--that was the legislative decree and the original plan--Addition would make the best park in Oregon

1

Please remove memorial sculpture from the summit.

1

As usage increases, the horseback riding will have to be separated from the hikers who often have dogs.

1



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- Dogs will have to be leashed in the future due to increased usage. 20 ft flexi-leashes are a great idea. Trails will also need improvements to prevent erosion. I only want to pay for maintenance of existing facilities. I don't want "improvements." Most "improvements" detract from natural values.
- I feel safe because activities are not available to attract persons that make our other parks and trails so unsafe. This area cannot support "improvements" that would attract more people. Dog owners should have to carry scoops. 1
- It's a place where any adjustment that is made could make it a magnet for large groups (faculty picnics & Hells Angels) or turn it into a an outdoor farm ..... I like it just the way it is. Its like a well worn pair of jeans. I like the dust, the poison oak, the cows and the power lines. What detracts most from my enjoyment is the presentiment that it will become one more playground for Eugene's favorite tribal rite--squabbling over land-use issues. 1
- If a fee per visit were the only option...I would probably just go elsewhere most of the time. 1
- The entire park is part of a system of habitat where wildlife is protected from the encroachment of development. The watershed spills all around the mountain and no bridge yet exists below those at Jasper and the one below Pleasant Hill on Hwy 58. Wildlife needs this corridor to migrate between the river systems. Develop parks down the greenway from Springfield and Eugene for bicycle and scenic river travel. Leave Buford Park alone! 1
- I make a point of getting to the park very early in the morning, before the crowds--especially on a weekend. We are very fortunate to have the park. 1
- Good general use park--well maintained and a pleasure to use. 1
- Manage the park different and make it pay its own way--you have some good farm ground that could be put to work and not hamper the hikers, boaters swimmers, horseback riders or mountain bikers 1
- Would like to see a trail around all of Mt. Pisgah at it's base. More footpaths near the rivers for bird watching. 1
- Dogs off leashes: I have been snipped at and charged by dogs. I also dread having them rub against me after 1

Survey Comments

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they have coursed thru the myriad of poison oak bushes. I try to come hike Mt. Pisgah at least 5 times a week using the Summit Trail. I do so for exercise but as importantly for emotional/spiritual composure. We picnic with friends around 6 times a year and I love showing visiting friends both the hike and the Arboretum.

A user fee would significantly add to my budget at the rate I use the park. It would become unaffordable and inaccessible. The noise of power tools and machinery detract from my enjoyment of the park. Hand tools might create more jobs. Or noise making tools could be used at certain times and the times would be posted so folks could avoid them. Dogs at swimming holes are a nuisance.

1

Use a permit system similar to the sno-park system. My friends and I generally use the Arboretum. We explore farther each visit. I would like to know more about the events that occur at the park. Publicity in local papers may make people more aware of your facilities.

1

If you're thinking of charging a user fee at Mt. Pisgah then there should be user fees at all parks located in Lane County. I personally would be willing to pay a minimal annual use fee, however I think all park users should be able to vote and participate in ALL decisions made for Mt Pisgah. PLEASE KEEP ME INFORMED.

1

Lack of bathroom facilities limits time use here as well as picnic accessibility. I do not see myself coming here if I had to pay a dollar every time I wanted to hike.

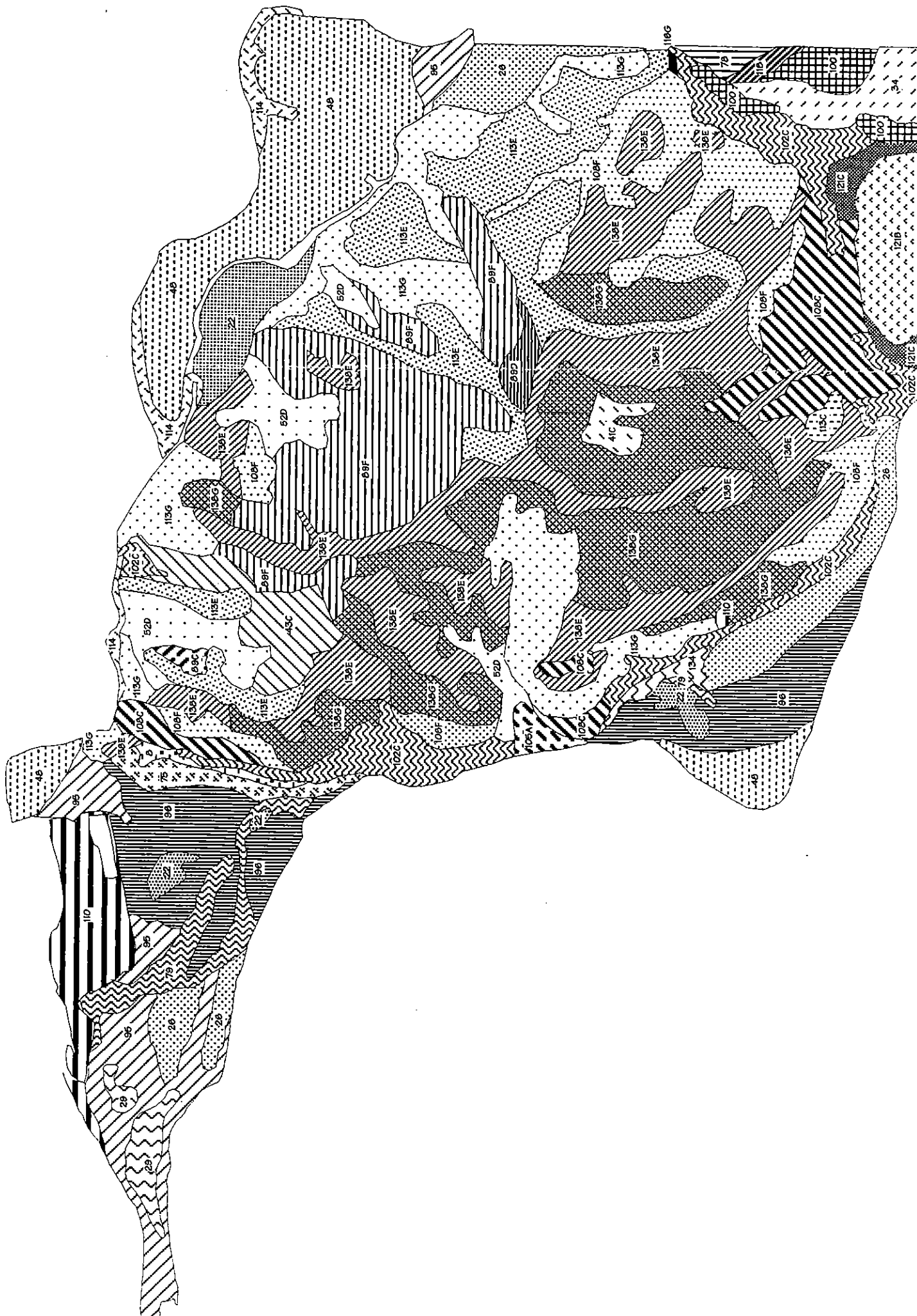
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*Appendix C*

*Soils*

This shows soil types within the park as well as those of privately owned lands adjacent to the park.

Source: Soil Survey of Lane County Area, Oregon

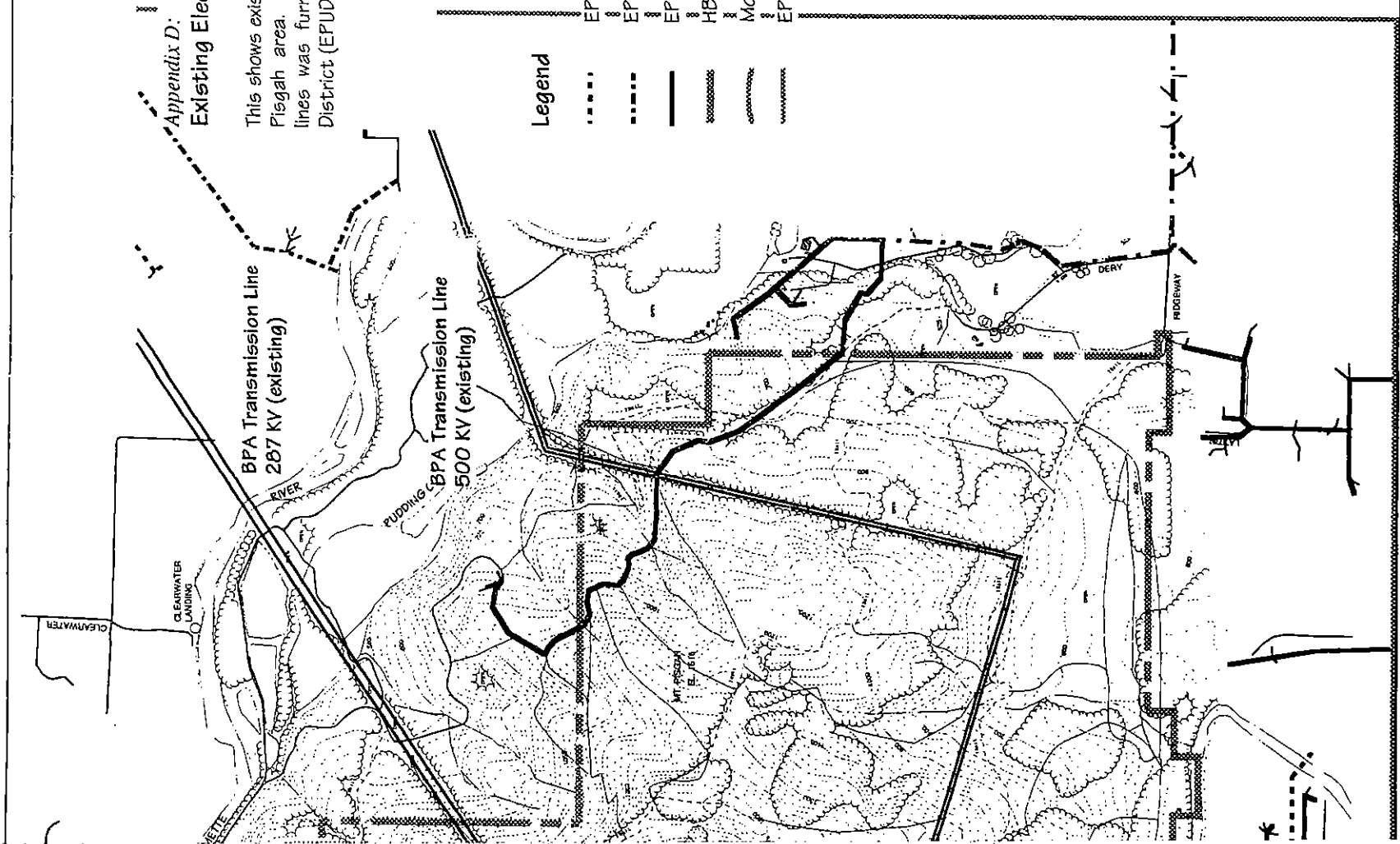


**Legend**

8	Bashaw Clay
22	Camas gravelly sandy loam, occasionally flooded
26	Chehalis silty clay loam, occasionally flooded
29	Cloquato silt loam
34	Courtney gravelly silty clay loam
41C	Dixonville silty clay loam, 3-12% slopes
43C	Dixonville-Philomath-Hazelair complex, 3-12% slopes
48	Fluvents
52D	Hazelair silty clay loam, 7-20% slopes
75	Malabon silty clay loam
78	McAlpin silty clay loam
79	McBee silty clay loam
88C	Nekia silty clay loam, 2-12% slopes
88D	Nekia silty clay loam, 12-20% slopes
89F	Nekia silty clay loam, 30 to 50% slopes
95	Newberg fine sandy loam
96	Newberg loam
100	Oxley gravelly silt loam
102C	Panther silty clay loam, 2-12% slopes
105A	Pengra silt loam, 1-4% slopes
108C	Philomath cobbly silty clay, 3-12% slopes
108F	Philomath cobbly silty clay, 12-45% slopes
110	Pits
113C	Ritner cobbly silty clay loam, 2-12% slopes
113E	Ritner cobbly silty clay loam, 12-30% slopes
113G	Ritner cobbly silty clay loam, 30-60% slopes
114	Riverwash
115	Salem gravelly silt loam
121B	Salkum silty clay loam, 2-8% slopes
121C	Salkum silty clay loam, 8-16% slopes
134	Wapato silty clay loam
138E	Witzel very cobbly loam, 3-30% slopes
138G	Witzel very cobbly loam, 30-75% slopes

Appendix D

Existing Electrical Service



Appendix D:  
Existing Electrical Service

This shows existing electrical service to the Mount Pisgah area. Information on existing electrical lines was furnished by Emerald People's Utility District (EPUD).

Legend

- EPUD 20.8 KV Single Phase
- EPUD 20.8 KV Double Phase
- EPUD 12 KV Single Phase
- HBRA Boundary
- Mount Pisgah Arboretum Boundary
- EPUD map boundary



*Appendix E*

*Master Plan Approval  
Process and Calendar*

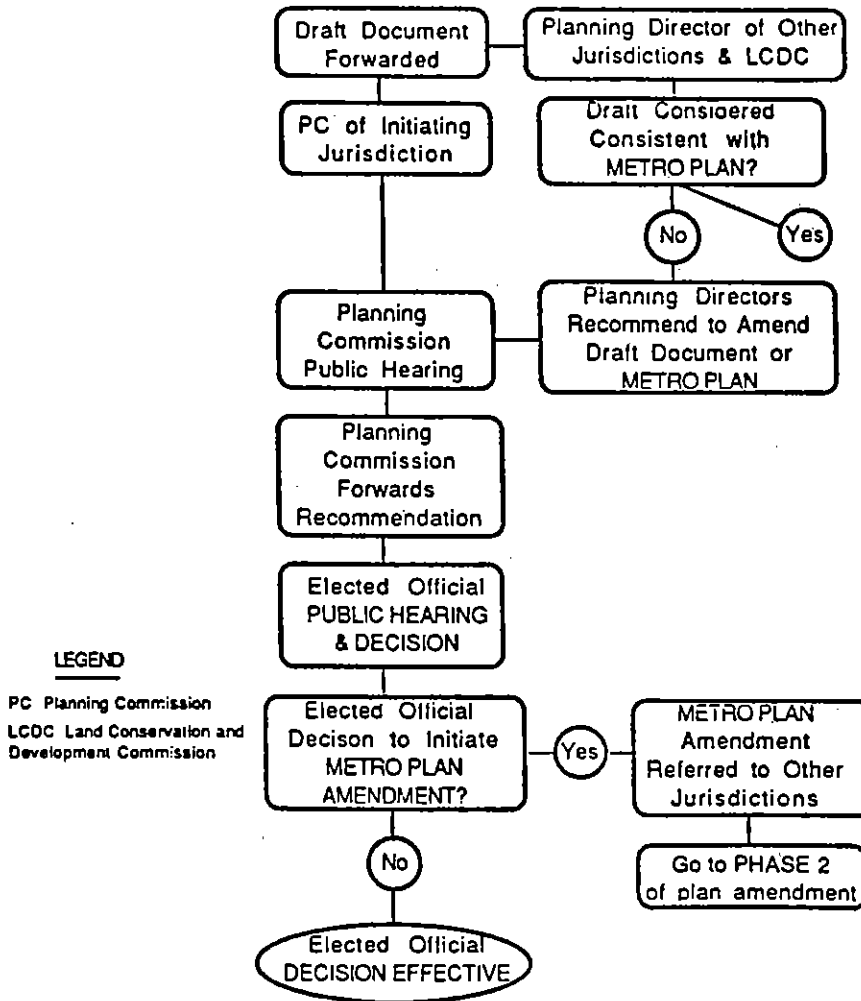




**HOWARD BUFORD RECREATION AREA  
MASTER PLAN APPROVAL PROCESS AND CALENDAR  
October 1, 1992**

October 27, 1992	HBRA Task Force Meeting to review Draft Conceptual Master Plan with Cameron and McCarthy. Task Force to recommend changes and clarifications in the Plan.
Oct. 28 - Oct. 30, 1992	Staff and Consultants (Cameron and McCarthy) discuss Task Force recommendations and determine what revisions should be made in the Plan.
Nov. 5 - Nov. 11, 1992	Revisions are made in the Plan as agreed upon.
November 12, 1992	Revised Plan sent to Parks Advisory Committee.
November 18, 1992	Parks Advisory Committee (PAC) to review revised draft of the Conceptual Plan with consultants and staff. The PAC will consider approving the Plan with possible changes and clarifications in the Plan.
Nov. 19 - Nov. 25, 1992	Staff and Consultants to discuss PAC action and make final revisions in the Plan as necessary.
Nov. 26 - Dec. 4, 1992	Final revisions are made in Conceptual Master Plan.
Dec. 7 - Dec. 18, 1992	Final Conceptual Master Plan printed.
Feb. 1 - Mar. 31, 1993	Conceptual Master Plan public comment period open. Staff and PAC hold 2 public open houses (workshops) to review the Plan and take written comments.
Apr. 1 - May 15, 1993	Revise Conceptual Master Plan and update the plan to the General Master Plan.
May 19, 1993	PAC meeting to review the General Master Plan.
June 16, 1993	PAC meeting to further review and approve the General Master Plan.
Oct. 1, 1993	Send General Master Plan to Lane County Land Management Division for submission as a refinement to the Lane County Metro Plan. Follow Metro Plan process for adopting refinements as shown on the back of this calendar.

### PROCESS for ADOPTING METRO PLAN REFINEMENTS & REGULATORY MEASURES



This special process is established for referral and review of refinements to the Metro Plan (neighborhood plans, special area studies, etc.) and regulatory measures (zoning measures, etc.) initiated by one or more of the local jurisdictions. In most circumstances, refinements and regulatory measures are consistent with the Metro Plan and do not require a Plan amendment. All newly adopted policy documents will be reflected in Chapter 1 of the Metro Plan at the earliest possible opportunity. The Plan amendment process applies only when Metro Plan refinements or regulatory measures result in specific Metro Plan amendments being initiated.

IV-7 Forward any adopted Metro Plan refinements or regulatory measures to Planning Directors of other jurisdictions and the Land Conservation and Development Commission.

FINDINGS OF FACT AND CONCLUSIONS OF LAW  
 DEMONSTRATING CONSISTENCY OF THE HOWARD BUFORD RECREATION AREA MASTER PLAN  
 WITH THE EUGENE-SPRINGFIELD METROPOLITAN AREA GENERAL PLAN

February 15, 1994

I. Basic Facts

A. Nature of the Decision

The Howard Buford Recreation Area Master Plan (HBRAMP) is a refinement plan to the Eugene-Springfield Metropolitan Area General Plan (Metro Plan) - one which does not require an amendment of the Metro Plan. The authority and reasoning for this position is as follows:

The Introduction to the Metro Plan states that Chapter IV establishes procedures for updating the plan and that "refinement will be necessary where conflicts exist." Metro Plan at I-3, par. 1. Also, the Metro Plan defines itself as a "framework plan" to be supplemented by more detailed "refinement plans." Metro Plan at I-5, par. 1. The Metro Plan lists several types of refinements including citywide policy documents, functional plans addressing single subjects such as water, sewer and transportation and neighborhood or special area studies that address issues unique to a specific geographic area." (Emphasis added.) Metro Plan at I-5, par. 2.

Chapter IV of the Metro Plan in several places refers to the plan as a "framework" to be "augmented and implemented" by more detailed "refinement plans." Metro Plan at IV-1, par. 1. For example, Finding No. 3 states: "Refinements to the Metro Plan are necessary in certain geographical portions of the community . . . or for certain special purposes." Objective No. 3 directs the jurisdictions governed by the Metro Plan to "[p]repare refinement and functional plans that supplement the [Metro Plan]." Metro Plan at IV-1. A specific reference is found in the Environmental Resources Element of the Metro Plan as follows: "C. Lane County, Eugene and Springfield shall pursue the development of a master plan for the Howard Buford Recreation Area, including lands between the park and the Middle fork of the Willamette River. This master plan shall be completed within three years." Metro Plan at III-C-14.

In addition to its definitions, the Metro Plan policies in Chapter IV provide guidance for review and adoption of refinements. Policy No. 11 states: "In addition to the update of the Metropolitan Plan, refinement studies may be undertaken for individual geographical areas and special purpose or functional elements, as determined appropriate by each governing body."

Policy No. 12 sets a standard for review by stating: "All refinement and functional plans must be consistent with the Metropolitan Plan . . . ." Policy No. 13 requires that refinement plans developed by one jurisdiction shall be referred to the other two jurisdictions for their review. That policy ends with the statement that "[e]ither of the two referral jurisdictions may determine that an amendment to the Metropolitan Plan is required."

That statement is useful in determining the process of adoption because, in stating that some refinement plans will require amendment of the Metro Plan, it strongly implies that other refinement plans will not require amendment. Adoption without amendment would be consistent with a conclusion that the HBRAMP is consistent with the Metro Plan. Measuring the HBRAMP against the above leads to the following conclusions:

Foremost is the conclusion that the HBRAMP is a refinement plan because it spells out in more detail than the Metro Plan the policies intended to guide the development and use of a specific geographic area. In that sense, it supplements and augments the Metro Plan. And, although the site has not engendered large-scale controversy, there have been some differences of opinion about appropriate uses. Examples include: (1) the role of grazing, (2) competition among horseback riders, hikers and bike riders and (3) balancing developed, active uses against undeveloped, passive uses. In making these types of choices in more detail than the Metro Plan, the HBRAMP qualifies as a refinement plan.

Lastly, the conclusion that adoption of the HBRAMP does not require amendment of the Metro Plan is based on the evidence in the form of testimony by Lane County Land Management Division Manager Roy Burns. Mr. Burns testified that referrals had been properly submitted to the cities of Eugene and Springfield and that neither jurisdiction had expressed any need for amendment of the Metro Plan.

#### B. Nature of the Property

The Howard Buford Recreation Area (Recreation Area or Park) is a 2200 acre regional park located near the confluence of the Middle and Coast Forks of the Willamette River at the eastern edge of the Eugene-Springfield Metropolitan Area. It is outside of the limits of either city and is approximately six miles southeast of downtown Eugene. It is accessed by Seavy Loop Road, a county road running east from near the Interstate Highway 5 interchange at 30th Street in Eugene. It can also be reached by traveling south from Springfield along Franklin Boulevard.

The site ranges in elevation from 500 feet to 1518 feet above sea level. The hilltop provides a 360 degree view of the Willamette Valley. The site features more than 2.5 miles of frontage on the Coast Fork of the Willamette River.

The site contains a wide variety of wildlife and plant habitat including several rare species and two listed as endangered. Vegetation ranges from riparian stands along the river to grass and brush slopes on the hillside. The forested areas include Ash, Alder, Cottenwood, Oak, Madrone, Douglas Fir and Bigleaf Maple, some of which are more than 200 years old.

Physical improvements include roads, parking lots, trails for horses and hikers and the Mt. Pisgah Arboretum. Some facilities such as an arena and pasture are available for horse users. No boating facilities have been developed. Uses of the Recreation Area include hiking to the summit, horseback riding, picnicking, bird and wildlife watching, non-motorized boating, swimming, walking in the arboretum and attending educational events in the arboretum. The only picnic tables, benches, drinking fountains and restrooms are found in the arboretum.

The arboretum is presently a 118 acre site developed and operated by the Friends of Mt. Pisgah Arboretum as a living museum under a 30-year lease from Lane County. It contains more than five miles of well groomed trails, causeways and bridges and several educational features.

Lane County has owned the entire Recreation Area since 1982. Prior to that, the site was leased from the State of Oregon starting in 1973.

## II. Findings of Fact and Conclusions of Law in Relation to Approval Criteria

As noted above, the standard for review of the HBRAMP is found at Chapter IV, Policy No. 12 of the Metro Plan. It states: "All refinement and functional Plans must be consistent with the Metropolitan Plan . . . ." The area is designated as Park & Open Space on the Plan Diagram. As such, several specific policies of the Metro Plan become, in effect, approval criteria.

In order to demonstrate consistency with the Metro Plan, the relevant specific policies from each of the elements of Chapter III of the Metro Plan are listed below followed by findings of fact and conclusions of law showing consistency. In the following text, the Metro Plan chapter or element and page number is listed first followed by the policy number. After that, the specific policy is stated verbatim in boldface type.

The findings of fact come primarily from the Howard Buford Recreation Area Master Plan of July, 1993, but also from evidence and testimony adduced in hearings before the Lane County Planning Commission and the Lane County Board of County Commissioners (Board). The HBRAMP is adopted and included herein by reference; the following text will refer to specific locations within the HBRAMP by page number.

General Assumptions (I-7)

**1. A population of 293,700 is expected to reside in the metropolitan area by the year 2000. This is a 59 percent increase from the 1977 population of 184,300. Since this plan is designed to accommodate the expected population rather than remain static until 2000, it can be adjusted periodically as changes in population trends are detected.**

Findings:

Regional parks are not sized for a certain population load in the same manner that neighborhood or community parks are. They tend to be selected more on the basis of unique natural attributes rather than user capacity. Also a factor is the fact that the users of the Recreation Area come from other parts of Lane County and beyond as well as the Metro Area. HBRAMP, page 1.

None-the-less, the HBRAMP is based on the general assumption that the Metro Area, which is the prime source of users, will continue to grow in population and area. HBRAMP, pages 9 & 24.

Conclusion:

Based on the above, the Board concludes that the Park use assumptions of the HBRAMP are consistent with the population growth assumptions of the Metro Plan.

Residential Land Use and Housing Element (III-A)

**Policy III-A-4 (1): Coordinate new residential development with the provision of an adequate level of services and facilities, such as sewers, water, transportation facilities, schools and parks.**

Findings:

Regional parks are selected to serve a large geographic region on the basis of unique natural features. Acquisition does not need to be coordinated with new residential development as would a neighborhood park. The level of improvements should rationally relate to the level of useage; however, budget problems mean that future improvements will be based more on user fees and volunteer efforts. Design and implementation goals and objectives are discussed in the HBRAMP on pages 27 through 42. Specific reference to funding sources is found at beginning at page 36.

Conclusion:

Based on the above, the Board concludes that the HBRAMP has outlined a coordinated list of future improvements and funding sources consistent with the Metro Plan.

Environmental Resources Element (III-C-1)

**Policy III-C-10 (25): When planning for and regulating development, local governments shall each continue to consider the need for protection of open spaces, including those characterized by significant vegetation and wildlife. Means of protecting open space include but are not limited to outright acquisition, conservation easements, planned unit development ordinances, streamside protection ordinances, open space tax deferrals, donations to the public and performance zoning.**

Findings:

While the primary land area of the Park is already in public ownership, certain adjacent lands have been assessed for their recreational potential and general contribution to the Park. Methods of land acquisition and protection area also set forth. HBRAMP, page 25 and page 28 at item F under Goal 1.

The park design concept itself is geared toward protection of open space. This is accomplished in part by proposing to locate the active development on the periphery and to preserve the vast interior space in its natural state. Also, it is worth noting that the entire park is within the Willamette River Greenway and thus subject to the County's Greenway regulations. See maps on file with the Lane County Land Management Division. See also Lane Code 10.322.

Conclusion:

Based on the above, the Board concludes that the HBRAMP and other county regulations provide means for protecting open space consistent with the Metro Plan.

**Policy III-C-10 (27): Local governments shall encourage further study by specialists of the endangered and threatened plant and wildlife species in the metropolitan area.**

**Policy III-C-10 (28): Local governments shall protect endangered and threatened plant and wildlife species, as recognized on a legally adopted statewide list, after notice and opportunity for public input.**

Findings:

Beginning at page 16, the HBRAMP notes several rare and endangered plant and animal species which either are resident in the Park or have been sighted from the Park. At Goal 2 on page 28 and at Goal 6 on page 30, the HBRAMP lists strategies to inventory, restrict access to and educate the users regarding sensitive and significant natural resources within the Park. Included are further studies by groups such as the Audubon Society, the Native Plant Society, the Division of State Lands and the State Department of Fish and Wildlife. (See below for findings and conclusions regarding notice and opportunities for public input.)

Conclusion:

Based on the above, the Board concludes that the HBRAMP is consistent with the Metro policies regarding endangered and threatened species. The plan expresses Lane County's willingness to work on a continuing basis with other agencies, such as the Oregon Department of Fish and Wildlife, to insure compliance with regulations pertaining to sensitive species and to otherwise minimize any disturbance to those species.



**Policy III-C-11 (32): Further studies are required for the Pudding Creek heronry and the Upper Russel Creek Drainage Basin potential natural areas.**

**Policy III-C-12(40): These policies apply to the Pudding Creek Heronry and Confluence Heronry on the Willamette River.**

**a. For the Pudding Creek Heronry: (The subsequent text in the Metro Plan lists a series of 6 detailed policies regarding a Sand and Gravel Management Plan for the heronry. It is listed here for information but has little direct relevance to the HBRAMP other than a notation that no recreational uses shall be allowed.)**

**Findings:**

The Pudding Creek area, on the east side of the Park, is identified as a particularly rich habitat. The area is recommended for public acquisition and habitat management, subject, of course, to the availability of funds and to the identification and selection of an appropriate legal entity to manage the area. The area is not designated as having recreational potential. HBRAMP, page 26. See also Figure 27: Adjacent Lands with Recreational Potential and Habitat Value.

**Conclusion:**

Based on the above, the Board concludes that the HBRAMP deals appropriately with the Pudding Creek area, recognizing that it is not in public ownership, and is consistent with the Metro Plan policy calling for further study.

**Policy III-C-14(40.c.): Lane County, Eugene and Springfield shall pursue the development of a master plan for the Howard Buford Recreation Area, including lands between the Park and the Middle Fork of the Willamette River. This master plan shall be completed within three years.**

**Findings:**

This policy was a driving force behind the development of the HBRAMP. Because Lane County owns the Park, it became the lead agency in the development of the Master Plan. The study does deal with all of the land between the Park and the Middle Fork; however, because of the present status of ownership, the Master Plan proposals focus on the 2200 acres presently in public ownership. As discussed elsewhere in these findings, the process of development, review and adoption involves participation by Eugene and Springfield. The process, to date, has taken approximately one year and three months. HBRAMP, page 2 and Appendix E.

**Conclusion:**

Based on the above, and especially in view of the County ownership, the Board concludes that the process used for development of the HBRAMP is consistent with the Metro Plan.

**Willamette River Greenway, River Corridors, and Waterway Element (III-D)**

**Policy III-D-4 (3): Eugene, Springfield and Lane County shall continue to cooperate in expanding water-related parks and other facilities, where appropriate, that allow access to and enjoyment of river and waterway corridors.**

**Policy III-D-4(10): Local and state governments shall continue to provide adequate public access to the Willamette River Greenway.**

Findings:

Water-related resources within the Park have been carefully inventoried and planned for with sensitivity. In general, the resources are sensitive and more suited to passive than active use. These resource qualities are reflected in the way the Park is presently used. Out of twelve activities listed in a user survey swimming and fishing ranked 7th and 12th respectively.

The water-related resources are associated mainly with riparian vegetation and wetlands in proximity to the river and its sloughs. Included are numerous animals such as ducks, geese, herons, western pond turtles, beavers and the red-legged frog. Numerous species of riparian vegetation have also been inventoried. HBRAMP beginning at page 15. See also Figure 18: Sensitive and Significant Natural Features.

Recognizing the sensitive nature of the resources, the HBRAMP calls for a restricted type of human access which will allow appreciation of the resources without risking despoilation. Primarily, this consists of providing additional trails, interpretive signs and observation blinds. Some of the trails will facilitate access for the disabled and may feature Braille signs. HBRAMP, pages 4, 27 & 34. Other water-related policies call for devoting further study to identified and potential wetlands and developing alternative horse watering facilities in order to avoid destruction of riparian vegetation. HBRAMP, pages 20 & 28 respectively.

Conclusion:

Based on the above, the Board concludes that the HBRAMP has planned for access to the Willamette River Greenway within the Park commensurate with the nature of the resource and is consistent with the Metro Plan.

**Policy III-D-4(8): Within the framework of mandatory statewide planning goals, local Willamette River Greenway plans shall allow a variety of means for public enjoyment of the river, including public acquisition areas, residential areas, and commercial areas.**

**Policy III-D-4(9): The specific use management considerations and requirements of statewide Goal 15, "Willamette River Greenway," shall be applied, where they are not specifically addressed in policy or land use designations elsewhere in this Plan, in local refinement plans and local implementing ordinances.**

Findings:

As noted above, the entire park is within the Willamette Greenway. Also as noted above, the HBRAMP is a refinement plan and has addressed relevant Greenway goals.

Conclusion:

Based on the above, the Board concludes that the HBRAMP is the logical document for setting forth public policy regarding this particular section of the Willamette Greenway. As such it is consistent with the design, procedural and structural policies of the Metro Plan.

Environmental Design Element (III-E)

**Policy III-E-3(2): Natural vegetation, natural water features, and drainageways shall be protected and retained to the maximum extent practicable,**

**considering the economic, social, environmental, and energy consequences in the design and construction of urban developments and landscaping shall be utilized to enhance those natural features.**

Findings:

The entire emphasis of the HBRAMP is summarized in the following management statement which articulates a vision of the Park :

*"The purpose of the Howard Buford Recreation area is to provide varied opportunities for primarily low intensity outdoor recreation and education activities while protecting, conserving, enhancing, and maintaining the natural, scenic, historical, rural and recreational qualities of this large, strategically located regional park."* HBRAMP, page 2.

Alternatively, it could be asserted that the Park is not an "urban development" in that it is situated outside of the current urban service area. From this viewpoint, the Park is a nonurban open space which benefits the nearby urban area without itself being an urban development.

Conclusion:

Whether or not the Park is viewed as an urban development, the Board concludes that the guiding philosophy and design policies of the HBRAMP are consistent with the Metro Plan.

Transportation Element (III-F):

**Policy III-F-5(2): The following policies are . . . geared toward . . . improving opportunities for using alternative modes . . . .**

**Policy III-F-6(7): The special needs of the transportation disadvantaged shall be considered when developing and implementing transportation improvements.**

Findings:

The HBRAMP includes a management objective aimed at cooperation with other organizations and agencies in providing a bike trail connection from the Eugene-Springfield system to the Recreation Area. HBRAMP, page 31. Also, the plan has a series of design and management objectives all aimed directly at encouraging the use of alternative modes of transportation to minimize increased traffic into the Park. HBRAMP, page 32.

Also, though not directly related to transportation, the HBRAMP calls for various measures to increase accessibility to people with decreased mobility. These include wheelchair accessible trails in the South Meadow and horse mounting ramps in the equestrian areas. HBRAMP, page 4

Conclusion:

Based on the above, the Board concludes that the HBRAMP is consistent with the transportation policies of the Metro Plan.

Public Utilities, Services, and Facilities Element (III-G):

**Policy III-G-5(2): Sewer and water service shall not be extended beyond urban growth boundary except to:**

- a. (Mahlon Sweet Field Airport and the Regional Wastewater Sludge Management Facility); and**
- b. (Any area posing a documented, immediate threat to public health or safety to the Metro Area that can be remedied only by service extension).**

**Findings:**

The HBRAMP does not anticipate the availability of municipal sewer or water service. At the same time, the soils pose severe limitations for traditional septic systems. For those reasons the plan calls for a septic system only for the visitor's center and caretaker's residence and for the use of composting toilets elsewhere. Onsite wells are and will be used for potable water in several locations. Water rights for horse watering and irrigation will be clarified and secured. Other postal type services such as telephone and electrical service will be provided as needed to the visitor's center, the recreation/interpretive center, the equestrian center and the maintenance facility. HBRAMP, page 39. See also Figure 30: Utility Plan.

**Conclusion:**

Based on the above, the Board concludes that the HBRAMP is consistent with the Metro Plan in that it does not call for the extension of any municipal services which might promote unplanned urban sprawl.

**Parks and Recreation Facilities Element (III-H):**

**Policy III-H-4(1): Develop a system of regional-metropolitan activity areas based on a facilities plan for the metropolitan area that includes acquisition, development, and management programs. The Plan and system should include reservoir and hill parks, the Willamette River Greenway and river corridors.**

**Policy III-H-5(2): Local Parks and recreation plans and analyses shall be prepared by each jurisdiction and coordinated on a metropolitan level.**

**Findings:**

As noted above at policy III-C-14(40.c.), the HBRAMP has been developed pursuant to a specific Metro Plan directive to prepare a master plan the Park, which includes hills and the Willamette River Greenway corridor. Also as noted above, the plan has been initiated by Lane County, as the Park owner, and has been coordinated and adopted via the Metro Plan Refinement Plan process.

**Conclusion:**

Based on the above, the Board concludes that the HBRAMP is consistent with the Parks and Recreation element of the Metro Plan.

**Historic Preservation Element (III-I):**

**Policy III-I-2(1): Adopt and implement historic preservation policies, regulations, and incentive programs that encourage the inventory, preservation, and restoration of structures; landmarks; sites; and areas of cultural, historic, or archaeological significance, consistent with overall policies.**

**Policy III-I-2(2): Institute and support projects and programs that increase citizen and visitor awareness of the area's history and encourage citizen participation in and support of programs designed to recognize and memorialize the area's history.**

Findings:

The cultural history of the Park is well inventoried and described in the HBRAMP. HBRAMP, page 5.

One of the guiding goals of the HBRAMP is to maximize the value of the Park as an educational resource. This includes educational and interpretive programs and facilities about the history of the Park and its context, including the neighboring Doris Ranch Living History Farm. HBRAMP, page 30 & 31.

Conclusion:

Based on the above, the Board concludes that the HBRAMP is consistent with the Historic Preservation Element of the Metro Plan.

Energy Element (III-J):

**Policy III-J-5(8): Commercial, residential, and recreational lands uses shall be integrated to the greatest extent possible, balanced with all planning policies to reduce travel distances, optimize reuse of waste heat, and optimize potential on-site energy generation.**

Findings:

As noted above, at B. Nature of the Property, the Recreation Area is strategically located near the Eugene-Springfield population centers. Also noted above, at Transportation Element, the HBRAMP calls for reasonable measures to reduce travel dependence on the automobile.

Conclusion:

Based on the above, the Board concludes that the HBRAMP, is consistent with the energy conservation policies of the Metro Plan.

Citizen Participation Element (III-K):

**Policy III-K-3(2): Maintain and fund a variety of programs and procedures for encouraging and providing opportunities for citizen involvement in metropolitan area planning issues. Such programs should provide for widespread citizen involvement, effective communication, access to technical information, and feedback mechanisms from policy makers. These programs shall be coordinated with local citizen involvement programs and shall be prepared on the metropolitan level by the JPCC a committee composed of two representatives from each of the three metropolitan planning commissions.**

Findings:

The HBRAMP was prepared using a process heavily based on participation by park area residents, park users and the general public. Included in the process were: (1) compilation of technical information from a variety of sources including citizens, the Lane County Parks Division and a professional landscape architectural consulting firm,

(2) preparation of a draft conceptual plan for public review with the assistance of a citizen's task force, (3) review by the citizen-member Parks Advisory Committee, (4) public input meetings and a public comment period, (5) a detailed, professionally conducted park user survey, (6) review and preparation of a final draft by the Parks Advisory Committee, and (7) consideration and adoption by the Lane County Planning Commission and the Board of County Commissioners following public hearings by each body. HBRAMP, page 2. See also Appendix A: Public Meetings and Public Comments, Appendix B: User Surveys, and Appendix E: Master Plan Approval Process and Calendar.

**Conclusion:**

Based on the above, the Board concludes that the HBRAMP is based on extensive citizen participation and is consistent with the Citizen Involvement Element of the Metro Plan.





# Habitat Management Plan

## *Howard Buford Recreation Area*

June 22, 2018



Prepared by Lane County Parks Division, Public Works Department  
In partnership with Friends of Buford Park & Mt. Pisgah and Mount Pisgah Arboretum

**EXHIBIT E**



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# Acknowledgements

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# Chapter 1: Executive Summary

The Habitat Management Plan for Lane County's Howard Buford Recreation Area (*Plan*) is designed to guide Lane County land managers, park stakeholders, agency partners, and interested park users in managing and sustaining the 2,214-acre Howard Buford Recreation Area's valuable aesthetic and natural resources and their enjoyment by the public.

This visionary document identifies high priority goals and strategies for application of available resources, and a focus for collaborative partnerships and future grant writing efforts. With this *Plan* in hand, park managers, partner agencies, and volunteer groups can work together more effectively to secure funding to sustain the park's diverse habitats, for the public to enjoy long into the future.

Howard Buford Recreation Area (HBRA) and the greater Middle Fork-Coast Fork Willamette confluence-area is recognized in the 2006 Oregon Conservation Strategy, as well as the 2016 revision, as a Conservation Opportunity Area—a location “that provide(s) good opportunities to address the conservation needs of high-priority habitats and species” (Oregon Department of Fish and Wildlife, 2006). More than 1,000 acres of prairie, savanna, and oak woodland are found within HBRA. With only about two percent of the Willamette Valley's original prairie and savanna and 10 percent of floodplain forest habitat remaining, HBRA is home to some of the largest remnants of these habitat types in public ownership. In 2010, The Nature Conservancy (TNC) purchased more than 1,200 acres of similar habitat immediately adjacent to HBRA, and the preserve was later expanded to 1305 acres. This presents extraordinary new opportunities for restoration and protection of significant contiguous acreage of these rare habitats. A fundamental challenge of park management in HBRA is to balance the recreational needs of park visitors with the conservation needs of plants and wildlife—some of which are listed as rare, threatened, or endangered.



*Each year, an estimated 400,000 people visit HBRA to enjoy its diverse natural beauty.*

## 1.1 Conservation Vision

The planning process and associated public input resulted in the creation of the following *Conservation Vision* for Howard Buford Recreation Area:

### *Conservation Vision for Howard Buford Recreation Area*

*The Howard Buford Recreation Area will be managed to conserve and restore prairie, savanna, woodland, forest, and river habitats in ways that enhance visitor experience, compatible recreation and educational uses described in the HBRA Master Plan (1994).*

*The uplands shall sustain increasingly rare Willamette Valley habitat types including a mosaic of open prairie, savanna, and oak woodland in portions of the park where these habitat types occurred historically. Conifer and mixed forest shall be retained and enhanced in upland portions of HBRA, particularly in portions of the park that historically supported forest conditions. The lowlands shall sustain healthy riparian (streamside) and aquatic habitats and processes. These native habitats shall*



*conserve common and rare native plants and animals, including federally and state-listed threatened and endangered species.*

*Habitat restoration shall provide significant increases in quality and/or extent of priority habitat to support a diversity of wildlife species, particularly those that were historically more prevalent throughout the Willamette Valley. Restoration will also lessen the threat of severe wildfire through reduction of dense, brushy fuels in prairie, savanna, and oak woodland habitats.*

## 1.2 Management Goals

Fifteen management goals and associated strategies were developed to provide measurable milestones on the road to achieving the Conservation Vision. Refer to Chapter 6 for a complete list of the strategies and projects associated with each goal, as well as a brief description of the conservation targets each goal is designed to address.

- **GOAL 1:** Provide a safe and positive visitor experience in Howard Buford Recreation Area.
- **GOAL 2:** Educate park users about the unique natural values that make the HBRA and the broader Mount Pisgah area a priority for conservation.
- **GOAL 3:** Maintain and improve the park's trail system to minimize ecological impacts while providing views of and access to HBRA's diverse habitats.
- **GOAL 4:** Minimize adverse impacts of park management on conservation targets.
- **GOAL 5:** Restore and enhance prairie, savanna and oak woodland habitats by reducing encroaching woody vegetation.

- **GOAL 6:** Achieve significant restoration of prairie and savanna, oak woodland, and wet prairie habitats in HBRA.
- **GOAL 7:** Achieve significant restoration of chaparral habitat in HBRA.
- **GOAL 8:** Manage for diverse native plant communities within each conservation target habitat.
- **GOAL 9:** Increase the size of wet prairie habitat patches.
- **GOAL 10:** Locate and, to the extent feasible, reduce populations of feral or harmful non-native animal species impacting each conservation target.
- **GOAL 11:** Locate and reduce the presence of habitat-modifying, non-native plant species within each conservation target habitat.
- **GOAL 12:** Remove fish passage barriers from the lower mile of creeks and streams in HBRA that flow into the Coast Fork and Middle Fork of the Willamette River.
- **GOAL 13:** Improve ecological health of creeks and streams.
- **GOAL 14:** Improve ecological health of riparian floodplain habitats.
- **GOAL 15:** Manage habitats in the North Bottomlands Stewardship Zone to be mutually compatible with recreational activities identified in the 1994 HBRA Master Plan and the recommendations of the Large Events Task Force (2015).

### 1.3 Moving Forward

Effective partnerships have been a key feature of the management of the Howard Buford Recreation Area since the park was established in 1972. Achieving the ambitious vision set forth in this *Plan* will require these partnerships to grow broader and deeper. The *Plan* provides the basis for that growth, and a solid framework for Lane County Parks and its partners to pursue the financial resources necessary for successful implementation.

### 1.4 Stakeholder Groups

At the outset of the planning process, HBRA stakeholders, including the Mount Pisgah Arboretum and the Lane County Sheriff's Mounted Posse, were invited to briefings on the project and to public input sessions. These groups are integral to the ongoing operation of HBRA.

**Mount Pisgah Arboretum**, a non-profit organization, is an approximately 203-acre, living tree museum on the west slope of Mount Pisgah within HBRA. The Arboretum operates through a 50-year lease with Lane County, which was initially established in 1973, and is responsible for habitat management within the Arboretum Stewardship Zone (see chapter 7). The primary purpose of Mount Pisgah Arboretum is nature education. Habitat management efforts are aimed at providing dynamic outdoor classrooms for teaching about local ecology. The Arboretum offers a wide range of both structured educational programs and informal learning opportunities for visitors of all ages, and is currently developing a series of interactive nature exhibits.

The **Lane County Sheriff's Mounted Posse**, established in 1941, was originally created to serve as both a community service group, and to assist the Sheriff, such as with search and rescue efforts. The posse operates the horse arena located in the North Bottomlands in HBRA as a training facility, hosts a series of regular events, and schedules regular trail rides to patrol park trails.

The mission of the **Friends of Buford Park and Mt. Pisgah** (the Friends), founded in 1989, is to protect and enhance native ecosystems and compatible recreation in the Mt. Pisgah area. The Friends is a 501(c)3 non-profit organization working to conserve the Mt. Pisgah area's incredible botanical, wildlife and recreational values. The Friends mobilizes funding, scientific expertise and volunteers to improve the botanical, fish, wildlife and recreational resources throughout the 4,700 acre greater Mt. Pisgah area.

The Friends is a separate organization distinct from the Mount Pisgah Arboretum, working to care for the 2,100 acres in Buford Park outside of the Arboretum Stewardship. Though separate organizations, together they help care for HBRA's natural and recreational values in partnership with Lane County, the landowner.

## 1.5 The Planning Process

The *Plan* was developed using the [Conservation Action Planning](#) process, or CAP (The Nature Conservancy, 2016). The CAP methodology is a science-based planning analysis developed by The Nature Conservancy and other land managers. The CAP process is an analytical methodology that allows a team of technical experts from diverse disciplines to work through a series of analytical steps that result in a set of priority strategies and actions to achieve conservation goals.

## 1.6 Methodology

Consistent with the CAP methodology, the Friends, with Lane County assistance, convened an inter-agency Technical Advisory Group (TAG) with diverse expertise to work through the planning process. The TAG held seven facilitated meetings to develop and review detailed conservation planning information. The TAG developed specific "conservation targets" for HBRA. Conservation targets are aspects of biodiversity or related habitat management focus. Conservation Targets in this plan include priority ecological communities or habitat types that are found within HBRA, as well as endangered, threatened, or at-risk native plant and animal species. Conservation targets are utilized in the planning process to guide development and analysis of conservation strategies in HBRA.

From the overall list of conservation targets identified for HBRA, the TAG selected nine targets as "focal conservation targets". These were chosen to represent the full array of biodiversity and habitat management priorities found in a project area. The focal conservation targets represent: 1) habitat types identified as important for conservation within the Oregon Conservation Strategy for the Willamette Valley Ecoregion; 2) habitats that provide important aquatic, wetland, and upland ecological functions; 3) federally listed species or species petitioned for listing; and 4) public uses that benefit from a landscape rich in native biodiversity. In the planning process, the focal targets are the basis for setting goals, carrying out conservation actions, and measuring conservation effectiveness.

The focal targets include six habitats, one federally endangered plant, one rare bird, and "visitor experience", to integrate and value compatible recreation. The specific focal conservation targets are:

- Upland prairie and savanna
- Oak woodland
- Wet prairie
- Bradshaw's lomatium (*Lomatium bradshawii*)
- Buckbrush chaparral
- Willamette riparian systems and associated floodplain
- Creeks and streams

- Oregon Vesper Sparrow (*Pooecetes gramineus affinis*)
- Visitor experience

Additional “nested targets” are identified in Chapter 4 of this document. Nested targets are rare or at-risk species or ecological communities whose conservation needs are similar to one or more focal conservation targets. It is expected that these species and communities of interest will benefit from strategies that address focal targets. Recognition of nested targets helps to ensure that strategies implemented to benefit focal targets also provide a wider range of benefits to HBRA’s natural features.

As part of the CAP methodology, the “viability” of and “threats” to the focal targets were assessed in order to establish clear goals and strategies (Chapter 6) for the desired future conditions for each target. Viability is defined as the status or health of a plant or animal species or habitat type. Viability is an indication of the ability of a conservation target to withstand or recover from disturbances or other alterations, and thus to persist into the long-term future. Threats are factors that directly or indirectly degrade or reduce the health of a conservation target. Identifying the important threats to conservation targets is a key step toward identifying effective conservation strategies.

Based on the viability and threats analysis for the focal conservation targets, 15 broad management goals were identified. Focusing on these 15 goals, strategies and stewardship projects were developed to address each goal, along with recommended best management practices and a “Stewardship Tool Box” (Chapters 10 and 11). The *Plan* calls for monitoring and adaptive management (Chapter 12) so that implementation actions may be adjusted to changing conditions and emerging information.

This plan has undergone extensive review and refinement. The Lane County Public Works Department performed a technical review of an early draft of the *Plan* in 2011. In 2012, habitat planning was postponed due to insufficient funding. In 2015, Lane County resumed the planning process, collaborating with Friends of Buford Park & Mt. Pisgah to complete the *Plan*. Version 2 of the *Plan* was released for public review and comment on May 6, 2016, and comments were received until July 31, 2016. The current version of the *Plan*, Version 3, reflects the input provided by the public and stakeholders during this public review process.

This *Plan* identifies strategies for habitat management to effectively guide the use of funding and labor on the part of Lane County and partners within HBRA. The work plan identified in Chapter 10 identifies a set of tasks to support the continued viability of the conservation targets present at HBRA. Maps showing desired future habitat conditions are intended to provide a template for achieving the conservation vision for HBRA. However, the maps do not constitute a financial commitment to implementing the necessary habitat improvements on a fixed timeline. Nor are the maps intended to describe future habitat conditions in any given portion of the park with certainty, given the financial and ecological variables that guide any course of habitat restoration. As such, this document is intended to be a technical document in support of administrative actions.

## 1.7 Public Input

During the planning process, Lane County, the TAG and Friends of Buford Park & Mt. Pisgah collaborated to:

- Host two public workshops: March 19, 2009 and June 2, 2009,
- Publish displays and informational materials on the internet,
- Obtain a major article in *The Register-Guard* (March 27, 2009),
- Host an informational booth at the Mount Pisgah Wildflower Festival in 2009, and



- Host two stakeholder meetings, Nov 12, 2008 and Sept 3, 2009.

During 2016 and 2017, Lane County solicited comments through:

- Stakeholder meetings,
- Outreach to the general public, park neighbors and other stakeholders through website postings; flyers at park kiosks; print, TV, and radio stories in May 2016,
- An informational booth at the May 19<sup>th</sup> 2016 Mount Pisgah Wildflower Festival,
- Three public park tours in June 2016, two public tours in 2017 (July and August respectively),
- An online survey to which there were 51 respondents,
- A public open house at Harris Hall on May 25<sup>th</sup> to provide information and solicit public feedback,
- Review by members of the inter-agency Technical Advisory Group, which met on May 5, 2016,
- Review by Parks Advisory Committee, including a public comment opportunity.

In 2018, Lane County conducted additional outreach on the revised "Proposed Plan":

- Outreach to the previous *Plan* commentators, general public, park neighbors, and other stakeholders through website postings, flyers at park kiosks, and print and radio stories in January and February 2018,
- A public open house at Harris Hall on February 15<sup>th</sup> to discuss the proposed *Plan*, and specifically identify how the *Plan* has been refined to reflect the public comment received, and
- Review by Parks Advisory Committee, including a public comment opportunity.
- Review and approval by Lane County Board of Commissioners, including additional opportunities for public comment.

## 1.8 Chapter 1 References

- Lane County Parks Division and Cameron & McCarthy Landscape Architects. 1994. Howard Buford Recreation Area Master Plan. Lane County Parks, Eugene, Oregon.
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- Oregon Department of Fish and Wildlife. 2006 and 2016. Oregon Conservation Strategy. Pp. 9, 11, 234-245.
- The Nature Conservancy. 2016. Conservation by Design 2.0. Guidance Document. [http://cmp-openstandards.org/wp-content/uploads/2016/04/CbD2.0\\_Guidance-Doc\\_Version-1.pdf](http://cmp-openstandards.org/wp-content/uploads/2016/04/CbD2.0_Guidance-Doc_Version-1.pdf)

## Chapter 2: Purpose & Need

### 2.1 Purpose

The purpose of this Plan is for Lane County and its partner agencies to identify goals, strategies and projects to effectively conserve a diversity of native habitats and species in the Howard Buford Recreation Area (HBRA or Buford Park) while effectively meeting demand for low intensity recreational use of the park, as provided for in the 1994 HBRA Master Plan. The *Plan* seeks to address identified threats to conservation targets, effectively manage habitat areas, reduce wildfire risk, and increase public safety within the park. The Plan will guide efforts by Lane County and its partners to secure sufficient resources for habitat conservation throughout Buford Park.

### 2.2 Regional Context: Mount Pisgah's Importance

The 2,214-acre HBRA, located primarily on the eastern, southern, and western slopes of Mount Pisgah, is a regionally significant natural area. The park encompasses a mosaic of increasingly rare habitats, including oak woodland, savanna, upland and wetland prairie, and riparian forest. HBRA is the second largest block of native prairie and oak habitats in the Willamette Valley under conservation management by a single owner; only the 5,706-acre Finley National Wildlife Refuge near Corvallis (managed by the U.S. Fish & Wildlife Service) is larger.

HBRA is the largest single public ownership in a 4,700-acre complex of conservation lands in the Mount Pisgah area owned by public and private agencies. Mount Pisgah is surrounded on three sides by two major rivers, the Middle and Coast Forks of the Willamette. At the confluence and across the river along the north bank of the Middle Fork of the Willamette, more than 1000 acres of additional public lands are managed by Willamalane Parks District, Springfield Utility Board, Oregon State Parks, and Friends of Buford Park & Mt. Pisgah. On HBRA's northern boundary is the 1305-acre Willamette Confluence Preserve, acquired in 2010 by The Nature Conservancy (TNC) with support from Lane County. This neighboring property includes conifer forest, oak woodland and savanna habitats on Mount Pisgah's northeast slope, as well as extensive floodplains, including large ponds from historic gravel mining and six miles of river frontage. TNC and partner agencies in the vicinity of the confluence of the Middle Fork and Coast Fork are collaborating to restore riparian and upland habitats on this property.

The resulting 4,700-acre block of contiguous open space not only offers primarily low-intensity recreation opportunities, but also serves as an important natural area for the conservation of declining fish, wildlife, and native flora, close to the cities of Eugene and Springfield, which combined are Oregon's second largest population center.

### 2.3 Rare Habitats at HBRA

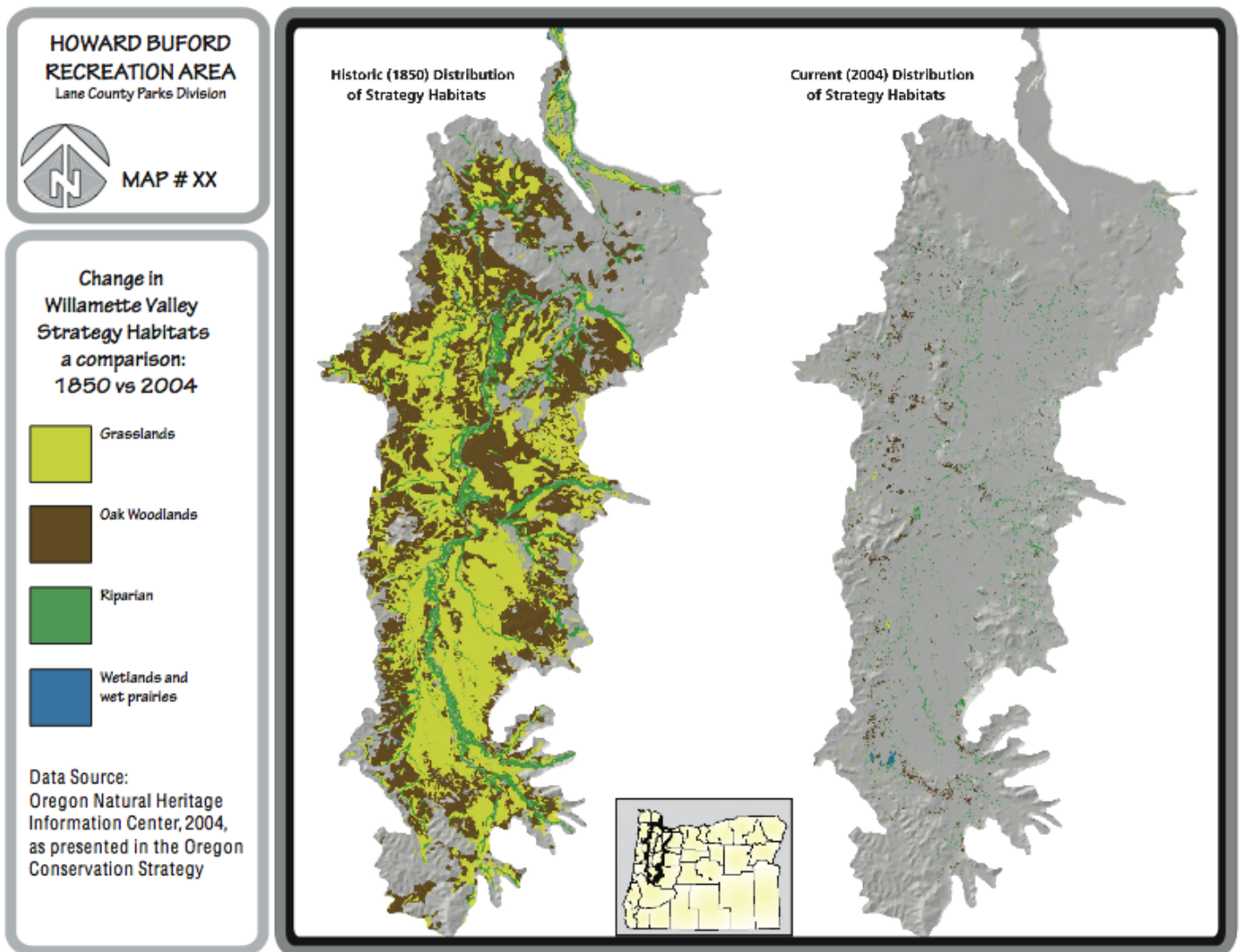
Howard Buford Recreation Area is noted for its diversity of habitat types. A number of these Willamette Valley habitats have become increasingly rare as much of the Willamette Valley landscape continues to be converted to agricultural and urban uses. As a result, the loss of native grassland and oak woodland habitat types has been dramatic, making the preservation of these habitats at HBRA ecologically significant for the Willamette Valley. See maps entitled: *Change in Willamette Valley Strategy Habitats: 1850 vs. 2004* (Figure 2-1). Strategy habitats are those identified in the *Oregon Conservation Strategy* (ODFW, 2006). From lowland to upland, examples of rare habitat types within HBRA include:



- Willamette Valley riparian forest,
- Willamette Valley wetland prairie,
- Willamette Valley upland prairie,
- Willamette Valley savanna (scattered trees, often oaks, in native grassland)
- Willamette Valley chaparral (fire-adapted, drought-tolerant shrub land)

Some wonder if conifer forests are rare in the Willamette Valley. Since the 1850s, the acreage occupied by conifer forests has expanded into oak woodlands, savannas and prairies, in part because Euro-Americans settlers to Oregon introduced the practice of suppressing fires. As a result, acreage of closed canopy conifer forest in the Willamette Valley at the present time is similar to the acreage that existed in the 1850's (Hulse et al., 2002). Therefore, young and mature (less than 150-year old) conifer forests are a plentiful habitat type in the Willamette Valley, and not considered rare. Within HBRA, cooler, wetter north-facing slopes usually support Douglas-fir (*Pseudotsuga menziesii*) forests that contribute to the park's habitat diversity.

Figure 2-1: Change in Willamette Valley Strategy Habitats 1850 vs. 2004



Source: Oregon Conservation Strategy, 2006

## 2.4 Managing Conservation Targets & Fire Risk in a Changing Climate

Another need for the HBRA *Plan* is to anticipate and plan for how future changes in the region's climate could stress or change the park's habitats, wildlife and rare species in the coming century.

While some may debate whether human activity is a primary cause of the documented changes in air temperatures, precipitation patterns, and extreme weather occurrences, a broad consensus of current scientific research provides evidence of a changing climate regionally and worldwide. This evidence ranges from shrinking glaciers, decreased polar ice caps, decreased regional snow packs, rising sea levels, and record high temperatures. [Climate Change 2014: Synthesis Report](#) (United Nations Intergovernmental Panel, 2014) is a generally accepted compilation of the state of scientific research on the issue.

In the Willamette Valley, scientists project that climate change is expected to result in:

- warmer and drier spring weather,
- hotter and drier summers (with increased potential for wildfires), and
- warmer winters with more frequent severe storms causing increased flooding (from faster snow melt) and smaller snowpack.

Without planning and active management, longer, hotter, drier summers could increase the risk of catastrophic fires that could destroy both remnant oak woodlands and young conifer forests in HBRA, as well as threaten adjacent private property and increase risks to public safety. Because of the drought tolerance of native oaks, prairie grasses, and forbs, managing the park to sustain prairies and oak savanna can make the park's habitats more resilient, and reducing woody fuels can reduce the risk of stand-replacing or high intensity wildfires.

Restoring riparian floodplain habitats should increase their ability to detain and filter floodwaters, reducing impacts downstream during high flows. The South Meadow Floodplain project in HBRA offers an example of how this can be accomplished while also enhancing passive recreational amenities such as improved trails, backwater overlook, and a wildlife blind.

## 2.5 Relationship to Previous Plans

Local, state and federal efforts to conserve a large natural area at the confluence of the Coast and Middle Forks of the Willamette River date to the early 1970s, when the Oregon Legislature authorized state funds to match federal Land and Water Conservation funding to purchase the 2,200-acre Mount Pisgah State Park. In 1982, after the state transferred title to the park to Lane County, the Board of Commissioners renamed the park Howard Buford Recreation Area to honor Lane County planner Howard Buford.

### 2.5.1 HBRA Master Plan (1994)

In 1994, Lane County adopted the *HBRA Master Plan* as a refinement to the *Metro Plan*. The *HBRA Master Plan* provides a comprehensive site analysis, a set of nine park goals, and a facilities plan that addresses park goals, in addition to recommendations for further study. The *HBRA Master Plan* specifically directed Lane County to develop both a wildlife management plan and a separate vegetation management plan. In 2005, Lane County decided to combine both plans into a single Habitat Management Plan to address both wildlife and vegetation management. This practical and cost-saving approach allows for evaluation of HBRA's unique and thriving wildlife populations and their connections to diverse plant communities (habitats) when planning and implementing management activities. This

Plan is relevant to, and helps achieve, six of the nine broad goals listed on p. 3 of the HBRA Master Plan that are intended to guide managers:

- 1) Accommodate increased use while protecting the resource, minimizing development and preserving the natural and rural character of the HBRA.
- 2) Protect sensitive and significant natural resource areas and restore degraded habitat.
- 3) Minimize conflicts among Park users.
- 4) Maximize the value of the Park as an educational resource.
- 5) Help coordinate efforts and cooperate with groups whose goals are complementary to those of the HBRA.
- 6) Protect the park and its users from damage and injury and prepare for emergency needs.

This *Plan* seeks to advance these goals through a more specific planning process to manage the park's natural resources, minimize conflicts, coordinate efforts among park groups, increase public safety, and identify ways to increase the park's value as an educational resource.

The 1994 HBRA Master Plan also included recommendations for trail renovation and construction, and proposed an inventory and analysis of the HBRA trail system. This analysis was incorporated into the HBRA Trail Management Plan (Lane County Parks Division, 1995).

### ***2.5.2 Confluence of Coast and Middle Forks Willamette River Project Area – Alternatives Team Recommendation (1997)***

In response to the 1980 Northwest Power Planning and Conservation Act, which required the Bonneville Power Administration (BPA) to compensate for losses of fish and wildlife habitat caused by construction and operation of the region's hydroelectric system, an inter-agency "Alternatives Team" was formed to help generate a series of recommended habitat enhancements for the lower Coast Fork and Middle Fork Willamette River. Included in the report was a recommendation for the acquisition and restoration of a private agricultural parcel along the east bank of the Coast Fork, now the BPA-owned Sorenson site.

### ***2.5.3 South Meadow Management Plan (2002)***

The "South Meadow" (aka "South Pasture") is an approximately 200-acre floodplain site located within Lane County's Howard Buford Recreation Area (HBRA) along the Coast Fork of the Willamette River.

The 1994 HBRA Master Plan identified the South Meadow as an area of "diminished use" as compared to relatively greater use expected in the Arboretum and "North Bottomlands," both located north of the South Meadow. The Master Plan proposed new trails and wildlife observation blinds in the South Meadow, as well as an education exhibit along Quarry Rd Trail #5.

The South Meadow Management Plan, adopted January 9, 2002 by Lane County's Board of Commissioners, is consistent with the HBRA Master Plan goal 2:

*To protect sensitive and significant natural resource areas and restore degraded habitat.*

To advance this park-wide goal and to further refine the proposed actions in the 1994 Master Plan, the South Meadow Management Plan identifies three management goals:

**Goal A: Restore the ecological integrity of the floodplain.**

**Goal B: Provide recreational opportunities compatible with ecological stewardship.**

**Goal C: Provide educational opportunities compatible with ecological stewardship.**

### **2.5.4 Rivers to Ridges Open Space Study (2003)**

Lane County, the Cities of Eugene and Springfield, and Willamalane Parks District endorsed the *Rivers to Ridges Metropolitan Regional Parks and Open Space Study: Vision and Strategies*. This document identified HBRA and the Willamette Confluence Preserve (acquired in 2010 by The Nature Conservancy) as open space anchors connected to parks in the metro area by “greenways” along ridgelines and “blueways” along streams and rivers. In general, the plan recognized the importance of the Willamette River for linking several of the region’s most significant park and open space features such as Howard Buford Recreation Area, Island Park, Alton Baker Park, Skinner Butte Park, Delta Ponds, and Green Island.

This *Plan* specifies ways to conserve and balance habitat and recreational values on the largest public ownership in the Mount Pisgah area “open space anchor” as identified in the Rivers to Ridges Open Space study.

### **2.5.5 Oregon Conservation Strategy (2006, updated in 2016)**

The *Oregon Conservation Strategy* (Oregon Dept. of Fish and Wildlife, 2006, pp. 244-5; the 2016 update is on the web at [www.oregonconservationstrategy.org/ecoregion/willamette-valley/](http://www.oregonconservationstrategy.org/ecoregion/willamette-valley/)) specifically identifies the Mount Pisgah area in its ecosystem conservation opportunity profile. This document notes that:

- This area supports a number of at-risk species, including some of the largest Northwestern pond turtle (*Actinemys marmorata*) populations in the ecoregion,
- Lands in the Mount Pisgah area represent some of the area’s largest tracts of native habitats,
- Mount Pisgah is a designated Oregon Important Bird Area, and
- The area contains a Great Blue Heron (*Ardea herodias*) rookery.

The *Oregon Conservation Strategy* explicitly states the following actions should be taken:

- Actively manage uplands to promote and maintain oak savanna and prairie habitats,
- Maintain or enhance in-channel watershed function, connection to riparian habitat, flow and hydrology,
- Maintain or restore riparian habitat and ecological function; ensure sufficient habitat complexity for wildlife, and
- Promote early detection and suppression of invasive weeds.

The *Oregon Conservation Strategy* identifies a number of priority habitats and species that are present on Buford Park, including:

- Oak woodlands:
  - Wayside aster (*Eucephalus vialis*)
  - Western gray squirrel (*Sciurus griseus*)
  - Songbird assemblage including Western Wood Pewee (*Contopus sordidulus*), Acorn Woodpecker (*Melanerpes formicivorus*), Western Bluebird (*Sialia mexicana*), White-breasted Nuthatch (*Sitta carolinensis aculeata*), Chipping Sparrow (*Spizella passerina*).
- Grasslands:
  - Grasshopper Sparrow (*Ammodramus savannarum perpallidus*)
  - Common Nighthawk (*Chordeiles minor*)
  - Western rattlesnake (*Crotalus oreganus*)
  - Monarch butterfly (*Danaus plexippus*)
  - Oregon Vesper Sparrow (*Pooecetes gramineus affinis*)
  - Western Meadowlark (*Sturnella neglecta*)

- Wetlands:
  - Bradshaw's lomatium (*Lomatium bradshawii*)
  - Willow Flycatcher (*Empidonax traillii*)
  - Yellow-breasted Chat (*Icteria virens auricollis*)
  - Northern red-legged frog (*Rana aurora*)
- Riparian:
  - Olive-sided Flycatcher (*Contopus cooperi*)
  - Townsend's big-eared bat (*Corynorhinus townsendii*)
  - Western pond turtle (*Actinemys marmorata*)
  - Breeding riparian songbirds
  - Great Blue Heron
  - Bald Eagle (*Haliaeetus leucocephalus*)
- Columbia (Willamette as tributary) River:
  - Chinook salmon (*Oncorhynchus tshawytscha*)
  - Winter steelhead (*Oncorhynchus mykiss*)
  - Oregon chub (*Oregonichthys crameri*)
- Freshwater aquatic:
  - Western brook lamprey (*Lampetra richardsoni*)
  - Pacific lamprey (*Lampetra tridentata*)

Oregon Department of Fish and Wildlife provided partial funding for this *Plan* through its Oregon Conservation Strategy Implementation grant program, in recognition of the vital importance of habitats in HBRA and in the broader Mount Pisgah "conservation opportunity area."

### **2.5.6 Willamette River Open Space Vision (2010)**

*The Willamette River Open Space Vision* is the first comprehensive open space vision or plan specifically for the Willamette River in the Eugene-Springfield region. It built on the 2003 *Rivers to Ridges Metropolitan Regional Parks and Open Space Vision* that identified the Willamette River as a key element of the region's open space network from a habitat, recreational, visual, and cultural perspective. Lane Council of Governments completed the *Willamette River Open Space Vision* in 2010. Below is the plan's vision statement:

Our community has long treasured the Willamette River for the natural, recreational, and visual qualities it provides. The river gives us a sense of place and contributes greatly to the quality of life for all who call the Eugene-Springfield area home. The open space that lines the river provides a welcome break from the urban environment, accommodates recreational amenities of all types, and provides exceptional wildlife habitat. The river corridor also functions as a linear connector between many of our region's major parks and natural areas for wildlife and humans alike. The goal of this planning effort is to create an inspiring vision for the Willamette River corridor that will help lead the way for coordinated efforts to further improve this outstanding open space resource in the coming years and decades.

The document, maps and other information are available at: <http://www.lcog.org/willamette/>.

This *Plan* advances the *Willamette River Open Space Vision* by identifying priority habitat management actions to conserve native habitats and enhance recreational opportunities in an "open space anchor" located within the urban/rural interface of the Eugene-Springfield metropolitan area.

### ***2.5.7 Lane County Parks and Open Space Master Plan (1981) and Lane County Parks Master Plan (revision in development)***

Lane County Parks Division is updating its 1981 Parks and Open Space Master Plan. The updated document will be a long-term plan for the 70 recreation sites managed by the County, including HBRA. The Parks Master Plan update would become an amendment, or change, to the County's Comprehensive Plan. In order for the new system-wide park Master Plan to take effect, the Lane County Parks Advisory Committee will review and make recommendations to the Lane County Board of Commissioners, which must adopt it by ordinance.

The Lane County webpage with more information is:

<http://www.lanecounty.org/Departments/PW/Parks/Pages/masterplan.aspx>

### ***2.5.8 Other Plans and Assessments***

All of HBRA is located within the Willamette River Greenway, as designated under Oregon Statewide Planning Goal 15. The purpose of Goal 15 is to "protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway".

To further aquatic and floodplain habitat improvements along the Willamette River, the Oregon Watershed Enhancement Board, Meyer Memorial Trust, and Bonneville Environmental Foundation created the "Willamette River Initiative", as a vehicle to support habitat restoration work. As part of this effort, priority areas have been identified as "Anchor Habitats", including both the Middle Fork and Coast Fork Willamette in the vicinity of Mount Pisgah (OWEB, 2016).

Management plans or assessments have been developed for several nearby conservation ownerships. These plans include:

- 1) Willamette Confluence Preserve Management Plan (TNC, 2012).
- 2) Sorenson Parcel Management Plan (Friends, 2015).
- 3) Turtle Flats Baseline Assessment (Friends, 2015).
- 4) Thurston Hills Management Plan (Willamalane, 2016).
- 5) Turtle Flats Management Plan (Friends, 2017).

## 2.6 Chapter 2 References

- Hulse, D., S. Gregory, and J. Baker. 2002. Willamette River Basin Planning Atlas: Trajectories of Environmental and Ecological Change. OSU Press, Corvallis.
- IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.
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<http://www.oregon.gov/lcd/docs/goals/goal15.pdf>
- Oregon Watershed Enhancement Board (2016). Willamette Special Investment Partnership, Accomplishments Summary Report.  
[http://www.oregon.gov/OWEB/docs/pubs/2016\\_Willamette\\_SIP\\_Report.pdf](http://www.oregon.gov/OWEB/docs/pubs/2016_Willamette_SIP_Report.pdf)



# Chapter 3: Methodology

## 3.1 The Conservation Action Planning Process

The “Conservation Action Planning” (CAP) methodology is a science-planning process used by governments and land trusts around the world to develop management plans for large natural areas. The Nature Conservancy initially developed the methodology in the 1990’s, in consultation with other land management agencies and conservation organizations. The CAP process draws upon the best professional judgment of a team of technical experts with knowledge in diverse disciplines and about the planning area. The planning process has the following steps:

- 1) Identify conservation targets,
- 2) Evaluate viability and critical threats to conservation targets,
- 3) Incorporate public input,
- 4) Develop conservation strategies,
- 5) Establish conservation measures, and
- 6) Develop a supporting stewardship work plan.

More information about conservation action planning can be found in the “Conservation by Design 2.0. Guidance Document” (The Nature Conservancy, 2016). The planning terms used in this chapter are defined in the Glossary (Appendix A.)

### ***3.1.1 Why This Tool Was Selected***

Conservation Action Planning (CAP) is a straightforward and proven approach for planning, implementing and measuring success for conservation projects. The analytical rigor of the CAP process provides a level of confidence in the management strategies that are developed from it. CAP requires analysis of the threats that impact the selected conservation targets, and identifies management strategies to address the significant threats or improve viability of conservation targets. It then establishes management actions and benchmarks for success to provide a quantifiable basis for evaluating progress toward goals.

### ***3.1.2 Other Conservation Action Plans developed in Western Oregon***

Public agencies have used the Conservation Action Planning methodology to develop habitat management plans for natural areas elsewhere in western Oregon. Below are four examples:

- *The West Eugene Wetlands Conservation Action Plan* included the City of Eugene, Bureau of Land Management, and The Nature Conservancy.
- *The Spencer Creek (south of Eugene, Oregon) Conservation Action Plan* (U.S. Forest Service, City of Eugene and The Nature Conservancy)
- *The Table Rocks (in Medford, Oregon) Conservation Action Plan* was developed by Bureau of Land Management in partnership with The Nature Conservancy. BLM is using the results of the Table Rocks CAP to inform their internal planning process.
- *Nehalem River Watershed (north Oregon Coast) Conservation Action Plan* was developed with representation from two Soil and Water Conservation Districts.

## 3.2 Planning Process Overview

### 3.2.1 Technical Advisory Group

Consistent with the CAP process, Lane County convened an inter-agency Technical Advisory Group with diverse expertise to work through the Conservation Action Planning protocol. Participants serving on the TAG included representatives from the following agencies listed in the table below:

**Figure 3-1: HBRA Habitat Management Plan Technical Advisory Group**

AGENCY	MEMBER	ROLE / EXPERTISE
Lane County Parks Division	Todd Winter	Former Parks Manager and TAG chair
Oregon Dept. of Forestry	Greg Wagenblast	Fire management and suppression
Oregon Dept. of Fish and Wildlife	Jeff Ziller, Kelly Reis, Erik Moberly, Brian Wolfer, and Chris Yee	Aquatic and terrestrial biologists
Oregon Department of Agriculture	Glenn Miller	Invasive species management
Bonneville Power Administration	Ben Tilley	Vegetation management specialist
US Army Corps of Engineers	Roberta Swift Garrett Dorsey (2016)	Wildlife (western pond turtle) biologist Wildlife Biologist
The Nature Conservancy	Ed Alverson Jason Nuckols (2016)	Botanist and ecologist Willamette and Restoration Program Manager
Mount Pisgah Arboretum	Tom LoCascio	Arboretum Site Manager and HBRA Caretaker with historic knowledge of the planning area
Watersheds Inc.	Paul Hoobyar	TAG facilitator specializing in natural resource issues
Friends of Buford Park & Mt Pisgah	Jason Blazar	Designer, landscape ecologist, steward Friends Stewardship Coordinator and Support staff to TAG
Friends of Buford Park & Mt. Pisgah	Bruce Newhouse	Botanist and ecologist Board member and chair of the Friends Stewardship Technical Advisory Committee
Project intern University of Oregon	Sandra Koike	TAG note taker Candidate for Masters in Landscape Architecture

*Lane County thanks the many agencies and their staff that contributed in-kind time to help develop this habitat management plan.*

### 3.2.2 The Role of Friends of Buford Park & Mt. Pisgah

Friends of Buford Park & Mt Pisgah, a non-profit 501c3 organization, was a primary contributor to the development of the habitat management planning process. Friends supported Lane County by:

- collaborating with Lane County to scope the *Habitat Management Plan* process,
- securing and administering a \$40,000 "Oregon Conservation Strategy" grant from Oregon Dept. of Fish and Wildlife to support plan development,
- providing funds for support staff, meeting facilitators, public outreach materials, public tours, and

- developing a Geographic Information System (GIS) project, which includes historic and current vegetation maps and pertinent base layers to support development of the desired future condition map, and to generate acreage figures for various habitat types, and
- developing the draft plan in collaboration with county staff.
- In addition, Friends of Buford Park's Stewardship Technical Advisory Committee (STAC), which is comprised of volunteer scientists, biologists, botanists, ecologists and related professions, served as a research and support resource to the TAG. The TAG sometimes would refer a question or issue to the STAC for additional research. Members of the STAC during development of this plan are listed in Figure 3-2.

**Figure 3-2: Friends of Buford Park & Mt. Pisgah Stewardship Technical Advisory Committee**

MEMBER	AFFILIATION / EXPERTISE
Bruce Newhouse	Chair, field ecologist and naturalist, Salix Associates, and Friends' representative on Technical Advisory Group.
Gail Baker	Botanist and educator (retired) – joined STAC in 2014
Kat Beal	Wildlife biologist (retired) – served on STAC 2013 - 2016
Bill Castillo	Wildlife Biologist, Oregon Dept. of Fish and Wildlife (retired) – resigned from STAC in 2009
Greg Hyde	Parks planner (retired) – joined STAC in 2015
Aryana Ferguson	Restoration Specialist, Madrona Consulting
Dr. Bart Johnson, Ph.D.	Associate Professor, Dept. of Landscape Architecture, University of Oregon
John Koenig	Botanist and hydrologist (retired)
Tom LoCascio	Site Manager, Mount Pisgah Arboretum
David Predeek	Botanist, U.S. Forest Service (retired)
Dr. Jim Reed, Ph.D.	GIS specialist, The Hydrologic Group – STAC ex officio member
Dr. Bitty A Roy, Ph.D.	Plant ecologist specializing in invasion biology and plant-fungus ecology, University of Oregon – STAC sub-committee member
Kevin Shanley	Landscape architect (retired) - joined STAC in 2015

*Lane County thanks the technical experts on the Stewardship Technical Advisory Committee for their contributed services to help develop this HBRA habitat management plan.*

### 3.3 Public Involvement

Lane County, in collaboration with Friends, sought public input during the development of this *Habitat Management Plan* through multiple outreach methods. Input from the public was essential to ensure that the resulting plan addresses the needs and perspectives of park visitors and stakeholders.

In the spring and fall of 2008, prior to initiation of habitat planning, Friends implemented a related, highly visible demonstration project along the Summit Trail (Trail 1) to educate the public about the need to enhance prairie, savanna and oak woodland habitat. This project included weed removal and savanna restoration through the removal of Douglas-fir and thinning of oaks and maples. Before, during and after implementation, the project engaged park visitors and the public through trailside information tables, temporary signage, and brochures. In addition, multiple pre- and post-project tours described the project goals and methods and the upcoming habitat management planning process. During implementation, extensive media coverage included numerous television, radio and print media, including a front-page article in *The Register-Guard*.

When habitat management planning began with the formation of the Technical Advisory Group (TAG), park stakeholders, including the Mount Pisgah Arboretum and Sheriff's Posse were invited to briefings on the project and upcoming public input opportunities. During the planning process, Lane County, the TAG and Friends collaborated to:

- host two public workshops: March 19, 2009 and June 2, 2009,
- publish displays and informational materials on the internet,
- obtain major article in *The Register-Guard* (March 27, 2009),
- host an informational booth at the Mount Pisgah Wildflower Festival in 2009,
- host two stakeholder meetings, Nov 12, 2008 and Sept 3, 2009, and
- post information about the planning process on the internet.

### **3.3.1 Lane County Technical Review**

Lane County's Public Works Department completed a technical review of the draft *Habitat Management Plan* in 2012. An environmental engineer, natural resource analyst and environmental engineering specialist were primary County contacts that reviewed and commented on the goals and objectives developed during the planning process, and provided comments and suggestions on the final draft plan. Lane County's Parks Manager and Natural Areas Coordinator reviewed and contributed to the final draft of this plan. This technical review augments the public meetings and other public input opportunities.

### **3.3.2 Habitat Management Plan, Version 2**

Version 2 of the *Habitat Management Plan* was presented to the PAC and released for public review via the Lane County Parks web site on May 9, 2016. A public comment period was open until July 31, 2016. A news release was distributed to local media outlets on May 18, 2016, and an extensive public outreach effort was implemented. Outreach events and opportunities included:

- Stakeholder meetings,
- Outreach to the general public, park neighbors and other stakeholders through website postings; flyers at park kiosks; print, TV, and radio stories in May 2016,
- An informational booth at the May 19<sup>th</sup> 2016 Mount Pisgah Wildflower Festival,
- Three public park tours in June 2016, two public tours in 2017 (July and August respectively),
- An online survey to which there were 51 respondents,
- A public open house at Harris Hall on May 25<sup>th</sup> to provide information and solicit public feedback,
- Review by members of the inter-agency Technical Advisory Group, which met on May 5, 2016,
- Review by Parks Advisory Committee, including a public comment opportunity,

After the close of the public comment period, the comments were compiled and presented, along with a summary memo, to the PAC on September 12<sup>th</sup>, 2016.

### **3.3.3 Habitat Management Plan, Version 3**

The current version of the *Plan*, Version 3, reflects the input provided by the public and stakeholders during this public review process. Outreach in early 2018 associated with presentation of Version 3 included:

- Outreach to the previous *Plan* commentators, general public, park neighbors, and other stakeholders through website postings, flyers at park kiosks, and print and radio stories in January and February 2018,
- A public open house at Harris Hall on February 15<sup>th</sup> to discuss version 3 of the *Plan*, and specifically identify how the *Plan* has been refined to reflect the public comment received, and
- Review by Parks Advisory Committee, including a public comment opportunity.

As part of this process, the Lane County Parks Advisory Committee (PAC) reviewed the *Plan* and recommended approval by the Lane County Board of Commissioners. The Board approved the final document, and subsequently adopted the *HBRA Habitat Management Plan* as a refinement to the Lane County Rural Comprehensive Plan.

This *Plan* identifies strategies for habitat management to effectively guide the use of funding and labor on the part of Lane County and partners within HBRA. The work plan identified in Chapter 10 constitutes a set of tasks, which if implemented, will support the continued viability of the conservation targets present at HBRA. Maps showing desired future habitat conditions are intended to provide a template for achieving the conservation vision for HBRA. However, the maps do not constitute a financial commitment to implementing the necessary habitat improvements on a fixed timeline. Nor are the maps intended to describe future habitat conditions in any given portion of the park with certainty, given the financial and ecological variables that guide any course of habitat restoration.

While the *Plan* will be an adopted refinement plan, it is also intended to support an adaptive management process. The *Plan* provides a conservation vision, nine focal conservation targets, and 15 management goals, to guide habitat management at HBRA over the next 15 years. The strategies (Ch. 6) and projects (Ch. 10) listed in this document reflect our current understanding of the best means to achieve the conservation vision and goals. As Lane County Parks and partners implement the strategies and projects, Parks staff and partners will evaluate the results and, if appropriate, consider alternative strategies or projects that may provide better results or be less costly to implement. The Habitat Advisory Team (HAT), described in Section 11.3, will participate in the adaptive management process through its annual meetings. In these meetings, the HAT will assess project outcomes, and recommend changes for plan improvement. Following each of the five year implementation phases, the HAT will assist Lane County Parks and stakeholders in updating the work plan for the coming five years, to incorporate previous experience and current knowledge.

### 3.4 Chapter 3 References

- The Nature Conservancy. 2016. Conservation by Design 2.0. Guidance Document. [http://cmp-openstandards.org/wp-content/uploads/2016/04/CbD2.0\\_Guidance-Doc\\_Version-1.pdf](http://cmp-openstandards.org/wp-content/uploads/2016/04/CbD2.0_Guidance-Doc_Version-1.pdf)

# Chapter 4: Conservation Vision, Conservation Targets, and Other Habitats

## 4.1 Conservation Vision Statement

This Conservation Vision Statement expresses the positive future outcome of managing habitats at the Howard Buford Recreation Area.

### Conservation Vision Statement for HBRA

*The Howard Buford Recreation Area will be managed to conserve and restore prairie, savanna, woodland, forest, and river habitats in ways that support compatible recreational and educational uses described in the HBRA Master Plan (1994).*

*The uplands shall sustain increasingly rare Willamette Valley habitat types including a mosaic of open prairie, savanna, and oak woodland on sites where these habitats occurred historically. Conifer and mixed forest shall be retained and enhanced in upland portions of HBRA that historically supported forests. The lowlands shall sustain healthy riparian (streamside) and aquatic habitats and processes. These native habitats shall conserve common and rare native plants and animals, including federally and state-listed threatened and endangered species*

*Habitat restoration shall provide significant increases in quality and/or extent of priority habitat to support a high diversity of wildlife species which were historically much more prevalent throughout the entire Willamette Valley. Restoration will also lessen the threat of severe wildfire through reduction of dense, brushy fuels in prairie, savanna, and oak woodland habitats.*

## 4.2 Conservation Targets

This plan identifies nine **focal conservation targets**. (See glossary for definitions of planning terms). Six are habitats, one is a federally endangered plant, one is a rare bird, and one is "visitor experience." The focal conservation targets represent: 1) habitat types identified as important for conservation within the Oregon Conservation Strategy for the Willamette Valley Ecoregion; 2) habitats that provide important aquatic, wetland, and upland ecological functions; 3) federally listed species or species petitioned for listing; and 4) public uses that benefit from a landscape rich in native biodiversity. Together, the focal conservation targets are intended to represent and encompass the full array of priority conservation values (habitats, species, and related beneficial public uses) of HBRA.

The TAG determined that this set of focal conservation targets was sufficient to represent the full range of ecological communities and native plant and animal species within the park, without being such a large list as to make the analysis unwieldy. The focal conservation targets are:

- Upland prairie and savanna
- Oak woodland
- Wetland prairie
- Bradshaw's lomatium (*Lomatium bradshawii*)
- Buckbrush chaparral
- Willamette riparian systems and associated floodplain
- Creeks and streams
- Oregon Vesper Sparrow (*Pooecetes gramineus affinis*)
- Visitor experience

**Nested conservation targets** are more specific natural features or species associated with each of the six habitats selected as focal targets. These are rare species, habitat types, or ecological communities whose conservation needs are subsumed by one or more focal conservation targets. Examples of nested targets include rare species, like the Western Meadowlark (Oregon's state bird that nests in prairies) and rare features, such as a seep within an upland prairie. Management actions that benefit the focal targets will also benefit the associated nested targets. Rare species that are included as nested targets are based on their status as determined by the Oregon Biodiversity Information Center (2016).

The nine focal conservation targets are described below. Nested targets are listed under the habitat they are most commonly associated with. Chapter 6 defines goals and strategies to conserve the conservation targets. Rare plant communities or habitat types are from the *Oregon Conservation Strategy* (ODFW, 2006).

#### **4.2.1 Upland prairie and savanna**

Description: These are grass and forb-dominated plant communities on non-hydric soils with few to no trees or shrubs (prairie), or with scattered open-grown trees that are not so dense as to break up the continuous grassland ground layer (savanna). The primary savanna tree species is Oregon white oak (*Quercus garryana*), but scattered conifers such as ponderosa pine (*Pinus ponderosa*), incense cedar (*Calocedrus decurrens*), and Douglas-fir may also be present. California black oak (*Quercus kelloggii*) grows naturally within about 1.5 miles to the west of HBRA, and one tree is located within HBRA in the Mount Pisgah Arboretum, but the origin of this tree is uncertain. Locations vary from productive soils on the valley floor to shallow soils on hot, dry exposures in the valley foothills. These grass and forb-dominated habitats were historically maintained by fire, which prevented succession to woodland and forest. Upland prairie often grades continuously into savanna, which in turn may grade into oak woodland. Upland prairie, savanna, and oak woodland provides important habitat for snakes and lizards, particularly where rocky.

Nested targets include:

- Western Meadowlark (*Sturnella neglecta*)
- Upland yellow violet (*Viola praemorsa* ssp. *praemorsa*)
- Camas pocket gopher (*Thomomys bulbivorus*)
- Western pond turtle (*Actinemys marmorata*, for nest sites)
- Monarch butterfly (*Danaus plexippus*)



- Western rattlesnake (*Crotalus oregonus*)
- Seasonal seeps and swales
- Herbaceous balds and rock outcrops

Several other globally-rare plant species documented from upland prairie and savanna habitats in the southern Willamette Valley could potentially be found occurring naturally within HBRA. These species, which are rare throughout their entire geographic range, include Willamette daisy (*Erigeron decumbens*), shaggy horkelia (*Horkelia congesta* ssp. *congesta*), Kincaid's lupine (*Lupinus oregonus*), and white-topped aster (*Sericocarpus rigidus*).

#### **4.2.2 Oregon Vesper Sparrow**

Description: Oregon Vesper Sparrow (*Pooecetes gramineus affinis*) is a subspecies of Vesper Sparrow that breeds only in the region west of the Cascades from northern California to western Oregon, western Washington, and (historically) southwestern British Columbia. Recent range-wide surveys estimate that only about 5,000 birds remain, with fewer than 500 birds in the Willamette Valley ecoregion. Very few of the remaining breeding populations are on public lands. More information on the bird's status can be found at [New Study Heightens Concern for Oregon Vesper Sparrow](#) (American Bird Conservancy, 2016).



Birders have long documented this resident during the breeding season in prairie and savanna habitats in HBRA, but sightings have declined in recent years. This grayish, brown bird has a streaked chest and back with white outer tail feathers. Oregon Vesper Sparrow is a ground-nesting bird, and is a species of upland prairie and savanna, with fairly specific habitat requirements in terms of tree density, short vegetation, plant species composition, and bare ground. Managing prairie habitats in HBRA can help sustain the presence of vesper sparrow in the park. It generally does not nest in otherwise suitable habitat located within about 25 meters of dense forest.

#### **4.2.3 Oak Woodland**

Description: Oak woodland is a sparsely treed community dominated by oaks with tree density intermediate between the scattered trees of an oak savanna and the interlocking crowns of a closed canopy forest. Tree crowns usually do not touch, allowing sunlight to penetrate to the ground. Tree architecture is a mixture of open-grown oaks and more vase-shaped oaks whose canopies are constrained by nearby trees. Conifers, including Douglas-fir, Ponderosa Pine, and Incense Cedar, may be associated with oaks. The ground layer of grasses and forbs is broken up by tree shade and/or by the presence of dispersed or dense shrubs. Oak woodland is located on non-hydric soils with varied topography, frequently on hill slopes of small buttes and valley foothills. It grades into savanna at the lower end of tree density and into closed canopy forest on the upper end.

Ponderosa pine is an important component of an oak-pine woodland community that is found in several parts of HBRA, particularly on the south and east slopes of Mount Pisgah. Ponderosa pine, which is at the edge of its geographic distribution in the Willamette Valley, grows with, and has a similar ecological profile to, Oregon white oak. It is commonly associated with dry or rocky soils that historically were fire-influenced. While Ponderosa pine occurs naturally in scattered pockets throughout much

*Typical oak woodland habitat along West Summit Trail #1. A 2008 restoration project removed invasive plants, woody vegetation and encroaching conifers in this area to enhance oak woodland.*

of the Willamette Valley, very few conservation sites or preserves happen to support examples of Ponderosa pine communities. In the absence of management, Ponderosa pine is similarly vulnerable to suppression by faster growing conifers such as Douglas-fir.

Nested targets include:

- Western gray squirrel (*Sciurus griseus*)
- White-breasted Nuthatch (*Sitta carolinensis*)
- Acorn Woodpecker (*Melanerpes formicivorus*)
- Wayside aster (*Eucephalus vialis*)
- Thin-leaved peavine (*Lathyrus holochlorus*)
- Ponderosa pine-Oregon white oak woodland

#### **4.2.4 Wetland Prairie**

Description This is a grass and forb dominated community with few to no trees or shrubs, located on hydric soils that are saturated to the surface during the rainy season and dry during the summer. Perched water tables associated with relatively impermeable clay soils are characteristic of this wetland type, but it also is found on lower slopes in areas of seasonal groundwater discharge. Surface topography includes pedestals and hummocks emerging above water level as well as vernal pools. Wetland prairie may be associated with shrub-scrub and forested wetlands where woody plants have established due to fire suppression.



Nested targets include:

- Western Meadowlark (*Sturnella neglecta*)
- Yellow- Breasted Chat (*Icteria virens*)
- Willow Flycatcher (*Empidonax traillii*)
- Timwort (*Cicendia quadrangularis*)
- Meadow checkermallow (*Sidalcea campestris*)
- Cusick's checkermallow (*Sidalcea cusickii*)
- Hitchcock's blue-eyed grass (*Sisyrinchium hitchcockii*)
- Seeps and swales



Cusick's checkermallow

#### 4.2.5 Bradshaw's lomatium

Description: Bradshaw's lomatium (*Lomatium bradshawii*) is a conservation target species at the HBRA because it is federally and state listed as an "endangered" species. It grows in wet prairie habitat in the southeast portion of the HBRA. It is an important population for the recovery of the species, because it is the largest population within the Eugene East recovery zone.

Bradshaw's Lomatium is endemic to the Willamette Valley and occurs only in wet prairie habitat. Wet prairies that comprise suitable habitat have heavy clay soil and a seasonally high water table (water perched usually at or just above the surface) through the early part of the growing season, and often are dominated by tufted hairgrass (*Deschampsia cespitosa*). Historically, vegetation of these sites were maintained by fire (from either indigenous peoples' cultural practice of burning prairies or from ignition by lightning strike), or by flooding from rivers, or high water tables. Sustaining the population of Bradshaw's lomatium in HBRA is an important action identified in the US Fish and Wildlife Service's 2010 "Recovery Plan for the Prairie Species of Western Oregon and Southwestern Oregon".





#### 4.2.6 Buckbrush chaparral

Description: This is a shrub-dominated community with few to no trees located on excessively drained to shallow soils on hot, dry hillside exposures and upon gravel bars within the floodplain. The principal shrub species is buckbrush (*Ceanothus cuneatus*), with associations of snowberry (*Symphoricarpos albus*), tall Oregon grape (*Berberis aquifolium*), poison oak (*Toxicodendron diversilobum*), and the occasional Oregon white oak tree. Lane County is the northern limit in the range of buckbrush chaparral and Mount Pisgah is the largest remaining patch of this habitat in the area. A population of Hedgerow hairstreak (*Satyrium saepium*) butterflies, uncommon at low elevations (below 1000'), utilize the buckbrush as its sole larval host plant at Mount Pisgah.

Nested targets include:

- Hedgerow hairstreak (*Satyrium saepium*)
- Blue-gray Gnatcatcher (*Polioptila caerulea*)



#### 4.2.7 Willamette riparian systems and associated floodplain

Description: Riparian areas are dynamic biological and physical systems that act as the interface between terrestrial and aquatic ecosystems. Riparian areas encompass the land and vegetation adjacent to Willamette River channels, oxbow lakes, alcoves, backwater areas, and sloughs that are influenced by perennial or intermittent water and the influence of hydric and fluvial soils. The frequency and physical extent of periodic flooding, an important disturbance regime, shapes the form and ecosystem function of the floodplain. Plant communities common within this system include Oregon ash (*Fraxinus latifolia*) - big leaf maple (*Acer macrophyllum*) floodplain forest, black cottonwood (*Populus trichocarpa*) bottomland forest, and willow (*Salix sp.*) shrub thickets.

Nested targets include:

- Upper Willamette spring chinook (*Oncorhynchus tshawytscha*)
- Cutthroat trout (*Oncorhynchus clarkii*)
- Rainbow trout, (*Oncorhynchus mykiss*), including the anadromous variant Winter Steelhead
- Oregon chub (*Oregonichthys crameri*)
- Northwestern pond turtle (*Actinemys marmorata*)
- Northern red-legged frog (*Rana aurora*)
- Bald Eagle (*Haliaeetus leucocephalus*)
- Dwarf false rue-anemone (*Enemion stipitatum*)



#### 4.2.8 Creeks and Streams

Description: These are riparian areas with intermittent flows, typically running from October through early June, originating from the slopes of Mount Pisgah. These areas are characterized as first and second order streams. Those that are first order headwater streams are closely associated with seeps fed by ground water discharge. Plant communities common within this system include oak woodland, wet prairie and mixed forest.



Nested targets include:

- Cutthroat trout (*Oncorhynchus clarkii*)
- Rainbow trout, (*Oncorhynchus mykiss*), including the anadromous variant Winter Steelhead



*Winter Steelhead at HBRA (photo: Jim Reed)*



#### 4.2.9 Visitor Experience

Description:

Compatible public use in the Howard Buford Recreation Area (HBRA) includes recreational and educational uses and activities identified in the 1994 *HBRA Master Plan*. This plan recognizes that a primary reason people visit HBRA is to recreate in the diverse natural beauty provided by diverse, healthy habitats. This *Habitat Management Plan* provides guidance to land managers to help ensure that recreation and visitor experience are enhanced and compatible with the management of the significant natural values and conservation targets recognized in the *HBRA Master Plan*.



#### 4.2.10 Other Habitats

HBRA contains hundreds of acres of other habitats that visitors enjoy, such as conifer forests on Mount Pisgah's north facing slopes. Unlike the habitats selected as conservation targets, conifer forests have not declined from historic abundance in the Willamette Valley ecoregion, although their structure has been altered, and the acreage of conifer forest currently managed primarily for conservation values is limited. However, these forests still contribute to the diversity of habitats for plants and wildlife in HBRA. While habitat management at HBRA will prioritize projects to sustain the conservation targets, regionally common habitat types will also be managed and conserved. These habitat types are described below:

##### **Conifer forest:**

Description: In general, a forest is considered as a stand of trees at a density of 100 to 200 trees per acre (or greater). The canopy cover from trees occupying the overstory is greater than 75 percent. Within the HBRA, Douglas-fir (*Pseudotsuga menziesii*) is the most common tree associated with conifer forest and is most often the dominant tree in the overstory. This habitat type includes several sub-types as listed below. In addition,



there are small stands of Pacific yew (*Taxus brevifolia*), a fire-sensitive conifer, on Mount Pisgah's north slope. Most conifer forest within HBRA is 50-75 year-old second growth from logging in areas of historic mature forests, as well as conifer encroachment into former oak savanna and oak woodland over the last 5-7 decades.

However, there are scattered older conifers, often "wolf trees" that were not removed during previous logging.

Nested community types and rare species include:

- Douglas-fir – Bigleaf maple (*Acer macrophyllum*) forest
- Douglas-fir – Grand fir (*Abies grandis*) forest
- Douglas-fir – Incense cedar (*Calocedrus decurrens*) forest
- Douglas-fir – Western hemlock (*Tsuga heterophylla*) forest
- Douglas-fir – Pacific madrone (*Arbutus menziesii*) forest
- Tall bugbane (*Cimicifuga elata*)



## 4.3 Projected Increase in Extent of Focal Conservation Target Habitats and Resources

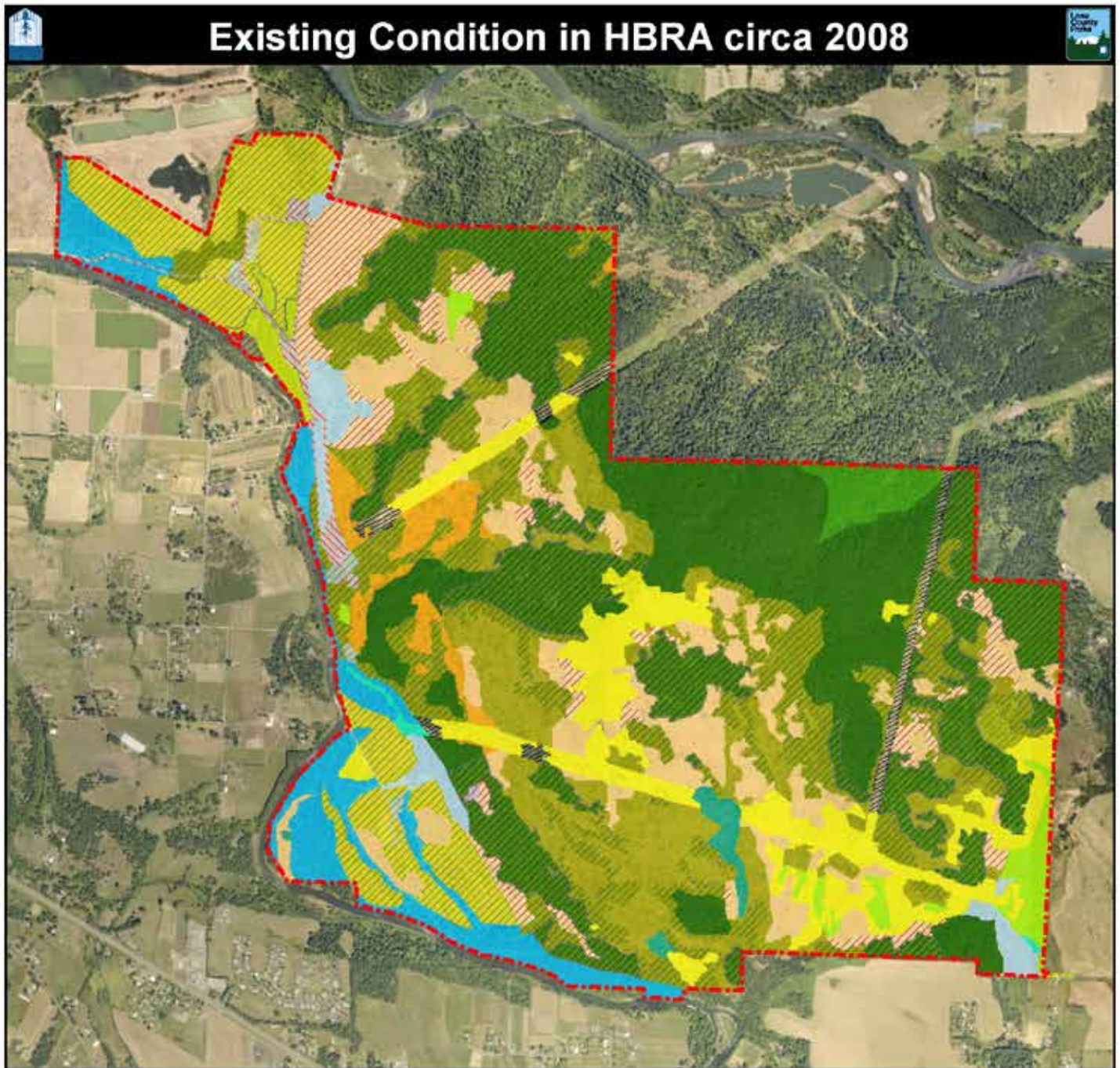
Implementation of the HBRA Habitat Management plan and its supporting work plan (as presented in Chapter 10 and Appendix E) will result in a direct increase in the total area occupied by each Focal Conservation Target Habitat, resources that directly support Focal Conservation Targets, as well as Other Habitats. Figure 4-1 presents an accounting of the projected change. Acreage of all map units within the HBRA boundary for both 2008 and 2035 are presented in Figure 4-4.

Figure 4-1 Focal Conservation Target or Other Habitat Percent Change 2008-2035

Target	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic Stewardship Facilities	0	2	2	2	-
Visitor Experience - Event Facilities	0	3	6	3	3
Visitor Experience - Parking Areas & Roads	0	16	18	16	2
Savanna	689	338	693	-351	355
Upland Prairie	822	178	246	-644	68
Wet Prairie	80	35	66	-45	31
Oak Woodland (incl. Oak-Ponderosa Pine)	0	225	491	225	266
Buckbrush Chaparral	0	14	40	14	26
Forested Wetland (including Alder forest)	0	42	30	42	-12
Riparian Bottomland Forest (including Riparian Mixed Upland Forest)	291	141	178	-150	37
Upland Conifer Forest	293	275	377	-18	102
Upland Hardwood Forest	0	27	35	27	8
Other Non-Conservation Target Cover Types	39	910	23	871	-887

NOTE –Increase in acres of non-target cover types between 1855 and 2008 is largely a result of conifer expansion into savanna and oak woodland. The projected decrease in acres of non-target cover types from 2008 to 2035 will be due in part to an increase in savanna and oak woodland as a result of conifer removal in some areas, as well as continuing ecological succession in the absence of active management in other areas, which will result in increased acres of conifer forest elsewhere. This table does not account for changes associated with Creeks and Streams, Bradshaw’s lomatium, Oregon Vesper Sparrow, or the trail system inventory.

Figure 4-2: HBRA Existing Condition circa 2008 Map



**Habitat or Land Cover**

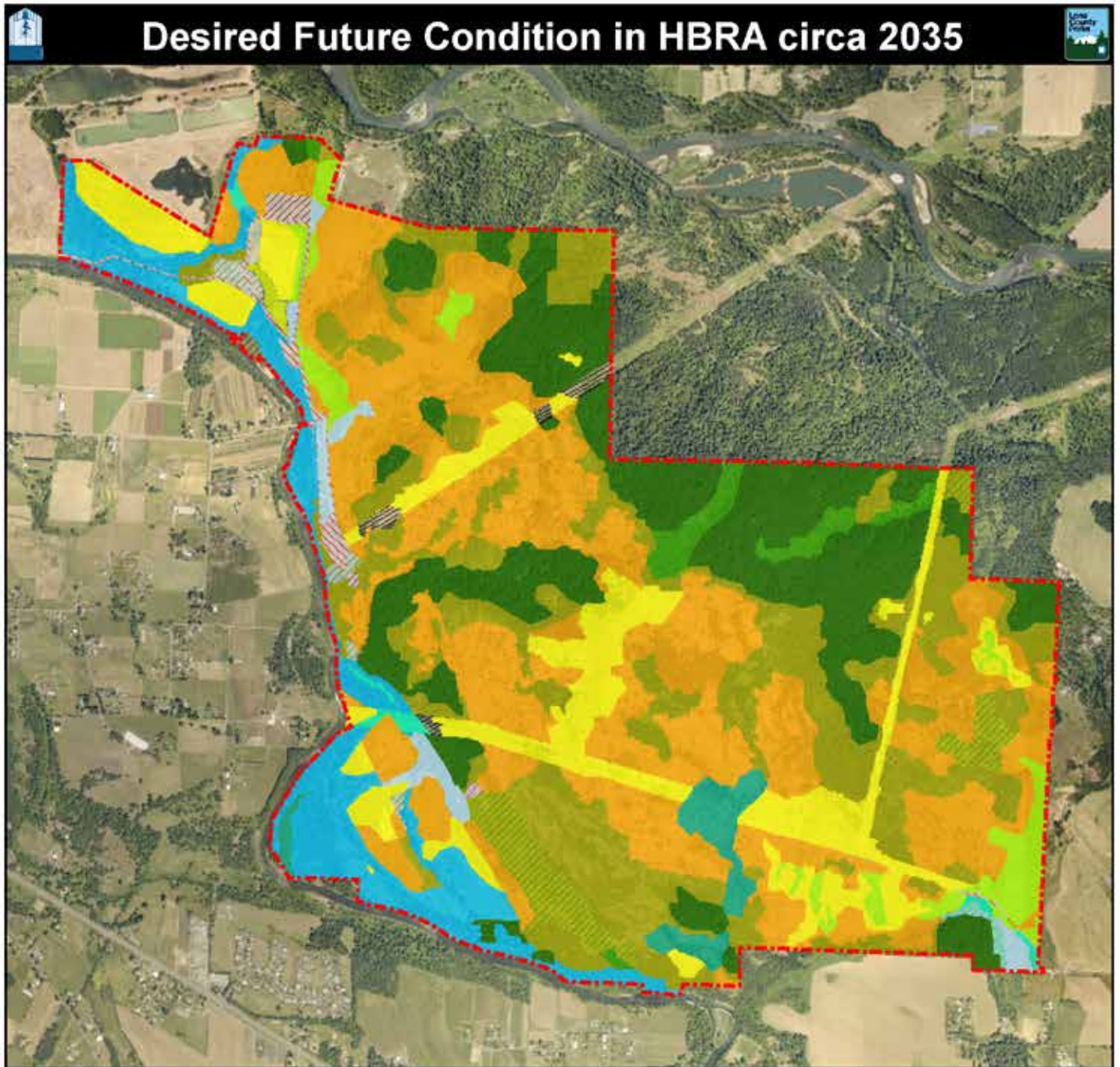
- |                          |                             |                              |                        |
|--------------------------|-----------------------------|------------------------------|------------------------|
| Upland Prairie           | Emergent Wetland            | Upland Hardwood Forest       | Scrub Wetland          |
| Oak Woodland             | Powerline Scrub             | Alder Forest                 | Water                  |
| Oak-Conifer Woodland     | Riparian Bottomland Forest  | Pasture                      | Historic Facilities    |
| Savanna - Good Condition | Forested Wetland            | Wet Prairie                  | Stewardship Facilities |
| Savanna - Fair Condition | Buckbrush Chaparral         | Riparian Mixed Upland Forest | Parking & Roads        |
| Savanna - Poor Condition | Oak-Ponderosa Pine Woodland | Quarry                       | Event Facilities       |
| Upland Conifer Forest    | Conifer-Oak Woodland        | Gravel Bar                   | HBRA Boundary          |



See Appendix E for detailed maps of each Stewardship Zone/Management Unit.



Figure 4-3: Desired Future Condition in HBRA circa 2035 Map



**Habitat or Land Cover**

- |                          |                             |                              |                        |
|--------------------------|-----------------------------|------------------------------|------------------------|
| Upland Prairie           | Emergent Wetland            | Upland Hardwood Forest       | Scrub Wetland          |
| Oak Woodland             | Powerline Scrub             | Alder Forest                 | Water                  |
| Oak-Conifer Woodland     | Riparian Bottomland Forest  | Pasture                      | Historic Facilities    |
| Savanna - Good Condition | Forested Wetland            | Wet Prairie                  | Stewardship Facilities |
| Savanna - Fair Condition | Buckbrush Chaparral         | Riparian Mixed Upland Forest | Parking & Roads        |
| Savanna - Poor Condition | Oak-Ponderosa Pine Woodland | Quarry                       | Event Facilities       |
| Upland Conifer Forest    | Conifer-Oak Woodland        | Gravel Bar                   | HBRA Boundary          |



See Appendix E for detailed maps of each Stewardship Zone/Management Unit.

Figure 4-4: Mapped Acreages of all Habitat or Land Cover Types for HBRA in 1855, 2008, and 2035

Habitat or Land Cover	Extent in 1855 (ACRES)	Extent in 2008 (ACRES)	Projected Extent in 2035 (ACRES)	Conservation Target?
Historic Facilities		2	2	
Stewardship Facilities		8	9	
Event Facilities		3	6	
Parking & Roads		16	18	
Savanna - Good Condition	689	46	693	Yes
Savanna - Fair Condition		188		Yes
Savanna - Poor Condition		104		Yes
Upland Prairie	822	178	246	Yes
Wet Prairie	80	35	66	Yes
Oak Woodland		217	432	Yes
Oak-Ponderosa Pine Woodland		8	59	Yes
Buckbrush Chaparral		14	40	Yes
Forested Wetland		42	26	Yes
Alder Forest			4	Yes
Riparian Bottomland Forest	291	125	173	Yes
Riparian Mixed Upland Forest		16	5	Yes
Upland Conifer Forest	293	275	377	No
Upland Hardwood Forest		27	35	No
Conifer - Oak Woodland		393		No
Oak - Conifer Woodland		310		No
Pasture		172		No
Powerline Scrub		28	11	No
Scrub Wetland		4	9	No
Gravel Bar		2	2	No
Quarry		1	1	No
Emergent Wetland		0.1		No
Water	39			No
<b>Total Acres</b>	<b>2214</b>	<b>2214</b>	<b>2214</b>	

## 4.4 Chapter 4 References

- American Bird Conservancy. 2016. New Study Heightens Concern for Oregon Vesper Sparrow. <https://abcbirds.org/new-study-heightens-concern-oregon-vesper-sparrow/>
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- US Fish and Wildlife Service. Recovery Plan for the Prairie Species of Western Oregon and Southwestern Oregon. 2010

# Chapter 5: Viability and Threats to the Conservation Targets

## 5.1 Assessing the Viability of Each Conservation Target

The Technical Advisory Group (TAG) evaluated the current “viability” of each focal conservation target. This provides a measure of the “health” of the target, and leads to the development of strategies to maintain or enhance the target’s health. The Conservation Action Planning process does this by having the team of experts first identify several “key ecological attributes” that are necessary to the long-term health of each conservation target.

For example, a healthy, viable prairie may have a “key ecological attribute” of an abundance of native grasses and forbs (“wildflowers”). Another example of a key ecological attribute of a healthy prairie is low cover of woody vegetation. After identifying a number of “key attributes” for each focal conservation target, the experts assigned one of four viability rankings for each attribute: “poor,” “fair,” “good,” or “very good.” For example, a prairie whose key attribute of less than five percent woody cover (trees and shrubs) was ranked as “very good.” Figure 5.1 identifies key ecological attributes and the TAG’s viability rankings for each conservation target.

## 5.2 Assessing Threats to Each Conservation Target

The next step in the CAP process is to analyze the threats to the long-term viability of each conservation target. Building on the understanding of each target’s “key attributes,” the TAG examined what ecological processes or external threats (such as invasive weeds) would undermine or threaten those key attributes.

For example, invasive exotic shrubs, like Scotch broom and blackberry, can convert a prairie’s structure to a shrub land. Western Meadowlarks or western pond turtles can no longer nest in the former prairie. Therefore, the threat of invasive non-native woody plants may be a greater threat than an invasive grass. Where possible, the TAG also attempted to identify and analyze the root causes of the threats.

Figure 5-2 is a summary of the TAG’s analysis of the most significant threats by conservation target. This is an attempt to synthesize many hours of analysis and discussion. After the most significant threats have been identified, the CAP planning process seeks to identify high priority stewardship goals, objectives and projects to reduce the threats.

## 5.3 Chapter 5 References

- The Nature Conservancy. 2016. Conservation by Design 2.0. Guidance Document. [http://cmp-openstandards.org/wp-content/uploads/2016/04/CbD2.0\\_Guidance-Doc\\_Version-1.pdf](http://cmp-openstandards.org/wp-content/uploads/2016/04/CbD2.0_Guidance-Doc_Version-1.pdf)



Figure 5-1: Viability of Conservation Targets Table

Conservation Target	Category	Key Attribute	Indicator	Poor	Fair	Good	Very Good	2008 Indicator Status	Rating	Desired Rating	Date of Current Rating	Date for Desired Rating
Bradshaw's lomatium ( <i>Lomatium bradshawii</i> )	Size	Population size relative to recovery plan goals for Eugene East recovery zone, maintained over 10 years	Number of plants	10 year average of <5000 plants	10 year average of 5000 to 10,000 plants	10 year average of 10,000 to 20,000 plants	10 year average of > 20,000 plants	Fair - monitoring data 1998-2008 suggests total population is about 7500 plants and increasing.	Fair	Very Good	2008	2033
Bradshaw's lomatium ( <i>Lomatium bradshawii</i> )	Condition	Population growth rate (recruitment)	Number of plants in several age classes	Declining	Stable	Increasing		Appears to be fluctuation around a longer term average.	Fair	Very Good	2008	2022
Buckbrush Chaparral	Size	Acres of habitat	Number of potential male blue gray gnatcatcher territories (4.5 acres)	Insufficient prairie/savanna habitat within or adjacent to chaparral for one male blue gray gnatcatcher i.e. less than 4 acres of chaparral	Enough suitable habitat for 1-2 male blue gray gnatcatcher territories, i.e. at least 5 acres of chaparral with 10+ acres of adjacent grassland	Enough suitable habitat for 3-5 male blue gray gnatcatcher territories, i.e. at least 13.5 acres of suitable contiguous or connected habitat. Alternatively 3 patches of closely associated suitable habitat, each > 4 acres in size	Enough suitable habitat for > 10 male blue gray gnatcatcher territories, i.e. > 40.5 acres of contiguous habitat.	1 successful pair (with chick) observed within 1 of 2 existing patches along Buckbrush Creek	Fair	Very Good	2008	2033
Buckbrush Chaparral	Condition	Native grass and forb abundance	Native species frequency	< 3 native high and moderate fidelity herbaceous prairie species occurring with >50% frequency and < 9 additional species occurring with at least 10% frequency in 1 meter sq. quadrats (i.e. does not meet fair criteria)	At least 3 native high and moderate fidelity herbaceous prairie species occurring with >50% frequency and at least 9 additional species occurring with at least 10% frequency in 1 meter sq. quadrats	At least 3 native high and moderate fidelity herbaceous prairie species occurring with >75% frequency and at least 9 additional species occurring with at least 25% frequency in 1 meter sq. quadrats	At least 7 native high and moderate fidelity herbaceous prairie species occurring with >75% frequency and at least 15 additional species occurring with at least 25% frequency in 1 meter sq. quadrats	Estimate: status uncertain, more data needed	Fair (estimate / need to review data further)	Very Good	2008	2033
Buckbrush Chaparral	Condition	Host plant for uncommon butterfly	Presence of hedgerow hairstreak butterfly population	None present	One small subpopulation present	Two small or one large subpopulation present	One small and one large subpopulation present or at least three subpopulations present	One small subpopulation	Fair	Very Good	2008	2033



**Figure 5-1: Viability of Conservation Targets Table**

Conservation Target	Category	Key Attribute	Indicator	Poor	Fair	Good	Very Good	2008 Indicator Status	Rating	Desired Rating	Date of Current Rating	Date for Desired Rating
Buckbrush Chaparral	Condition (process)	Fire regime	Notes: FEIS 30-100 year fire return interval (attached)	Fire return interval of <10 years	Fire return interval of 10-20 or >150 years	Fire return interval of 20-30 or >100 years	80% of the total population area has experienced one fire event over the last 50 years as a result of up to 3-5 spatially discrete low to moderate severity fires	There is no knowledge of fire having occurred within buckbrush habitats at HBRA	not able to rate at this time	Very Good	2008	2033
Buckbrush Chaparral	Landscape Context	Number and extent of patches	Number of patches at least 4 acres in size	0	1	2	3+	2 patches >4 acres occur along Buckbrush Creek	Good	Very Good	2008	2033
Creeks & Streams	Condition	Native riparian composition of first order creeks	% of riparian corridor with predominantly native shrub/herbaceous vegetation along both banks	<30% of potential vegetation	> 30% of potential vegetation	> 60% of potential vegetation	> 80% of potential vegetation	Estimate: status uncertain, more data needed	Fair	Good	2008	2033
Creeks & Streams	Landscape Context	Connectivity to floodplains in Buckbrush, Canyon, and Pudding Creek	Relative bed stability			Baseline	Above baseline	Baseline is existing condition	Good	Very Good	2008	2033
Creeks & Streams	Landscape Context	Connectivity of stream segments to Willamette River	# of .25-mile stream segments (measured from confluence upstream) that are free from fish passage barriers	<50% of the .25-mile segments are free of barriers	50-75% of 0.25-mile segments are free of barriers	76-90% of 0.25 mile segments are free from barriers	>90% of 0.25 mile segments are free from barriers	Partial barriers exist on lower reaches of Canyon and Buckbrush Creeks	Poor	Very Good	2008	2033
Oak Woodland	Condition	Native grass and forb presence	Native species richness (alpha diversity). # of species/unit - need to identify size of sample area	<20 native species with high and moderate fidelity to oak woodland occur within the patch.	20 -39 native species with high and moderate fidelity to oak woodland occur within the patch.	40 -59 native species with high and moderate fidelity to oak woodland occur within the patch.	>60 native species with high and moderate fidelity to the system types present within the patch.	90 species	Very Good	Very Good	2008	2033
Oak Woodland	Size	Acres of habitat	Number of 20 acre units with mature oaks exhibiting sufficient habitat structure: based on a combination of white-breasted nuthatch, acorn woodpecker and gray squirrel home range size	Insufficient oak woodland/forest for home range of two nuthatch pairs or acorn woodpecker colonies, i.e. less than 40 acres of oak woodland or oak forest in a contiguous patch.	Enough suitable habitat for 2 to 5 nuthatch pairs or acorn woodpecker colonies, i.e. at least 40 acres of oak woodland or oak forest in a contiguous patch.	Enough suitable habitat for 6 to 20 nuthatch pairs or acorn woodpecker colonies, i.e. at least 120 acres of oak woodland or oak forest in a contiguous patch. Alternatively, 3 patches of closely associated suitable habitat, each >40 acres in size.	Enough suitable habitat for >20 nuthatch pairs or acorn woodpecker colonies, i.e. at least 400 acres of oak woodland or oak forest in a contiguous patch. Alternatively, 3 patches of suitable contiguous or connected habitat, each >140 acres in size.	At least 5-20 ac patches of open oak woodland  At least 3-20ac patches of closed oak woodland	Good	Very Good	2008	2028

**Figure 5-1: Viability of Conservation Targets Table**

Conservation Target	Category	Key Attribute	Indicator	Poor	Fair	Good	Very Good	2008 Indicator Status	Rating	Desired Rating	Date of Current Rating	Date for Desired Rating
Oak Woodland	Condition	Native grass and forb abundance	Native species frequency	< 3 native high and moderate fidelity herbaceous prairie species occurring with >50% frequency and < 9 additional species occurring with at least 10% frequency in 1 meter sq. quadrats (i.e. does not meet fair criteria)	At least 3 native high and moderate fidelity herbaceous prairie species occurring with >50% frequency and at least 9 additional species occurring with at least 10% frequency in 1 meter sq. quadrats	At least 3 native high and moderate fidelity herbaceous prairie species occurring with >75% frequency and at least 9 additional species occurring with at least 25% frequency in 1 meter sq. quadrats	At least 7 native high and moderate fidelity herbaceous prairie species occurring with >75% frequency and at least 15 additional species occurring with at least 25% frequency in 1 meter sq. quadrats	California Oatgrass, Oregon Sunshine, and Western Buttercup occur with at least 50% frequency in open oak woodland with at least 9 additional native species meeting frequency standard (10%)	Fair	Very Good	2008	2028
Oak Woodland	Condition	Vegetation Structure	Cover (25-60%) and architecture of woody vegetation (trees)	Woody vegetation is invading woodland and forest and total woody cover is acceptable (25-60%) over less than 50% of the area being managed for oak woodland.	Woody vegetation is invading woodland and forest habitat but total woody cover is acceptable (25%-60%) over at least 50% of the area being managed for oak woodland.	Woody vegetation is invading woodland and forest habitat but total woody cover is acceptable (25%-60%) over at least 90% of the area being managed for oak woodland.	Woody vegetation is invading woodland and forest habitat but total woody cover is acceptable (25%-60%) over at least 90% of the area being managed for oak woodland, and canopy architecture represents an appropriate mix of large open grown trees and younger tree recruitment that will replace older trees when they die.	-43% (230 or 544ac) of existing oak woodland meets desired condition. -57% of existing oak woodland exceeds desired condition. -Douglas fir cover is greater than 50% where Oregon white oak persists in the understory on 385acres. -Visual assessment of recent leaf-off aerials show extensive presence of conifers in oak woodlands.	Poor	Very Good	2008	2028
Oak Woodland	Condition	Vegetation Structure	Relative dominance of oak vs other woody vegetation in the canopy	Relative cover of oak approximates historic condition (i.e. is within 10% of the condition that existed ca. 1950) over < 50% of the site occupied by oak woodland and forest	Relative cover of oak approximates historic condition (i.e. is within 10% of the condition that existed ca. 1950) over >50% but < 90% of the site occupied by oak woodland and forest	Relative cover of oak approximates historic condition (i.e. is within 10% of the condition that existed ca. 1950) over >90% of the site occupied by oak woodland and forest	Relative cover of oak approximates historic condition (i.e. is within 10% of the condition that existed ca. 1950) over >90% of the site occupied by oak woodland and forest, and non-oak individuals in the subcanopy do not represent a substantial risk to appropriate oak canopy cover.	Approximately 300 of 550 acres of areas mapped as oak woodland in 1950 remain oak woodland in 2008.	Fair	Good	2008	2028

**Figure 5-1: Viability of Conservation Targets Table**

Conservation Target	Category	Key Attribute	Indicator	Poor	Fair	Good	Very Good	2008 Indicator Status	Rating	Desired Rating	Date of Current Rating	Date for Desired Rating
Oregon Vesper Sparrow	Size	Acres of habitat away from forest edge	Acres of prairie and savanna in patches of 20 acres or more that are >75 m from forest edge	<40 acres (insufficient habitat for 2 Oregon Vesper Sparrow territories)	40-100 acres (sufficient habitat for 2 - 5 Oregon Vesper Sparrow territories)	100 - 400 acres (sufficient habitat for 6 - 20 Oregon Vesper Sparrow territories)	>400 acres (sufficient habitat for >20 Oregon Vesper Sparrow territories)	-60ac total comprised of 3 patches of pasture, prairie, & savanna (grade b) -1-20 acre patches of grade b savanna, -1-20 ac patch of grade b savanna & prairie, -1-20ac patch of pasture. -100ac total comprised of 5 patches of prairie, savanna (grade c) & wet prairie in varying condition -1-20 ac patches of grade c savanna, -1-20ac patch of mixed prairie & grade c savanna, -1-20ac patch of mixed wet prairie & grade c savanna, -2-20ac patch of mixed wet prairie, prairie, & grade c savanna	Fair although there is sufficient acreage for a good rating, the number of acres of grade c savanna warrants a lower rating.	Very Good	Jul 2008	Dec 2027
Oregon Vesper Sparrow	Condition	Acres of habitat with suitable vegetative structure	Acres of prairie and savanna in patches of 20 acres or more that are >75 m from forest edge, with short grass (mostly < 2 ft. tall), and <15% shrub cover	<40 acres (insufficient suitable habitat for 2 Oregon Vesper Sparrow territories)	40-100 acres (sufficient suitable habitat for 2 - 5 Oregon Vesper Sparrow territories)	100 - 400 acres (sufficient suitable habitat for 6 - 20 Oregon Vesper Sparrow territories)	>400 acres (sufficient suitable habitat for >20 Oregon Vesper Sparrow territories)	1-20 ac patch of pasture	Poor	Very Good	Jul 2008	Dec 2027
Savanna Portion of Upland Prairie and Savanna Target	Condition	Vegetation structure	Cover (5-25%) and architecture of woody vegetation	Woody vegetation is invading savanna habitat and total woody cover is acceptable ( 5-25%) over less than 50% of the area being managed for savanna.	Woody vegetation is invading savanna habitat but total woody cover is acceptable (5%-25%) over 50% to 90% of the area being managed for savanna.	Woody vegetation is invading savanna habitat but total woody cover is acceptable (5%-25%) over at least 90% of the area being managed for savanna.	Woody vegetation is invading savanna habitat, but total woody cover is acceptable (5%-25%) over at least 90% of the area being managed for savanna, and canopy architecture represents an appropriate mix of large open grown trees and younger tree recruitment that will replace older trees when they die.	47ac - very good 208ac - fair-good (grade B) 109ac - poor (grade C)	Fair	Very Good	2008	2028

**Figure 5-1: Viability of Conservation Targets Table**

Conservation Target	Category	Key Attribute	Indicator	Poor	Fair	Good	Very Good	2008 Indicator Status	Rating	Desired Rating	Date of Current Rating	Date for Desired Rating
Upland Prairie and Savanna	Condition	Native grass and forb presence/absence	Native species richness (alpha diversity)	<20 native species with high fidelity to the system types present within the patch.	20-39 native species with high fidelity to the system types present at the patch.	40-59 native species with high fidelity to the system types present at the patch.	> 60 native species with high fidelity to the system types present at the patch.	Approximately 80 of 143ac of prairie is dominated by either tall oatgrass or tall fescue and has fewer than 20 native species present within effected areas. There are small patches (less than .25ac inclusion) where native species diversity meets the good condition.	Fair	Very Good	2008	2023
Upland Prairie Portion of Prairie and Savanna Target; Wetland Prairie	Condition	Vegetation structure	Woody vegetation cover less than 5%	Total woody cover is acceptable (i.e. <5%) over less than 50% of the area being managed for prairie.	Total woody cover is acceptable (i.e. <5%) over 50% to 90% of the area being managed for prairie.	Total woody cover is acceptable (i.e. <5%) over at least 90% of the area being managed for prairie, though trees saplings and/or shrub sprouts may be present within these areas.	Total woody cover is acceptable (i.e. <5%) over at least 90% of the area being managed for prairie, and trees saplings and/or shrub sprouts are absent.	Woody cover occupies 25-50% of the 143 ac of upland prairie	Fair	Very Good	2008	2023
Visitor Experience	Size	Scope of interpretive opportunities	Acres of high quality habitat types available for education and interpretive use	<50% of HBRA acres support high quality habitats for educational and interpretive use	Between 50% and 80% of HBRA acres support high quality habitats for educational and interpretive use	Between 80% and 95% of HBRA acres support high quality habitats for educational and interpretive use	>95% of HBRA acres support high quality habitats for educational and interpretive use	Percentage of high quality habitat differs from different habitat types; generally high quality wetlands and forest habitats are better represented than prairie, savanna, and oak woodland. Given that 190 acres or 28 percent of prairie and savanna is currently mapped as grade A, it is plausible to estimate that the current condition is less than 80%, and thus is either Poor or Fair.	Poor or Fair (estimate)	Good	April 2016	2033
Visitor Experience	Condition	Dispersal of park users	Likelihood of users of trails other than 1, 2, and arboretum trails to encounter hikers moving in opposite direction	High likelihood (>90% of time) of encountering >2 hikers moving in opposite direction	Moderate likelihood (50 to 90% of time) of encountering >2 hikers moving in opposite direction	Occasional likelihood (10 to 50% of time) of encountering >2 hikers moving in opposite direction	Low likelihood (<10% of time) of encountering >2 hikers moving in opposite direction	While we lack data on numbers and dispersal of trail users, it appears that the majority of hikers use the Arboretum or Trail 1 or 2 to hike to the summit. The trail system is sufficiently extensive that hikers can usually find solitude on weekdays, when weather is not ideal, or at certain times of the day.	Fair (estimate)	Good	Apr 2016	2033
Visitor Experience	Size	Number of interpretive opportunities	# of participants in guided tours and other educational events and activities lead by Arboretum, Friends, or other groups	< 10K participants in educational events and activities per year	10K to 15K participants in educational events and activities per year	15K to 20K participants in educational events and activities per year	> 20K participants in educational events and activities per year	12K participants in educational events and activities per year	Fair	Very Good	Jul 2008	2033

**Figure 5-1: Viability of Conservation Targets Table**

Conservation Target	Category	Key Attribute	Indicator	Poor	Fair	Good	Very Good	2008 Indicator Status	Rating	Desired Rating	Date of Current Rating	Date for Desired Rating
Visitor Experience	Size	Number of park visits	Vehicle Count	< 100K, or > 400K vehicle entries per year	100K to 200K vehicle entries per year	200K to 300K vehicle entries per year	300K to 400K vehicle entries per year	250K vehicle entries per year	Good	Very Good	2008	2022
Visitor Experience	Size	Number of interpretive opportunities	# of visits to educational webpages per year, including visits via links at interpretive exhibits	< 5K visits to educational webpages per year	5K to 10K visits to educational webpages per year	10K to 15K visits to educational webpages per year	> 15K visits to educational webpages per year	6K visits to educational webpages per year	Fair	Very Good	2008	2033
Visitor Experience	Size	Amenities	Number of toilets and drinking water sources relative to total visitors	<1 toilet and 1 drinking water source for each 100K annual vehicle entries at each trailhead	1 toilet and at least 1 drinking water source for each 100K annual vehicle entries at each trailhead	2 toilets and at least 1 drinking water source for each 100K annual vehicle entries at each trailhead	At least 3 toilets and 1 drinking water sources for each 100K annual vehicle entries at each trailhead	At least 1 restroom (including porta potties) per 100K vehicle entries, but drinking water only available at 1 of 3 trailheads	Poor	Good	2008	2023
Visitor Experience	Size	Public safety	Number of reported crimes and vandalism incidents in the park each year	> 50 crimes reported in the Park annually	Between 30 and 50 crimes reported in the Park annually	Between 10 and 30 crimes reported in the Park annually	< 10 crimes reported in the Park annually	Status unknown	Poor	Very Good	2008	2023
Visitor Experience	Condition	Trail condition	Percentage of trail segments meeting standards for width, grade, poison oak control, hazard removal, and surface condition	< 50% of trail segments meet standards for width, grade, poison oak control, hazard removal, and surface condition	Between 50% and 80% of trail segments meet standards for width, grade, poison oak control, hazard removal, and surface condition	Between 80% and 95% of trail segments meet standards for width, grade, poison oak control, hazard removal, and surface condition	> 95% of trail segments meet standards for width, grade, poison oak control, hazard removal, and surface condition	Approximately 12 of 25miles of trail meet the standard	Poor	Very Good	2008	Dec 2022
Wet Prairie	Condition	Native grass and forb presence/ absence	Native species richness (alpha diversity)	<20 native species with high fidelity to the system types present within the patch.	20-39 native species with high fidelity to the system types present at the patch.	40-59 native species with high fidelity to the system types present at the patch.	> 60 native species with high fidelity to the system types present at the patch.	At least 50 native species with high fidelity are found on approximately 30 or 35 acres of wet prairie	Good	Very Good	2008	2023
Wet Prairie	Condition	Native grass and forb abundance	Native species frequency	< 2 native high fidelity herbaceous prairie species occurring with >50% frequency and < 9 additional species occurring with at least 10% frequency in 1 meter sq. quadrats (i.e. does not meet fair criteria)	At least 2 native high fidelity herbaceous prairie species occurring with >50% frequency and at least 9 additional species occurring with at least 10% frequency in 1 meter sq. quadrats	At least 3 native high fidelity herbaceous prairie species occurring with >75% frequency and at least 9 additional species occurring with at least 25% frequency in 1 meter sq. quadrats	At least 7 native high fidelity herbaceous prairie species occurring with >75% frequency and at least 15 additional species occurring with at least 25% frequency in 1 meter sq. quadrats	Straight beaked buttercup and Western rush occur with at least 50% frequency with at least 9 additional native species meeting frequency standard (10%)	Fair	Very Good	2008	2023

**Figure 5-1: Viability of Conservation Targets Table**

Conservation Target	Category	Key Attribute	Indicator	Poor	Fair	Good	Very Good	2008 Indicator Status	Rating	Desired Rating	Date of Current Rating	Date for Desired Rating	
Wet Prairie	Condition	Surface hydrology	Seasonal high water table	Wet prairie soils are either never saturated to the surface during the rainy season, or are completely inundated for more than 120 continuous hours (5 days) at least once in a five year period.				Wet prairie soils are generally saturated to the surface during the rainy season, with pedestals/hummocks emerging above water level except for short duration flood events, and low spots between pedestals generally covered with shallow water < 2" deep.	Much of wet prairie has altered hydrology resulting from trailside ditching or historic attempts to drain the area by ditching however soils remain super saturated or flooded during the rainy season.	Fair - Good	Very Good	2008	2023
Willamette Riparian System & Floodplain	Size	Size/extent of characteristic communities/ ecosystems	% of floodplain gallery forest potential unconverted, by branch	<30% of potential vegetation	> 30% of potential vegetation	> 60% of potential vegetation	> 80% of potential vegetation	Mapped bottomland forest is 66% of historic acreage	Good	Good (DFC is 73% of historic acreage)	2008	2023	
Willamette Riparian System & Floodplain	Condition	Presence/ abundance of keystone species	Beaver abundance	Beaver absent as permanent residents	Less than acceptable range of variation (ARV)	acceptable ARV	NRV of beaver numbers	1-2 beavers occur per linear mile of river frontage	Fair	Good	2008	2023	
Willamette Riparian System & Floodplain	Condition	Understory native vascular plant composition and cover	Presence/ absence of mono-culture non-natives	>10% of 10 ha grids in bottomland habitats occupied by non-native plant monocultures	<10%-5% of 10 ha grids in bottomland habitats occupied by non-native plant monocultures	<5% of 10 ha grids in bottomland habitats occupied by non-native plant monocultures	<1% of 10 ha grids in bottomland habitats occupied by non-native plant monocultures	Need more data but non-native monocultures are currently fairly limited	Fair	Good	2008	2023	
Willamette Riparian System & Floodplain	Landscape Context	Dynamic fluvial system	Percent of channel with artificial impediments to in-channel and overbank flow.	>35 percent and few or more instream structures that have severe impact	21-35 percent and few instream structures that have moderate impact	10-20 percent and few instream structures that have minimal impact	<10 percent of total stream length accounting for both sides of stream and no instream structures	Extensive reaches of the bank of the Coast Fork are armored with rip-rap	Poor	Good	2008	2023	
Willamette Riparian System & Floodplain	Landscape Context	Dynamic fluvial system	Percentage of historic floodplain that is part of current floodplain	<10% of the bottomland portions of HBRA are within the 20 year floodplain	>10% and <50% of the bottomland portions of HBRA are within the 20 year floodplain	>50% and <90% of the bottomland portions of HBRA are within the 20 year floodplain	<90% of the bottomland portions of HBRA are within the 20 year floodplain	Some but not all of the South Bottomlands floodplain has been reconnected	Fair	Good	2008	2023	

Figure 5-2: Summary of Threats Table

Summary of Threats, HRBA - Mt. Pisgah												
Threats Across Systems		Wet Prairie	Upland prairie	Savanna	Oak Woodland	Creeks and Streams	Willamette Riparian System and Floodplain	Buckbrush Chaparral	Bradshaw's lomatium ( <i>Lomatium bradshawii</i> )	Oregon Vesper Sparrow	Visitor Experience	Overall Threat Rank
		1	2	3	4	5	6	7	8	9	10	
1	Loss of ability to interact with floodplain - channelization	low	NA	NA	NA	high	high	low	low	NA	low	medium
2	Loss of ability to interact with floodplain - altered flow regime	low	NA	NA	NA	high	high	low	low	NA	low	medium
3	Lack of riparian vegetation for shade, wood recruitment, bank stabilization, habitat for insects (fish food supply)	low	NA	NA	NA	low	medium	low	NA	NA	medium	medium
4	Artificial blockages to fish passage (culverts)	medium	NA	NA	NA	high	high	NA	NA	NA	low	high
5	Upstream nonpoint source - chemical pollution	low	NA	NA	NA	low	high	low	low	NA	NA	high
6	Upstream nonpoint source - temperature pollution	low	NA	NA	NA	low	high	low	low	NA	NA	high
7	Changing water flow patterns from natural range of variation - upstream	low	NA	NA	NA	low	very high	NA	low	NA	NA	very high
8	Changing water flow patterns from natural range of variation - within the HBRA	very high	medium	low	low	very high	high	low	very high	NA	NA	very high
9	Encroachment of native trees	high-very high	high-very high	high-very high	high	low	low	high	high-very high	very high	high	high-very high
10	Expansion of native shrubs	high	high	medium	medium	low	low	low	very high	high	high	high
11	Expansion of non-native shrubs and small trees	high-very high	high-very high	high-very high	high-very high	high-very high	high-very high	high-very high	very high	very high	high	high-very high
12	Livestock farming and ranching	very high	very high	very high	very high	very high	very high	very high	very high	medium	High	very high
13	Altered ecological fire regime	very high	very high	very high	very high	high	low	high	very high	very high	low	very high



Figure 5-2: Summary of Threats Table

Summary of Threats, HRBA - Mt. Pisgah												
Threats Across Systems		Wet Prairie	Upland prairie	Savanna	Oak Woodland	Creeks and Streams	Willamette Riparian System and Floodplain	Buckbrush Chaparral	Bradshaw's lomatium ( <i>Lomatium bradshawii</i> )	Oregon Vesper Sparrow	Visitor Experience	Overall Threat Rank
		1	2	3	4	5	6	7	8	9	10	
14	Invasive non-native terrestrial animals (feral pigs, turkeys, E fox squirrel, opossum)	high	high	high	high	high	high	high	high	high	low	high
15	Invasive non-native aquatic animals	medium	low	low	low	high	very high	low	high	NA	low	medium-high
16	Invasive non-native herbaceous plants	very high	very high	very high	very high	very high	very high	very high	very high	very high	medium	very high
17	Invasive fungal or microbial species	low	low	high	high	medium	medium	high	high	low	NA	medium-high
18	Problematic native animal species (elk)	medium	medium	medium	medium	medium	medium	medium	very high	medium	low	medium
19	Trampling from recreation	high	high	high	high	high	high	high	high	high	high	high
20	Trampling from management	high	high	high	high	high	high	high	high	medium	high	high
21	Roads and trails	medium	low	low	low	medium	high	low	high	medium	low	medium
22	Utility and service lines	medium	medium	medium	medium	low	medium	low	medium	medium	high	medium
23	Trail closures to conduct habitat and facility improvements	NA	NA	NA	NA	NA	NA	NA	NA	NA	low	low
24	Park closure due to high fire danger	NA	NA	NA	NA	NA	NA	NA	NA	NA	high	high
25	Poison oak height and density along designated trails	NA	NA	NA	NA	NA	NA	NA	NA	NA	medium	medium
26	Rogue trails	medium	medium	medium	medium	NA	NA	medium	medium	medium	high	medium-high
27	Unauthorized park use	medium	medium	medium	medium	medium	medium	medium	medium	medium	medium	medium
<b>Threat Status for Targets and Site</b>		very high	very high	very high	high	high	high	high	very high	very high	high	high

## Chapter 6: Goals and Strategies

The goals and strategies listed below were carefully developed to address park management issues in a way that maintains or improves the condition of (Figure 5-1) and/or addresses the most significant threats (Figure 5-2) to the nine focal conservation targets and their associated nested targets. However, despite the importance of these activities, funding and other resources available for implementation are currently limited.

Fortunately, wide recognition of the conservation value of Howard Buford Recreation Area has generated significant support for habitat improvement in the park in the past. This support has come from a variety of sources, including private donors and grants secured by Friends of Buford Park & Mt. Pisgah and, separately, by the Mount Pisgah Arboretum; participation in projects by Lane County's operations team; in-kind contributions of technical expertise and services from partner agencies; scientific research by University professors and their graduate students; and tens of thousands of hours of labor contributed by volunteers to care for the park.

This visionary plan identifies the highest priorities for available resources, and a focus for collaborative partnerships and future grant writing efforts. With this management plan in hand, park managers, partner agencies and volunteer groups can collaborate more effectively to conserve the park's diverse habitats for the public to enjoy for many years to come. Note that there is no priority implied by the order in which the goals and strategies are listed.

Projects that are consistent with these goals and strategies are described in Chapter 10, both by conservation target and geographically by stewardship zone.

### 6.1 Overview of Goals and Strategies

#### GOAL 1: Provide a safe and positive visitor experience in Howard Buford Recreation Area (HBRA)

**Conservation Target:** Visitor Experience

**Issues Addressed:** Goal 1 seeks to enhance the visitor experience and alleviate impediments to a quality experience.

- Strategy 1.1: Minimize adverse impacts of management activities upon visitor experience.
- Strategy 1.2: Manage vegetation within designated parking areas to enhance visibility and deter crime.
- Strategy 1.3: Collaborate with Oregon Department of Forestry to incorporate fire evacuation information (in case of wildfire) within signage posted at the trailhead.
- Strategy 1.4: Monitor trail usage and collect census information to quantify park usage, inform seasonal management decisions, and guide long term planning considerations.
- Strategy 1.5: Identify and address hazard trees within 30' of the edge of designated trail corridors.
- Strategy 1.6: Manage populations of poison oak and non-native blackberry to prevent encroachment along all designated recreational trail corridors.
- Strategy 1.7: Locate viewpoints and benches in a manner that nurtures a sense of place while minimizing impacts to other users and habitat.

- Strategy 1.8: Manage dog use in HBRA to reduce impacts to other visitors by requiring that dogs be on leash throughout the park except in specific designated off-leash areas or trails.

**GOAL 2: Educate park users about the unique natural values that make the HBRA and the broader Mount Pisgah area a priority for conservation.**

**Conservation Target:** All conservation targets.

**Issues Addressed:** Goal 2 seeks to foster visitors' appreciation of Mount Pisgah's importance and uniqueness as a regionally significant habitat area, to encourage visitors to enjoy the park with care, minimize their impacts to other conservation targets, and become engaged in and supportive of habitat management and conservation activities.

- Strategy 2.1: Collaborate with Friends of Buford Park & Mt. Pisgah, Mount Pisgah Arboretum, the Sheriff's Mounted Posse, and other stakeholders to survey and educate park patrons about impacts of off-trail activity and cultivate a "stay-on-the-trail" ethic.
- Strategy 2.2: Partner with organizations such as Friends of Buford Park & Mount Pisgah, Travel Lane County, Mount Pisgah Arboretum, equestrian groups, the University of Oregon, and watershed councils, to develop an interpretation program including media outreach, guided tours, self-guided tours (possibly using digital media), and informational displays. The program should enhance appreciation for Mount Pisgah's natural capital, elevate understanding of and support for native habitat management and conservation on local and ecoregional scales, and cultivate a "leave no trace" ethic.
- Strategy 2.3: Educate visitors to help them understand the seasonal sensitivities of wildlife to visitor activities.

**GOAL 3: Maintain and improve the park's trail system to minimize ecological impacts while providing views of and access to HBRA's diverse habitats.**

**Conservation Target:** All conservation targets.

**Issues Addressed:** Goal 3 seeks to enhance visitor experience by improving trail conditions and reducing impacts of recreation upon other conservation targets.

- Strategy 3.1: Encourage park visitors to remain on designated trails.
- Strategy 3.2: Manage dog use in HBRA to reduce impacts to wildlife by requiring that dogs be on leash throughout the park except in specific designated off-leash areas or during specified seasons.
- Strategy 3.3: Manage vegetation to preserve and enhance trailside viewpoints, as well as provide shade in appropriate locations.
- Strategy 3.4: Update 1995 HBRA Trail Management Plan to ensure that the trail system addresses the visitor experience and habitat needs/goals of the Habitat Management Plan.
- Strategy 3.5: Apply best management practices and trail standards (see Chapter 11) when implementing trail construction and maintenance projects.
- Strategy 3.6: Research feasibility of a forage production program to produce "Pisgah" native hay (consisting of native grasses and forbs harvested from designated areas in bottomland portions of HBRA) with consultation from area ranchers and equestrian groups.
- Strategy 3.7: Use best available science about wildlife and habitat impacts of different visitor uses and facilities to guide decisions about improving or constructing trails and facilities for park visitors.

**GOAL 4: Minimize impacts of park management on conservation targets.**

**Conservation Target:** All conservation targets.

**Issues Addressed:** Goal 4 seeks to reduce impacts from park management upon conservation targets.

- Strategy 4.1: Manage natural areas, recreational facilities (including but not limited to trails and parking areas), and utility corridors consistent with best management practices in the Oregon Department of Transportation BMPs (adopted by Lane County) and the “Stewardship Tool Box” in Chapter XI of this *Habitat Management Plan*.
- Strategy 4.2: Managers will reference the *Habitat Management Plan* to guide habitat management practices.
- Strategy 4.3: Partner with confluence area land management agencies to design and develop an equipment cleaning facility.
- Strategy 4.4: Collaborate with agency partners to secure designated equipment for use specifically within natural areas in the Mount Pisgah area.

**GOAL 5: Restore and enhance prairie, savanna and oak woodland habitats by reducing encroaching woody vegetation.**

**Conservation Targets:** Prairie and savanna, oak woodland, wet prairie, Oregon Vesper Sparrow.

**Issues Addressed:** Goal 5 seeks to enhance viability of wet prairie, upland prairie, savanna and oak woodland habitats by reducing the threat of encroachment from woody vegetation.

- Strategy 5.1: Treat 1,000+ acres to reduce woody cover in oak woodland, savanna and prairie and wet prairie habitats so these habitats are under the appropriate thresholds for woody cover, using methods that minimize soil disturbance and impacts to remnant native herbaceous vegetation.
- Strategy 5.2: Collaborate with Bonneville Power Administration, Friends of Buford Park & Mt Pisgah, Oregon Department of Forestry, U.S. Fish & Wildlife Service and other partners to reduce density of woody vegetation within prairie, savanna, and oak woodland habitats.
- Strategy 5.3: Retain appropriate amounts of large down wood and dead trees, or create snags, for habitat value when reducing tree density as part of savanna and oak woodland restoration.

**GOAL 6: Achieve significant restoration of prairie and savanna, oak woodland, and wet prairie habitats in HBRA.**

**Conservation Targets:** Upland prairie and savanna, oak woodland, wet prairie, Oregon Vesper Sparrow

**Issues Addressed:** Goal 6 seeks to enhance viability of upland and wet prairie, savanna and oak woodlands by introducing periodic ecological burns.

- Strategy 6.1: Continue ongoing collaboration with Oregon Department of Forestry East Lane District, Rivers to Ridges Partnership, and other qualified fire management entities to design and implement ecological burns on an average of 50-250 acres annually.
- Strategy 6.2: By 2020 collaborate with Oregon Department of Forestry East Lane District to revise fire management plan to update suppression objectives within HBRA to minimize negative habitat impacts from wildfire suppression efforts.
- Strategy 6.3: By 2022, use an integrated pest management strategy to manage fuels along the edge of forests, prairies and savannas to reduce potential for fire escape and catastrophic fire behavior.

- Strategy 6.4: By 2032, achieve a fire-return interval of three to 13 years on at least 1,500 acres spanning prairie and savanna, oak woodland, and wet prairie.

#### **GOAL 7: Achieve significant restoration of chaparral habitat in HBRA.**

**Conservation Targets:** Buckbrush chaparral.

**Issues Addressed:** Goal 7 seeks to enhance viability of this habitat by using ecological burns.

- Strategy 7.1: Burn 25 percent of the buckbrush chaparral habitat periodically to achieve a fire return interval of 50 years.
- Strategy 7.2: By 2032, triple the acreage where buckbrush (*Ceanothus cuneatus*) affords at least 25 percent cover in habitat blocks of at least five acres.

#### **GOAL 8: Manage for diverse native plant communities within each conservation target habitat.**

**Conservation Targets:** Prairie and savanna, oak woodland, wet prairie, Oregon Vesper Sparrow.

**Issues Addressed:** Goal 8 seeks to enhance viability of prairie and savanna, oak woodland, and wet prairie by reducing the threat of invasive, non-native vegetation.

- Strategy 8.1: By 2020, 10 or more patches greater than 10 acres of prairie, savanna, oak woodland, and wet prairie have five or more “high-fidelity” (defined in Appendix A: Glossary) native herbaceous species with 75 percent frequency in one meter square plots, and 10 or more additional native herbaceous species occurring with at least 25 percent frequency in one meter square plots.
- Strategy 8.2: Maintain existing high quality habitat patches using ecological burning, mowing, and other treatments to control species of invasive plants.
- Strategy 8.3: Enhance low quality patches of existing habitat.

#### **GOAL 9: Increase the extent of wet prairie habitat.**

**Conservation Targets:** Wet prairie, Bradshaw’s lomatium.

**Issues Addressed:** Goal 9 seeks to enhance viability of federally endangered Bradshaw’s lomatium and its wet prairie habitat by increasing the extent of wet prairie habitat on HBRA. Threats include impacts from management of roads and trails, encroachments of native woody vegetation, invasion of non-native vegetation, and altered ecological fire regime.

- Strategy 9.1: Where feasible, restore areas of wet prairie on HBRA that have been filled, drained, modified or adversely affected by adjacent land management (such as modification of upslope/upstream hydrology in conjunction with trail infrastructure).
- Strategy 9.2: Identify intact wet prairie on adjacent properties and explore potential to cooperate on habitat enhancements, restoration funding, or conservation easements.
- Strategy 9.3: Establish new and expand existing populations of Bradshaw’s lomatium within wet prairies.

**GOAL 10: Locate and, to the extent feasible, reduce populations of feral or harmful non-native animal species impacting each conservation target.**

**Conservation Targets:** All conservation targets.

**Issues Addressed:** Goal 10 seeks to reduce the threat of impacts by non-native animals.

- Strategy 10.1: Document observations of non-native animal species present or potentially present within HBRA and evaluate to identify species that represent threats or potential threats to conservation targets ("problem species").
- Strategy 10.2: Initiate an Early Detection Rapid Response program in partnership with Lane County Animal Services (for feral domestic animals), Oregon Dept. of Agriculture (ODA), and Oregon Dept. of Fish and Wildlife (ODFW) to report observations of problem species within the greater Mount Pisgah area.
- Strategy 10.3: Collaborate with Lane County Animal Services, Feral Cat Coalition, Oregon Humane Society, and related groups to initiate an educational campaign to discourage people from releasing domestic animals into natural areas.
- Strategy 10.4: Working under the direction of ODFW and other partners, monitor abundance (particularly for game species) and reduce or eliminate threats to conservation targets from non-native animal species that are creating significant impacts to conservation targets. Implement strategies to the extent practicable.
- Strategy 10.5: Collaborate with neighboring landowners (public and private), stakeholders, and watershed councils to control problem species on adjoining lands and in the greater Mount Pisgah area.

**GOAL 11: Locate and reduce the presence of habitat-modifying, non-native plant species within each conservation target habitat.**

**Conservation Targets:** All conservation targets.

**Issues Addressed:** Goal 11 seeks to address the threat from invasion of non-native plant species (herbaceous and woody plants). A preliminary list and profile of "habitat modifying" non-native plant species is located in Chapter 9 (developed by the Friends of Buford Park Stewardship Technical Advisory Committee).

- Strategy 11.1: Screen and prioritize for management all non-native species known to occur within the HBRA using the standardized assessment tool, "Handbook for Ranking Exotic Plants for Management and Control", created by U.S. National Park Service (Hiebert and Stubbendieck, 1993).
- Strategy 11.2: Operate an "Early Detection - Rapid Response" program. Train volunteers to identify and report invasive plant populations.
- Strategy 11.3: Effectively manage all target "invasive" plants along their vectors of distribution; treat all "outlier" populations and effectively contain the "main" populations.
- Strategy 11.4: Manage "secondary invaders" (e.g. nipplewort (*Lapsana communis*) along edges of roads, recreational trails, and wildlife trails.
- Strategy 11.5: Reduce populations of false brome (*Brachypodium sylvaticum*), Maltese star thistle (*Centaurea melitensis*), spotted knapweed (*Centaurea stoebe*), meadow knapweed (*Centaurea x moncktonii*), cotoneaster (*Cotoneaster sp.*), English ivy (*Hedera hibernica*), and giant knotweeds (*Polygonum cuspidatum*, *P. x bohemicum*), to less than five percent of the 2008 area of occupation.

- Strategy 11.6: Effectively treat populations of shining geranium (*Geranium lucidum*), reed canary grass (*Phalaris arundinacea*), and tansy ragwort (*Senecio jacobaea*) among other species growing within vicinity of rare, sensitive, and listed plants and animals.
- Strategy 11.7: Remove individual trees and patches of non-native fruit and nut trees, including English hawthorn (*Crataegus monogyna*), apple (*Malus domestica*), common pear (*Pyrus communis*), Myrobalan plum (*Prunus cerasifera*), sweet cherry (*Prunus avium*), hazelnut (*Corylus avellana*), and walnuts (*Juglans nigra* and *J. regia*) impacting conservation target species and habitats.
- Strategy 11.8: Remove patches of non-native blackberry species (*Rubus armeniacus*, *R. anglocandicans*, *R. laciniatus*, *R. vestitus*) and Scotch broom (*Cytisus scoparius*) impacting conservation target species and habitats.
- Strategy 11.9: Collaborate with neighboring landowners (public and private), stakeholders, and watershed councils to proactively reduce the threat of invasive non-native species on adjoining lands and in the broader confluence/Mount Pisgah area, with a particular focus on early invaders.
- Strategy 11.10: Partner with Friends of Buford Park, Mount Pisgah Arboretum and other partners to fund a stewardship endowment to support ongoing management of invasive species.
- Strategy 11.11: Partner with Friends of Buford Park & Mt. Pisgah, Mount Pisgah Arboretum and Bonneville Power Administration to remove priority invasive non-native plant species from power line rights-of-way, and prevent the establishment of new invaders.

**GOAL 12: Remove fish passage barriers from the lower mile of creeks and streams on HBRA that flow into the Coast Fork and Middle Fork of the Willamette River.**

**Conservation Targets:** Creeks and streams

**Issues Addressed:** Goal 12 seeks to enhance viability of creeks and streams by improving fish passage, a key ecological attribute. Threats to this conservation target include obstructions to fish passage, such as poorly designed culverts.

- Strategy 12.1: Inventory each creek or stream in HBRA to identify barriers obstructing aquatic connectivity/passage (and their impacts).
- Strategy 12.2: Where appropriate, remove human-created barriers to aquatic passage identified in the inventory.

**GOAL 13: Improve ecological health of creeks and streams.**

**Conservation Target:** Creeks and streams

**Issues Addressed:** Loss of creek or stream's ability to interact with its floodplain due to channelization, lack of riparian vegetation, and impacts from management. Goal 13 considers the form and function of streams in HBRA and seeks to enhance viability for creeks and streams for this "key ecological attribute."

- Strategy 13.1: Improve 50 percent of stream miles rated "poor" to "good" condition for macro-invertebrates.
- Strategy 13.2: Research, prioritize and begin restoration of stream reaches that have been straightened, channelized, or dewatered. Start implementation on downstream ends where feasible, aiming to restore functionality of entire high priority stream basins before moving to lower priority basins.
- Strategy 13.3: Manage grazing practices near streams and wetlands to limit damage.



**GOAL 14: Improve ecological health of riparian floodplain habitats.**

**Conservation Target:** Willamette River riparian system and associated floodplains

**Issues Addressed:** Goal 14 seeks to enhance the viability of Willamette River riparian and floodplain habitat by addressing the threat of loss of the river's ability to interact with its floodplain due to channelization. Goal 14 will also benefit nested targets and other native plants and animals that rely on floodplains for some or all of their habitat and life history requirements.

- Strategy 14.1: Reconnect and improve function of the sloughs, oxbows and historic channels within the contemporary floodplain.
- Strategy 14.2: Remove plugs and constructed barriers that obstruct connectivity with the river for flows equal to or greater than bank full events.
- Strategy 14.3: Restore and connect historic alcoves, side channels, and back water sloughs to the river.
- Strategy 14.4: Explore opportunities to collaborate with neighboring landowners (public and private), stakeholders, and watershed councils to restore historic alcoves, side channels, and back water sloughs that connect to the river on adjoining lands and in the greater Mount Pisgah area.

**Goal 15: Manage habitats in the North Bottomlands Stewardship Zone to be mutually compatible with recreational activities identified in the 1994 HBRA Master Plan and the recommendations of the Large Events Task Force.**

**Conservation Targets:** Goal 15 seeks to enhance visitor experience (specific to the North Bottomlands) while also enhancing oak woodland, Willamette River riparian systems and associated floodplains, upland and wet prairie.

**Issues Addressed:** Impacts to visitor experience, impacts from management (such as infrastructure improvements); invasion of non-native vegetation. Goal 15 seeks to enhance visitor experience in the North Bottomlands by enhancing habitats in a manner that accommodates more active recreational uses (such as small events and use of the outdoor equestrian arena) through compatible conservation actions for oak woodland, upland and wet prairie, and for Willamette River riparian systems and associated floodplains.

- Strategy 15.1: When issuing special use permits for events, consider protocols and conditions that minimize potential impacts to conservation targets to the maximum extent practicable.
- Strategy 15.2: Reduce the potential for the colonization of invasive plant species within the North Bottomlands and their spread to other areas of the park.
- Strategy 15.3: Develop and appropriately site infrastructure improvements to minimize impacts to adjacent habitats.
- Strategy 15.4: Develop projects within the North Bottomlands Stewardship Zone to highlight HBRA conservation vision and education opportunities in a manner that is accessible to all park visitors.
- Strategy 15.5: Sustain and, if warranted, expand operation of the native plant nursery managed by Friends of Buford Park & Mt. Pisgah to provide native plant materials (seeds and plants) for restoration projects in HBRA.
- Strategy 15.6: Manage agricultural activities so they are compatible with recreation and conservation goals.

- Strategy 15.7: Restore a configuration of habitats in the North Bottomlands that is compatible with and complementary to the planned Desired Future Conditions for habitat restoration in adjacent portions of The Nature Conservancy's Willamette Confluence Preserve.
- Strategy 15.8: Work with partners to identify ecologically appropriate corridors to extend the trail system to afford access along the northwest boundaries of the park and to the Willamette Confluence Preserve if (and when) it becomes open to the public.

## 6.2 Chapter 6 References

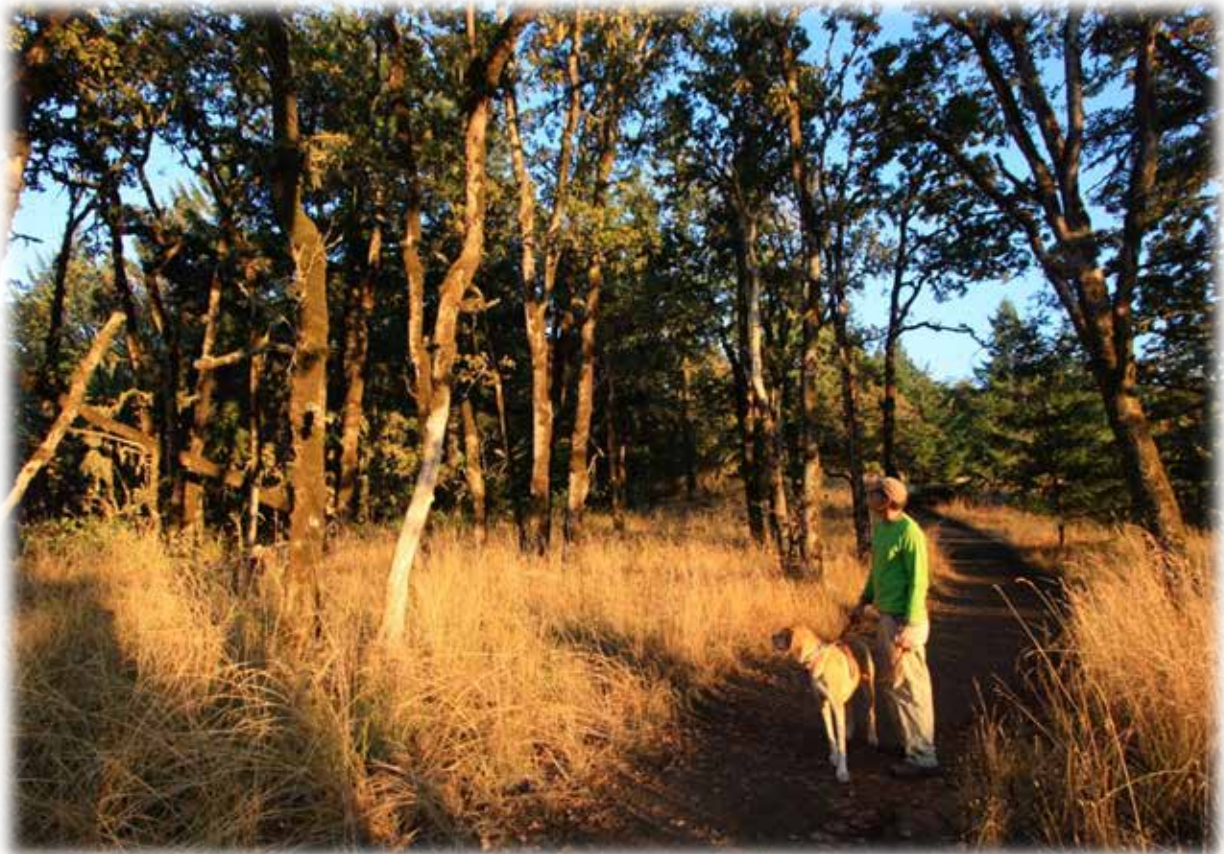
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# Chapter 7: Enhancing Visitor Experience While Managing Habitats

## 7.1 Recreational and Educational Values of Healthy Native Habitats

Howard Buford Recreation Area is the most visited park in the Lane County park system. The park annually receives an estimated 400,000 visits by people who enjoy its diverse natural beauty. There is also diversity in how these hundreds of thousands of visitors use the park. Every time a visitor enters HBRA, he or she has an opportunity to enjoy and learn about these diverse and valuable native habitats.

- Many park users hike or ride horses to the summit, enjoying vistas of the Willamette Valley to the west and the snow-capped Cascades to the east. The open character of prairie and savanna habitat makes these views possible.
- Others enjoy a leisurely walk on the level trails along the Coast Fork Willamette River in the Mount Pisgah Arboretum or along the South Bottomlands trails.
- Some people seek vigorous exercise, training daily with hikes or runs on the park's 27-mile trail network, winding through forest, savanna, and prairie habitats.
- Other visitors come to enjoy the remarkable birds and other wildlife that inhabit HBRA. The park's habitat diversity supports 30 butterfly species and more than 120 bird species, and Mount Pisgah is recognized by the Audubon Society as an official Important Bird Area.



- Spring wildflower displays are spectacular. Artists, photographers, botanists, and naturalists find inspiration in the myriad wildlife and botanical species and varied landscapes present in the park.

Each year, thousands of visitors attend Mount Pisgah Arboretum's Spring Wildflower and Fall Mushroom Festivals.

- Mount Pisgah Arboretum has developed and is implementing a comprehensive interpretive plan for its approximately 203-acre lease area. The Friends and Lane County Parks Division support that effort and have collaborated with the Arboretum to develop interpretive sign standards for all of HBRA. The goal is to enable park visitors to more easily learn about native habitats throughout the park, no matter what their primary reason for visiting.
- HBRA also serves as an educational resource for children and adults from pre-school through graduate school and beyond. Whether enrolled in formal classes or out of personal interest, many visitors study the diverse plants, animals, and habitats in the park. By participating in projects led by the Arboretum or the Friends, school groups and university classes regularly visit the park to learn about botany, wildlife, natural history, and natural resource management. Mount Pisgah Arboretum provides environmental education programs that teach thousands of school children and hundreds of adults each year about the park's native fauna and flora. The restoration activities and ongoing ecosystem management envisioned in this plan will complement these environmental education curricula by providing additional important natural resource learning opportunities.
- Volunteers form the common thread that creates and connects so much of the recreation, education, and community value that HBRA provides. They are key to Mount Pisgah Arboretum's environmental education program, and also help care for the Arboretum's trails and natural habitats. Volunteers are the backbone of the Friends native plant nursery. Friends volunteer Trails Committee is crucial to trail planning, design, and maintenance on several of the park's most popular hiking routes. Friends and Arboretum volunteers are an essential complement to County and both non-profits' staffs, who together maintain and restore natural habitats throughout the park.

## 7.2 Balancing Visitor experience with Habitat Management

A key purpose of this *Habitat Management Plan* is to enhance visitor experience while protecting and improving habitat for plants, fish and wildlife. This plan's Goals 1, 2, and 15 (see Chapter 6) seek to sustain and improve recreation by:

- Improving visitor experience at HBRA,
- Increasing public understanding and appreciation for "the unique qualities that make HBRA and the broader Mount Pisgah area a priority for conservation" and,
- Expanding habitat management activities in the North Bottomlands Stewardship Zone that are compatible with existing recreational activities as identified within the HBRA Master Plan and other applicable documents such as the Large Event Task Force recommendations.

By raising awareness of the regional importance of habitats within HBRA, we expect visitors will increasingly choose to tread thoughtfully and lightly on the park. In addition, carefully designed park infrastructure, such as trails that are properly located and constructed, will help minimize the impacts to habitats from park visitors.

### 7.2.1 Suitable locations for interpretive signage

Interpretive signage can help increase public understanding and appreciation for the park's "unique qualities," but too many signs far from the trailheads would degrade the "wild backcountry" feel of the park's trails that visitors value. This plan calls for additional interpretation at each of the three main trailheads. Existing kiosks may be used or new signage installed.

Signage to interpret habitat restoration is valuable to help the public understand habitat management. Outside of the Arboretum, this plan calls for temporary signage (posted for up to 3 years) along trails to

explain the purpose and benefits of habitat management actions, such as ecological burns, vegetation management, or wetland restoration.

Mount Pisgah Arboretum, in its role as an educational hub for the Mount Pisgah area, has initiated implementation of its own comprehensive interpretive program. The Arboretum interpretive plan envisions permanent interactive interpretive exhibits at each of eight designated habitat "eco-nodes" within its lease area that exemplify the park's varied native ecosystems.

### ***7.2.2 Suitable locations for benches and view points***

The summit of Mt. Pisgah is the most common destination to take in sweeping views of the Southern Willamette Valley. Visitors to the summit, as well as other areas of the park, perch upon rock outcrops, low hanging branches, or on the ground to take in the view or simply stop and rest as there are few benches within the park outside of the Arboretum. The sheer number of people who visit the park warrants installation of additional benches in carefully selected sites as a means to reduce the impacts of trampling habitat as well as disturbance to wildlife and other users.

Carefully located benches and viewpoints can foster a sense of place in HBRA. For some visitors, to spend time in the outdoors represents an opportunity to get away from the hustle and bustle of one's daily routine. It is important that the location of benches and viewpoints do not dominate the adjacent landscape. The view, which may frame points of interest near and far away, should be structured in a manner that screens the viewer from other points on the trail as well as to the area beyond the trail.

As with interpretive signage, benches located far from trailheads and the most popular trails will degrade the "wild backcountry" feel of the park's trails. Benches are most appropriate on the western side of Mt. Pisgah. Along trails on the eastern and southern slopes, selected viewpoints can be identified where natural objects, such as boulders or fallen logs, can provide sitting places. But otherwise viewpoint development on the east and south side of the park will be limited to unobtrusive pruning or clearing of vegetation to frame viewing opportunities.

In particular it should be noted that the view from the summit westward is being increasingly obscured by Douglas-fir trees that have established on the upper summit ridge in the past 25 years. Removal of these trees will be necessary to preserve existing views, and will also benefit the existing prairie vegetation.

### ***7.2.3 Dogs On Leash***

Many park visitors enjoy bringing their dogs to the HBRA, whether they hike to the summit, stroll through the old fields and prairie in the bottomlands, or swim in the Willamette River on a hot summer day.

No matter the destination, it's important that dog owners manage their dogs responsibly so that everyone can enjoy the park and its trails. Current policy requires all dogs within the park to be under voice control by their owners, and within the Arboretum and on Trails 1 and 2 dogs are required to be on a leash not more than 6 feet in length.

Unfortunately, with these park rules in place, off-leash dogs have been a frequent source of conflict for park users for many decades. This plan calls for developing a new policy for dog use in HBRA, possibly in conjunction with a future update to the 1994 HBRA Master Plan, which would require dogs to be kept on leash in all parts of the park except for designated places and trails where they may be off leash. The reasons for developing a new policy are many, including:



- 1) Off-leash dogs can impact visitor experience, jump on other visitors, including children, and can cause accidents or injuries.
- 2) Off-leash dogs scare and/or chase or otherwise harass wildlife.
- 3) For people who are afraid of or uncomfortable around dogs, an encounter with an off-leash dog can be unpleasant or downright terrifying.
- 4) Off-leash dogs can instigate aggression or fights with leashed dogs.
- 5) If an off-leash dog causes a serious issue, the dog owner could be held liable in a lawsuit or face criminal charges, or even loss of the pet.
- 6) When off-leash, dogs can encounter or ingest harmful substances.
- 7) Dogs may transfer irritating poison oak oils to owners or others park users.

Lane County Parks and planning partners will engage in a public involvement process to obtain feedback from the entire spectrum of park users, including dog owners and non-dog owners, to identify appropriate areas of the park to allow off-leash dog use, without significantly impacting habitat values or the visitor experience for non-dog owners.

### 7.3 Habitat Stewardship Zones

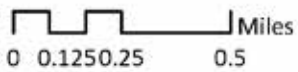
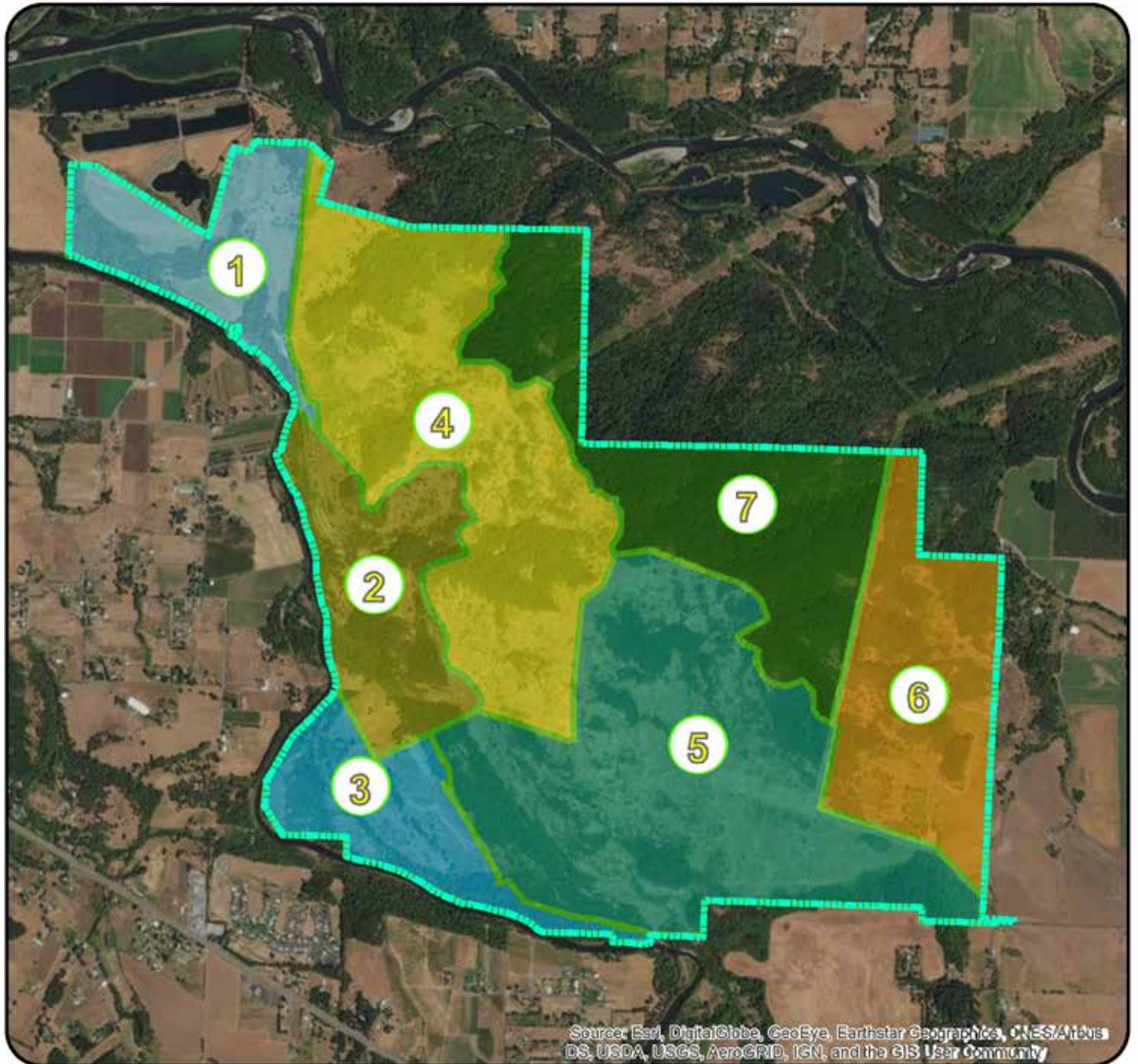
The 1994 HBRA Master Plan (p. 33) designated six management “Zones and Elements”, including:

- North Bottomlands
- Main Entrance
- Main Parking Area
- Mount Pisgah Arboretum
- South Meadow, and
- Mount Pisgah Trail System (the entire hillside except for an upland portion of the Arboretum).

The South Meadow Zone has been re-named here as the “South Bottomlands”, since this zone contains a variety of habitat types. In addition, the “Main Entrance” is consolidated here into the North Bottomlands Zone, and the “Main Parking Area” is consolidated into the Mount Pisgah Arboretum.

To facilitate habitat stewardship, as shown in Figure 7.1, this management plan further divides the largest zone, the “Mount Pisgah Trail System,” into four smaller stewardship zones: Western Uplands, Southern Uplands, Eastern Uplands, and Northern Forest. Each of the four new stewardship zones are further subdivided into a set a subordinate management units.




Figure 7-1: HBRA Stewardship Zones Map



### HBRA Stewardship Zones



#### Zone Boundary

-  Zone 1: North Bottomlands - 166ac Zone
-  2: Mount Pisgah Arboretum - 203ac Zone
-  3: South Bottomlands - 155ac

-  Zone 4: Western Uplands - 493ac
-  Zone 5: Southern Uplands - 609ac
-  Zone 6: Eastern Uplands - 262ac
-  Zone 7: Northern Forest - 326ac
-  HBRA Property Boundary



## 7.4 Brief Descriptions of Stewardship Zones

### ***North Bottomlands Stewardship Zone (166 acres)***

This zone encompasses the floodplain of the Coast Fork of the Willamette River at the far northwest corner of the park. The zone's habitat includes various wetland and riparian woodlands and prairies. Part of Thompson Slough, a forested old river meander/seasonal wetland, flows into the Willamette Confluence Preserve. Park facilities located within this stewardship zone include the horse arena, the Native Plant Nursery, the Kienzle house and barn, and the North Trailhead/Parking Lot. These facilities support a variety of recreational uses, consistent with direction provided in the 1994 *HBRA Master Plan*. This zone provides opportunities for enhancing and restoring a diversity of riparian and floodplain plant communities. Here, habitat management will be compatible with and enhance recreational uses. For example, removal of blackberry in riparian forests will make the areas more accessible and scenic if additional trails are developed in the future.

### ***Mount Pisgah Arboretum (203 acres)***

Lane County leases approximately 203 acres within HBRA to Mount Pisgah Arboretum, an independent non-profit 501c3 organization founded in 1973. The Arboretum was involved in the original justifications and development of the Park, and has been an active partner with Lane County since HBRA was established. The Arboretum's stewardship zone lies immediately adjacent to the Coast Fork of the Willamette River and encompasses portions of the west slope of Mount Pisgah. This area contains many diverse Willamette Valley plant communities, including oak savanna, oak woodland, Douglas-fir forest, incense cedar forests, mixed forests, riparian forests, riverine wetlands, and grassy meadows. The Arboretum boundary has never been formally surveyed, and the 203 acre figure is based on the original paper maps, which lack precision. Once the lease boundary is surveyed, the actual number of acres may differ slightly from this number.

Mount Pisgah Arboretum is responsible for habitat management in this stewardship zone. Over more than four decades, the Arboretum has worked to enhance its native ecosystems by controlling invasive plant species and restoring native habitats. In doing so, the Arboretum seeks to actively engage the public in hands-on stewardship, and to minimize the use of herbicides.

The primary purpose of Mount Pisgah Arboretum is nature education, and habitat management efforts are aimed at providing dynamic outdoor classrooms for teaching about local ecology. The Arboretum offers a wide range of both structured educational programs and informal learning opportunities for visitors of all ages, and is currently developing a series of interactive nature exhibits.

As one of the Park's busier access points, the Arboretum maintains more than seven miles of all-season trails as well as public restrooms and drinking water, parking areas, a picnic area, a covered pavilion, a small visitor center, and on-site offices. The Arboretum's Site Manager lives on-site and serves as HBRA caretaker for Lane County Parks.

### ***South Bottomlands Stewardship Zone (155 acres)***

This zone encompasses the floodplain of the Coast Fork of the Willamette River upstream and south of the Mount Pisgah Arboretum Lease Area. The zone includes a mosaic of restored prairie and savanna, oak woodlands, riparian forest, and shrub thickets. It features enhanced connections between the river and the floodplain along a restored side channel and associated backwater. Miles of fencing were removed and replaced with a network of mowed and graveled trails. Wildlife observation is encouraged at two developed viewing points, including a 'wildlife viewing blind' that provides opportunities to observe beavers, birds, deer, turtles and other species of interest.

**Western Uplands Stewardship Zone (493 acres)**

This zone encompasses much of the west-facing slope of Mount Pisgah, from the Arboretum boundary uphill to the main summit ridgeline. This is the most visible side of the mountain to approaching visitors, and its condition impacts the experience of park visitors as they first enter the park.

Western Uplands Stewardship Zone Management Units	Period of Intensive Restoration	Acreage
BPA North: Santiam-Alvey	2023 - 2027	17
BPA South: Marion-Alvey + Lookout Point-Alvey	2018 - 2022	9
Bridge Bowl	2019 - 2022	63
Fir Ridge	2023 - 2024	46
Lazuli	2024	41
Spring Box	2018	43
Swing Hill	2019 - 2022	121
Upper Canyon Creek	2023 - 2024	108
Vesper	2021 - 2022	45

**Southern Uplands Stewardship Zone (609 acres)**

This zone is dominated by oak savanna, oak woodland and upland prairie. Much of the park’s buckbrush chaparral is found within this zone as well as some of the most intact prairie and savanna habitats in the park.

Southern Uplands Stewardship Zone Management Units	Period of Intensive Restoration	Acreage
BPA: Marion-Alvey + Lookout Point-Alvey	2018 - 2022	34
Buckbrush	2025 - 2027	254
Fawn Lily	2025 - 2027	139
Meadowlark South	2019	182

**Eastern Uplands Stewardship Zone (262 acres)**

This zone extends from wetland prairie and wetland shrub habitats located at the foot of Mount Pisgah, uphill to include both upland savanna and woodland habitats. This zone supports most of the wet prairie within the park as well as extensive ponderosa pine stands.

Eastern Uplands Stewardship Zone Management Units	Period of Intensive Restoration	Acreage
BPA: Marion-Alvey	2018 - 2019	10
Meadowlark East	2018 - 2019	143
Ponderosa	2018 - 2020	109

### ***Northern Forest Stewardship Zone (326 acres)***

This zone includes a large, mostly forested area on the northeast slope of Mount Pisgah that will largely be managed as conifer woodland or forest. This zone has a mix of Douglas-fir, bigleaf maple and grand fir overstory, with lesser amounts of and other tree species. Pockets of Oregon white oak communities are also found within this zone in areas of shallow soils. Although not a focal conservation target in this plan, conifer forest, which has not declined in acreage in the Willamette Valley, provides habitat for a variety of native plant and wildlife species, some of which are not found in other habitat types.

Northern Forest Stewardship Zone Management Units	Period of Intensive Restoration	Acreage
BPA: Santiam-Alvey	2023 - 2027	5
Bugbane	2023 - 2024	75
Eagle's Lair	2028 - 2029	50
Headwaters	2029 - 2030	196

### ***Park Facilities (Main Entrance, Roads, Parking Lots, Trails, Utility Corridors)***

Some of these infrastructure elements are present in each of the stewardship zones. In general, this plan's best management practices provide guidance for how to manage these infrastructure elements to protect the conservation targets, including visitor experience.

## **7.5 Chapter 7 References**

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- Bend Park & Recreation District. Dogs in Parks (web site reference). [www.bendparksandrec.org/parks\\_trails/dogs\\_in\\_parks/](http://www.bendparksandrec.org/parks_trails/dogs_in_parks/)

# Chapter 8: Fire as a Management Tool

## 8.1 The Historic Role of Fire in Chaparral, Prairie, Savanna, & Woodland Habitats

### *8.1.1 Historic Climate Variations*

Significant portions of Oregon's ecoregions support habitats that are dependent on fire for their continued health and survival. Climate conditions approximately 5,000 to 8,000 years ago that were warmer and drier than today likely influenced the establishment of prairie and savanna habitats in the Willamette Valley ecoregion. As the climate subsequently cooled, frequent low intensity wildland fires maintained extensive prairies and savannas, which would otherwise have declined in the absence of fire. While some fires may have been the result of lightning strikes, deliberate ignition by the indigenous peoples of the area as a land management practice is likely to have been an important ecological influence (Walsh et al. 2010; Walsh et al. 2015).

### *8.1.2 Observations of Early Explorers*

The first Euro-American explorers and settlers who arrived in the Willamette Valley in the early 1800's described the Willamette Valley as having extensive areas of prairie and oak savanna. Land surveys conducted by the General Land Office of the US Government in the 1850's documented that about one million acres of the Willamette Valley was prairie, and 500,000 acres were savanna (Christy and Alverson, 2011; Appendix B). These native prairie and savanna habitats have been greatly reduced in extent due to agriculture, grazing of domestic livestock, residential and urban development, and expansion of forest vegetation into former prairies. Only a few thousand acres of high quality native prairie and savanna are currently known to survive in the Willamette Valley, a reduction of 98 percent or more from the original extent of prairie and savanna.

Thus, it was a "natural" landscape shaped (largely) by human-set fires that the first Euro-American explorers and settlers encountered in the early 1800's (Habeck 1961, Johannessen et al 1970, Towle 1974). Morris (1934), Johannessen (1971) and Boyd (1986) document this practice through reviews of the early Euro-American explorers' and missionaries' journals (David Douglas-1826, John Work-1834, C. Wilkes-1845, B. Hines-1881, etc.). These records report that fires were set annually in late summer and early fall, and covered extensive portions of the Willamette Valley. The main difficulty with historic observations and descriptions is that they do not clearly describe how often fires returned to any specific location, and that is a pertinent question that remains to be answered.

Drastic population declines resulting from introduced diseases, and ultimately, the removal of the Kalapuya Indians to the Grand Ronde Reservation halted wide scale burning in the Willamette Valley in the 1830s and 1840s. Without fire, wet prairies that have been left undisturbed have in many cases gradually changed into willow and ash forests, while the drier prairies have converted to oak woodlands and maple and Douglas-fir forests.

### *8.1.3 Cultural Use of Fire as a Management Tool*

The Winefelly group of the Kalapuya people (a primary tribe in the Willamette Valley), who spoke the Central Kalapuya dialect, were the primary native inhabitants of the Mount Pisgah/Confluence area. The Mount Pisgah area was likely used for seasonal hunting and food plant gathering activities.

Because of the Willamette Falls at Oregon City, the Willamette was not historically a major salmon stream, and the Kalapuya did not utilize salmon as a food source to the extent that tribes along the Columbia River did. Instead, the Kalapuya, hunted game such as deer and elk, and gathered food plants from the native flora. The prairies provided the majority of their food plants, including camas (*Camassia* spp.) bulbs, yampah (*Perideridia* spp.) roots, and tarweed (*Madia* spp.) seeds.

Though they were not farmers in the conventional sense, the Kalapuya used fire to maintain prairie habitats for valued food plants, increase production of native nut and fruit trees, and facilitate harvest of food plants such as tarweed. In addition, they may have found fire useful in hunting game, by attracting animals to browse on the fresh green growth that emerges soon after a fire (Boyd 1986). During the many millennia that the Kalapuya subjected the Willamette Valley to frequent low intensity fires, a diverse flora and fauna evolved that had appropriate adaptations to avoid, withstand, or even depend upon fire. In some cases, these were species occurring nowhere else in the world except the Willamette Valley.

From the mid-1800s, settlers stopped the periodic wild land fires that jeopardized homes and towns and generally discontinued the practice of prescribed burning. Cessation of frequent fires has resulted in significant alteration of habitats and landscapes even if they have not been converted to economic uses such as agriculture and urbanization.

For instance, fire suppression resulted in the development of “closed form” oak forests, and consequently closed form oak habitat (where the tree canopy is continuous) is now relatively more abundant than the open grown trees that were once common within the Willamette Valley’s savannas (Towle 1982). The increased density and extent of conifers such as Douglas-fir, which expands in the absence of periodic fire, has also resulted in loss of prairie and oak savanna habitat. The fast growing conifers overtop, shade out and eventually kill the oak trees in a decades-long process of ecological succession. Evidence for this process can be seen in historical aerial photographs of HBRA that go back to 1936 (see Appendix C); even since the park was first established in 1972, significant ecological changes in habitat types have occurred (see photo comparison on the cover).

#### ***8.1.4 Ecological Fire as a Habitat Management Tool***

Since 1999, ecological burning has been used as a management tool in HBRA. Based on careful planning and preparation, prescribed ecological burns are implemented in specific areas of the park to help create and maintain prairie, savanna, and woodland habitat. These burns are conducted in collaboration with the Oregon Department of Forestry (ODF), U.S. Fish & Wildlife Service, Bureau of Land Management, U.S. Forest Service, and The Nature Conservancy. All burns are implemented in compliance with Lane Regional Air Pollution Authority (LRAPA) permit regulations.

### 8.1.5 Ecological benefits of frequent low intensity fire

Having established that fires likely were a significant feature of the landscape prior to Euro-American settlement, scientists began developing hypotheses regarding the specific roles that fire plays in maintaining prairie and savanna habitats.

Historical analyses of vegetation change at individual sites led to the development of a number of hypotheses, including:

- Fires occurring at frequent intervals maintained open prairie habitats and prevented colonization of trees and shrubs on sites where they would be able to occur if fire was excluded;
- Many native herbaceous prairie species may possess tolerance or even adaptation to fire as a frequent influence; and
- Some non-native plant species, particularly those coming from regions where fires do not occur, may be negatively affected by fire.



*A 1999 wildfire (pictured above) closed HBRA. Fires in prairies and savannas usually burn with low intensity and cause little damage to native forbs or oak trees.*

Thus, ecological burning can reduce cover of encroaching woody plants, enhance the populations of native plant species, and help reduce the abundance of some undesirable non-native plants.

Experience with prescribed burning in Willamette Valley prairie and oak habitats began in the 1970s at Finley National Wildlife Refuge, and continued in the 1980's on Corps of Engineers prairies at Fern Ridge reservoir and BLM and Nature Conservancy land in West Eugene. Prescribed burning began in HBRA in 1999. In general, the results of the burns have supported the hypotheses listed above. Typically, new green growth begins to sprout within two weeks after the burn; species such as tufted hairgrass (*Deschampsia cespitosa*), the dominant native grass in wet prairies, grow more vigorously through the fall and winter than in unburned areas. The following year, and often the following two years, see increases in the flowering and seed production of many native prairie plants such as camas.

With increased flowering and seed production, the fire adapted species may gradually increase in population size. For example, a study of the federally listed endangered Bradshaw's lomatium (*Lomatium bradshawii*) found that within two years of a fire the populations showed an increase in density of vegetative and reproductive plants, and demographic analyses suggest that without fire, Bradshaw's lomatium will not persist (Pendergrass et al., 1999, Kaye et al., 2001). In addition, researchers have observed that some invasive plant species, such as the ox-eye daisy (*Leucanthemum vulgare*), decrease in abundance in the year immediately following a fire (Nuckols et al. 2011).



Woody plants, which have encroached into these native prairie remnants, have also been negatively affected by prescribed burns. Observations suggest that the burns are successful in killing smaller conifers as well as seedlings of deciduous trees and shrubs. Fires also kill the above ground portions of the majority of deciduous woody plants, which are subject to subsequent resprouting from the stump. However, the large oaks that were historically present at low density in savannas, have thick bark and are resistant to damage from fire (Niemiec et al., 1995). Manual or mechanical removal of woody plants may also be needed in conjunction with prescribed burns, to help speed progress toward achieving site management goals.

### ***8.1.6 Potential drawbacks to ecological burning***

The main drawback of prescribed burns from the point of the general public is that smoke that is generated. While a prescribed burn may resemble a grass field burn, the amount of smoke produced by a prescribed burn in a native prairie is much less than a burn of an equal area of grass seed field. This is because the amount of fuel present in a grass seed field is typically two to four times greater per unit area than in a native prairie. Prescribed burns are only conducted under atmospheric conditions that provide for the most efficient upward dispersal of smoke. Generally small burn units also mean that the actual length of time during which the burns occur is quite short. Risk of escape of prescribed burns is minimized by ensuring that conditions the day of the burn are within the designed prescription, and the personnel and equipment used to conduct the burn are sufficient and appropriately trained.

### ***8.1.7 Wildfire versus ecological burning:***

Public safety is the number one goal of wildfire management at HBRA. Unlike controlled fire used as a management tool (ecological burns), wildfire is a significant safety threat for park patrons and neighbors. It also has the potential for devastating impacts on important natural habitats throughout HBRA. The most recent large wildfire in HBRA occurred in September 1999. The fire started in the Mount Pisgah Arboretum and moved upslope toward the summit. The fire was suppressed along the summit ridge in the Southern Uplands Stewardship Zone. 119 acres burned in total through prairie, savanna, and woodland. Several Douglas-fir trees were killed by the fire or by subsequent fire suppression actions. Lane County contracts with the Oregon Department of Forestry (ODF) for development of wildfire plans



*Decades of fire suppression has resulted in larger "fuel loads" in the park's forest and woodlands. The dense woody vegetation increases the risk of a catastrophic "crown fire" that will damage or destroy mature oak trees and large conifers.*

and wildfire control services at HBRA. Because of the threat fire poses to park visitors, as well as the park's location in the midst of rural residential properties, the primary objective of wildfire control is suppression. It is important to note that much of the prairie and oak savanna restoration work identified in this *Habitat Management Plan* will also serve to reduce wildfire risks in HBRA by reducing potential



fuels and reducing the likelihood of high severity wildfire. Implementation of the *Habitat Management Plan* will help reduce the risk of wildfire in the years ahead. In addition, Lane County Parks and park partners will continue to work with ODF to reduce, as much as possible, negative impacts on native habitat caused by fire suppression activities.

## 8.2 Ecological Burn Strategy

Utilize ecological burning (prescribed fire) to maintain chaparral, upland and wetland prairie, savanna, and oak woodlands following recommended fire return intervals identified for each conservation target within Chapter VI (Goals and Objectives).

### ***8.2.1 Implement ecological burns annually in accord with habitat management plan***

- Burn 50 to 250 acres/year. (See Figure 8-1: Ecological Burn Units Map)
  - Where feasible keep vehicles and equipment on designated trails and access corridors.
  - Secure annual permit from Lane Regional Air Pollution Authority
    - § Collaborate with Rivers to Ridges partnership to prepare and secure annual multi-agency permit.
    - § Comply with permit to minimize impact of smoke drifting into the Eugene-Springfield metropolitan area, the City of Pleasant Hill, and the City of Oakridge.
- Coordinate all ecological burn activities with the Oregon Department of Forestry (ODF).
  - Utilize ecological burns to train fire suppression personnel and improve the capacity of local forestry districts, fire protection personnel, and other natural resource agency staff.
  - Collaborate with and utilize non-ODF fire teams and other resources when available.
  - Consider using contract fire crews to implement ecological burns if ODF crews are not available and the burn's timing is important to achieve the desired habitat outcomes.
- Provide public notice of the upcoming ecological burns.
  - Post notice at trailheads and in proximity to the burn unit.
  - Notify adjacent landowners of the upcoming annual ecological burn activities.
  - Release Public Service Announcements in advance of implementation.
- Prepare ecological burn sites.
  - Implement site preparation prescriptions in late June or early July to minimize adverse effects to wildlife, botanical resources, and public safety (resulting from a wild land fire).
  - Follow specified Best Management Practices as described in Chapter XII.
- Implement ecological burn(s)
  - Lane County Parks Manager or his/her designee reviews and approves the burn plan and coordinates with designated "burn boss" to approve ignition of the burn in HBRA.

### ***8.2.2 Factors to consider when planning ecological burns:***

- First, apply research on the effects of prescribed fire and alternate management methods on the vegetation associated with each of the conservation targets identified for ecological burning.
  - The timing of burns may affect the response of vegetation.
  - When feasible, participate in and support studies to evaluate the responses of species to fire and to evaluate the efficacy of alternative management manipulations in stewardship efforts. These alternatives may include but are not limited to mowing with removal of cut material, "flash grazing," hand-removal of woody species, and no manipulation.
- Second, evaluate populations of nonnative plants occurring within each management unit where ecological burns will occur.

- Implement site preparation strategies to neutralize the threat posed by those species that have the capability to change the species composition and structure of the conservation target if left untreated.
  - § Site preparation and associated stewardship tasks may occur for several years preceding implementation of the ecological burn to provide adequate control.
- Third, consider smoke-management rules and variable weather conditions when planning and implementing ecological burns.
  - Give preference to scheduling burns during the season when fires most commonly occurred within the given conservation target.
  - If appropriate, implement burns during a non-traditional season to minimize adverse impacts to air quality, such as during a cold, dry period in winter.

## 8.3 Chapter 8 References

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# Chapter 9: Management of Non-Native Invasive Species

## 9.1 What is a Non-Native Invasive Species?

The U.S. Department of Agriculture defines "invasive species" as:

- non-native (or alien) species to the ecosystem under consideration, and
- if established, causes or is likely to cause economic or environmental harm or harm to human health.

Invasive species can be plants, animals, insects and other organisms (e.g., microbes). Only a subset of documented non-native species are considered invasive, due to their negative impacts to native species and ecosystems. Human actions are the primary means of invasive species introductions.

## 9.2 Non-Native Species at HBRA

Over 200 species of wild plants that have been documented at HBRA are considered to be non-native species and did not occur in Oregon prior to the arrival of Euro-American settlers. These species were either intentionally or accidentally introduced to the area after the mid-1800's.

Some non-native plant species provide resources to native wildlife, including shelter and food. However, the invasive non-native plant species that are prioritized for management in this plan substantially alter habitat structure or displace native species that in many cases provide greater habitat function for wildlife. When certain non-native plants are generally acknowledged as not belonging in the parks' landscape, it can be detrimental to the visitor experience if the plants are highly visible, creating an overall impression of a lack of stewardship of the park. A particularly visible example are large patches of non-native blackberries seen covering the open slopes of the mountain and infesting the floodplain woodlands.

Fewer than 25 percent of the 200+ non-native plant species in HBRA are identified here as priorities for management because they can significantly degrade habitat functions and values. Strategy 11.1 references a methodology that can identify the invasive plant species that are priorities for management (Hiebert and Stubbendieck, 1993).

The goal of invasive plant management is not just to eliminate problematic non-native plants, but to also to promote and maintain high quality native plant communities. Managing invasive non-native plant species at HBRA provides opportunities, on a park-wide scale, to gradually replace any ecological functions or resources provided by non-native species with the increased abundance and function of native species.

In most cases, complete eradication of a particular non-native species is not feasible. Rather, the objective is to substantially reduce their ecological influence. Complete eradication of particular invasive non-native plant species will be sought only in a select few cases where the species has established only recently, or is present only in small numbers. As such, early detection and treatment of new invaders is perhaps the most important step in the management of invasive non-native plants.

Non-native animals can also have negative impacts on native species and habitats, through predation, competition, or direct habitat disturbance. For example, feral cats may hunt native birds in a natural area, which is particularly problematic for ground nesting grassland birds. Non-native bullfrogs can swallow a rare native western pond turtle hatchling. Managing non-native animals can be challenging

due to the simple fact that animals are mobile compared to a plant, which once located can be treated by manual removal, mowing to interrupt seed maturation, etc.

### 9.3 Problematic Native Species

Native species can also cause economic or environmental harm or harm to human health. For example, poison oak, a native plant, is a common associate of the plant communities that compose each of the Conservation Targets. However, poison oak may cause mild to significant harm to human health. For that reason, this *Habitat Management Plan* recommends the Best Management Practice of clearing poison oak along trails.

Over time, native woody species such as Douglas-fir trees can overtop, shade out and kill oak trees in rare oak woodlands and savannas. For the purpose of this plan, native species that expand into conservation target habitats are referred to as “encroaching” species to distinguish them from exotic “invasive” species.

### 9.4 Management of Invasive Non-Native Species in the HBRA

Efforts to manage exotic invasive species in the HBRA will follow the principles of Integrated Pest Management, which utilizes a variety of methods (manual, mechanical, chemical) to achieve the best result and minimize environmental impact.

Invasive species are considered in two categories:

- species known to occur within the HBRA, and
- species that do not occur in the HBRA but are known to occur in other areas of Lane County, in the State of Oregon, or in the Pacific Northwest.

### 9.5 Integrated Pest Management

Integrated Pest Management (IPM) is an approach to reduce or eliminate a wide spectrum of noxious flora and fauna utilizing a combination of common-sense practices. IPM fuses a diversity of pest management methods and strategies (identified in the Stewardship Tool Box, Chapter XI), describes an organism’s life history and ecological context, and takes into account the most recent scientific research to manage populations of targeted pests in a cost-effective and environmentally sensitive manner. As outlined by the US Environmental Protection Agency, IPM practitioners follow a four-tiered approach to management of noxious organisms.

- 1) **Set Action Thresholds:** Identify the parameters for which a population of introduced organisms occurring within the ecoregion or ecosystem under management will be tolerated. If the size of the population exceeds this outside limit, treatment actions are initiated. The threshold at which pests become an economic threat is critical to guide future pest treatment decisions.
- 2) **Monitor and Identify Pests:** IPM programs work to monitor for pests and identify them accurately, so that appropriate treatment decisions can be made in conjunction with action thresholds.
- 3) **Prevention:** IPM programs seek to prevent pests from becoming a threat while minimizing risk to people or the environment.
- 4) **Treatment:** Once monitoring, identification, and action thresholds indicate that pest treatment is required and preventive methods are no longer effective or available, IPM programs then evaluate the proper method(s) both for effectiveness and risk. Effective, less *risky* treatment methods are

chosen first, including highly targeted chemicals, such as pheromones to disrupt pest mating, or mechanical methods, such as mowing, trapping or weeding. If further monitoring, identifications and action thresholds indicate that less risky methods are not working or are not feasible, then additional methods would be employed, such as targeted spraying of pesticides. Broadcast spraying of non-specific pesticides is a last resort.

For invasive non-native species such as non-native blackberries, which have been well established in the park for many years, reducing their abundance to acceptable levels is a major endeavor that will require substantial funding and concerted effort. For cases such as these, treatment is often best conducted (and funded) in conjunction with other habitat restoration efforts. Treatment should also prioritize important visitor use areas (such as trail corridors and viewpoints), outlier patches, and areas of high quality habitat that currently have minimal levels of infestation.

## 9.6 Early Detection and Rapid Response: Prevention and Suppression of “New” Invasive Species

Early Detection and Rapid Response (EDRR) seeks to prevent establishment and spread of new noxious species introductions before they become widespread. EDRR is the most cost effective and environmentally benign program to successfully manage threats to the viability of the conservation targets from invasive species within HBRA. If new invasive noxious species are left unmanaged, economic losses will exponentially exceed the present costs of eradication or containment. The EDRR strategy seeks to:

- Identify new invaders prior to widespread establishment or introduction.
- Eradicate or contain new invading animals and weeds.
- Increase awareness of new invaders with partners and public.

Early Detection and Rapid Response (EDRR) is a primary strategy of the Oregon Department of Agriculture’s Noxious Weed Program. Weeds are listed and targeted for early detection and rapid response activities. The goal is to prevent their introduction or eradicate them before they become widespread, or to contain limited populations to prevent their widespread occurrence in Oregon.

## 9.7 Invasive Species Lists

The following lists were formulated with consideration of Oregon Department of Agriculture (State Weed Board) lists of noxious invasive weeds and animals as well as information from the Oregon Department of Fish & Wildlife. The lists below should be reviewed and updated at least every three years in response to monitoring for new invasive plants that may appear in the park.

**Figure 9-1: Invasive Plants Known to Occur in the HBRA**

### Herbaceous Plants:

<i>Carduus pycnocephalus</i>	Italian thistle
<i>Carduus tenuiflorus</i>	slender thistle
<i>Centaurea × moncktonii</i>	meadow knapweed
<i>Centaurea melitensis</i>	Maltese star thistle
<i>Cirsium arvense</i>	Canada thistle
<i>Cirsium vulgare</i>	bull thistle
<i>Conium maculatum</i>	poison hemlock
<i>Convolvulus arvensis</i>	bindweed
<i>Datura stramonium</i>	Jimson weed
<i>Daucus carota</i>	Queen Anne's lace
<i>Digitalis purpurea</i>	foxglove
<i>Dipsacus fullonum</i>	teasel
<i>Geranium lucidum</i>	shining geranium
<i>Geranium robertianum</i>	Herb Robert
<i>Geranium</i> spp. (several other non-native species occur within HBRA)	crane's bill geranium
<i>Heracleum mantegazzianum</i>	giant hogweed
<i>Hypericum perforatum</i>	St. John's wort
<i>Lactuca serriola</i>	prickly thistle
<i>Lapsana communis</i>	nipplewort
<i>Leucanthemum vulgare</i>	ox-eye daisy
<i>Melissa officinalis</i>	lemon balm
<i>Mentha pulegium</i>	pennyroyal
<i>Parentucellia viscosa</i>	yellow glandweed
<i>Phytolacca americana</i>	pokeweed
<i>Polygonum x bohemicum, P. japonicum, P. sachalinense</i>	giant knotweeds
<i>Ranunculus ficaria</i>	lesser celandine
<i>Ranunculus repens</i>	creeping buttercup
<i>Rumex crispus</i>	curly dock
<i>Senecio jacobaea</i>	tansy ragwort
<i>Silybum marianum</i>	blessed milk thistle
<i>Sonchus</i> spp. (several species occur within HBRA)	sow thistle
<i>Trifolium</i> spp. (several non-native species occur within HBRA)	clover
<i>Verbascum blattaria</i>	moth mullein
<i>Verbascum thapsus</i>	common mullein



**Grasses:**

<i>Agrostis capillaris</i>	bentgrass
<i>Aegilops cylindrica</i>	jointed goatgrass
<i>Agropyron repens</i>	quackgrass
<i>Arrhenatuerum elatius</i>	tall oatgrass
<i>Avena fatua</i>	wild oat
<i>Brachypodium sylvaticum</i>	false brome
<i>Cynosurus echinatus</i>	hedgehog dogtail grass
<i>Phalaris arundinacea</i>	reed canarygrass
<i>Taeniatherum caput-medusae</i>	medusahead rye

**Shrubs, Trees, and Vines:**

<i>Corylus avellana</i>	common hazel
<i>Cotoneaster spp.</i>	cotoneaster
<i>Crataegus monogyna</i>	English hawthorn
<i>Cytisus scoparius</i>	Scotch broom
<i>Hedera helix</i>	English ivy
<i>Hedera hibernica</i>	Atlantic Ivy
<i>Ilex aquifolium</i>	English holly
<i>Juglans nigra</i>	black walnut
<i>Juglans regia</i>	English walnut
<i>Malus domestica</i>	domestic apple
<i>Photinia serratifolia</i>	Chinese photinia
<i>Prunus avium</i>	cherry (domestic)
<i>Prunus cerasifera</i>	cherry plum
<i>Prunus domestica</i>	plum (domestic)
<i>Pyrus communis</i>	pear (domestic)
<i>Rosa rubiginosa (R. eglanteria)</i>	sweetbriar rose
<i>Rosa multiflora</i>	multi-flowered rose
<i>Rubus anglocandicans</i>	English blackberry
<i>Rubus armeniacus</i>	Armenian blackberry
<i>Rubus laciniatus</i>	evergreen blackberry
<i>Rubus vestitus</i>	velvet blackberry
<i>Ulmus procera</i>	English elm
<i>Vinca major</i>	greater periwinkle
<i>Vinca minor</i>	lesser periwinkle

**Figure 9-2: Non-Native Invasive Plants Not Currently Known to Occur in the HBRA (Watch List)**

Early detection and monitoring efforts should be alert to these potential “new arrivals” at HBRA.

**Herbaceous Plants:**

<i>Aegopodium podagraria</i>	goutweed
<i>Alliaria petiolata</i>	garlic mustard
<i>Anchusa officinalis</i>	common bugloss
<i>Arum italicum</i>	Italian lords and ladies
<i>Centaurea diffusa</i>	diffuse knapweed
<i>Centaurea solstitialis</i>	yellow starthistle
<i>Centaurea stoebe</i>	spotted knapweed
<i>Chaerophyllum temulum</i>	rough chervil
<i>Cyperus esculentus</i>	yellow nutsedge
<i>Echium plantagineum</i>	Paterson’s curse
<i>Foeniculum vulgare</i>	fennel
<i>Geum urbanum</i>	Herb Bennett
<i>Hieracium aurantiacum</i>	orange hawkweed
<i>Hieracium floribundum</i>	yellow hawkweed
<i>Hieracium pilosella</i>	mouse-ear hawkweed
<i>Hydrilla verticillata</i>	waterthyme
<i>Impatiens capensis</i>	orange jewelweed
<i>Impatiens glandulifera</i>	policeman’s helmet
<i>Iris pseudacorus</i>	yellow flag iris
<i>Lamiastrum galeobdolon</i>	yellow archangel
<i>Lathyrus latifolius</i>	everlasting pea
<i>Lathyrus sylvestris</i>	flat peavine
<i>Linaria vulgaris</i>	yellow toadflax
<i>Lotus corniculatus</i>	birdsfoot trefoil
<i>Lotus uliginosus</i>	greater birdsfoot trefoil
<i>Ludwigia hexapetala.</i>	willow primrose
<i>Lythrum salicaria</i>	purple loosestrife
<i>Myriophyllum aquaticum</i>	parrot’s feather
<i>Nymphoides peltata</i>	yellow floating heart
<i>Pentaglottis sempervirens</i>	evening bugloss
<i>Picris echioides</i>	bristly oxtongue
<i>Polygonum polystachyum (Persicaria wallachii)</i>	Himalayan knotweed
<i>Potentilla recta</i>	sulfur cinquefoil
<i>Soliva sessilis</i>	lawn burrweed
<i>Tribulus terrestris</i>	puncturevine
<i>Valerianella eriocarpa</i>	Italian Cornsalad

**Grasses:**

<i>Eragrostis curvula</i>	weeping lovegrass
<i>Glyceria declinata</i>	waxy mannagrass
<i>Holcus mollis</i>	creeping velvetgrass
<i>Phalaris aquatica</i>	Harding grass
<i>Stipa tenuissima</i>	Mexican feather grass

**Shrubs and Trees:**

<i>Acer platanoides</i>	Norway maple
<i>Aesculus hippocastanum</i>	horse chestnut
<i>Ailanthus altissima</i>	tree of heaven
<i>Buddleja davidii</i> ( <i>B. variabilis</i> )	butterfly bush
<i>Clematis vitalba</i>	old man's beard
<i>Cytisus striatus</i>	Portugese broom
<i>Daphne laureola</i>	spurge laurel
<i>Elaeagnus umbellata</i>	autumn olive
<i>Genista monspessulana</i>	French broom
<i>Juniperus virginiana</i>	eastern Juniper
<i>Lonicera maackii</i>	Amur honeysuckle
<i>Prunus laurocerasus</i>	English laurel
<i>Pueraria lobata</i>	kudzu
<i>Robinia pseudoacacia</i>	black locust
<i>Ulex europaeus</i>	gorse
<i>Viburnum opulus</i> var. <i>opulus</i>	snowball bush

**Figure 9-3: Documented or Potential Harmful Non-Native Animals of Howard Buford Recreation Area**  
*Actions to reduce the presence of animal species that impact native wildlife should be explored.*

**Non-Native Animals documented within HBRA:**

<i>Chelydra serpentina</i>	Common snapping turtle
<i>Didelphis virginiana</i>	Opossum
<i>Felis catus</i>	Feral cat
<i>Meleagris gallopavo intermedia</i>	(Rio Grande) Turkey
<i>Myocastor coypus</i>	Nutria
<i>Rana catesbeiana</i>	Bullfrog
<i>Sciurus niger</i>	Fox squirrel
<i>Sturnus vulgaris</i>	Common starling
<i>Trachemys scripta elegans</i>	Red-eared slider

**Non-Native Animals Known in Willamette Valley but not documented within HBRA**

<i>Cipangopaludina chinensis</i>	Chinese mystery snail
<i>Cipangopaludina japonica</i>	Japanese mystery snail
<i>Orconectes neglectus</i>	Ringed crayfish
<i>Procambarus clarkia</i>	Red swamp crayfish
<i>Sus scrofa</i>	Feral swine
<i>Sylvilagus floridanus</i>	Eastern cottontail rabbit

## 9.8 Chapter 9 References

- Hiebert, R.D. and J. Stubbendieck, 1993. Handbook for Ranking Exotic Plants for Management and Control. U.S. National Park Service, Natural Resources Report NPS/NRMWRO/NRR-93/08.
- Oregon Department of Agriculture. Oregon Noxious Weed Profiles (web site reference). [www.oregon.gov/oda/programs/weeds/oregonnoxiousweeds/pages/aboutoregonweeds.aspx](http://www.oregon.gov/oda/programs/weeds/oregonnoxiousweeds/pages/aboutoregonweeds.aspx)
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## Chapter 10: Stewardship Projects to Protect and Enhance Conservation Targets

This chapter presents recommendations for habitat projects to improve the viability of the conservation targets and to enhance visitor experience at HBRA. These projects are presented in a table organized by *Habitat Management Plan* Goals.

The table presents the period of project implementation by assigning it one of three five-year periods in the next fifteen years (i.e., 0-5 years, 5 to 10 years, or 10 to 15 years). In some cases, projects span multiple periods or the entire fifteen-year arc of plan implementation. The Habitat Advisory Team will meet periodically to meet review and evaluate progress and will make recommendations to adjust the timeline accordingly.

Land management is normally site specific, for that reason the implementation schedule for intensive investments to advance restoration of Focal Conservation Target Habitats as well as other Significant Habitats corresponds with Management Units within Each Stewardship Zone with exception to those Stewardship Zones which are not subdivided into Management Units. Management Unit specific projections of Historic Vegetation, the Existing Condition Circa 2008, and the Desired Future Condition Circa 2035 are presented in Appendix E. In addition, Appendix E includes a summary of stewardship activities completed 1998 – 2018 within each Management Unit as well as a set of prescriptions forecast for implementation within the Management Unit.

As noted in Chapter 6, funding for project implementation may not be in hand for the fifteen-year horizon of this plan. However, this park-wide *Habitat Management Plan* will help Lane County or its partners secure grants and other funding, since the plan provides a clear "road map," which is key to marshaling the resources and partnerships necessary to accomplish this collective vision.

Figure 10-1: Implementation Schedule Map

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
<b>Goal 1: Provide a safe and positive visitor experience in HBRA</b>			
1.1	Visitor Experience	0-15yrs	o <u>Project 1.1.1</u> : Maintain a permanent 'notice' board at the three trailheads and within the Arboretum to inform park users of areas of project activity or closures. Parking Areas: includes West (Main/MPA) lot, North Lot, and East lot.
1.1	Visitor Experience	0-15yrs	o <u>Project 1.1.2</u> : Maintain and update the HBRA trail map to clearly indicate segments of closed trail.
1.1	Visitor Experience	0-15yrs	o <u>Project 1.1.3</u> : Post Stewardship Program Project or Activity updates at Trail Head Kiosks to inform park visitors about area closures or habitat and vegetation management activity in progress in proximity to the trail.
1.1	Visitor Experience	0-5yrs	o <u>Project 1.1.4</u> : Establish criteria for trailside temporary signage ("sandwich board" or equivalent) to inform trail users of habitat or vegetation management activity in progress adjacent to the trail.
1.1	Visitor Experience	0-5yrs	o <u>Project 1.1.5</u> : Establish criteria to limit the installation of permanent signage along trails away from trailheads.
1.1	Visitor Experience	0-5yrs	o <u>Project 1.1.6</u> : Establish criteria to limit the use of flagging tape and the period it is posted in the field.
1.1	Visitor Experience	0-5yrs	o <u>Project 1.1.7</u> : Develop a riverfront trail plan to establish preferred routes to access the river for the public and for first responders (in the case of emergencies) while protecting sensitive habitats. Consider closing certain access points to the river during nesting season and other times when disturbance to wildlife will result in an adverse impact.
1.1	Visitor Experience	0-5yrs	o <u>Project 1.1.8</u> : Survey the riverfront and delineate sensitive habitat features.
1.1	Visitor Experience	0-5yrs	o <u>Project 1.1.9</u> : Improve parking areas, construct trails, and develop supporting infrastructure to improve access to the river
1.2	Visitor Experience	0-15yrs	o <u>Project 1.2.1</u> : Develop vegetation management protocols for all parking areas within the HBRA.
1.2	Visitor Experience	0-15yrs	o <u>Project 1.2.2</u> : Remove vegetation to maintain sightlines to enhance public safety and deter property crime.
1.3	Visitor Experience	0-5yrs	o <u>Project 1.3.1</u> : Post fire evacuation information at trailhead kiosks during the fire season (June-October).
1.4	Visitor Experience	0-5yrs	o <u>Project 1.4.1</u> : Gather data and interview trail users.
1.5	Visitor Experience	0-5yrs	o <u>Project 1.5.1</u> : Survey trail segments for nearby hazards and clearly delineate areas of caution.
1.6	Visitor Experience	0-5yrs	o <u>Project 1.6.1</u> : Inventory patches of poison oak growing within 5' of the edge of all recreational trails.



**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
1.6	Visitor Experience	0-5yrs	o <u>Project 1.6.2</u> : Remove poison oak growing within 5' of recreational trail edge.
1.6	Visitor Experience	0-5yrs	o <u>Project 1.6.3</u> : Maintain trail edges with annual mowing.
1.7	Visitor Experience	0-5yrs	o <u>Project 1.7.1</u> : Develop a bench location plan that identifies appropriate locations to provide at least one bench or viewpoint per mile of trail along major trail corridors (trails 1, 2, 3, 5, and 6).
1.7	Visitor Experience	0-5yrs	o <u>Project 1.7.2</u> : Install benches at designated locations.
1.7	Visitor Experience	0-15yrs	o <u>Project 1.7.3</u> : Maintain viewpoints and benches.
1.8	Visitor Experience	0-5yrs	o <u>Project 1.8.1</u> : Prepare an "on leash policy".
1.8	Visitor Experience	0-5yrs	o <u>Project 1.8.2</u> : Collaborate with stakeholders and interested members of the public to identify areas within the park where dogs will be allowed to be off leash.
1.8	Visitor Experience	0-5yrs	o <u>Project 1.8.3</u> : Solicit input from park users through trailhead tabling and public open houses.
1.8	Visitor Experience	0-5yrs	o <u>Project 1.8.4</u> : Conduct a pilot implementation project to evaluate compliance and community support
1.8	Visitor Experience	0-5yrs	o <u>Project 1.8.5</u> : Implement the approved policy
<b>Goal 2: Educate park users about the unique natural values that make the HBRA and the broader Mount Pisgah area a priority for conservation</b>			
2.1	All Conservation Targets	0-5yrs	o <u>Project 2.1.1</u> : Develop signage and associated educational materials interpreting the park's natural values, and post at trailheads.
2.1	All Conservation Targets	0-5yrs	o <u>Project 2.1.2</u> : Maintain and update trail map to clearly indicate segments of closed trail.
2.2	All Conservation Targets	0-5yrs	o <u>Project 2.2.1</u> : Maintain a permanent 'notice' board at trail head kiosks to inform park users of temporary area closures in the park.
2.2	All Conservation Targets	0-5yrs	o <u>Project 2.2.2</u> : Implement interpretive plan for 203-acre Arboretum lease area.
2.3	All Conservation Targets	0-5yrs	o <u>Project 2.3.1</u> : Lead a series of tours that showcase the natural history of wildlife that reside within or pass through the HBRA.
2.3	All Conservation Targets	0-5yrs	o <u>Project 2.3.2</u> : Host a series of natural history talks that showcase species of wildlife that reside within or pass through the HBRA.
2.3	All Conservation Targets	0-5yrs	o <u>Project 2.3.3</u> : Post informational displays at trail head kiosks that encourage park visitors to be respectful of wildlife.

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
<b>Goal 3: Maintain and improve the park's trail system to minimize ecological impacts while providing views of and access to HBRA's diverse habitats.</b>			
3.1	Visitor Experience	0-5yrs	o <u>Project 3.1.1</u> : Construct and maintain seed removal stations at each trailhead including capacity to accommodate hikers, equestrians (horse trailers, horses, etc. at the east and north parking areas) and their dogs.
3.2	All Conservation Targets	0-5yrs	o <u>Project 3.2.1</u> : Conduct a pilot project to evaluate the effects of dogs upon the success of nesting species during the breeding season.
3.2	All Conservation Targets	0-5yrs	o <u>Project 3.2.2</u> : Conduct a pilot project to evaluate the impact of dogs upon habitat quality during structured periods of "off leash" activity.
3.2	All Conservation Targets	0-5yrs	o <u>Project 3.2.3</u> : Monitor wildlife species richness before and after implementation of the "on leash" policy.
3.3	All Conservation Targets	0-5yrs	o <u>Project 3.3.1</u> : Collaborate with Friends of Buford Park and Mount Pisgah Arboretum and other partners to utilize volunteers to preserve and enhance viewpoints.
3.4	All Conservation Targets	0-5yrs	o <u>Project 3.4.1</u> : Collaborate with groups such as the Friends of Buford Park, Mount Pisgah Arboretum, Northwest Youth Corps, equestrian groups, and other trail partners to develop an updated trail management plan with input from diverse group of stakeholders. Trail standards should seek to minimize impacts of trail infrastructure upon adjacent conservation targets. Plan should identify actions to address management of high use areas (such as the Summit and Swing Hill), to improve viewpoints or focal areas. The plan should evaluate the benefits and drawbacks of seasonal closure of trail segments that traverse sensitive regions of the park (with regards to habitat usage, e.g., nesting seasons, hydrology, soils, slope, etc.)
3.4	All Conservation Targets	0-5yrs	o <u>Project 3.4.3</u> : Inventory the condition of all trails.
3.4	All Conservation Targets	0-5yrs	o <u>Project 3.4.4</u> : Inventory "rogue trails", analyze trail function, and identify management actions to reduce the impact to conservation targets from rogue trails while addressing the needs of park users that such trails support.
3.4	All Conservation Targets	0-5yrs	o <u>Project 3.4.5</u> : Identify trail segments that bisect conservation target habitats and measure the area of the habitat patch size to identify and evaluate areas where trails are undermining viability of conservation targets.
3.5	All Conservation Targets	0-5yrs	o <u>Project 3.5.1</u> : Measure the effectiveness of recommended BMP's and adjust the standards with consideration of monitoring results and data analysis.

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
3.5	All Conservation Targets	0-5yrs	o <u>Project 3.6.1</u> : Develop and implement a pilot project to explore the feasibility of producing native hay within HBRA.
3.5	All Conservation Targets	0-5yrs	o <u>Project 3.7.1</u> : Conduct a pilot project to evaluate measures to mitigate visitor impacts on wildlife habitat.
<b>Goal 4: Minimize impacts of park management on conservation targets.</b>			
4.1	All Conservation Targets	0-5yrs	o <u>Project 4.1.1</u> : provide a copy of the ODOT BMP handbook & 'Stewardship Toolbox' to stakeholders, volunteer groups, and staff who assist with management of habitat within the park.
4.2	All Conservation Targets	0-5yrs	o <u>Project 4.2.1</u> : designate a location to develop an equipment cleaning facility.
4.2	All Conservation Targets	0-5yrs	o <u>Project 4.2.2</u> : construct a facility to clean and remove foreign material from equipment.
4.3	All Conservation Targets	0-5yrs	o <u>Project 4.3.1</u> : identify needed equipment.
4.3	All Conservation Targets	0-5yrs	o <u>Project 4.3.2</u> : acquire equipment.
<b>Goal 5: Restore and enhance prairie, savanna and oak woodland habitats by reducing encroaching woody vegetation.</b>			
5.1	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-15yrs	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions within each management unit.
5.1	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-5yrs	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
5.2	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-15yrs	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects in accordance with the 2018-2032 Implementation Schedule as outlined in Appendix E.
5.3	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-5yrs	o <u>Project 5.3.1</u> : Collaborate with research scientists at the UO or OSU to determine the appropriate amount of coarse woody debris to retain within restoration project areas of different habitat types.

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
<b>Goal 6: Achieve significant restoration of prairie and savanna, oak woodland, and wet prairie habitats in HBRA.</b>			
6.1	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-5yrs	o <u>Project 6.1.1</u> : prepare prescribed burn plans for the Meadowlark South MU (2018), Meadowlark East MU & Ponderosa MU (2020), Bridge Bowl MU & Swing Hill MU (2021), and North Bottomlands SZ & Vesper MU (2022)
6.1	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	5-10yrs	o <u>Project 6.1.2</u> : prepare prescribed burn plans for the Bugbane MU (2023), Lazuli MU, & Upper Canyon Creek MU (2024), Buckbrush MU (2025), and Fawn Lily MU (2026)
6.1	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	10-15yrs	o <u>Project 6.1.3</u> : prepare prescribed burn plans for the Eagle's Lair MU & Head Waters MU (2029)
6.2	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-5yrs	o <u>Project 6.2.1</u> : Collaborate with Oregon Department of Forestry to prepare a revised fire management strategy for the HBRA. (2019-20)
6.3	Oak Woodland, Oregon Vesper Sparrow, Other Significant Habitats, Prairie & Savanna, and Wet Prairie	0-5yrs	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
6.3	Oak Woodland, Oregon Vesper Sparrow, Other Significant Habitats, Prairie & Savanna, and Wet Prairie	0-5yrs	o <u>Project 6.3.2</u> : once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
6.3	Oak Woodland, Oregon Vesper Sparrow, Other Significant Habitats, Prairie & Savanna, and Wet Prairie	0-5yrs	o <u>Project 6.3.3</u> : flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
6.4	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-15yrs	o <u>Project 6.4.1</u> : implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie.
<b>Goal 7: Achieve significant restoration of chaparral habitat in HBRA.</b>			
7.1	Buckbrush Chaparral	5-10yrs	o <u>Project 7.1.1</u> : Prepare burn plan for buckbrush patches within the Buckbrush MU.
7.1	Buckbrush Chaparral	5-10yrs	o <u>Project 7.1.2</u> : Collaborate with Oregon Department of Forestry East Lane District, Rivers to Ridges partners, and other fire management organizations to implement prescribed burns within at least 4 distinct units within the buckbrush chaparral habitat type. Units should be at least 5 acres and no larger than 13 acres in size. The size and form of unit will be determined with consideration of slope, aspect, and proximity to established control features such as Buckbrush Creek, Trail 3, Trail 5, & Trail 6.
7.2	Buckbrush Chaparral	5-10yrs	o <u>Project 7.2.1</u> : manage invasive vegetation and broadcast seed or plant Buckbrush in designated areas of the Buckbrush MU
7.1	Buckbrush Chaparral	10-15yrs	o <u>Project 7.2.2</u> : manage invasive vegetation and broadcast seed or plant Buckbrush in designated areas of the South Bottomlands Stewardship Zone
<b>Goal 8: Manage for diverse native plant communities within each conservation target habitat.</b>			
8.1	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-5yrs	o <u>Project 8.1.1</u> : remove and manage invasive species where cover is greater than 25% within ten 10acre patches of oak woodland, prairie, savanna, and wet prairie within the Bridge Bowl MU, Meadowlark East MU, Ponderosa MU, Spring Box MU, Swing Hill MU, and Vesper MU.
8.1	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-5yrs	o <u>Project 8.1.2</u> : Broadcast native seed mixes or install native plants to establish cover of native species within ten 10acre patches of oak woodland, prairie, savanna, and wet prairie within the Bridge Bowl MU, Meadowlark East MU, Ponderosa MU, Spring Box Mu, Swing Hill MU, and Vesper MU.
8.2	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-15yrs	o <u>Project 8.2.1</u> : annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie throughout the HBRA.

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
8.3	Oak Woodland, Oregon Vesper Sparrow, Prairie & Savanna, and Wet Prairie	0-15yrs	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
<b>Goal 9: Increase the extent of wet prairie habitat.</b>			
9.1	Bradshaw's Lomatium & Wet Prairie	0-5yrs	o <u>Project 9.1.1</u> : Identify areas where wet prairie was filled, drained, or modified.
9.1	Bradshaw's Lomatium & Wet Prairie	0-5yrs	o <u>Project 9.1.2</u> : Secure resources to advance and support restoration of wet prairies
9.1	Bradshaw's Lomatium & Wet Prairie	0-5yrs	o <u>Project 9.1.3</u> : Restore wet prairie(s) in identified project areas within the Bridge Bowl MU, Meadowlark South MU, North Bottomlands SZ, Ponderosa MU, Spring Box MU, and Swing Hill MU.
9.1	Bradshaw's Lomatium & Wet Prairie	5-10yrs	o <u>Project 9.1.4</u> : Restore wet prairie within the balance of areas identified under the scope of project 9.1.1
9.2	Bradshaw's Lomatium & Wet Prairie	0-5yrs	o <u>Project 9.2.1</u> : Identify, assess, and inventory wet prairie within the greater Mt. Pisgah area
9.2	Bradshaw's Lomatium & Wet Prairie	0-5yrs	o <u>Project 9.2.2</u> : Convene property owners and stakeholders to discuss conservation easements, fee title acquisition, and property donation options.
9.2	Bradshaw's Lomatium & Wet Prairie	0-10yrs	o <u>Project 9.2.3</u> : Collaborate with partners to use conservation easements to protect wet prairie on nearby private properties.
9.3	Bradshaw's Lomatium & Wet Prairie	0-5yrs	o <u>Project 9.3.1</u> : propagate seed and plugs of Bradshaw's lomatium at the Friends Native Plant nursery
9.3	Bradshaw's Lomatium & Wet Prairie	0-5yrs	o <u>Project 9.3.2</u> : plant plugs and broadcast seed of Bradshaw's lomatium in 5x100 sq. ft. plots within wet prairie restoration sites.
9.3	Bradshaw's Lomatium & Wet Prairie	5-10yrs	o <u>Project 9.3.3</u> : Plant plugs and broadcast seed of Bradshaw's lomatium within 1x100 sq. ft. plot within the balance of areas identified under the scope of project 9.1.1

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
<b>Goal 10: Locate and, to the extent feasible, reduce populations of feral or harmful non-native animal species impacting each conservation target.</b>			
10.1	All Conservation Targets	0-5yrs	o <u>Project 10.1.1</u> : develop reporting system for park users to document sightings of non-native animals within the HBRA.
10.1	All Conservation Targets	0-5yrs	o <u>Project 10.1.2</u> : Acquire and deploy "trail cameras" located away from trails to discreetly monitor the HBRA for non-native animal species.
10.1	All Conservation Targets	5-10yrs	o <u>Project 10.1.3</u> : Process data and identify the types of non-native animal species observed in and around HBRA.
10.2	All Conservation Targets	0-5yrs	o <u>Project 10.2.1</u> : Collaborate with ODFW, neighbors, and partner agencies to monitor for the presence of non-native animals previously undocumented within the Greater Mount Pisgah Area.
10.2	All Conservation Targets	0-5yrs	o <u>Project 10.2.2</u> : develop an 'EDRR most wanted poster' to communicate the species of interest to park users.
10.3	All Conservation Targets	0-5yrs	o <u>Project 10.3.1</u> : Create presentation and outreach materials.
10.3	All Conservation Targets	0-5yrs	o <u>Project 10.3.2</u> : Host educational presentations & distribute outreach materials that explain the issue.
10.4	All Conservation Targets	5-10yrs	o <u>Project 10.4.1</u> : Collaborate with ODFW to survey and monitor native and non-native wildlife game species within the HBRA.
10.4	All Conservation Targets	0-5yrs	o <u>Project 10.4.2</u> : Collaborate with ODFW to evaluate monitoring data to set tolerance thresholds to govern actions to manage non-native species within the HBRA.
10.5	All Conservation Targets	0-5yrs	o <u>Project 10.4.3</u> : Where feasible, collaborate with ODFW, Oregon State Police, Lane County Animal Services to employ prescriptions to eliminate the threat of increased populations of non-native species listed on the 'EDRR most wanted poster' to HBRA conservation targets. When appropriate, collaborate with Lane County Animal Services to facilitate adoption of captured domestic animals such as cats.
10.5	All Conservation Targets	5-10yrs	o <u>Project 10.5.1</u> : Collaborate with ODFW to trap and remove non-native animal species, such as Wild Turkeys, that pose the greatest threat to conservation targets and native animals that are known to occur within the greater Mount Pisgah area.



**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
<b>Goal 11: Locate and reduce the presence of habitat-modifying, non-native plant species within each conservation target habitat.</b>			
11.1	All Conservation Targets	0-5yrs	o <u>Project 11.1.1</u> : Update Invasive Species management and watch lists
11.2	All Conservation Targets	0-15yrs	o <u>Project 11.2.1</u> : Monitor all Stewardship Zones for all invasive species noted on the EDRR watch list.
11.2	All Conservation Targets	0-15yrs	o <u>Project 11.2.2</u> : Collaborate with partners to recruit and train volunteers to assist with monitoring activities.
11.3	All Conservation Targets	0-15yrs	o <u>Project 11.3.1</u> : Manage patches of invasive species adjacent to roads and trails and within parking areas and power line easements.
11.3	All Conservation Targets	0-10yrs	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread within a Management Unit or through the HBRA.
11.3	All Conservation Targets	0-15yrs	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species as part of Management Unit specific restoration investments.
11.4	All Conservation Targets	0-15yrs	o <u>Project 11.4.1</u> : Manage or suppress species classified as "secondary invaders" along roads, trail corridors and within parking areas or powerline easements.
11.5	All Conservation Targets	0-15yrs	o <u>Project 11.5.1</u> : Intensively manage false brome as part of Management Unit specific restoration investments.
11.5	All Conservation Targets	5-10yrs	o <u>Project 11.5.2</u> : Intensively manage Maltese star thistle as part of Management Unit specific restoration investments.
11.6	All Conservation Targets	0-5yrs	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
11.7	All Conservation Targets	0-10yrs	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry, as part of Management Unit specific restoration investments.
11.8	All Conservation Targets	0-15yrs	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom as part of Management Unit specific restoration investments.

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
11.9	All Conservation Targets	0-5yrs	o <u>Project 11.9.1</u> : Convene partners, stakeholders, and neighbors to identify invasive species management priorities for the Greater Mount Pisgah Area.
11.9	All Conservation Targets	5-15yrs	o <u>Project 11.9.2</u> : Collaborate with partners to host an invasive species management workshop
11.9	All Conservation Targets	5-15yrs	o <u>Project 11.9.3</u> : Collaborate with partners to secure funding to manage invasive species on adjacent lands.
11.10	All Conservation Targets	10-15yrs	o <u>Project 11.10.1</u> : Collaborate with partners to assess mechanisms to fund an endowment.
11.10	All Conservation Targets	10-15yrs	o <u>Project 11.10.1</u> : Collaborate with partners to establish and fund an endowment.
11.11	All Conservation Targets	0-15yrs	o <u>Project 11.11.1</u> : Collaborate with BPA to manage large areas within the powerline easement occupied by invasive species in conjunction with their three year system wide vegetation management cycle.
<b>Goal 12: Remove fish passage barriers from the lower mile of creeks and streams on HBRA that flow into the Coast Fork and Middle Fork of the Willamette River.</b>			
12.1	Creeks & Streams	0-5yrs	o <u>Project 12.1.1</u> : identify, assess, and inventory barriers to fish passage
12.2	Creeks & Streams	0-5yrs	o <u>Project 12.2.1</u> : replace culvert and improve stream crossing at the intersection of Buckbrush Creek and Trail 56.
12.2	Creeks & Streams	5-10yrs	o <u>Project 12.2.2</u> : secure resources to replace culverts or implement other retrofits to improve fish passage in the balance of sites identified during the inventory.
<b>Goal 13: Improve ecological health of creeks and streams.</b>			
13.1	Creeks & Streams	0-5yrs	o <u>Project 13.1.1</u> : assess macroinvertebrate populations within streams.
13.2	Creeks & Streams	0-5yrs	o <u>Project 13.2.1</u> : Identify impacted stream corridors
13.2	Creeks & Streams	0-10yrs	o <u>Project 13.2.2</u> : secure resources to advance stream restoration
13.2	Creeks & Streams	0-10yrs	o <u>Project 13.2.3</u> : implement stream restoration projects.
13.3	Creeks & Streams	5-10yrs	o <u>Project 13.3.1</u> : Coordinate with livestock producers to identify and evaluate opportunities to utilize grazing as a means to manage vegetation in a manner that enhances conservation target habitats.
13.3	Creeks & Streams	5-10yrs	o <u>Project 13.3.2</u> : Collaborate with a livestock producer(s) to implement a pilot project to assess the benefits of grazing in conservation target habitats including oak woodland, prairie, savanna, and wet prairie while minimizing adverse effects to creeks and streams.

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
<b>Goal 14: Improve ecological health of riparian floodplain habitats.</b>			
14.1	Willamette Floodplain	0-5yrs	o <u>Project 14.1.1</u> : Survey the Thompson Slough channel corridor and adjacent floodplain and install dataloggers and staff gages within the lowest reaches of the floodplain.
14.1	Willamette Floodplain	0-5yrs	o <u>Project 14.1.2</u> : Monitor hydrology within the Thompson Slough channel corridor and adjacent floodplain.
14.1	Willamette Floodplain	0-5yrs	o <u>Project 14.1.3</u> : Monitor and document wildlife along Thompson Slough and in the adjacent floodplain.
14.1	Willamette Floodplain	0-5yrs	o <u>Project 14.1.4</u> Collaborate with partners to design & permit prescriptions and develop site engineering plans to restore Thompson Slough channel corridor and adjacent floodplain.
14.1	Willamette Floodplain	0-5yrs	o <u>Project 14.1.5</u> : Manage invasive species within the Thompson Slough channel corridor and adjacent floodplain in preparation for site construction.
14.1	Willamette Floodplain	0-5yrs	o <u>Project 14.1.6</u> : Implement restoration plans including site construction along the Thompson Slough channel corridor and within the adjacent floodplain.
14.2	Willamette Floodplain	0-5yrs	o <u>Project 14.2.1</u> : Survey the sloughs and adjacent floodplain in proximity to the North Parking lot in the North Bottomlands and install dataloggers and staff gages within the lowest reaches of the floodplain.
14.2	Willamette Floodplain	0-5yrs	o <u>Project 14.2.2</u> : Monitor hydrology within the proximity to the North Parking lot in the North Bottomlands.
14.2	Willamette Floodplain	0-5yrs	o <u>Project 14.2.3</u> Collaborate with partners to design & permit prescriptions and develop site engineering plans to remove plugs and restore sloughs in proximity to the North Parking lot in the North Bottomlands.
14.2	Willamette Floodplain	0-5yrs	o <u>Project 14.2.4</u> : Manage invasive species within proximity to the North Parking lot in the North Bottomlands in preparation for site construction and grading associated with floodplain restoration.
14.2	Willamette Floodplain	0-5yrs	o <u>Project 14.2.5</u> : Implement restoration plans including site construction in proximity to the North Parking lot in the North Bottomlands.
14.3	Willamette Floodplain	10-15yrs	o <u>Project 14.3.1</u> : Survey the South Bottomlands sloughs and adjacent floodplain and install dataloggers and staff gages within the lowest reaches of the floodplain.
14.3	Willamette Floodplain	10-15yrs	o <u>Project 14.3.2</u> : Monitor hydrology within the South Bottomlands sloughs and adjacent floodplain.
14.3	Willamette Floodplain	10-15yrs	o <u>Project 14.3.3</u> : Monitor and document wildlife along South Bottomlands sloughs and in the adjacent floodplain.

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
14.3	Willamette Floodplain	10-15yrs	o <u>Project 14.3.4</u> Collaborate with partners to design & permit prescriptions and develop site engineering plans to restore Thompson Slough channel corridor and adjacent floodplain.
14.3	Willamette Floodplain	10-15yrs	o <u>Project 14.3.5</u> : Manage invasive species within the South Bottomlands sloughs and adjacent floodplain in preparation for site construction.
14.3	Willamette Floodplain	10-15yrs	o <u>Project 14.3.6</u> : Implement restoration plans including site construction along the South Bottomlands sloughs and within the adjacent floodplain.
14.4	Willamette Floodplain	0-5yrs	o <u>Project 14.4.1</u> : Collaborate with partners to convene a round table of stakeholders and neighbors to discuss and identify floodplain enhancement and restoration opportunities within the Seavey Floodplain along the lower Coast Fork of the Willamette.
14.4	Willamette Floodplain	0-5yrs	o <u>Project 14.4.2</u> : Collaborate with partners to convene a round table of stakeholders and neighbors to discuss and identify floodplain enhancement and restoration opportunities along the lower Middle Fork of the Willamette.
<b>Goal 15: Manage habitats in the N. Bottomlands Stewardship Zone to be compatible with the HBRA Master Plan and Large Event Task Force recommendations.</b>			
15.1	Visitor Experience	0-5yrs	o <u>Project 15.1.1</u> : Develop event protocols and conditions of use that can be incorporated into special use permits for North Bottomlands events.
15.1	Visitor Experience	0-5yrs	o <u>Project 15.1.2</u> : Define and include best management practices for invasive plant treatments as a condition of use for event organizers.
15.2	Oak Woodland, Oregon Vesper Sparrow, Other Significant Habitats, Prairie & Savanna, Wet Prairie, & Willamette Floodplain	0-5yrs	o <u>Project 15.2.1</u> : Continue to treat non-native blackberry and other invasive plant species within the North Bottomlands.
15.2	Visitor Experience	0-5yrs	o <u>Project 15.2.2</u> : Construct seed removal stations at each trailhead that accommodate hikers, equestrians and dog walkers.

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
15.2	Visitor Experience	0-5yrs	o <u>Project 15.2.3</u> : Define and implement vegetation management objectives to facilitate recreation and enhance habitat in the North Bottomlands. (Examples may include controlling poison oak, deadly nightshade, and poison hemlock, or using vegetative barriers to impede entry into sensitive habitats.).
15.2	Visitor Experience	0-5yrs	o <u>Project 15.2.4</u> : Utilize trailhead temporary signage during North Bottomlands events (“sandwich board” or equivalent) to inform trail users of the importance of using seed removal stations to prevent movement of invasive weeds from event area into the natural areas of the park.
15.3	Visitor Experience	0-5yrs	o <u>Project 15.3.1</u> : Lane County park managers and partners reference the <i>Habitat Management Plan</i> and consider ‘context sensitive’ design alternatives when reviewing, approving and implementing infrastructure improvements in the North Bottomlands. (Examples may include renovation of Kienzle house and barn, trail and equestrian developments, etc.)
15.3	Visitor Experience	0-5yrs	o <u>Project 15.3.2</u> : Identify potential negative conservation impacts of each priority improvement. Considering financial, logistical and technical feasibility and constraints, and design improvements to minimize negative impacts to park safety as well as adjacent habitats.
15.4	Visitor Experience	0-5yrs	o <u>Project 15.4.1</u> : Install temporary signage near future conservation project areas in the North Bottomlands that educate park users about the parallel goals to enhance conservation targets and continue recreation uses in the North Bottomlands.
15.4	Visitor Experience	0-5yrs	o <u>Project 15.4.2</u> : Staff booths at special events that educate the public on future conservation actions and ongoing recreation uses in the North Bottomlands.
15.4	Visitor Experience	0-5yrs	o <u>Project 15.4.3</u> : Install signage in appropriate locations that educate the public about County conservation goals in higher use recreation areas.

**Figure 10-2: Stewardship Projects Table**

Supporting Strategy	Benefitting Conservation Target	Schedule	Project
15.4	Oak Woodland, Oregon Vesper Sparrow, Other Significant Habitats, Prairie & Savanna, Wet Prairie, & Willamette Floodplain	0-5yrs	o <u>Project 15.4.4</u> : Implement demonstration conservation projects in higher use recreation areas.
15.5	All Conservation Targets	0-15yrs	o <u>Project 15.5.1</u> : Collaborate with Friends of Buford Park & Mt. Pisgah to develop a lease agreement for the Native Plant Nursery facility. Consider expanding the footprint of the production area to afford ample acreage to support plant material production to advance implementation of the Habitat Management Plan as well as conservation actions by Rivers to Ridges partners or other partners working in the Willamette Valley.
15.6	All Conservation Targets	0-5yrs	o <u>Project 15.6.1</u> : Coordinate with partners and area farmers to manage old pastures for hay production.
15.7	Oak Woodland, Oregon Vesper Sparrow, Other Significant Habitats, Prairie & Savanna, Wet Prairie, & Willamette Floodplain	0-5yrs	o <u>Project 15.7.1</u> : Develop conservation actions and best management practices (BMPs) for the North Bottomlands for a 100-foot riparian revegetation area adjacent to the Coast Fork Willamette River, in conjunction with planning for the Thompson Slough restoration project.
15.8	Visitor Experience	0-5yrs	o <u>Project 15.8.1</u> : Collaborate with partners to design a trail through the North Bottomlands that addresses both ecological and visitor access goals.
15.8	Visitor Experience	0-5yrs	o <u>Project 15.8.2</u> : Collaborate with partners to maintain a temporary mowed trail to evaluate and adjust the alignment.
15.8	Visitor Experience	0-5yrs	o <u>Project 15.8.3</u> : Collaborate with partners to construct a permanent trail

# Chapter 11: Best Management Practices and Stewardship Tool Box

## 11.1 Use of the Best Management Practices

The intent of this chapter is to document and describe the protocols and procedures that will be incorporated into implementation of ongoing stewardship projects, to ensure that stewardship actions are conducted in a safe and effective manner, and do not create unacceptable harm to other conservation targets. To a considerable extent the Best Management Practices (“BMPs”) listed below capture the expertise and practices that have been developed as a part of ongoing stewardship actions since the park was established.

Lane County managers and operational staff, as well as staff from partner agencies, such as Friends of Buford Park & Mt. Pisgah, Mount Pisgah Arboretum, and Lane County Sheriff’s Posse (“Staff”) are expected to become familiar with this section of the HBRA Habitat Management Plan. Staff will review this section when planning and implementing projects so that actions are consistent with the avoidance and minimization measures, as well as the BMPs. Whenever an organization that is approved to work within HBRA initiates a project, it is the responsibility of that organization to ensure that it complies with any and all local, state, and federal regulatory and permitting requirements associated with the project.

The purpose of this Habitat Management Plan is for Lane County Parks and its partners to identify goals, strategies, and projects to effectively conserve a diversity of native habitats and species throughout HBRA, while effectively meeting demand for recreational use of the park. It should be noted that Mount Pisgah Arboretum holds a long-term lease on approximately 203 acres within HBRA, and has developed its own policies and practices. There is no intention on the part of Lane County or its partners to reduce the Arboretum’s current level of autonomy in the management of its leased area. The Arboretum policies and practices are generally compatible with those described in this chapter, but may vary in some cases to meet the specific needs of its mission and programs.

## 11.2 Professional Judgment

Within this section, words and phrases such as “where feasible”, “where appropriate”, and “where practicable” are used in conjunction with some minimization and avoidance measures, BMPs, and techniques. These phrases, which allow some exercise of professional judgment by Staff, are not to be used for convenience or ease of operation. Rather, these words are included to depict the unique nature of habitat management at the HBRA, which may be either scheduled, dependent on site conditions, or responsive to unexpected events (such as wildfire, windstorm, flood, etc.).

Projects or other treatments will be planned and implemented in selected locations based on an analysis of conditions and needs. Funds are limited, and the intention is to treat areas where the benefits are greatest, or the risk of negative impacts is greatest if action is not taken.

## 11.3 Habitat Advisory Team (HAT)

Lane County Parks Manager shall create and seek advice from a Habitat Advisory Team (HAT). The HAT will be composed of representatives from Lane County Parks (Parks Manager, Parks Supervisor, Natural Areas Coordinator), Friends of Buford Park & Mt. Pisgah, Mount Pisgah Arboretum, Sheriff’s Posse, and



The Nature Conservancy. The HAT may also include other stakeholders, such as Oregon Dept. of Forestry, Oregon Dept. of Fish and Wildlife, Bonneville Power Administration, as appropriate. The HAT will meet at least annually to review implementation of the *Habitat Management Plan* and recommend changes for plan improvement. The HAT will annually assess previous project outcomes, report on projects planned for the upcoming year, and discuss future project priorities.

## 11.4 Training

Understanding and correctly implementing BMPs for maintenance and stewardship activities is the responsibility of every employee and anyone who supervises volunteers from each organization approved and authorized to work within the HBRA. Stakeholders may collaborate on trainings where appropriate, or when more appropriate, implement training opportunities individually.

Examples of training opportunities include:

- Stewardship Academy: For new employees and volunteers, includes presentation of the Habitat Management plan, associated environmental issues, and the HBRA Master Plan
- Herbicide applicator trainings
- Wildland fire suppression and management training
- Participation in professional symposiums and conferences
- Continuing education classes
- New product trials and equipment demonstrations
- Rivers to Ridges Field Operations Group project tours and site visits
- HBRA quarterly meetings with special interest groups
- Team meetings

## 11.5 Documentation and Reporting

Stewardship staff involved with plan implementation will brief the Habitat Advisory Team (HAT) about plan-related activities that occurred during the year prior to each annual meeting. HAT members will review and discuss this information as the basis for developing any possible recommendations for changes to the plan. Elements that may be addressed during this review include:

- Summary of routine work accomplished throughout the year.
- Challenges, controversies, and successes affecting implementation of the BMPs.
- Results of research and any recommendations for modifications to BMPs.
- Summary of Stewardship Project accomplishments.
- Summary of storm damage or accidental incidents such as fire, including unanticipated ecological damage and associated outcomes.
- A summary of projects that could not use the BMPs and actions taken to inform future revisions of this section of the Habitat Management Plan.

## 11.6 Best Management Practices by Category

### 11.6.1 Trails (TR)

#### In General

- TR-1. When maintaining trails, if feasible, prioritize activities during the weekday (M-Th: 9-3pm and Friday 10-2pm) when tasks have the potential for causing adverse impacts to park patrons during periods of peak use.
- TR-2. Post temporary precautionary signage to advise park patrons as they are approaching hazard(s).

### **When managing vegetation adjacent to trails:**

- TR-3. Remove vegetation encumbering trail corridors.
- Prune and remove limbs from shrubs, small trees, and trees in ways that minimize visible evidence, such as flush cuts.
- TR-4. Manage and remove invasive vegetation.
- Incorporate recent EDRR reports for each trail segment when implementing vegetation management actions.
- TR-5. Remove undesirable woody vegetation (such as blackberry and poison oak) growing adjacent to the trail edge.
- Mechanically or chemically manage vegetation growing adjacent to (typically within 3') the trail edge.
    - Schedule treatments for a time of year that will minimize impacts to native herbaceous species, such as during the late summer – fall.
    - Identify and treat any invasive herbaceous species that occur under cover of the targeted vegetation.
    - Post signage and pertinent information to inform trail users about the application.
    - When practical, close the trail segment concurrent with the application and for a period following the completion of the application consistent with guidelines defined on the product label.
- TR-6. If planning (non-routine) maintenance or trail improvements that will alter vegetation growing adjacent to the trail (new switch backs, trail alignment, overlooks, etc.) coordinate with appropriate experts to conduct surveys for sensitive species in selecting alignments, salvage and/or transplant native plant materials, and take other precautionary actions to minimize impacts.

### **Maintain trail bed**

- TR-7. When removing branches and/or organic debris (leaf litter, twigs and branches, etc.) from trail segments,
- Cut and scatter branches in forest understory at least 3' from trail, if quantity of material is small, or
  - Place branches in small piles at least 15' from the edge of the trail, or
  - Scatter debris across a larger area, if quantity of material is large.
  - Avoid placing debris and branches within prairie, savanna, and oak woodland habitats if at all possible. Such debris should be hauled off site, or can be placed in nearby conifer forest habitat instead.
- TR-8. When preventing vegetation from establishing or growing up within the trail bed.
- Apply wood chips where feasible to create a vegetation-free trail surface
  - Mow trails occasionally during the mowing season where appropriate.
  - Utilize thermal treatments in the winter, spring, and fall to eliminate vegetation, particularly annual seedlings.
  - If necessary and appropriate, utilize chemical treatments to eliminate persistent perennial vegetation attempting to colonize the trail bed.
- TR-9. When agitating and re-compacting trail surfaces to maintain an even trail surface.
- Source gravel products from trustworthy vendors who can guarantee that the gravel is "weed free."

## Management of hazard trees or fallen trees

- TR-10. Contact Lane County Parks Division to report trees that may pose a potential threat to public safety. Contact Number: (541) 682-2000. Following a storm event causing tree damage, Lane County Parks Division will determine whether to implement a temporary park closure, and will coordinate with stakeholders to identify roles and responsibilities for cleanup implementation within the park. Providing safe access to the public will be the first priority in storm response efforts.
- TR-11. When County operations employees, park partners, and/or contractors remove hazard trees:
- Prior to project work, photo-document and describe any potential tree hazard risks. This will aid in minimizing safety risks and provide for hazard abatement prior to the start of any project. Photo documentation is also desirable to accompany Federal Emergency Management Agency (FEMA) reimbursement requests for clean-up costs after federally declared disaster storm events.
  - Consult with appropriate experts to determine if sensitive animal or plant species are known to occur in proximity to the hazard tree, and if so, take action to minimize collateral impacts to these natural resources.
  - Priority should be given to reducing the potential hazard by means of hazard mitigation and assessment. Not all tree hazards require removal and can be eliminated or reduced through pruning, crown cleaning and other approved arboricultural practices. These methods should be evaluated prior to the removal of an assessed hazard tree.
  - For those trees warranted for removal because of hazard risk, if feasible leave as much “standing snag habitat” while insuring no further hazard remains at the site. This can be done by designing snags so that if they were to fall, they would not hit a trail, road, or other public gathering place.
  - When practicable, manage (using manual, mechanical or chemical treatments) patches of blackberry or other invasive woody species prior to placement of removed hazard tree logs or debris.
  - When feasible, place large woody debris and/or logs adjacent to trails, or other areas that would provide for suitable habitat or benefit to the natural area. Consult with appropriate staff to insure the best use of the downed wood prior to completion.
  - When feasible, utilize removed portions of the hazard tree to obstruct unauthorized trails from within a reasonable proximity of the removal. Outside the Arboretum, this should require the authorization of appropriate County staff prior to implementation.
- TR-12. Following significant storm events (including high winds, excessive rain, lightning strikes) patrol high use trail corridors to identify and remove trees or branches that obstruct the trail corridor.

### ***11.6.2 Stormwater Management***

#### **In General**

- TR-13. Promote trail design that maintains storm water sheet flow across the trail bed and/or minimizes hydrologic changes to adjacent wetland habitats when and where appropriate. Example methods for maintaining sheet flow include grading and/or utilization of a French drain structure to re-establish sheet flow in areas where storm water is being concentrated.
- TR-14. If necessary to allow a desired trail alignment, incorporate boardwalks or similar infrastructure in trail design in areas where site hydrology may otherwise be affected by trail construction.
- TR-15. If planning (non-routine) maintenance or trail improvements that will alter the trail bed (new switch backs, trail alignment, overlooks, etc.) or change the existing drainage (new rolling dip, rolling grade, culvert) coordinate with appropriate experts to determine if formal design, permits, etc. are required to modify existing storm water management facilities.

- TR-16. Implement seasonal closure of trail segments where trails traverse areas of sensitive habitat, hydrology, or other biological, ecological, or geological features of concern.
- TR-17. Upon discovery of trail corridor damage caused by erosion or storm events, contact the Lane County Parks Division (or Mount Pisgah Arboretum staff for trails located inside the Arboretum lease area) to report the problem and to coordinate trail abatement measures.

### ***11.6.3 Parking Areas and Access Roads (PR)***

When County operations employees, park partners, volunteers, and/or contractors carry out management of parking areas and access roads:

#### **In General**

- PR-1. Utilize Lane County's Routine Road Maintenance Best Management Practices (RRM BMP) Guide.
- PR-2. Manage vegetation within parking areas (and within 100 yards along roadsides on the approach to parking areas) to enhance and maintain visibility, to deter theft, and protect the safety of park patrons.
- PR-3. Manage refuse to minimize impact on wildlife where refuse facilities are provided.
- Collect and remove refuse at a regular frequency.
  - Use refuse containers that are sealed and designed in a manner to prevent access to wildlife.
- PR-4. Manage herbaceous vegetation by mowing annually (ideally in late June or early July) near parking areas and along roadsides to reduce fuels that could carry and spread wildfire.
- PR-5. Manage problematic vegetation, such as poison oak, near parking areas to protect park patrons.
- PR-6. When re-vegetating disturbed soils, utilize native seed from the Mount Pisgah provenance (such as that produced through Friends' nursery program) and/or other native seed that has an identified collection source located within 20 miles of the park.

### ***11.6.4 Utility Corridors (BPA powerlines, natural gas lines, EPUD powerlines) (UC)***

For BPA right of way, please refer to "Transmission System Vegetation Management Program Final Environmental Impact Statement (FEIS), May 2000" and the Memorandum of Understanding between BPA and 'Pisgah Partners'.

When utility company employees and/or contractors, County operations employees, park partners, and/or contractors carry out management within utility corridors:

#### **In General**

- UC-1. Prioritize maintenance activities during the weekday (M-F: 9-3pm) to minimize adverse impacts to park patrons during periods of peak (weekly) use.
- UC-2. Post temporary precautionary signage to advise park patrons as they are approaching hazard(s).

#### **Season**

- UC-3. Prioritize timing of vegetation management activities for seasons that minimize collateral impacts or risks. To the extent possible, mowing should be timed to avoid impacts to nesting songbirds, reptiles, and reproduction of native herbaceous plants. Chemical treatments should be timed to avoid impacts to pollinators, minimize impacts to actively growing native herbaceous species, and minimize seed set of invasive plants. Thermal treatments should be timed to avoid wildfire risk.

## Access

- UC-4. Utilize the existing trail system to access easements. Minimize off-trail travel including pedestrian and vehicle traffic.

## Vegetation Management

- UC-5. Coordinate with utilities to seek advance notice of planned work.
- UC-6. Minimize and abate disturbance to soil or vegetation.
- UC-7. When re-vegetating disturbed soils, utilize native seed from the Mount Pisgah provenance (such as produced through Friends nursery program) and/or other native seed that has an identified collection source located within 20 miles of the park.

### ***11.6.5 Ecological Tree Removal (for habitat restoration purposes) (ER)***

Recommended guidelines and BMPs for ecological tree removal activities are presented for reference only. All potential tree removal activities within HBRA are evaluated on a project-by-project basis by Lane County, and the recommendations identified below are not intended to limit the discretion of Lane County Park Manager, County Administrator, or Board of County Commissioners when making policy decisions. Tree removal and related actions within the Mount Pisgah Arboretum's lease area will be governed by the lease and associated agreements based on the lease intent. The recommendations under Item 3 are presented in a prioritized sequence. If the first recommendation is not available, or is fully met with additional material remaining, then the next recommendation in the list is to be considered.

- ER-1. All trees proposed for removal as part of a County-approved project (outside the Arboretum) will be appropriately marked to assist Lane County staff field inspections prior to any work activities.
- ER-2. Utilize appropriate erosion control BMPs that prohibit the movement of disturbed soils from the identified work area
- ER-3. Recommendations for the disposition of trees determined to have commercial value.
  - 1) Utilize logs for restoration and habitat conservation purposes or park facility improvements:
    - Within the boundaries of the restoration project from which they are cut, or
    - On another restoration project within HBRA.
    - Mill logs on site with a portable mill to produce materials for fences, benches, siding, and other park facilities.
  - 2) Use proceeds from the sale of the merchantable material to offset costs directly related to the tree-removal activities on the restoration project from which the trees are cut.
  - 3) If funds remain after direct tree removal costs are paid, use proceeds to support habitat and visitor infrastructure improvement projects within HBRA.

## **11.7 HBRA Stewardship Zones**

- S-1 Protect the Best Habitats.
  - 1) In prairie and oak habitats, identify areas with a
    - High richness of high fidelity native herbaceous prairie plant species.
    - Abundance of features associated with native reptiles such as nesting areas, basking areas, or hibernacula
    - Sites with unique or diverse examples of the native invertebrate fauna

- 2) In riparian and conifer forest habitats, identify areas with
    - A high richness or cover of spring wildflowers, or
    - A high density of nesting neotropical migrant songbirds.
  - 3) Minimize adverse impacts to populations of plant and animal species in high quality habitats.
    - Follow appropriate BMPs for restoration and/or maintenance activities in these areas.
    - Utilize appropriate site preparation activities at the onset of large scale enhancement and restoration projects.
    - When performing ecological burns, treat no more than half of the target areas in a single year to allow invertebrates and other inhabitants in the untreated portion to complete their life cycles.
- S-2 Minimize soil disturbance and compaction.
- 1) When feasible, implement soil-disturbing restoration, construction or maintenance activities when soils are dry.
  - 2) Minimize the creation of new maintenance corridors (subject to repetitive use) into or through a management unit.
- S-3 Minimize hydrological disturbance.
- 1) When feasible, implement soil-disturbing restoration, construction or maintenance activities when soils are dry.
  - 2) Minimize the creation of new maintenance corridors into or through a management unit, particularly corridors that follow the fall line.
- S-4 Minimize disturbance of native vegetation.
- 1) When feasible, implement vegetation disturbing activities between July 15 (after seed set and bird nesting) and November 15.
  - 2) Minimize the creation of new maintenance corridors into or through a management unit.
  - 3) Where necessary, locate maintenance corridors utilized by mechanized equipment in areas already invaded by non-native species such as blackberry and Scotch broom, so as to avoid impacting prairie habitats.
- S-5 Minimize adverse impacts on native animal species, including nesting birds.
- 1) When feasible, avoid noise and vegetation disturbance from March 15 – July 15, except where it can be demonstrated that adverse impacts will be minimal.
  - 2) When feasible, plan significant activities according to seasonal sensitivity of species of interest.
  - 3) Protect and enhance invertebrate species.
    - When feasible, time use of herbicides to minimize adverse impacts on pollinators and other invertebrates.
    - When reintroducing native plants, provide many individuals of each species.
    - Provide native plants that flower throughout the growing season and provide pollen or nectar for all types of pollinators.
    - During maintenance of restored habitats, use management techniques that do not affect an entire habitat patch in the same year.
    - Provide different sizes of standing and down wood (snags and logs).
    - Provide small areas of bare soil for ground nesting bees.

- S-6 Minimize transport of invasive plant species.
- 1) Identify how invasive species are being introduced to the Park.
  - 2) Identify actions to reduce introduction, including both on-site and off-site movement.
  - 3) Wash soil, seeds, and vegetative debris from all classes of equipment, as well as from individual operators or technicians when entering or leaving any portion of the site where invasive species are present.
- S-7 Minimize adverse impacts of stewardship activities on park patrons.
- 1) Prioritize stewardship activities in high use areas to non-peak times, such as M-F, 7 am – 5 pm.
  - 2) Post temporary precautionary signs to advise park patrons of potential hazards associated with stewardship activities.
  - 3) Remove temporary signage as promptly as safety considerations will permit.
- S-8 Avoid impacts to cultural resources.
- 1) Plan projects so as to avoid impacting cultural resources documented in the 1994 HBRA Master Plan or subsequent surveys.
  - 2) Incorporate an appropriate level of cultural resource monitoring to any stewardship project that has potential to impact cultural resources through soil disturbance (excavation, tilling/disking, etc.).

## 11.8 Stewardship Toolbox

### *11.8.1 Stewardship, Site Preparation and Invasive Management Methods*

The following section details stewardship methods that can be implemented to maintain conservation targets, to manage invasive vegetation and prepare project areas for enhancement or restoration actions, such as floodplain channel excavation, ecological burns, etc.

When feasible, assign a botanist or lead steward to track progress and effectiveness of site preparation activities and evaluate methods of the Stewardship Tool Box to manage populations of invasive plants occurring on a micro-site scale. Working at this scale, being flexible, and employing a combination of site preparation and methods can help ensure project success.

### *11.8.2 Equipment Cleaning Guidelines*

All equipment utilized (by staff, contractors, or volunteers) during implementation of site stewardship must be thoroughly cleaned (preferably with compressed air and/or a pressure washer) prior to site entry to remove all dirt and debris to reduce the possibility of introduction of invasive plants not currently existing within the project area. If cleaning occurs within the HBRA, the area in which the cleaning takes place should be noted or mapped so it can be monitored and checked for any future weed growth.

### *11.8.3 Invasive Plant Management Methods*

- 1) **Bradley Method.** In areas of high quality habitat (where native species cover is relatively high with respect to total cover), small patches of invasive species are removed manually. The area relieved of invasive vegetation is not replanted; rather the area is left for natural colonization by adjacent native plants. The treated area is periodically re-visited by work groups who remove any and all seedlings and/or root sprouts of undesirable species. In time the area is colonized by native species. In some circumstances plants (either salvaged from the project area or grown by



local native plant nurseries) may be planted in these areas when a particular habit, character, or presence not currently represented within the area is desired. This method may also be applied in habitats adjacent to a project site to support the larger project area and prevent further spread.

- 2) **Repetitive mowing.** In areas where noxious woody perennial species cover is both dominant and high (relative cover greater than 80 percent, the area is mowed periodically with a tractor mounted mower or with a walk-behind rotary mower (depending on the size of the area to be treated). Treatments may be applied at any time in the year but it is recommended that treatments occur between May-November to avoid the potential for soil disturbance and compaction that may result during the rainy season. In some sites with well drained soils, it may be possible to implement mowing in early spring before native plants emerge. In those areas where relative cover by native species is at least 10-20 percent with respect to total cover (depending upon native species composition), the first treatment should not be applied until the native plants have set seed. It is expected that an area may be treated 2-7 times before the prescription may be considered successful. Following several cycles of mowing, a brush rake may be used to dislodge root crowns and root masses from the treatment area. If it is determined that the treatment will adversely affect roots of desirable vegetation, root crowns of invasive woody plants (primarily Armenian blackberry) should be removed manually. If a brush rake is used, the ground is then dressed/rolled following disturbance. The area should be seeded with a mix of herbaceous native annual pioneer species intrinsic to the particular ecotype that will develop as the noxious species are managed. Native hay may be broadcast over the disturbed soil as well to minimize soil erosion. Following the final treatment, desirable native perennial shrubs and trees will be planted in accordance with the Future Conditions Plan for the specific area.
- 3) **Removal of seed heads.** In some cases, manual or mechanical removal of seed heads may be an important interim measure, if more permanent treatments methods are not feasibly given available resources. This will at least prevent an increase in the quantity of non-native seed being added to the seed bank.
- 4) **Repetitive shallow disking, tilling and irrigation.** Within areas of non-native pasture grasses and forbs, where native species are absent, a field is mowed through the growing season. In early summer the field may be chemically treated with either a gator-mounted boom sprayer or brush monitor. A few weeks later the field is shallowly disked and tilled several times. The field may be irrigated following tillage. Tillage is repeated after a week or ten days following germination from the seed bank. The treatment is repeated until germination is sparse across the field. After tilling is complete, the restoration area should be seeded heavily with an aggressive native seed mix. Spot herbicide treatment (ideally using selective herbicides), followed by broadcast seeding, may be needed within some parts of the restoration area.
- 5) **Solarization.** In areas where invasive herbaceous species cover is both dominant and high, and high-fidelity native prairie species are absent, Solarization may be appropriate. The area is first mowed short and then tilled with either a tractor-mounted rotterra device or with a rototiller. The soil should be well-churned when tilling is complete. Larger areas may be graded for desirable micro-topography following tilling. The area of treatment is then covered with a 4-year/6 mil clear plastic. The plastic edge should be sealed to retain heat, and anchored to ensure that it is not adversely affected by wind. The plastic is left in place for 8-12 weeks. It is critical that ambient air temperatures are at least 90°F for a period of not less than three days during the time of treatment. This prescription is applied in the summer months. It is recommended that plastic be laid no later than the third week of June. Plastic should be removed prior to the return of regular fall precipitation. Following treatment, a native seed mix is broadcast within the footprint. Herbaceous plugs and woody plants may be planted as well.

- 6) **Smothering.** Summer-Fall application: In small areas (less than 100 sq. ft.) within a prairie/meadow or forested ecotype where invasive species cover is both dominant and high (greater than 60 percent) with respect to total cover, the area is mowed very short and then covered with heavy black nursery fabric or non-woven road fabric. The fabric should be secured in place with landscape staples. The fabric is then removed in the fall of the following year (fabric may be left in place for multiple years). The area is then planted with plugs, salvaged plant materials and/or broadcast with a mix of native seed.
- 7) **Herbicide Application.** Those areas dominated by habitat-altering, invasive vegetation for which other means of control have not been successful may be treated with chemical herbicides. Herbicide will be applied by licensed applicators. Applicators will strictly follow the rules and regulations as directed on the label. Furthermore, selection of herbicide will closely follow those products approved under the biological opinion developed for Bonneville Power Administration by the federal National Marine Fisheries Service. Herbicide may be applied by wiper applicator, brush, backpack spray, motorized hand gun, and motorized boom spray applicator.
- 8) **Infrared (propane) burner.** In areas where annual or perennial herbaceous species cover is both dominant and high (greater than 60 percent) with respect to total cover, the area is flamed with an infrared (propane) burner. The treatment is applied to wilt the invasive vegetation, not consume it. Treatments are applied when fire danger is low and when plant growth or seed production will be impacted. Subsequently, the area should be seeded with a mix of herbaceous native pioneer species associated with the particular habitat that will develop as the invasive species are reduced. In addition, desirable native perennial shrubs and trees will be planted in accordance with planting plan for the specific area.
- 9) **Biological Control.** Biocontrol agents destroy plant tissues and cause stress to the weeds, making them less competitive against desirable flora. It may take 10-20 years for a biocontrol project to successfully manage a weed at the regional scale. Managers should work with the Oregon Department of Agriculture to collect and redistribute biocontrol agents to other infested areas throughout the park. Treatment areas are to be monitored to ensure populations of biological control agents remain at optimal levels to control select species of invasive vegetation within the HBRA and the greater Mount Pisgah Area. Biological control agents are not to be used if they have been determined to create adverse effects to native (and endemic) species related to the target of control.
- 10) **Bio Char.** Where practical instead of burning piles of brush, convert woody debris generated through vegetation management prescriptions to reverse encroachment by native plants or invasion by non-native plants into bio char. Bio char is charcoal produced from plant matter and stored in the soil as a means of removing carbon dioxide from the atmosphere.

## 11.9 Chapter 11 References

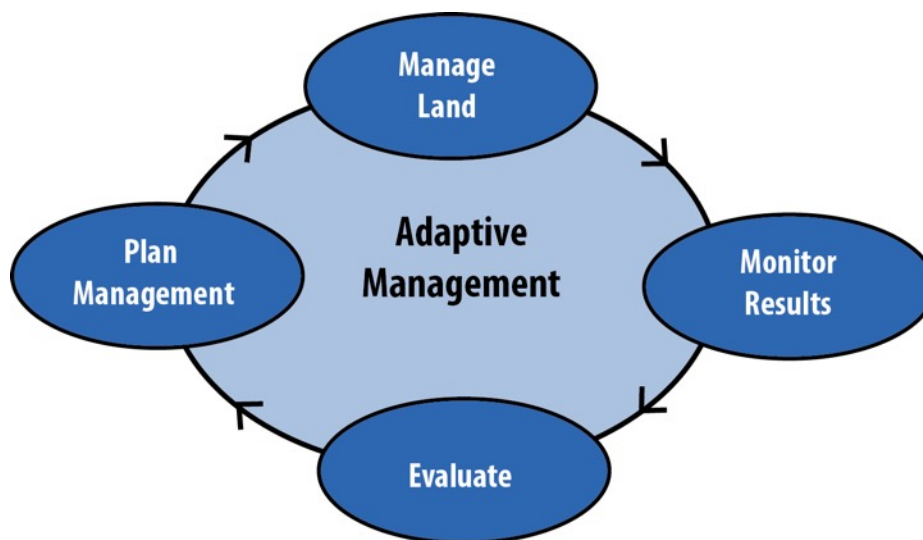
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# Chapter 12: Monitoring and Adaptive Management

## 12.1 What is Adaptive Management?

Adaptive management is an approach that incorporates monitoring of past management into the planning of subsequent management actions, and systematically tests assumptions in order to learn and adapt. First, a management objective is identified. Next, a best management option is selected and stewardship actions are implemented. Stewardship results are monitored and compared with expectations so that subsequent management actions can be adjusted after considering insights gained and lessons learned from previous management actions. The following flow chart image suggests the cycle of adaptive management.

Figure 12-1: Adaptive Management Diagram



Monitoring within HBRA should focus on two basic questions:

1. Strategy effectiveness - Are the conservation actions being taken within HBRA achieving their desired results?
2. Status assessments - What is the status and what are the trends of conservation targets within HBRA?

More specifically, monitoring tasks should be linked to the plan objectives, conservation targets, key ecological attributes, and threats outlined in this plan. Implementation of the HBRA *Habitat Management Plan* will incorporate the practice of adaptive management to ensure that lessons learned improve the results of future management.

Following approval of the HBRA *Habitat Management Plan*, a comprehensive monitoring plan will be developed by Lane County Parks Division and partners, which will identify a realistic set of monitoring tasks and time frames, based on the monitoring categories described below, to provide information to guide adaptive management. At five year intervals, a review of habitat management accomplishments and conservation target status will be completed, to provide direction for planning of subsequent management actions.

In addition, each project proposal approved by Lane County Parks for implementation of stewardship activities will include both a monitoring component and a maintenance component, to describe the process for identifying and implementing follow-up stewardship tasks as identified through monitoring and adaptive management.

## 12.2 Funding for Monitoring

Funds for the monitoring activities specified in this chapter are not secured. However, monitoring of habitat conditions has been ongoing since at least the 1980s by volunteers. For example, botanists mobilized by Friends have developed a database of over 500 plant species identified and located in the park, and have conducted annual monitoring of the Bradshaw's lomatium population nearly every year since 1993. Amateur ornithologists have documented over 100 bird species using the park. In more recent years, as grants have been secured for habitat improvement, modest funding for monitoring, combined with volunteer labor has enabled monitoring of fish, herptiles, birds and hydrology along the Coast Fork Willamette, as well as invasive removal in the park. With clear priorities and more effective partnerships, limited funding for monitoring can be focused to better inform future management.

## 12.3 Monitoring Conservation Targets

Documenting the status and trends of individual focal conservation targets is an important benchmark for determining whether the goals of the plan are being met. Status of habitat types can be quantified over time by mapping their extent from aerial photographs and other historic data. Condition of habitat types can be most efficiently documented in a qualitative way by use of permanent photo points; supplemented, where appropriate, by data from vegetation plots. Status and trend of species targets requires some documentation of distribution and population size (preferably but not necessarily annually), with a monitoring intensity sufficient to document change over time. For monitoring nested targets, documenting presence/absence (ideally on a Management Unit basis) will be valuable documentation. This need not be done annually, but if done by volunteers at three to five year intervals, this would be sufficient.

## 12.4 Monitoring Key Ecological Attributes

The "Key Ecological Attributes" identified in Chapter 5, Figure 5.1, represent important factors for the viability of the habitat types and species listed in this plan as focal and nested conservation targets. Figure 5.1 lists specific indicators for each KEA, and monitoring should provide information, where appropriate, sufficient to update indicator ratings (poor, fair, good, or very good) over time. The necessary intensity of data collection varies for different indicators. For particular indicators that require intensive data collection, it may only be appropriate to invest resources in collecting such data where the level of treatments or management effort is correspondingly high. Visitor experience KEA's will guide monitoring for this target, but in addition, occasional visitor surveys could supplement other monitoring and, if implemented consistently over time, may provide data on trends.

## 12.5 Monitoring Threats

Threats to conservation targets are identified in Chapter 5, Figure 5.2. The status of threats with an overall threat rank of "High" or "Very High" should be done in a qualitative way on an annual basis. If there is uncertainty as to whether threat abatement practices in place are adequate, a more intensive assessment of the threat's impacts may be warranted.

## 12.6 HBRA Species Inventory/Monitoring

Baseline species inventory provides important data related to viability and threats of conservation targets within HBRA. Documenting the species of plants and animals present within HBRA, as well as change over time, informs ongoing management planning and implementation. For some types of organisms, species lists developed over the years are fairly complete, but for others only partial species lists exist. Compiling existing species presence data and improving completeness, where feasible, should be an ongoing endeavor. For nested species conservation targets, documenting locations of populations with GIS should be a priority. For other species, documenting presence/absence by Stewardship Zone or other appropriate sub-unit of the park will be beneficial. Introduced non-native species are a particular category for which strategic tracking of distribution and abundance will benefit conservation management.

## 12.7 Project Effectiveness Monitoring

Project effectiveness monitoring is likely to be a requirement of grant funding to support habitat restoration work at HBRA. In a general sense, project effectiveness monitoring should help us determine whether the conservation actions being taken within HBRA are achieving their desired results. More specifically, project effectiveness monitoring tasks can be selected to provide useful information to feed the adaptive management cycle described above, by improving the effectiveness, efficiency, quality, or cost of restoration and management activities.

## 12.8 Chapter 12 References

- Salafsky, N., R. Margoulis, and K. Redford. 2001. Adaptive Management: A Tool for Conservation Practitioners. Biodiversity Support Program Publ. 112, Washington DC.
- The Nature Conservancy. 2016. Conservation by Design 2.0. Guidance Document. [http://cmp-openstandards.org/wp-content/uploads/2016/04/CbD2.0\\_Guidance-Doc\\_Version-1.pdf](http://cmp-openstandards.org/wp-content/uploads/2016/04/CbD2.0_Guidance-Doc_Version-1.pdf)



Appendix A:  
**Glossary**  
HBRA Habitat Management Plan



## Stewardship and Conservation Planning Terms used within the Habitat Management Plan

**ADAPTIVE MANAGEMENT** – A process originally developed to manage natural resources in large scale ecosystems by formal or observational experimentation and systematic monitoring of the results. More broadly, it is the incorporation of a formal learning process into conservation action. Specifically, it is the integration of design, management, and monitoring to systematically test assumptions in order to learn and adapt.

**BEST MANAGEMENT PRACTICES** – In the context of ecological stewardship, a standard set of activities that can be implemented in appropriate situations or locations, that provide desired habitat benefits and at the same time minimize possible negative impacts to habitats.

**BRADLEY METHOD** – A habitat restoration technique that involves focused, small scale manual removal of invasive plant species in a way that allows regeneration by native species to naturally fill the bare gaps left after invasives are removed. This method is particularly applicable to higher quality habitats where invasive plant species are still a minor component of the vegetation, or at the boundaries between high quality habitats and denser patches of invasives.

**CONSERVATION TARGET** – An element of biodiversity or related habitat management focus. Conservation Targets typically include plant and animal species, ecological communities, and ecological systems. For the purposes of this plan, “Visitor Experience” as it relates to habitat management has also been identified as a conservation target.

**ECOLOGICAL BURNING** – Prescribed burning to achieve one or more ecological goals – such as reducing woody plant invasion of prairies, enhancing flowering and reproduction of native prairie plants, or reducing the abundance of non-native herbaceous plant species.

**FIRST ORDER STREAM** – A seasonal or perennial stream that has no flowing tributaries. First, second, and third order streams are considered to be headwater streams.

**FIDELITY** – Refers to an estimate of the proportion of a native plant species’ occurrences in prairie or oak habitats at the time of Euroamerican settlement in the mid-1800’s. High fidelity species would have been largely restricted to prairie and oak habitats at the time of settlement. Moderate fidelity species may have occurred with equal frequency in prairie/oak and non-prairie/oak habitats. Low fidelity species would have also been widely distributed in a range of conifer forest, wetland, riparian forest, or other non-prairie/oak habitats.

**FIRE RETURN INTERVAL** – For prescribed burning and other fire management strategies, Fire Return Interval is a measure of fire frequency based on a number of fires per unit of time. Median fire return interval provides information on the average number of years between fires. However, this is just an average, and time spans between burns may be more or less than the average.

**FLASH GRAZING** – A livestock grazing practice that involves short term use of a high concentration of livestock, often applied in a stewardship setting to manage non-native plant species or other undesirable vegetation.

**FOCAL CONSERVATION TARGET** – A limited subset of species, communities, and ecological systems that are chosen to represent the full array of biodiversity and habitat management priorities found in a project area. They are the basis for setting goals, carrying out conservation actions, and measuring

conservation effectiveness. Conservation of the focal targets is intended to ensure the conservation of all native biodiversity within functional landscapes.

**FORB** – An annual or perennial herbaceous plant (lacking woody stems) that is not a member of the grass, rush, or sedge plant families; these are typically recognized as wildflowers.

**GRAMINOID** – An annual or perennial herbaceous plant (lacking woody stems) that is a member of the grass, rush, or sedge plant families.

**HABITAT ENHANCEMENT** – Refers to actions taken to increase the ecological function of an area of habitat; typically used in cases where the habitat type is not converted, or fundamental ecological processes are not altered, but other actions are taken to improve habitat quality.

**HABITAT MANAGEMENT PLAN** – A document that identifies habitat conservation goals and objectives, providing a context for prioritizing on-the-ground restoration and enhancement projects over a defined period of time. A Habitat Management Plan should also identify ways to measure success through monitoring, and adapt and learn over time through analysis of monitoring results.

**HABITAT RESTORATION** – Refers to management actions taken to return an area of habitat to a condition that existed previously. The term may be applied to conversion of a habitat type to one that existed previously, or the return of a fundamental ecological process. Our best assessment of the condition or processes that were in place at the time of Euroamerican settlement (roughly 1850) is commonly used as the benchmark. However, the term can also be used to refer to a less specific time frame, and/or a more general (such as ecoregional) spatial scale. This term is often used somewhat interchangeably with “Habitat Enhancement” under a broader category of “Habitat Management”.

**HABITAT TYPE** – Generally synonymous with “cover type”. Habitat types are general classifications of vegetation structure (tree density and height) and functional category (e.g., conifer vs. hardwood) within relatively homogeneous stands.

**HYDRIC SOIL** – A soil that forms under conditions of water saturation, ponding, or flooding for a sufficient length of the growing season to expose the root systems of plants to anaerobic conditions (lacking oxygen).

**INDICATOR** – Measurable entities related to a specific information need (for example, the status of a key ecological attribute, change in a threat, or progress towards an objective). A good indicator meets the criteria of being: measurable, precise, consistent, and sensitive.

**INVASIVE** – In the context of this plan, invasive species are a subset of non-native species which colonize and spread relatively rapidly, and/or significantly to greatly impact a native habitat or native species.

**KEY ATTRIBUTE** – Aspects of a conservation target's biology or ecology that, if missing or altered, would lead to the loss of that target over time. They are aspects that sustain a target's viability or ecological integrity.

**LEGACY TREE** – In the context of this plan, refers to an older tree, typically Oregon white oak, which was originally open grown, but has become surrounded by a denser stand of younger trees. Savanna restoration often involves identifying and protecting legacy trees as a key feature of the restored habitat.

**MAIN POPULATION** – In the context of invasive species management, this term refers to a larger, long-established patch of an invasive species that is in the process of expanding its occurrence within a site or geographic area.

**NON-NATIVE** – Synonyms of non-native are exotic, introduced and alien. For the purposes of this plan, a non-native species is defined as one that was not present at the HBRA ca. 1850, and does not have a recent, local, shared evolutionary history with plant, animal, fungi or other species present. Non-native species have arrived either incidentally with human activities (such as ballast or as “hitchhikers” with other plant materials) or were introduced deliberately (such as escaped ornamentals). See “Native” and “Invasive”.

**NATIVE** – “Indigenous” is a synonym. For the purposes of this plan, a native species is defined as one that was present at the HBRA ca. 1850, and has a recent, local, shared evolutionary history with plant, animal, fungi or other species present. This definition recognizes local ecological relationships that have evolved over time as a basis for the definition, rather than recognizing a randomly chosen geographic area as a basis as is typically done (e.g., “native to Oregon”).

**NESTED CONSERVATION TARGET** – Species, ecological communities, or ecological system targets whose conservation needs are subsumed by one or more focal conservation targets. An example is a rare species that is associated with a particular habitat type that has been selected as a focal target.

**OUTLIER POPULATION** – In the context of invasive species management, this term refers to a smaller, more recently established satellite patch of an invasive species that is in the process of expanding its occurrence within a site or geographic area.

**PATCH** – Distinct areas of a habitat type. Patches of similar habitats dominating the landscape form a matrix, within which individual, smaller patches of other habitats exist. For example, a large area of forest habitat may contain small patches of prairie intermixed. Size of habitat patches can be an important factor in maintaining the viability of some conservation targets.

**PUBLIC SAFETY** – As a general term, “public safety” refers to the safety, security, and protection of members of the public. For Parks, specifically, the term addresses providing a safe place for citizens and visitors to enjoy outdoor recreation activities.

**SECOND ORDER STREAM** – A seasonal or perennial stream that is the product of two first order streams joining together. First, second, and third order streams are considered to be headwater streams.

**SECONDARY INVADER** – Refers to particular non-native plants that often proliferate in newly opened space soon after primary invasive plants (such as non-native blackberries) are removed.

**SPOT SPRAY** – A method of selectively applying herbicides directly to individual target plants without impacting adjacent non-target species; contrast with broadcast spray methods where all vegetation within a treatment area receives the spray.

**STAKEHOLDER** – An individual, group, or institution who has a vested interest in the natural resources of the project area and/or who potentially will be affected by project activities and have something to gain or lose if conditions change or stay the same.

**STEWARDSHIP** – This term refers to an ethic of responsible habitat management. The term is a metaphor that originates from the concept of a domestic steward, a household servant responsible for

managing the needs of a large household. Ecological Stewardship is a practice that was championed by Aldo Leopold, as part of a “Land Ethic” that addressed modern humans’ relationship to the natural world.

**THREAT** – An agent or factor that directly or indirectly degrades or reduces the health of a conservation target. Threats can be divided into two types. These are direct threats, which are the agents that directly degrade targets (for example, “woody plant invasion in prairie habitats”), and indirect threats, which are the factors that are drivers of direct threats (for example, “lack of fire”). Indirect threats are often the most effective entry point for conservation actions.

**VIABILITY** – The status or “health” of a population of a specific plant or animal species. More generally, viability indicates the ability of a conservation target to withstand or recover from most natural or anthropogenic disturbances and thus to persist for many generations or over long time periods.

**VISION** – A general summary of the desired state or ultimate condition of the project area or scope that a project is working to achieve. A good vision statement meets the criteria of being visionary, relatively general, brief, and measurable.

**WILDLAND** – A mosaic of habitats which are unmanaged, or managed for the integrity of native habitat types, and are dominated by (or at least have a significant component of) native species.

**WILDLIFE BLIND** – A shelter that is used to camouflage or hide park visitors so they can observe wildlife at close quarters.

**WOLF TREE** – A *wolf tree* is an unusually large coniferous tree (at least in the Pacific Northwest) which was originally growing in an open environment. Wolf Trees tend to have an irregular crown, often with the top broken off due to storm or lightning damage, and have large lower branches or branch stubs. Their large size and irregular form provide valuable habitat for wildlife. Typically wolf trees are 150 years old or older. At HBRA wolf trees can be seen along Trial 1 just north of the summit of Mt. Pisgah.

### **Definitions of Focal Targets and Other Habitat Types**

**BALD** – A plant community with little or no woody vegetation, where bedrock is at or close to the surface, which consists of plant species adapted to very dry conditions during the summer.

**FOREST** – In general, a forest is considered as a dense stand of trees where the canopies of adjacent trees generally touch, forming a more or less continuous canopy. However, older stands in particular may support canopy gaps, so overall canopy cover ranges from 75% to 100%. General Land Office survey notes from the 1850’s indicate that Willamette Valley forests generally supported at least 40, and up to 100, trees per acre at the time of Euroamerican settlement (tree density was partially a function of tree size and age). Forest Types in HBRA include conifer or mixed conifer-hardwood forest, riparian and floodplain forest, and forested wetland.

**PRAIRIE** – Grass and forb-dominated communities on non-hydric soils with few or no trees and few shrubs. Trees (particularly Oregon white oak), if present, are very widely scattered; 5% canopy cover is generally considered the upper limit of tree cover in prairie. General Land Office survey notes from the 1850’s indicate that Willamette Valley prairies supported fewer than 1 tree per acre at the time of Euroamerican settlement. Upland prairies occur on well drained soils and seasonal wet prairies occur on hydric soils. Upland prairie often occurs in a mosaic with savanna, and for the purposes of this plan the two habitat types are combined as a single conservation target.

SAVANNA – Savanna has scattered open-grown trees (5% to 25% canopy cover) that are not so dense as to break up the continuous layer of grasses and forbs. General Land Office survey notes from the 1850's indicate that Willamette Valley savannas supported 1 to 7 trees per acre at the time of Euroamerican settlement . Oregon white is the dominant tree species of savanna but scattered conifers such as ponderosa pine, Douglas-fir, and incense cedar may also be present.

SHRUBLAND – Naturally occurring shrublands are found where native shrub species such as buckbrush (*Ceanothus cuneatus*) form dense stands, along with grasses, forbs, and scattered Oregon white oak trees.

WATERWAY – Waterways within HBRA range from narrow riparian areas with seasonal flows (typically running from late fall through late spring) that originate from the slopes of Mount Pisgah, to the channel and banks of the Coast Fork of the Willamette River.

WOODLAND – In general, a woodland is considered to be a more or less continuous stand of trees where the canopies do not touch, but rather provide continuous gaps. Overall canopy cover may range from 25% to 75%. General Land Office survey notes from the 1850's suggest that Willamette Valley woodlands supported 7 to 40 (100) trees per acre at the time of Euroamerican settlement. Some researchers separate two woodland types, an open woodland (25% to 50% canopy cover), and a closed woodland type (50% canopy cover to 75% canopy cover). Data from the General Land Office surveys suggest that historic woodlands in the Willamette Valley were generally of the open woodland type. In HBRA, oak woodland and associated community types (such as Oregon white oak-ponderosa pine woodland) are a focal target for habitat management.

Appendix B:  
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HBRA Habitat Management Plan

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Appendix C:  
**Historic Vegetation and Land Use**  
HBRA Habitat Management Plan







Appendix D:  
**Aerial Imagery Archive**  
HBRA Habitat Management Plan













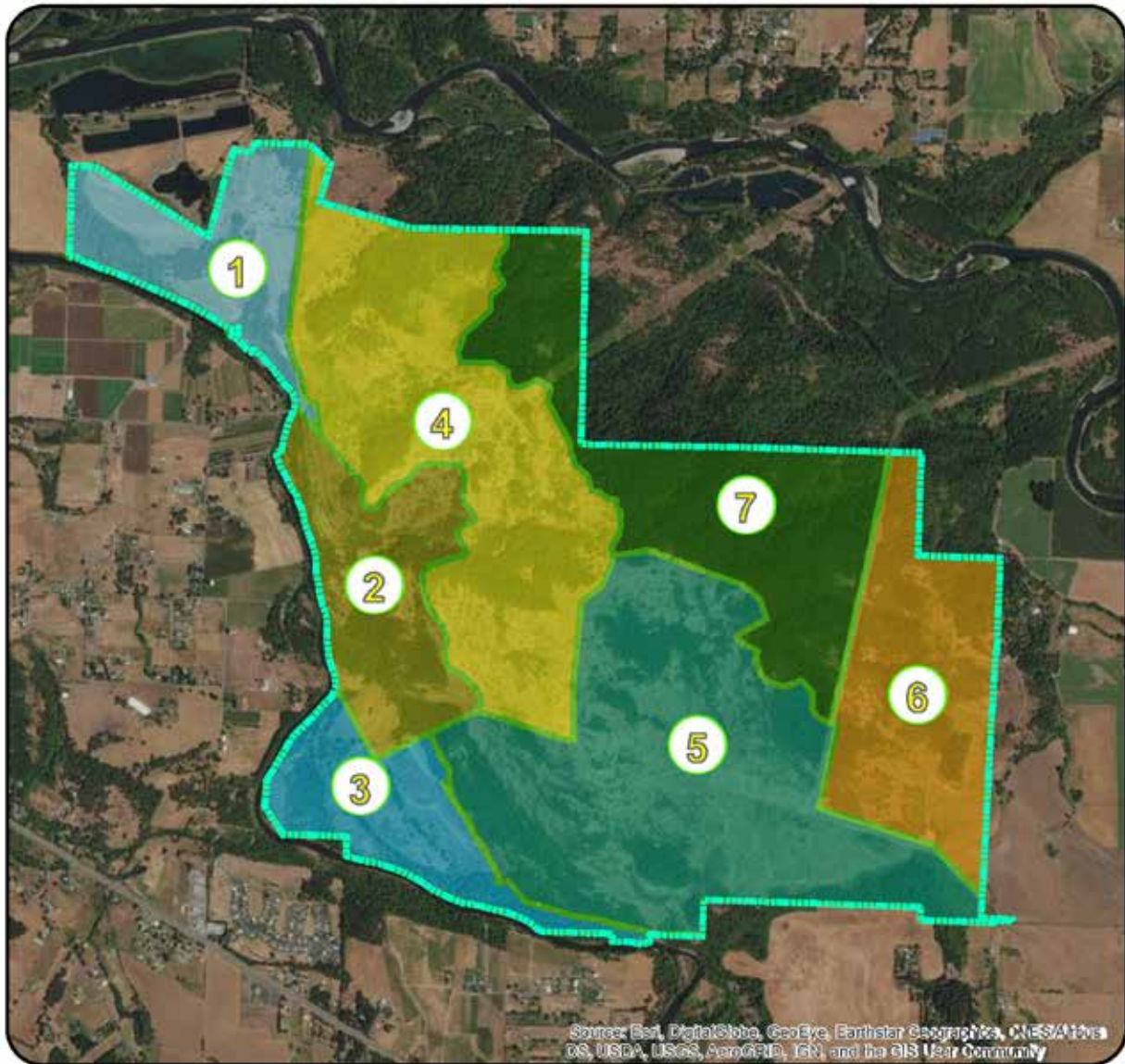


Appendix E:  
**Park Wide and Management Unit  
Specific Work Plans**  
HBRA Habitat Management Plan



## Introduction to Appendix E




This Appendix provides information on a Management Unit scale that is only provided on a park-wide basis in the body of this *Plan*. As described in Section 7.3 (pp. 54-58), the park is divided into seven Stewardship Zones, as shown below. The larger Stewardship Zones are further subdivided into multiple Management Units, although three of the Stewardship Zones (North Bottomlands, Mount Pisgah Arboretum, and South Bottomlands) consist of a single Management Unit. Note that the BPA power line easements, outside of the Mount Pisgah Arboretum, are displayed on a separate map and tables.



**HBRA Stewardship Zones**



**Zone Boundary**

-  Zone 1: North Bottomlands - 166ac Zone
-  2: Mount Pisgah Arboretum - 203ac Zone
-  3: South Bottomlands - 155ac

-  Zone 4: Western Uplands - 493ac
-  Zone 5: Southern Uplands - 609ac
-  Zone 6: Eastern Uplands - 262ac
-  Zone 7: Northern Forest - 326ac
-  HBRA Property Boundary

The maps and tables in this Appendix are listed in the order of the numbered stewardship zones. Within each Stewardship Zone, Management Unit-specific maps, if applicable, are listed alphabetically. Each map includes an inset map that shows the location of the Stewardship Zone and Management Unit in the context of the park as a whole. A map of all of the Management Units in HBRA is included in Chapter 10.

Each map page provides a comparison of mapped acres for three different time frames: Historic Condition (circa 1855); Existing Condition at the time the planning process began (2008); and the Desired Future Condition circa 2035.

Associated with each map is a set of tables. The first table is a tally of acres for both conservation targets and non-target map units for each of the three mapped time periods. Tallies of acreage changes are provided for the 1855-2008 and 2008-2035 time periods. For map units that represent habitat types, changes involving an increase in acreage are highlighted in black, and changes that involve a decrease in acreage are highlighted in red.

The second table is a set of projects, which represent the subset of projects presented in Chapter 10 that pertain to each Management Unit. In addition, to avoid unnecessary repetition, a separate table lists the projects that are applicable to all Management Units. The projects are grouped according to which of the three 5-year time intervals they are scheduled for implementation.

As noted in Chapter 3, the *Plan* will be implemented through an adaptive management process. As Lane County Parks and partners implement the strategies and projects, Parks staff and partners will evaluate the results and, if appropriate, consider alternative strategies or projects that may provide better results or be less costly to implement. It is likely that the projects contained in this set of work plans will be updated in the future, at least for each five year time interval, to incorporate previous experience and current knowledge.

It should be noted that the historic (1855) vegetation was reconstructed primarily from General Land Office survey data that focused on section lines and section corners, and was extrapolated to the interiors of sections. This means that both the locations of habitat transitions, and the granularity of the vegetation mosaic, are much more generalized than the Existing and Desired Future Condition maps, which are derived largely from aerial photography. Some conservation targets in this *Plan*, such as Buckbrush chaparral, were not documented in the historic vegetation mapping. In addition, apparent changes in acreage, such as apparent loss of target habitat types, may be an artifact of mapping precision rather than a reflection of actual habitat change. Thus, the Existing and Desired Future condition maps should also be taken as a generalization rather than precise representation of conditions on the ground, present and future.

## Definitions of HBRA Vegetation Map Units

The following habitats or land cover types have been mapped within HBRA, and are shown on the maps in this Appendix as well as in Chapter 4:

Alder Forest: A specific sub-type of forested wetland, found only in a small portion of the SE corner of HBRA, dominated by red alder.

Buckbrush chaparral: This is a shrub-dominated community with few to no trees located on excessively drained to shallow soils on hot, dry hillside exposures and on gravel bars within the floodplain. The

principal shrub species is buckbrush, with associations of snowberry, tall Oregon grape, poison oak, and occasional Oregon white oak trees.

Conifer - Oak Woodland: A closed woodland comprised of a mix of Oregon white oak and conifers, particularly Douglas-fir and Incense cedar, occasionally also Ponderosa pine, in which the canopy cover of oak is less than 50%.

Forested Wetland: A forest dominated by Oregon ash, occurring on hydric soils and often adjacent to wet prairie.

Oak Woodland: Oak woodland is a sparsely treed community dominated by oaks in which tree crowns typically do not touch or form a continuous canopy cover, allowing sunlight to penetrate to the ground. Canopy cover is generally between 25% and 75%. Woodland can be divided into open woodland (7-20 trees per acre) and closed woodland (20-100 trees per acre). Tree architecture is a mixture of open-grown oaks and more vase-shaped oaks whose canopies are constrained by nearby trees. Conifers, including Douglas-fir, ponderosa pine, and incense cedar, may be associated with oaks. The ground layer of grasses and forbs is broken up by tree shade and/or by the presence of dispersed or dense shrubs.

Oak-Conifer Woodland: Oak-conifer woodland is similar to oak woodland in general structure and composition, but has a significant, and typically increasing, cover of conifers, particularly Douglas-fir.

Oak-Ponderosa Pine Woodland: Ponderosa pine is an important component of an oak-pine woodland community that is found in several parts of HBRA, particularly on the south and east slopes of Mount Pisgah. Ponderosa pine, which is at the edge of its geographic distribution in the Willamette Valley, grows with, and has a similar ecological profile to, Oregon white oak. It is commonly associated with dry or rocky soils that historically were fire-influenced.

Pasture or Non-Native Grassland: This is an open grass-forb dominated vegetation type, with few or no trees, which have been cultivated and disturbed by agriculture in the past. As a result, the vegetation is dominated by non-native pasture grasses, and few native forbs are present.

Powerline Scrub: Vegetation under the BPA power lines is managed by BPA to be kept free of trees. In areas where the adjacent vegetation is forest, and the area within the power line right-of-way was forest prior to clearing and transmission line construction, the forest understory shrubs still predominate.

Riparian Bottomland Forest: Riparian areas encompass the land and vegetation adjacent to Willamette River channels, oxbow lakes, alcoves, backwater areas, and sloughs that are influenced by perennial or intermittent water, including periodic flooding during winter storms. Plant communities common within this system include Oregon ash - big leaf maple floodplain forest, black cottonwood bottomland forest, and willow shrub thickets.

Riparian Mixed Upland Forest:

Riparian Mixed Upland Forest is found on higher ground within the floodplain and hosts a mix of conifer including Douglas-Fir, Grand fir, and Incense Cedar and hardwood including bigleaf maple, bitter cherry, chokecherry, Oregon White Oak, and Pacific dogwood.

Savanna - Good Condition: This is a community with scattered open-grown trees that are not so dense as to break up the continuous grassland ground layer (savanna). The understory is dominated by grasses and forbs. The primary savanna tree species is Oregon white oak, but scattered conifers such as

ponderosa pine, incense cedar, and Douglas-fir may also be present, and would have been present historically as well. Canopy cover is generally between 5% and 25%, and tree density is typically fewer than 7 trees per acre.

Savanna that has been mapped as “good” condition typically has 90% of the habitat patch within the desired range for woody cover (5% to 25% cover), and high native grass/forb species richness (>40 species within a given habitat patch).

Savanna - Fair Condition: Savanna that has been mapped as “fair” condition typically has at least 50% of the habitat patch within the desired range for woody cover (5% to 25% cover), and moderate native grass/forb species richness (>20 species within a given habitat patch).

Savanna - Poor Condition: Savanna that has been mapped as “poor” condition typically has less than 50% of the habitat patch within the desired range for woody cover (5% to 25% cover), and low native grass/forb species richness (<20 species within a given habitat patch).

Scrub Wetland: This vegetation types occurs as a few small patches of hardhack-dominated shrubland, in some cases with a diversity of associated native herbaceous plants.

Upland Conifer Forest: : Within HBRA, Douglas-fir is the most common tree associated with conifer forest and is most often the dominant tree in the overstory, but grand fir and various hardwoods may be associated in lesser abundance. Areas mapped as forest In general, typically have a stand density of 100 to 200 trees per acre, and the canopy cover from trees occupying the overstory is greater than 75 percent. Most conifer forest within HBRA is 50-75 year-old second growth from logging in areas of historic mature forests, as well as conifer encroachment into former oak savanna and oak woodland over the last 5-7 decades. However, there are scattered older conifers, often “wolf trees” that were not removed during previous logging.

Upland Hardwood Forest: These are generally patches of upland forest dominated by bigleaf maple, occurring within a broader matrix of upland conifer forest.

Upland Prairie: This is a grass and forb-dominated plant community with few to no trees or shrubs, occurring on non-hydric soils. Because upland prairie occurs in a mosaic with savanna, the two community types are recognized as a combined conservation target in this Plan.

Wet Prairie: This is a grass and forb dominated community with few to no trees or shrubs, located on hydric soils that are saturated to the surface during the rainy season and dry during the summer.

Park Facilities – Historic: This is the area in and around the Kienzle House and barn, located in the North Bottomlands.

Parking Areas & Roads: This map unit includes both paved and gravel roads and parking lots, located in the Arboretum, North Bottomlands, and Southern Uplands Stewardship Zones.

Stewardship Facilities: This map unit includes structures and grounds associated with stewardship operations, located in the Arboretum, North Bottomlands, and South Bottomlands Stewardship Zones.

Event Facilities: This map unit is associated with the horse arena located in the North Bottomlands, operated by the Lane County Sheriff’s Mounted Posse.

Quarry: Old quarries, developed before the park was established, are located on the lower Western and SW slope of Mt. Pisgah.

## **HBRA Habitat Management Goals**

The 15 management goals, identified by number in the tables of projects in Appendix E, are described in greater detail in Chapter 6, along with the accompanying strategies for each goal.

- **GOAL 1**: Provide a safe and positive visitor experience in Howard Buford Recreation Area.
- **GOAL 2**: Educate park users about the unique natural values that make the HBRA and the broader Mount Pisgah area a priority for conservation.
- **GOAL 3**: Maintain and improve the park's trail system to minimize ecological impacts while providing views of and access to HBRA's diverse habitats.
- **GOAL 4**: Minimize adverse impacts of park management on conservation targets.
- **GOAL 5**: Restore and enhance prairie, savanna and oak woodland habitats by reducing encroaching woody vegetation.
- **GOAL 6**: Achieve significant restoration of prairie and savanna, oak woodland, and wet prairie habitats in HBRA.
- **GOAL 7**: Achieve significant restoration of chaparral habitat in HBRA.
- **GOAL 8**: Manage for diverse native plant communities within each conservation target habitat.
- **GOAL 9**: Increase the size of wet prairie habitat patches.
- **GOAL 10**: Locate and, to the extent feasible, reduce populations of feral or harmful non-native animal species impacting each conservation target.
- **GOAL 11**: Locate and reduce the presence of habitat-modifying, non-native plant species within each conservation target habitat.
- **GOAL 12**: Remove fish passage barriers from the lower mile of creeks and streams in HBRA that flow into the Coast Fork and Middle Fork of the Willamette River.
- **GOAL 13**: Improve ecological health of creeks and streams.
- **GOAL 14**: Improve ecological health of riparian floodplain habitats.
- **GOAL 15**: Manage habitats in the North Bottomlands Stewardship Zone to be mutually compatible with recreational activities identified in the 1994 HBRA Master Plan and the recommendations of the Large Events Task Force (2015).

Howard Buford Recreation Area			Acres
Park-Wide Projects			2214
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 1	1.1	visitor experience	o <u>Project 1.1.3</u> : Post Stewardship Program Project or Activity updates at Trail Head Kiosks to inform park visitors about area closures or habitat and vegetation management activity in progress in proximity to the trail.
	1.1	visitor experience	o <u>Project 1.1.4</u> : Establish criteria for trailside temporary signage (“sandwich board” or equivalent) to inform trail users of habitat or vegetation management activity in progress adjacent to the trail.
	1.1	visitor experience	o <u>Project 1.1.5</u> : Establish criteria to limit the installation of permanent signage along trails away from trailheads.
	1.1	visitor experience	o <u>Project 1.1.6</u> : Establish criteria to limit the use of flagging tape and the period it is posted in the field.
	1.1	visitor experience	o <u>Project 1.1.7</u> : Develop a riverfront trail plan to establish preferred routes to access the river for the public and for first responders (in the case of emergencies) while protecting sensitive habitats. Consider closing certain access points to the river during nesting season and other times when disturbance to wildlife will result in an adverse impact.
	1.1	visitor experience	o <u>Project 1.1.8</u> : Survey the riverfront and delineate sensitive habitat features.
	1.1	visitor experience	o <u>Project 1.1.9</u> : Improve parking areas, construct trails, and develop supporting infrastructure to improve access to the river.
	1.2	visitor experience	o <u>Project 1.2.1</u> : Develop vegetation management protocols for each parking area within the HBRA.
	1.2	visitor experience	o <u>Project 1.2.2</u> : Remove vegetation around parking areas as appropriate to maintain sightlines to enhance public safety and deter property crime.
	1.3	visitor experience	o <u>Project 1.3.1</u> : Post fire evacuation information at trailhead kiosks during the fire season (June-October).
	1.4	visitor experience	o <u>Project 1.4.1</u> : Gather data and interview trail users.



Howard Buford Recreation Area			Acres
Park-Wide Projects			2214
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	1.5	visitor experience	o <u>Project 1.5.1</u> : Survey trail segments for nearby hazards and clearly delineate areas of caution.
	1.6	visitor experience	o <u>Project 1.6.1</u> : Inventory patches of poison oak growing within 5' of the edge of all recreational trails.
	1.6	visitor experience	o <u>Project 1.6.2</u> : Remove poison oak growing within 5' of recreational trail edge.
	1.6	visitor experience	o <u>Project 1.6.3</u> : Maintain trail edges with mowing or clipping annually or at other appropriate time intervals.
	1.7	visitor experience	o <u>Project 1.7.1</u> : Develop a bench location plan that identifies appropriate locations to provide at least one bench or viewpoint per mile of trail along major trail corridors (trails 1, 2, 3, 5, and 6).
	1.7	visitor experience	o <u>Project 1.7.2</u> : Install benches at designated locations.
	1.7	visitor experience	o <u>Project 1.7.3</u> : Maintain viewpoints and benches.
	1.8	visitor experience	o <u>Project 1.8.1</u> : Prepare an "on leash policy".
	1.8	visitor experience	o <u>Project 1.8.2</u> : Collaborate with stakeholders and interested members of the public to identify areas within the park where dogs will be allowed to be off leash.
	1.8	visitor experience	o <u>Project 1.8.3</u> : Solicit input from park users through trailhead tabling and public open houses.
	1.8	visitor experience	o <u>Project 1.8.4</u> : Conduct a pilot implementation project to evaluate compliance and community support.
	1.8	visitor experience	o <u>Project 1.8.5</u> : Implement the approved policy.
<b>Goal 2</b>	2.1	all conservation targets	o <u>Project 2.1.1</u> : Develop signage and associated educational materials interpreting the park's natural values, and post at trailheads.
	2.1	all conservation targets	o <u>Project 2.1.2</u> : Maintain and update trail map to clearly indicate segments of closed trail.
	2.2	all conservation targets	o <u>Project 2.2.1</u> : Maintain a permanent 'notice' board at trail head kiosks to inform park users of temporary area closures in the park.



Howard Buford Recreation Area			Acres
Park-Wide Projects			2214
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	2.3	all conservation targets	o <u>Project 2.3.1</u> : Lead a series of tours that showcase the natural history of wildlife that reside within or pass through the HBRA.
	2.3	all conservation targets	o <u>Project 2.3.2</u> : Host a series of natural history talks that showcase species of wildlife that reside within or pass through the HBRA.
	2.3	all conservation targets	o <u>Project 2.3.3</u> : Post informational displays at trail head kiosks that encourage park visitors to be respectful of wildlife.
<b>Goal 3</b>	3.1	visitor experience	o <u>Project 3.1.1</u> : Construct and maintain seed removal stations at each trailhead including capacity to accommodate hikers, equestrians (horse trailers, horses, etc. at the east and north parking areas) and their dogs.
	3.2	all conservation targets	o <u>Project 3.2.1</u> : Conduct a pilot project to evaluate the affects of dogs upon the success of nesting species during the breeding season.
	3.2	all conservation targets	o <u>Project 3.2.2</u> : Conduct a pilot project to evaluate the impact of dogs upon habitat quality during structured periods of "off leash" activity.
	3.2	all conservation targets	o <u>Project 3.2.3</u> : Monitor wildlife species richness before and after implementation of the "on leash" policy.
	3.3	all conservation targets	o <u>Project 3.3.1</u> : Collaborate with Friends of Buford Park and Mount Pisgah Arboretum and other partners to utilize volunteers to preserve and enhance viewpoints.
	3.4	all conservation targets	o <u>Project 3.4.1</u> : Collaborate with groups such as the Friends of Buford Park, Mount Pisgah Arboretum, Northwest Youth Corps, equestrian groups, and other trail partners to develop an updated trail management plan with input from diverse group of stakeholders. Trail standards should seek to minimize impacts of trail infrastructure upon adjacent conservation targets. Plan should identify actions to address management of high use areas (such as the Summit and Swing Hill), to improve viewpoints or focal areas. The plan should evaluate the benefits and drawbacks of seasonal closure of trail segments that traverse sensitive regions of the park (with regard to habitat usage, e.g., nesting seasons, hydrology, soils, slope, etc.).

Howard Buford Recreation Area			Acres
Park-Wide Projects			2214
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	3.4	all conservation targets	o <u>Project 3.4.3</u> : Inventory the condition of all trails.
	3.4	all conservation targets	o <u>Project 3.4.4</u> : Inventory “rogue trails”, analyze trail function, and identify management actions to reduce the impact to conservation targets from rogue trails while addressing the needs of park users that such trails support.
	3.4	all conservation targets	o <u>Project 3.4.5</u> : Identify trail segments that bisect conservation target habitats and measure the area of the habitat patch size to identify and evaluate areas where trails are undermining viability of conservation targets.
	3.5	all conservation targets	o <u>Project 3.5.1</u> : Measure the effectiveness of recommended BMP's and adjust the standards with consideration of monitoring results and data analysis.
	3.6	all conservation targets	o <u>Project 3.6.1</u> : Develop and implement a pilot project to explore the feasibility of producing native hay within HBRA.
	3.7	all conservation targets	o <u>Project 3.7.1</u> : Conduct a pilot project to evaluate measures to mitigate visitor impacts on wildlife habitat.
<b>Goal 4</b>	4.1	all conservation targets	o <u>Project 4.1.1</u> : Provide a copy of the ODOT BMP handbook & 'Stewardship Toolbox' to stakeholders, volunteer groups, and staff who assist with management of habitat within the park.
	4.2	all conservation targets	o <u>Project 4.2.1</u> : Designate a location to develop an equipment cleaning facility.
	4.2	all conservation targets	o <u>Project 4.2.2</u> : Construct a facility to clean and remove foreign material from equipment.
	4.3	all conservation targets	o <u>Project 4.3.1</u> : Identify needed equipment.
	4.3	all conservation targets	o <u>Project 4.3.2</u> : Acquire equipment.
<b>Goal 5</b>	5.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.3.1</u> : Collaborate with research scientists at the UO or OSU to determine the appropriate amount of coarse woody debris to retain within restoration project areas of different habitat types.

Howard Buford Recreation Area			Acres
Park-Wide Projects			2214
Goal	Supporting Strategy	Benefitting Conservation Target	Project
Goal 6	6.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.2.1</u> : Collaborate with Oregon Department of Forestry to prepare a revised fire management strategy for the HBRA. (2019-20)
Goal 8	8.2	Oregon Vesper Sparrow	o <u>Project 8.2.1</u> : Survey for Oregon Vesper Sparrow during the breeding season and locate nest sites
Goal 9	9.2	Bradshaw's lomatium & wet prairie	o <u>Project 9.2.1</u> : Identify, assess, and inventory wet prairie within the greater Mt. Pisgah area.
	9.2	Bradshaw's lomatium & wet prairie	o <u>Project 9.2.2</u> : Convene property owners and stakeholders to discuss conservation easements, fee title acquisition, and property donation options.
	9.2	Bradshaw's lomatium & wet prairie	o <u>Project 9.2.3</u> : Collaborate with partners to use conservation easements to protect wet prairie on nearby private properties.
Goal 10	10.1	All conservation targets	o <u>Project 10.1.1</u> : Develop reporting system for park users to document sightings of non-native animals within the HBRA.
	10.1	All conservation targets	o <u>Project 10.1.2</u> : Acquire and deploy "trail cameras" located away from trails to discreetly monitor the HBRA for non-native animal species.
	10.2	All conservation targets	o <u>Project 10.2.1</u> : Collaborate with ODFW, neighbors, and partner agencies to monitor for the presence of non-native animals previously undocumented within the Greater Mount Pisgah Area.
	10.2	All conservation targets	o <u>Project 10.2.2</u> : Develop an 'EDRR most wanted poster' to communicate the species of interest to park users.
	10.3	All conservation targets	o <u>Project 10.3.1</u> : Create presentation and outreach materials.
	10.3	All conservation targets	o <u>Project 10.3.2</u> : Host educational presentations & distribute outreach materials that explain the issue.
	10.4	All conservation targets	o <u>Project 10.4.2</u> : Collaborate with ODFW to evaluate monitoring data to set tolerance thresholds to govern actions to manage non-native species within the HBRA.

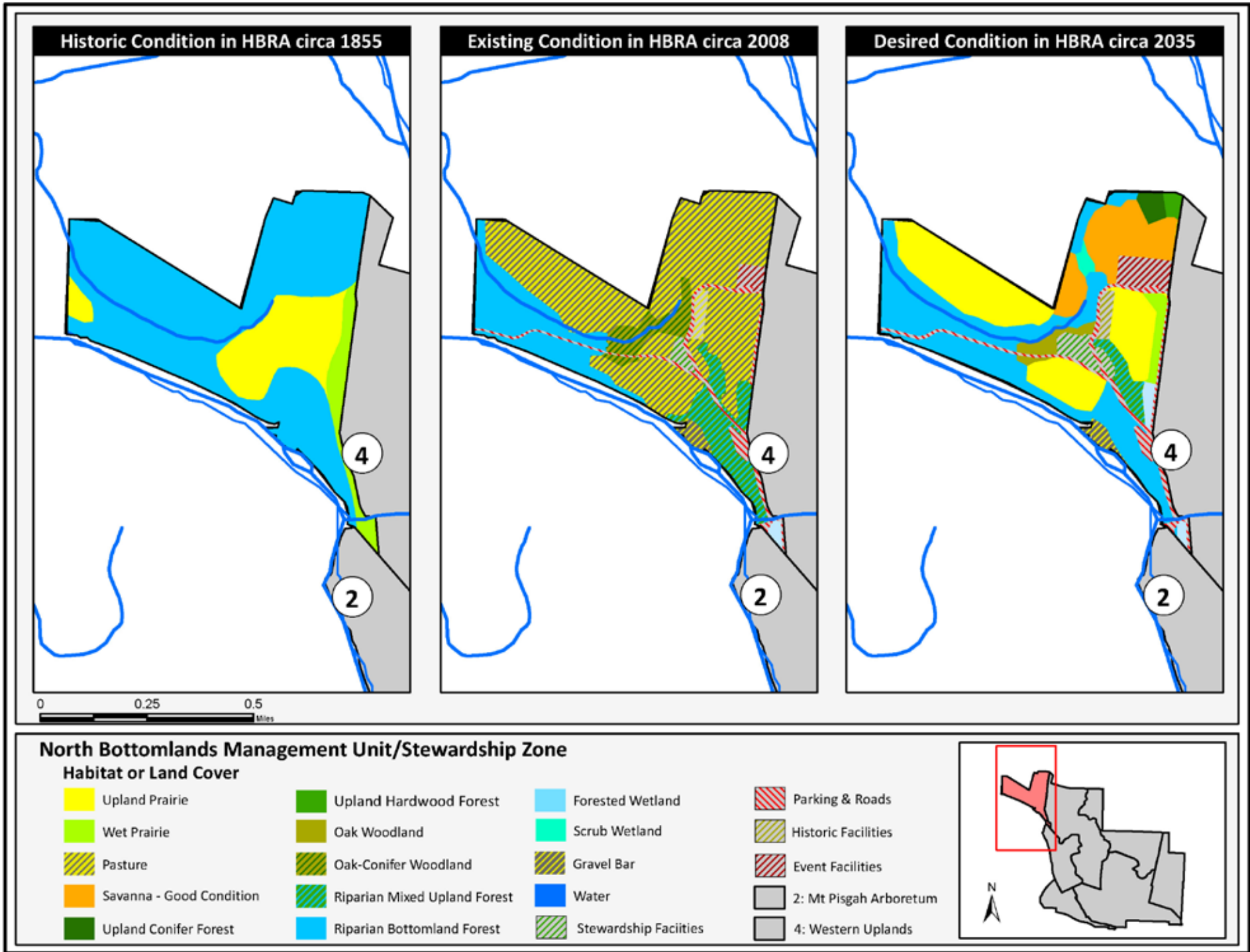
Howard Buford Recreation Area			Acres
Park-Wide Projects			2214
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	10.4	All conservation targets	o <u>Project 10.4.3</u> : Where feasible, collaborate with ODFW, Oregon State Police, Lane County Animal Services to employ prescriptions to eliminate the threat of increased populations of non-native species listed on the 'EDRR most wanted poster' to HBRA conservation targets. When appropriate, collaborate with Lane County Animal Services to facilitate adoption of captured domestic animals such as cats.
<b>Goal 11</b>	11.1	All conservation targets	o <u>Project 11.1.1</u> : Update Invasive Species management and watch lists.
	11.2	All conservation targets	o <u>Project 11.2.1</u> : Monitor all Stewardship Zones for all invasive species noted on the EDRR watch list.
	11.2	All conservation targets	o <u>Project 11.2.2</u> : Collaborate with Partners to recruit and train volunteers to assist with monitoring activities.
	11.3	All conservation targets	o <u>Project 11.3.1</u> : Manage patches of invasive species adjacent to roads and trails and within parking areas and power line easements.
	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread within a Management Unit or through the HBRA.
	11.9	All conservation targets	o <u>Project 11.9.1</u> : Convene Partners, Stakeholders, and neighbors to identify invasive species management priorities for the Greater Mount Pisgah Area.
	11.11	All conservation targets	o <u>Project 11.11.1</u> : Collaborate with BPA to manage large areas within the powerline easement occupied by invasive species in conjunction with their three year system wide vegetation management cycle.
<b>Goal 12</b>	12.1	creeks & streams	o <u>Project 12.1.1</u> : Identify, assess, and inventory barriers to fish passage.
<b>Goal 13</b>	13.1	creeks & streams	o <u>Project 13.1.1</u> : Assess macroinvertebrate populations within streams.
	13.2	creeks & streams	o <u>Project 13.2.1</u> : Identify impacted stream corridors.
	13.2	creeks & streams	o <u>Project 13.2.2</u> : Secure resources to advance stream restoration.
	13.2	creeks & streams	o <u>Project 13.2.3</u> : Implement stream restoration projects.
<b>Goal 14</b>	14.4	Willamette Floodplain	o <u>Project 14.4.1</u> : Collaborate with partners to convene a round table of stakeholders and neighbors to discuss and identify floodplain enhancement and restoration opportunities within the Seavey Floodplain along the lower Coast Fork of the Willamette.

Howard Buford Recreation Area			Acres
Park-Wide Projects			2214
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	14.4	Willamette Floodplain	o <u>Project 14.4.2</u> : Collaborate with partners to convene a round table of stakeholders and neighbors to discuss and identify floodplain enhancement and restoration opportunities along the lower Middle Fork of the Willamette.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
<b>Goal 1</b>	1.1	visitor experience	o <u>Project 1.1.3</u> : Post Stewardship Program Project or Activity updates at Trail Head Kiosks to inform park visitors about area closures or habitat and vegetation management activity in progress in proximity to the trail.
	1.2	visitor experience	o <u>Project 1.2.1</u> : Develop vegetation management protocols for all parking areas within the HBRA.
	1.2	visitor experience	o <u>Project 1.2.2</u> : Remove vegetation to maintain sightlines to enhance public safety and deter property crime.
	1.7	visitor experience	o <u>Project 1.7.3</u> : Maintain viewpoints and benches.
<b>Goal 9</b>	9.2	Bradshaw's lomatium & wet prairie	o <u>Project 9.2.3</u> : Collaborate with Partners to use conservation easements to protect wet prairie on nearby private properties.
<b>Goal 10</b>	10.1	All conservation targets	o <u>Project 10.1.3</u> : Process data and identify the types of non-native animal species observed in and around HBRA.
	10.4	All conservation targets	o <u>Project 10.4.1</u> : Collaborate with ODFW to survey and monitor native and non-native wildlife game species within the HBRA.
	10.5	All conservation targets	o <u>Project 10.5.1</u> : Collaborate with ODFW to trap and remove non-native animal species, such as Wild Turkeys, that pose the greatest threat to conservation targets and native animals that are known to occur within the greater Mount Pisgah area.
<b>Goal 11</b>	11.2	All conservation targets	o <u>Project 11.2.1</u> : Monitor all Stewardship Zones for all invasive species noted on the EDRR watch list.
	11.2	All conservation targets	o <u>Project 11.2.2</u> : Collaborate with Partners to recruit and train volunteers to assist with monitoring activities.
	11.3	All conservation targets	o <u>Project 11.3.1</u> : Manage patches of invasive species adjacent to roads and trails and within parking areas and power line easements.

Howard Buford Recreation Area			Acres
Park-Wide Projects			2214
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species as part of Management Unit specific restoration investments.
	11.4	All conservation targets	o <u>Project 11.4.1</u> : Manage or suppress species classified as "secondary invaders" along roads, trail corridors and within parking areas or powerline easements.
	11.9	All conservation targets	o <u>Project 11.9.2</u> : Collaborate with Partners to host an invasive species management workshop
	11.9	All conservation targets	o <u>Project 11.9.3</u> : Collaborate with Partners to secure funding to manage invasive species on adjacent lands.
	11.11	All conservation targets	o <u>Project 11.11.1</u> : Collaborate with BPA to manage large areas within the powerline easement occupied by invasive species in conjunction with their three year system wide vegetation management cycle.
<b>Goal 12</b>	12.2	creeks & streams	o <u>Project 12.2.2</u> : Secure resources to replace culverts or implement other retrofits to improve fish passage in the balance of sites identified during the inventory.
<b>Goal 13</b>	13.2	creeks & streams	o <u>Project 13.2.2</u> : Secure resources to advance stream restoration.
	13.2	creeks & streams	o <u>Project 13.2.3</u> : Implement stream restoration projects.
	13.3	creeks & streams	o <u>Project 13.3.1</u> : Coordinate with livestock producers to identify and evaluate opportunities to utilize grazing as a means to manage vegetation in a manner that enhances conservation target habitats.
	13.3	creeks & streams	o <u>Project 13.3.2</u> : Collaborate with a livestock producer(s) to implement a pilot project to assess the benefits of grazing in conservation target habitats including oak woodland, prairie, savanna, and wet prairie while minimizing adverse affects to creeks and streams.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
<b>Goal 1</b>	1.1	visitor experience	o <u>Project 1.1.3</u> : Post Stewardship Program Project or Activity updates at Trail Head Kiosks to inform park visitors about area closures or habitat and vegetation management activity in progress in proximity to the trail.
	1.2	visitor experience	o <u>Project 1.2.1</u> : Develop vegetation management protocols for all parking areas within the HBRA.

Howard Buford Recreation Area			Acres
Park-Wide Projects			2214
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	1.2	visitor experience	o <u>Project 1.2.1</u> : Remove vegetation to maintain sightlines to enhance public safety and deter property crime.
	1.7	visitor experience	o <u>Project 1.7.3</u> : Maintain viewpoints and benches.
<b>Goal 11</b>	11.2	All conservation targets	o <u>Project 11.2.1</u> : Monitor all Stewardship Zones for all invasive species noted on the EDRR watch list.
	11.2	All conservation targets	o <u>Project 11.2.2</u> : Collaborate with Partners to recruit and train volunteers to assist with monitoring activities.
	11.3	All conservation targets	o <u>Project 11.3.1</u> : Manage patches of invasive species adjacent to roads and trails and within parking areas and power line easements.
	11.4	All conservation targets	o <u>Project 11.4.1</u> : Manage or suppress species classified as "secondary invaders" along roads, trail corridors and within parking areas or powerline easements.
	11.9	All conservation targets	o <u>Project 11.9.2</u> : Collaborate with Partners to host an invasive species management workshop.
	11.9	All conservation targets	o <u>Project 11.9.3</u> : Collaborate with Partners to secure funding to manage invasive species on adjacent lands.
	11.10	All conservation targets	o <u>Project 11.10.1</u> : Collaborate with Partners to assess mechanisms to fund an endowment.
	11.11	All conservation targets	o <u>Project 11.11.1</u> : Collaborate with BPA to manage large areas within the powerline easement occupied by invasive species in conjunction with their three year system wide vegetation management cycle.





Focal Conservation Target or Other Habitat Net Change: North Bottomlands Stewardship Zone (166 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	2.1	2.1	2.1	-
Stewardship Facilities	0	1.7	4.6	1.7	2.9
Visitor Experience - Event Facilities	0	2.2	5.5	2.2	3.3
Visitor Experience - Parking Areas & Roads	0	9.3	9.3	9.3	-
Savanna	0	0.1	21.2	0.1	21.1
Upland Prairie	33.1	0	46.3	-33.1	46.3
Wet Prairie	10.6	0	3.3	-10.6	3.3
Oak Woodland	0	0	4.4	-	4.4
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	1.0	2.4	1.0	1.4
Riparian Bottomland Forest	122.3	26.9	53.3	-95.4	26.4
Upland Conifer Forest	0	8.9	2.5	8.9	-6.4
Upland Hardwood Forest	0	15.9	6.2	15.9	-9.7
Other Non-Conservation Target Cover Types	0.1	97.9	4.8	97.8	-93.0

Stewardship Zone		Management Unit	Acres
North Bottomlands		not applicable	166
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Stewardship Activities completed 2008 - 2017</b>			
			o Managed small patches of invasive species to suppress their spread.
			o Managed large areas occupied by invasive species.
			o Suppressed "secondary invaders" along roads, trail corridors and within parking areas.
			o Managed false brome.
			o Located and manage invasive species including English hawthorn, black walnut, common pear, myrobalan plum, and sweet cherry.
			o Prepared and incorporated protocols and conditions of use into special use permits for North Bottomlands events.
			o Defined and included best management practices for invasive plant treatments as a condition of use for event organizers.
			o Managed non-native blackberry and other invasive plant species within the North Bottomlands.
			o Coordinated with Partners and area farmers to manage old pastures for hay production.
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
<b>Goal 5</b>	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects.
<b>Goal 6</b>	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.1</u> : Prepare prescribed burn plans (2022).
	6.3	oak woodland, Oregon Vesper Sparrow, other significant habitats, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, other significant habitats, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.

Stewardship Zone		Management Unit	Acres
North Bottomlands		not applicable	166
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	6.3	oak woodland, Oregon Vesper Sparrow, other significant habitats, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie (2022).
<b>Goal 8</b>	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.2</u> : Broadcast native seed mixes or install native plants to establish cover of native species within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
<b>Goal 9</b>	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.1</u> : Propagate seed and plugs of Bradshaw's lomatium at the Friends Native Plant nursery.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.1</u> : Manage patches of invasive species adjacent to roads and trails and within parking areas and power line easements.
	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread.
	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
<b>Goal 14</b>	14.1	Willamette Floodplain	o <u>Project 14.1.1</u> : Survey the Thompson Slough channel corridor and adjacent floodplain and install dataloggers and staff gages within the lowest reaches of the floodplain.
	14.1	Willamette Floodplain	o <u>Project 14.1.2</u> : Monitor hydrology within the Thompson Slough channel corridor and adjacent floodplain.
	14.1	Willamette Floodplain	o <u>Project 14.1.3</u> : Monitor and document wildlife along Thompson Slough and in the adjacent floodplain.

Stewardship Zone		Management Unit	Acres
North Bottomlands		not applicable	166
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	14.1	Willamette Floodplain	o <u>Project 14.1.4</u> Collaborate with Partners to design & permit prescriptions and develop site engineering plans to restore Thompson Slough channel corridor and adjacent floodplain.
	14.1	Willamette Floodplain	o <u>Project 14.1.5</u> : Manage invasive species within the Thompson Slough channel corridor and adjacent floodplain in preparation for site construction.
	14.1	Willamette Floodplain	o <u>Project 14.1.6</u> : Implement restoration plans including site construction along the Thompson Slough channel corridor and within the adjacent floodplain.
	14.2	Willamette Floodplain	o <u>Project 14.2.1</u> : Survey the sloughs and adjacent floodplain in proximity to the North Parking lot in the North Bottomlands and install dataloggers and staff gages within the lowest reaches of the floodplain.
	14.2	Willamette Floodplain	o <u>Project 14.2.2</u> : Monitor hydrology within the proximity to the North Parking lot in the North Bottomlands.
	14.2	Willamette Floodplain	o <u>Project 14.2.3</u> Collaborate with Partners to design & permit prescriptions and develop site engineering plans to remove plugs and restore sloughs in proximity to the North Parking lot in the North Bottomlands.
	14.2	Willamette Floodplain	o <u>Project 14.2.4</u> : Manage invasive species within proximity to the North Parking lot in the North Bottomlands in preparation for site construction and grading associated with floodplain restoration.
	14.2	Willamette Floodplain	o <u>Project 14.2.5</u> : Implement restoration plans including site construction in proximity to the North Parking lot in the North Bottomlands.
<b>Goal 15</b>	15.1	visitor experience	o <u>Project 15.1.1</u> : Develop event protocols and conditions of use that can be incorporated into special use permits for North Bottomlands events.
	15.1	visitor experience	o <u>Project 15.1.2</u> : Define and include best management practices for invasive plant treatments as a condition of use for event organizers.
	15.2	oak woodland, Oregon Vesper Sparrow, other significant habitats, Prairie & Savanna, wet prairie, & Willamette Floodplain.	o <u>Project 15.2.1</u> : Continue to treat non-native blackberry and other invasive plant species within the North Bottomlands.

Stewardship Zone		Management Unit	Acres
North Bottomlands		not applicable	166
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	15.2	visitor experience	o <u>Project 15.2.2</u> : Construct seed removal stations at each trailhead that accommodate hikers, equestrians and dog walkers.
	15.2	visitor experience	o <u>Project 15.2.3</u> : Define and implement vegetation management objectives to facilitate recreation and enhance habitat in the North Bottomlands. (Examples may include controlling poison oak, deadly nightshade, and poison hemlock, or using vegetative barriers to impede entry into sensitive habitats.).
	15.2	visitor experience	o <u>Project 15.2.4</u> : Utilize trailhead temporary signage during North Bottomlands events (“sandwich board” or equivalent) to inform trail users of the importance of using seed removal stations to prevent movement of invasive weeds from event area into the natural areas of the park.
	15.3	visitor experience	o <u>Project 15.3.1</u> : Lane County park managers and partners reference the <i>Habitat Management Plan</i> and consider ‘context sensitive’ design alternatives when reviewing, approving and implementing infrastructure improvements in the North Bottomlands. (Examples may include renovation of Kienzle house and barn, trail and equestrian developments, etc.)
	15.3	All conservation targets	o <u>Project 15.3.2</u> : Identify potential negative conservation impacts of each priority improvement. Considering financial, logistical and technical feasibility and constraints, and design improvements to minimize negative impacts to park safety as well as adjacent habitats.
	15.4	visitor experience	o <u>Project 15.4.1</u> : Install temporary signage near future conservation project areas in the North Bottomlands that educate park users about the parallel goals to enhance conservation targets and continue recreation uses in the North Bottomlands.
	15.4	visitor experience	o <u>Project 15.4.2</u> : Staff booths at special events that educate the public on future conservation actions and ongoing recreation uses in the North Bottomlands.
	15.4	visitor experience	o <u>Project 15.4.3</u> : Install signage in appropriate locations that educate the public about County conservation goals in higher use recreation areas.

Stewardship Zone		Management Unit	Acres
North Bottomlands		not applicable	166
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	15.4	oak woodland, Oregon Vesper Sparrow, other significant habitats, Prairie & Savanna, wet prairie, & visitor experience, Willamette Floodplain.	o <u>Project 15.4.4</u> : Implement demonstration conservation projects in higher use recreation areas.
	15.5	All conservation targets	o <u>Project 15.5.1</u> : Collaborate with Friends of Buford Park & Mt. Pisgah to develop a lease agreement for the Native Plant Nursery facility. Consider expanding the footprint of the production area to afford ample acreage to support plant material production to advance implementation of the Habitat Management Plan as well as conservation actions by Rivers to Ridges Partners or other partners working in the Willamette Valley.
	15.6	All conservation targets	o <u>Project 15.6.1</u> : Coordinate with Partners and area farmers to manage old pastures for hay production.
	15.7	oak woodland, Oregon Vesper Sparrow, other significant habitats, Prairie & Savanna, wet prairie, & visitor experience, Willamette Floodplain.	o <u>Project 15.7.1</u> : Develop conservation actions and best management practices (BMPs) for the North Bottomlands for a 100-foot riparian revegetation area adjacent to the Coast Fork Willamette River, in conjunction with planning for the Thompson Slough restoration project.
	15.8	visitor experience	o <u>Project 15.8.1</u> : Collaborate with Partners to design a trail through the North Bottomlands that addresses both ecological and visitor access goals.
	15.8	visitor experience	o <u>Project 15.8.2</u> : Collaborate with Partners to maintain a temporary mowed trail to evaluate and adjust the alignment.
	15.8	visitor experience	o <u>Project 15.8.3</u> : Collaborate with Partners to construct a permanent trail
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie (2022).
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.1</u> : Manage patches of invasive species adjacent to roads and trails and within parking areas and power line easements.
	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread.
	11.4	All conservation targets	o <u>Project 11.4.1</u> : Manage or suppress species classified as "secondary invaders" along roads, trail corridors and within parking areas.



Stewardship Zone		Management Unit	Acres
North Bottomlands		not applicable	166
Goal	Supporting Strategy	Benefitting Conservation Target	Project
Goal 15	15.8	visitor experience	o <u>Project 15.8.3</u> : Collaborate with partners to construct a permanent trail.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns
Goal 8	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.

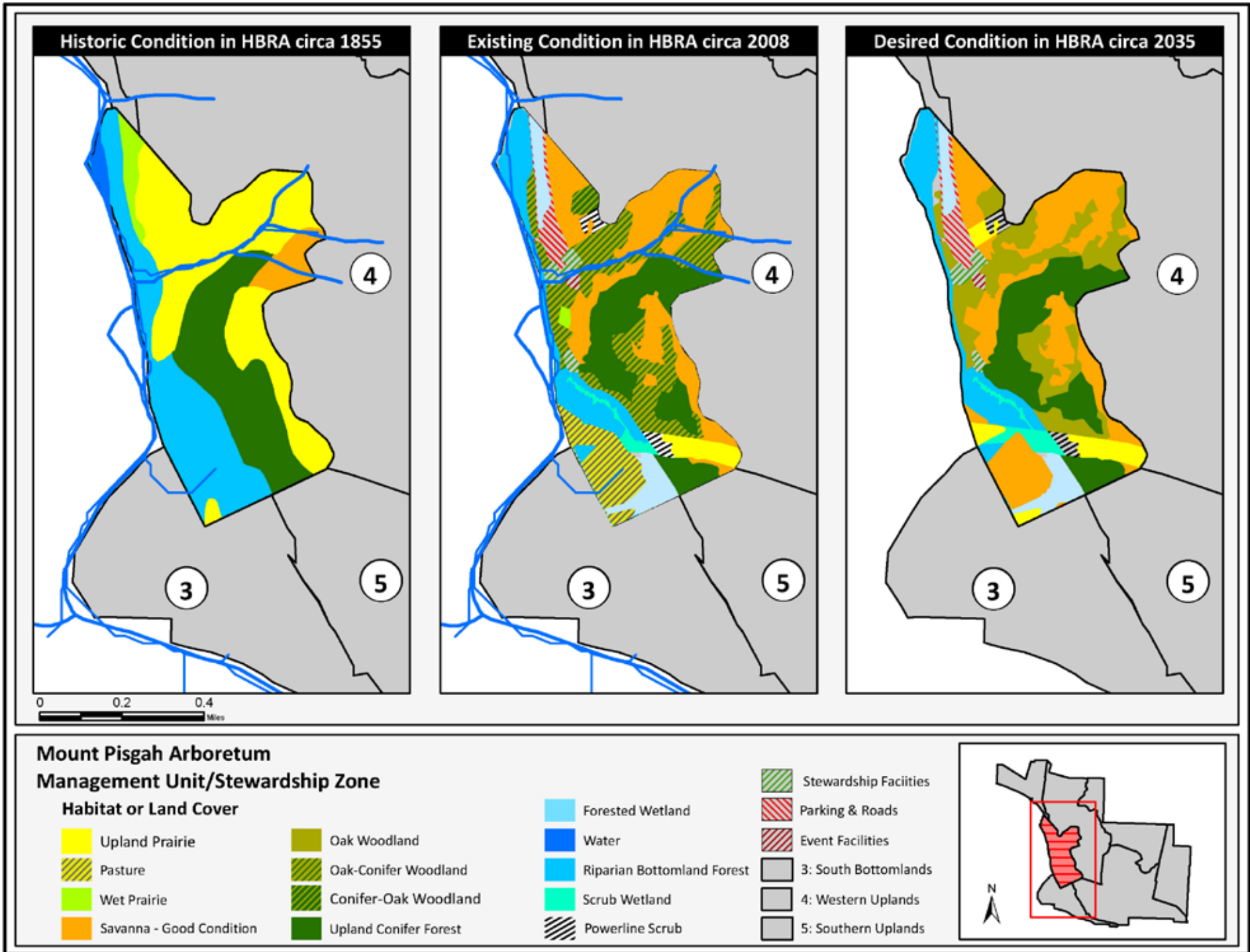
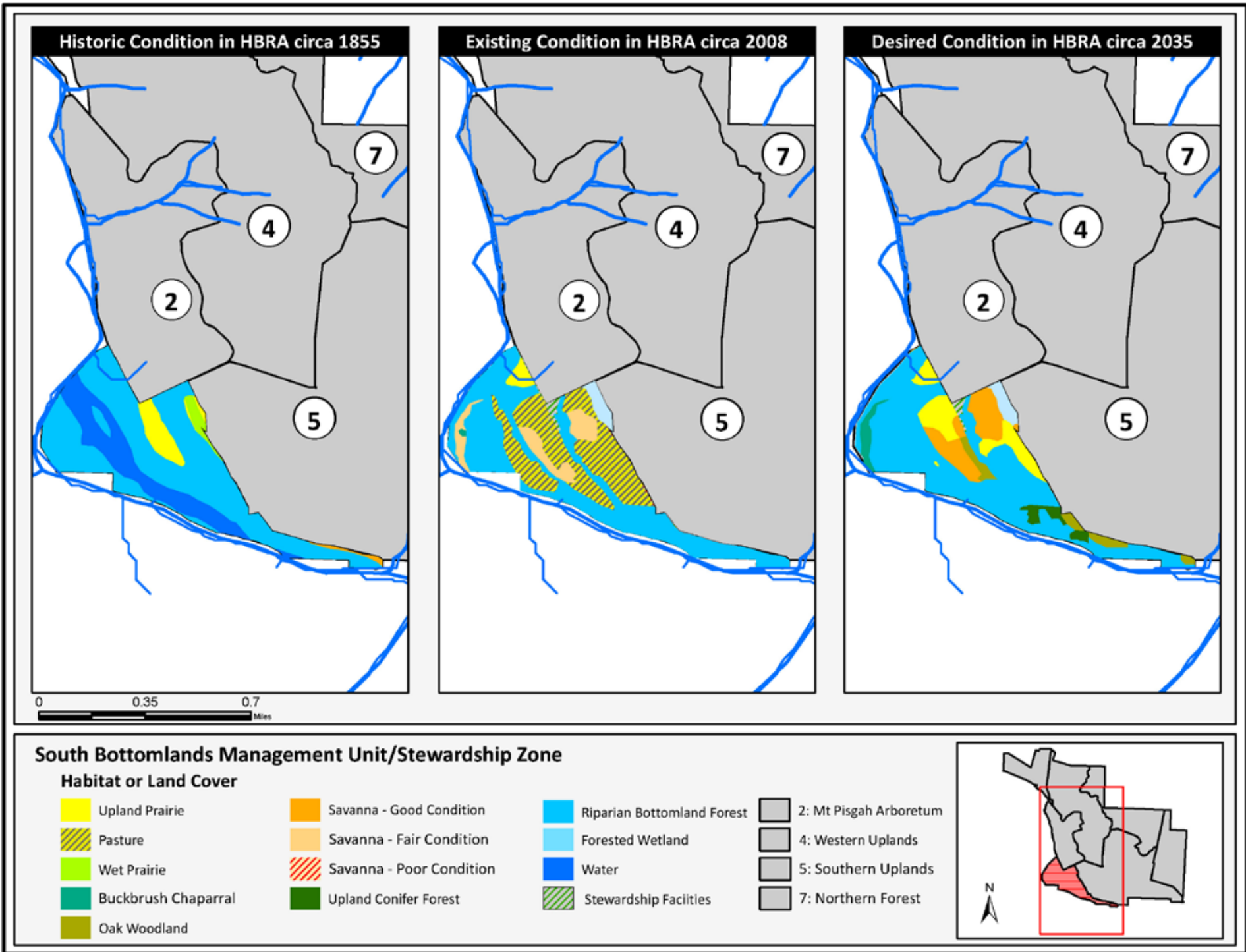


EXHIBIT E

Focal Conservation Target or Other Habitat Net Change: Mount Pisgah Arboretum Stewardship Zone (203 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	3.9	3.0	3.9	-0.9
Visitor Experience - Event Facilities	0	0.7	0	0.7	-0.7
Visitor Experience - Parking Areas & Roads	0	5.8	6.0	5.8	0.2
Savanna	7.2	45.9	69.0	38.7	23.1
Upland Prairie	75.0	0	1.0	-75.0	1.0
Wet Prairie	6.1	0.9	0	-5.2	-0.9
Oak Woodland	0	0.1	45.0	0.1	44.9
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	10.6	10.0	10.6	-0.6
Riparian Bottomland Forest	40.0	21.9	24.0	-18.1	2.1
Upland Conifer Forest	75.0	35.0	40.0	-40.0	5.0
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	78.5	5.3	78.5	-73.2

Stewardship Zone		Management Unit	Acres
Mt. Pisgah Arboretum		not applicable	203
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 1	1.1	visitor experience	o <u>Project 1.1.7</u> : Develop a riverfront trail plan to establish preferred routes to access the river for the public and for first responders (in the case of emergencies) while protecting sensitive habitats. Consider closing certain access points to the river during nesting season and other times when disturbance to wildlife will result in an adverse impact.
	1.1	visitor experience	o <u>Project 1.1.8</u> : Survey the riverfront and delineate sensitive habitat features.
	1.1	visitor experience	o <u>Project 1.1.9</u> : Improve parking areas, construct trails, and develop supporting infrastructure to improve access to the river.
Goal 2	2.2	all conservation targets	o <u>Project 2.2.2</u> : Implement interpretive plan for 203-acre Arboretum lease area.
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions within each management unit.
Goal 6	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and grind stumps of small trees along the edge of closed woodland and forest.
Goal 8	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.

Stewardship Zone		Management Unit	Acres
Mt. Pisgah Arboretum		not applicable	203
Goal	Supporting Strategy	Benefitting Conservation Target	Project
Goal 9	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.2</u> : plant plugs and broadcast seed of Bradshaw's lomatium in 5x100sq ft plots within wet prairie restoration sites.
Goal 11	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread within Mt. Pisgah Arboretum or throughout the HBRA.
	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.5	All conservation targets	o <u>Project 11.5.2</u> : Intensively manage Maltese Star Thistle as part of Management Unit specific restoration investments.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
Goal 12	12.2	creeks & streams	o <u>Project 12.2.2</u> : Secure resources to replace culverts or implement other retrofits to improve fish passage in the balance of sites identified during the inventory.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.1</u> : Prepare prescribed burn plan.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns
Goal 8	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.

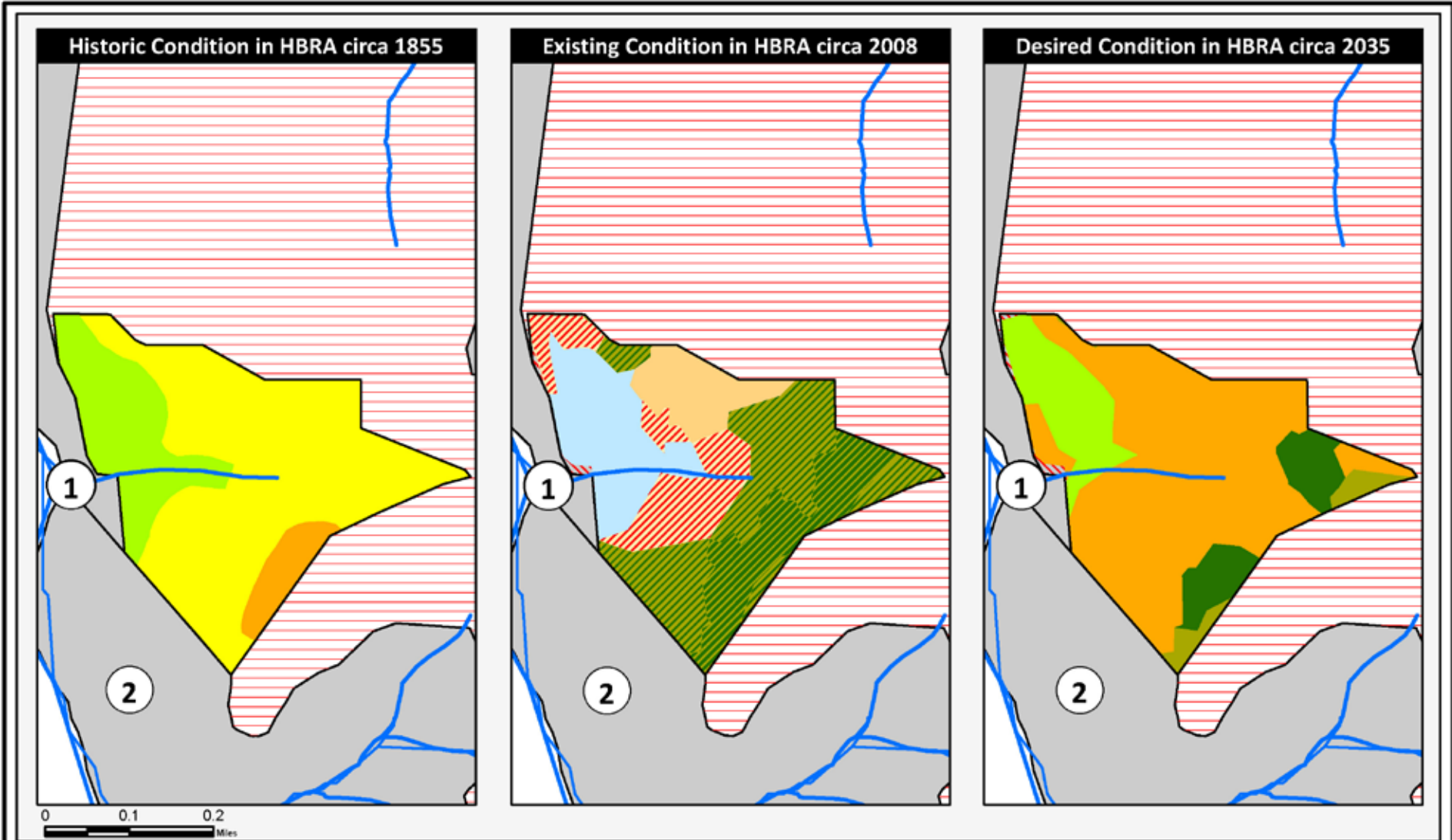


Focal Conservation Target or Other Habitat Net Change: South Bottomlands Stewardship Zone (155 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	2.1	2.1	2.1	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	1.4	14.8	19.0	13.4	4.2
Upland Prairie	10.3	3.3	18.0	-7.0	14.7
Wet Prairie	3.2	0	0	-3.2	-
Oak Woodland	0	0	7.2	-	7.2
Buckbrush Chaparral	0	0.4	4.3	0.4	3.9
Forested Wetland	0	3.8	3.7	3.8	-0.1
Riparian Bottomland Forest	103.7	75.4	95.8	-28.3	20.4
Upland Conifer Forest	0	0	4.6	-	4.6
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	36.0	55.0	0.0	19.0	-55.0



Stewardship Zone		Management Unit	Acres
South Bottomlands		not applicable	155
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o manage invasive species
			o restore floodplain connectivity
			o prepare and implement ecological burn plans
			o install woody plants to nurture desired future conditions
			o broadcast diverse seed mixes
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie.
Goal 8	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
Goal 11	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie.
Goal 8	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
Goal 11	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie.
Goal 7	7.2	Buckbrush chaparral	o <u>Project 7.2.2</u> : manage invasive vegetation and broadcast seed or plant Buckbrush in designated areas of the South Bottomlands Stewardship Zone

Stewardship Zone		Management Unit	Acres
South Bottomlands		not applicable	155
Goal	Supporting Strategy	Benefitting Conservation Target	Project
Goal 8	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o Project 8.3.1: Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
Goal 14	14.3	Willamette Floodplain	o <u>Project 14.3.1</u> : Survey the South Bottomlands sloughs and adjacent floodplain and install dataloggers and staff gages within the lowest reaches of the floodplain.
	14.3	Willamette Floodplain	o <u>Project 14.3.2</u> : Monitor hydrology within the South Bottomlands sloughs and adjacent floodplain
	14.3	Willamette Floodplain	o <u>Project 14.3.3</u> : Monitor and document wildlife along South Bottomlands sloughs and in the adjacent floodplain.
	14.3	Willamette Floodplain	o <u>Project 14.3.5</u> : Manage invasive species within the South Bottomlands sloughs and adjacent floodplain in preparation for site construction.
	14.3	Willamette Floodplain	o <u>Project 14.3.6</u> : Implement restoration plans including site construction along the South Bottomlands sloughs and within the adjacent floodplain.



**Bridge Bowl Management Unit  
Western Uplands Stewardship Zone  
Habitat or Land Cover**

- |                  |                          |                       |                        |
|------------------|--------------------------|-----------------------|------------------------|
| Upland Prairie   | Savanna - Good Condition | Conifer-Oak Woodland  | Western Uplands - SZ   |
| Wet Prairie      | Savanna - Fair Condition | Upland Conifer Forest | 1: North Bottomlands   |
| Forested Wetland | Savanna - Poor Condition | Oak-Conifer Woodland  | 2: Mt Pisgah Arboretum |
| Oak Woodland     | Oak-Conifer Woodland     | Parking & Roads       |                        |



Focal Conservation Target or Other Habitat Net Change: Bridge Bowl Management Unit (63 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0.4	0.4	0.4	-
Savanna	4.1	18.5	43.6	14.4	25.1
Upland Prairie	43.7	0	0	-43.7	
Wet Prairie	15.1	0	9.3	-15.1	9.3
Oak Woodland	0	0	2.6	-	2.6
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	12.9	0	12.9	-12.9
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	0	0	7.0	-	7.0
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	31.1	0.0	31.1	-31.1

Stewardship Zone		Management Unit	Acres
Western Uplands		Bridge Bowl	63
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o Managed patches of invasive species adjacent to roads and trails and within parking areas and power line easements.
			o Managed small patches of invasive species to suppress their spread
			o Managed or suppress species classified as "secondary invaders" along roads, trail corridors and within parking areas
			o Intensively managed false brome
			o <u>Project 1.1.1</u> : Maintain a permanent 'notice' board at the three trailheads and within the Arboretum to inform park users of areas of project activity or closures. Parking Areas: includes West (Main/MPA) lot, North Lot, and East lot.
			o <u>Project 1.1.2</u> : Maintain and update the HBRA trail map to clearly indicate segments of closed trail.
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
<b>Goal 5</b>	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects .
<b>Goal 6</b>	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.1</u> : Prepare prescribed burn plans (2019).
	6.3	oak woodland, Oregon Vesper Sparrow, other significant habitats, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, other significant habitats, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.

Stewardship Zone		Management Unit	Acres
Western Uplands		Bridge Bowl	63
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	6.3	oak woodland, Oregon Vesper Sparrow, other significant habitats, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie (2020).
Goal 8	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.2</u> : Broadcast native seed mixes or install native plants to establish cover of native species within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
Goal 9	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.1</u> : Identify areas where wet prairie was filled, drained, or modified.
	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.3</u> : Restore wet prairie(s) in identified project areas
	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.4</u> : Restore wet prairie within the balance of areas identified under the scope of project 9.1.1
	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.2</u> : plant plugs and broadcast seed of Bradshaw's lomatium in 5x100sq ft plots within wet prairie restoration sites.
Goal 11	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread.
	11.3		o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.

Stewardship Zone		Management Unit	Acres
Western Uplands		Bridge Bowl	63
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie (2022).
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns
Goal 8	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.



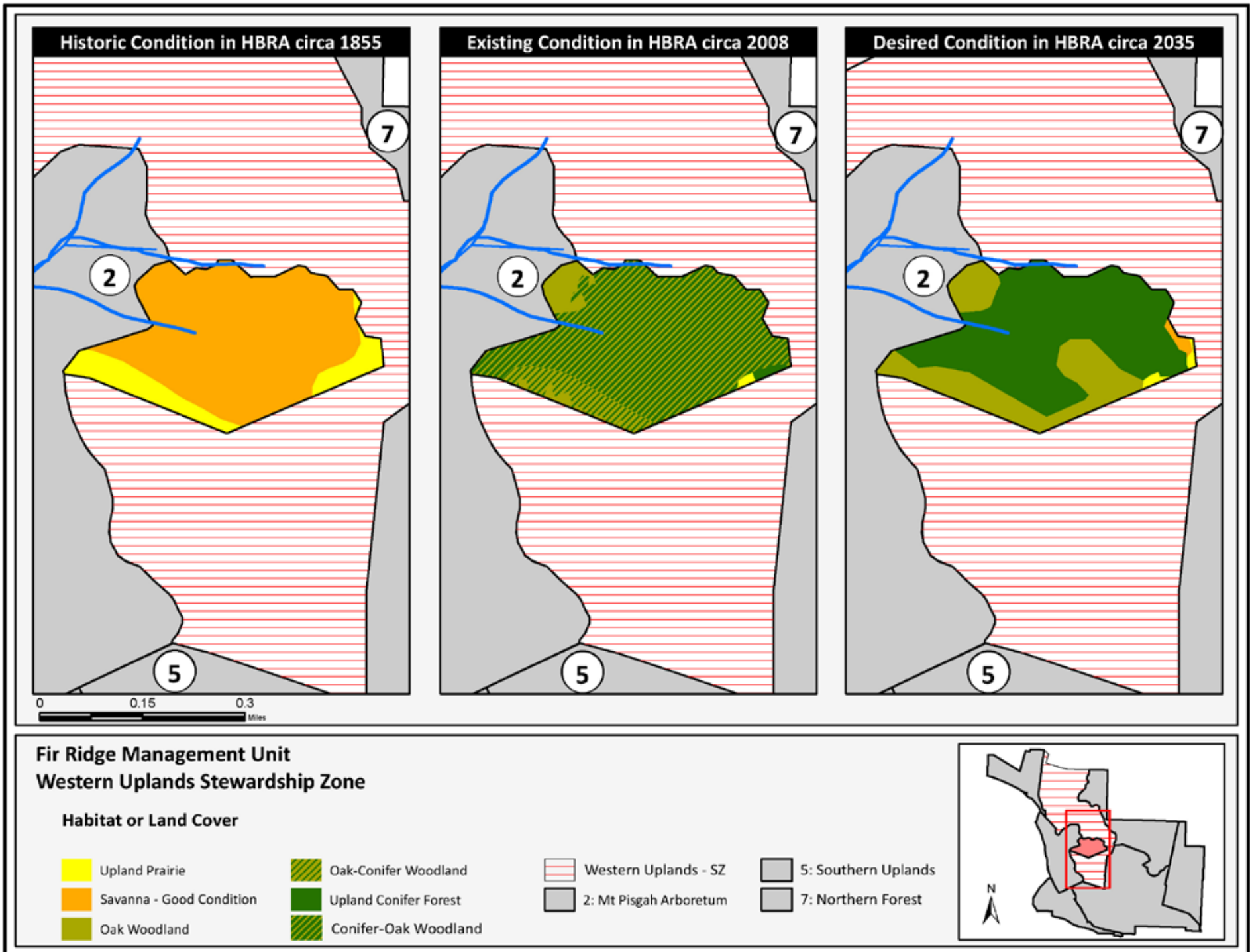
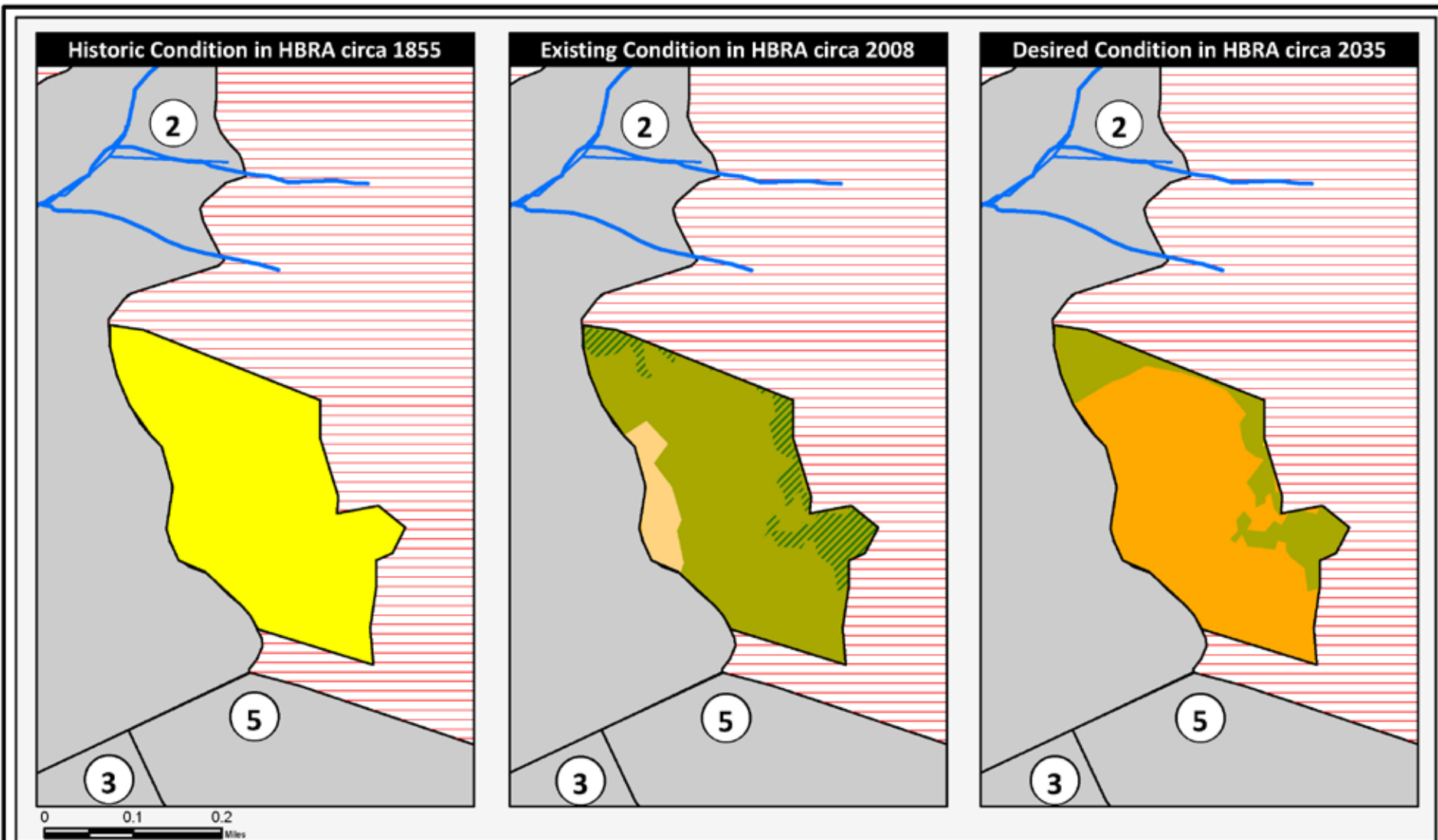


EXHIBIT E

Focal Conservation Target or Other Habitat Net Change: Fir Ridge Management Unit (46 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	38.5	0.0	0.5	-38.5	0.5
Upland Prairie	7.6	0.2	0.5	-7.4	0.3
Wet Prairie	0	0	0		
Oak Woodland	0	2.7	13.8	2.7	11.1
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	0	0.4	31.3	0.4	30.9
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	42.7	0	42.7	-42.7

Stewardship Zone		Management Unit	Acres
Western Uplands		Fir Ridge	46
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
Goal 8	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie throughout the HBRA.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects.
Goal 6	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
Goal 8	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie throughout the HBRA.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.

Stewardship Zone		Management Unit	Acres
Western Uplands		Fir Ridge	46
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
<b>Goal 8</b>	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie throughout the HBRA.



**Lazuli Management Unit  
Western Uplands Stewardship Zone**

**Habitat or Land Cover**

- |                          |                      |                        |                      |
|--------------------------|----------------------|------------------------|----------------------|
| Upland Prairie           | Oak Woodland         | Western Uplands        | 3: South Bottomlands |
| Savanna - Good Condition | Oak-Conifer Woodland | Forested Wetland       | 5: Southern Uplands  |
| Savanna - Fair Condition | Conifer-Oak Woodland | 2: Mt Pisgah Arboretum |                      |

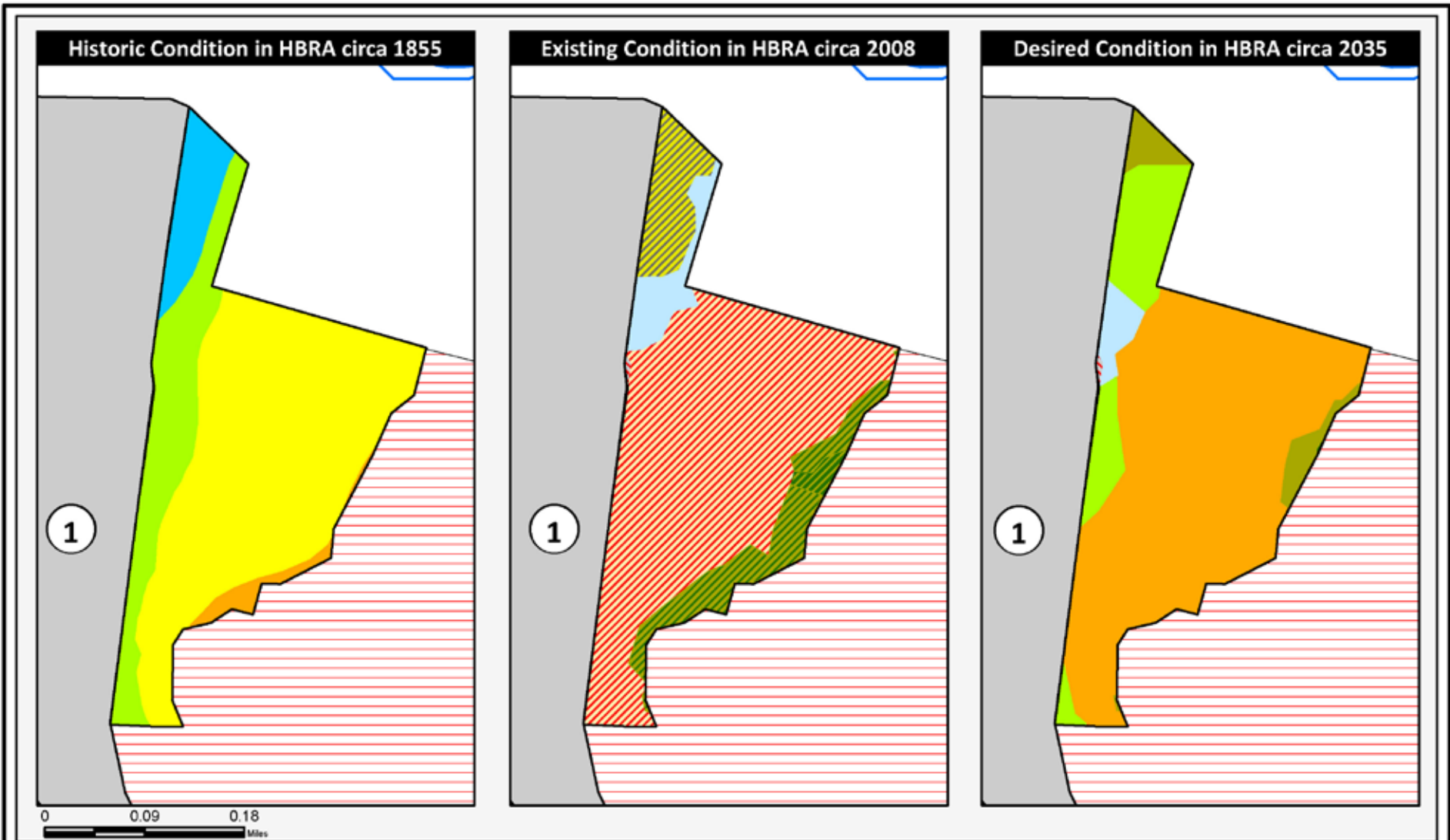


Focal Conservation Target or Other Habitat Net Change: Lazuli Management Unit (41 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	0	3.8	31.4	3.8	27.6
Upland Prairie	41.0	0	0	-41.0	-
Wet Prairie	0	0	0		
Oak Woodland	0	30.2	9.4	30.2	-20.8
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	0	0	0	-	-
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	7.0	0	7.0	-7.0

Stewardship Zone		Management Unit	Acres
Western Uplands		Lazuli	41
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o manage patches of Maltese starthistle.
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
Goal 6	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.1</u> : Prepare prescribed burn plans for the Lazuli MU (2022).
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects.
Goal 6	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns.
Goal 8	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.



Stewardship Zone		Management Unit	Acres
Western Uplands		Lazuli	41
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.5	All conservation targets	o <u>Project 11.5.2</u> : Intensively manage Maltese Star Thistle as part of Management Unit specific restoration investments.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns.
<b>Goal 8</b>	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.



**Spring Box Management Unit  
Western Uplands Stewardship Zone**

**Habitat or Land Cover**

- |                          |                          |                            |                      |
|--------------------------|--------------------------|----------------------------|----------------------|
| Upland Prairie           | Savanna - Poor Condition | Riparian Bottomland Forest | Western Uplands - SZ |
| Wet Prairie              | Oak Woodland             | Forested Wetland           | Parking & Roads      |
| Pasture                  | Oak-Conifer Woodland     | Upland Conifer Forest      | 1: North Bottomlands |
| Savanna - Good Condition | Conifer-Oak Woodland     |                            |                      |

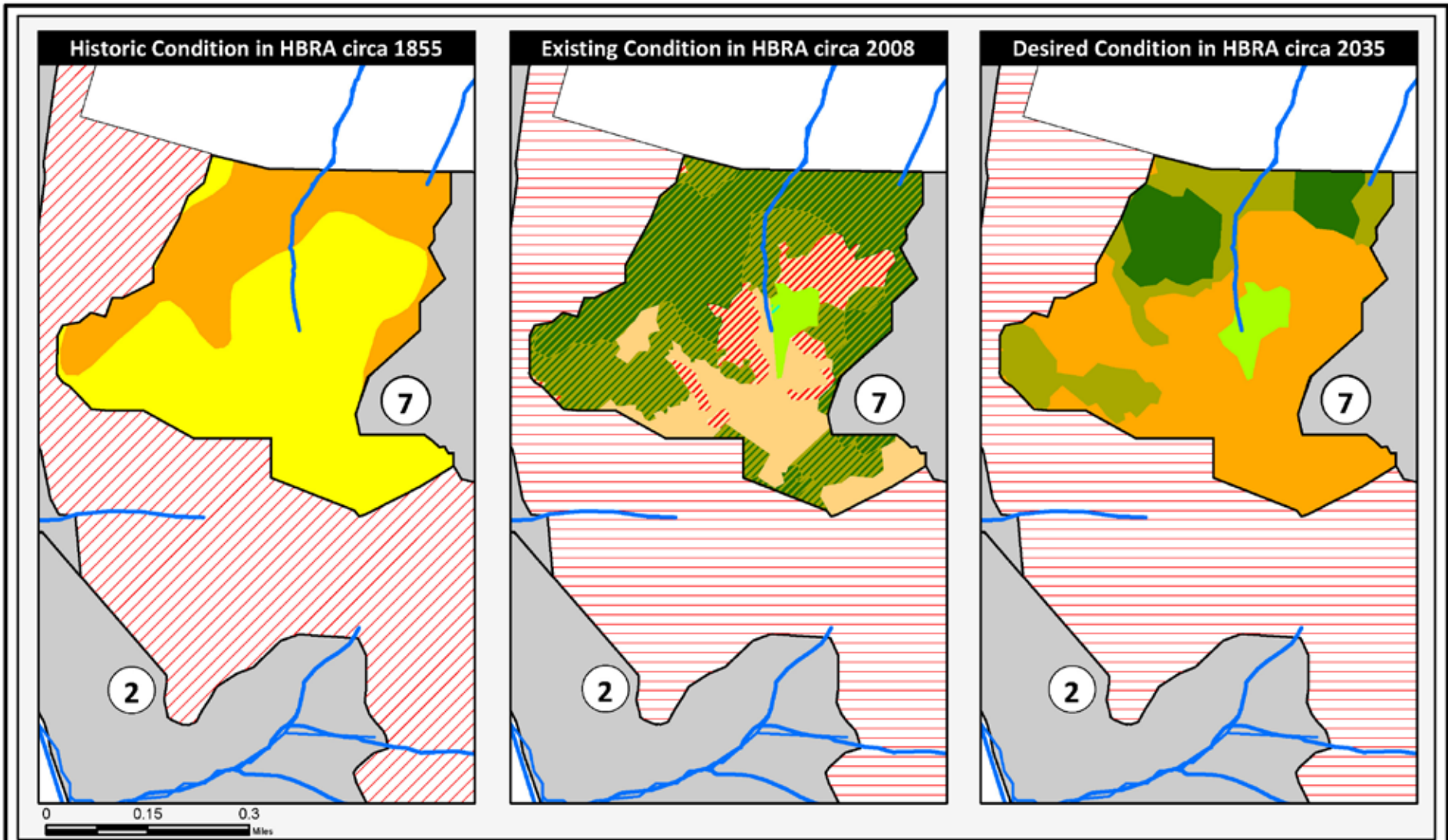


Focal Conservation Target or Other Habitat Net Change: Spring Box Management Unit (43 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0.1	0.1	0.1	-
Savanna	1.2	31.3	33.3	30.1	2.0
Upland Prairie	29.2	0	0	-29.2	-
Wet Prairie	9.2	0	6.3	-9.2	6.3
Oak Woodland	0	0	2.3		2.3
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	2.5	1.3	2.5	-1.2
Riparian Bottomland Forest	3.7	0	0	-3.7	-
Upland Conifer Forest	0	0	0.01	-	0.01
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	9.5	0	9.5	-9.5

Stewardship Zone		Management Unit	Acres
Western Uplands		Spring Box	43
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
		Savanna - 2012 projects	o manage blackberry (30ac)
		Oak woodland - 2012 projects	o manage blackberry (12ac)
		Savanna - 2013 projects	o broadcast simple seed mix (30ac)
		Oak woodland - 2013 projects	o broadcast simple seed mix (12ac)
		Savanna - 2014 projects	o prepare unit for ecological burn, ecological burn canceled (30ac)
		Oak woodland - 2014 projects	o Girdled select trees, removed small dimensional fir
		Savanna - 2015 projects	o implement ecological burn (30ac)
		Oak woodland - 2015 projects	o mow area (12ac)
		Savanna - 2015 projects	o broadcast diverse seed mix (30ac)
		Oak woodland - 2015 projects	o broadcasted seed & planted plugs (1ac)
		Savanna - 2016 projects	o install plugs of diverse forbs species (5ac)
		Savanna - 2017 projects	o manage invasive species (teasel) (5ac)
		Savanna - 2017 projects	o implement late season mow (15ac)
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
<b>Goal 5</b>	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
<b>Goal 6</b>	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas managed for oak woodland, prairie, savanna, and wet prairie.
<b>Goal 8</b>	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.

Stewardship Zone		Management Unit	Acres
Western Uplands		Spring Box	43
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.2</u> : Broadcast native seed mixes or install native plants to establish cover of native species within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
<b>Goal 9</b>	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.1</u> : Identify areas where wet prairie was filled, drained, or modified.
	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.2</u> : Secure resources to advance and support restoration of wet prairies.
	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.3</u> : Restore wet prairie(s).
	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.2</u> : plant plugs and broadcast seed of Bradshaw's lomatium in 5x100sq ft plots within wet prairie restoration sites.
<b>Goal 11</b>	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.

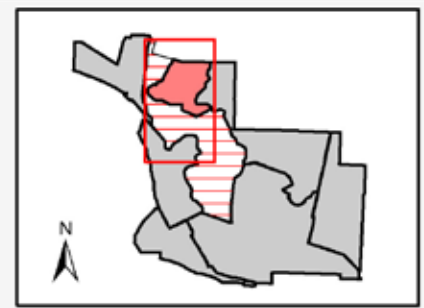
Stewardship Zone		Management Unit	Acres
Western Uplands		Spring Box	43
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns
Goal 8	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns
Goal 8	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.



**Swing Hill Management Unit  
Western Uplands Stewardship Zone**

**Habitat or Land Cover**

- |                  |                          |                       |                        |
|------------------|--------------------------|-----------------------|------------------------|
| Upland Prairie   | Savanna - Good Condition | Oak-Conifer Woodland  | Western Uplands - SZ   |
| Wet Prairie      | Savanna - Fair Condition | Conifer-Oak Woodland  | 2: Mt Pisgah Arboretum |
| Emergent Wetland | Savanna - Poor Condition | Upland Conifer Forest | 7: Northern Forest     |
| Oak Woodland     |                          |                       |                        |



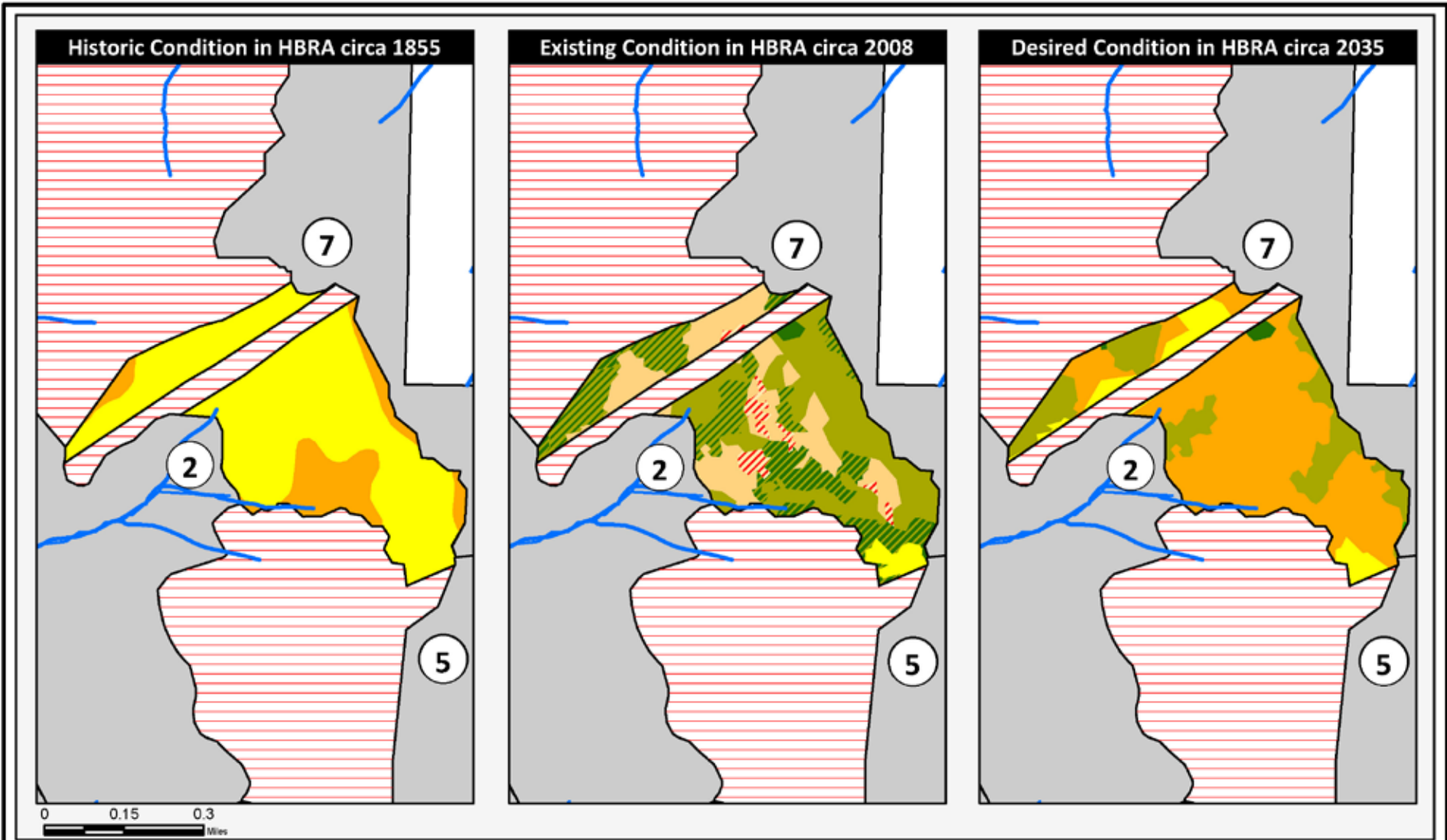


Focal Conservation Target or Other Habitat Net Change: Swing Hill Management Unit (121 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	42.7	38.4	72.8	-4.3	34.4
Upland Prairie	78.2	0	0	-78.2	-
Wet Prairie		3.5	4.8	3.5	1.3
Oak Woodland	0	0	26.9	-	26.9
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	0	0	16.4	-	16.4
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	79.1	0	79.1	-79.1

Stewardship Zone		Management Unit	Acres
Western Uplands		Swing Hill	121
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions within Swing Hill MU.
	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects in Swing Hill MU as outlined in Appendix E.
Goal 6	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.1</u> : Prepare prescribed burn plan for Swing Hill MU (2021).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in Swing Hill MU.
Goal 8	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.2</u> : Broadcast native seed mixes or install native plants to establish cover of native species within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.

Stewardship Zone		Management Unit	Acres
Western Uplands		Swing Hill	121
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
<b>Goal 9</b>	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.1</u> : Identify areas where wet prairie was filled, drained, or modified.
	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.3</u> : Restore wet prairie in identified project areas within the Swing Hill MU.
	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.2</u> : plant plugs and broadcast seed of Bradshaw's lomatium in 5x100sq ft plots within wet prairie restoration sites.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns
<b>Goal 8</b>	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
<b>Goal 9</b>	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.4</u> : Restore wet prairie within the balance of areas identified under the scope of project 9.1.1

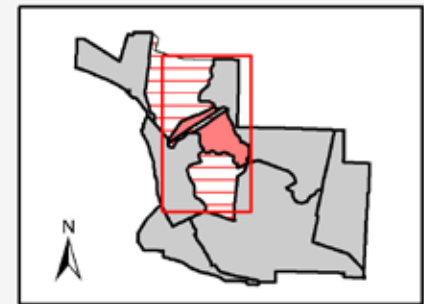
Stewardship Zone		Management Unit	Acres
Western Uplands		Swing Hill	121
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns
Goal 8	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.



**Upper Canyon Creek Management Unit  
Western Uplands Stewardship Zone**

**Habitat or Land Cover**

- |                          |                       |                        |                      |
|--------------------------|-----------------------|------------------------|----------------------|
| Upland Prairie           | Oak Woodland          | Powerline Scrub        | 3: South Bottomlands |
| Savanna - Good Condition | Oak-Conifer Woodland  | Upper Canyon Creek MU  | 5: Southern Uplands  |
| Savanna - Fair Condition | Conifer-Oak Woodland  | Western Uplands        | 7: Northern Forest   |
| Savanna - Poor Condition | Upland Conifer Forest | 2: Mt Pisgah Arboretum |                      |

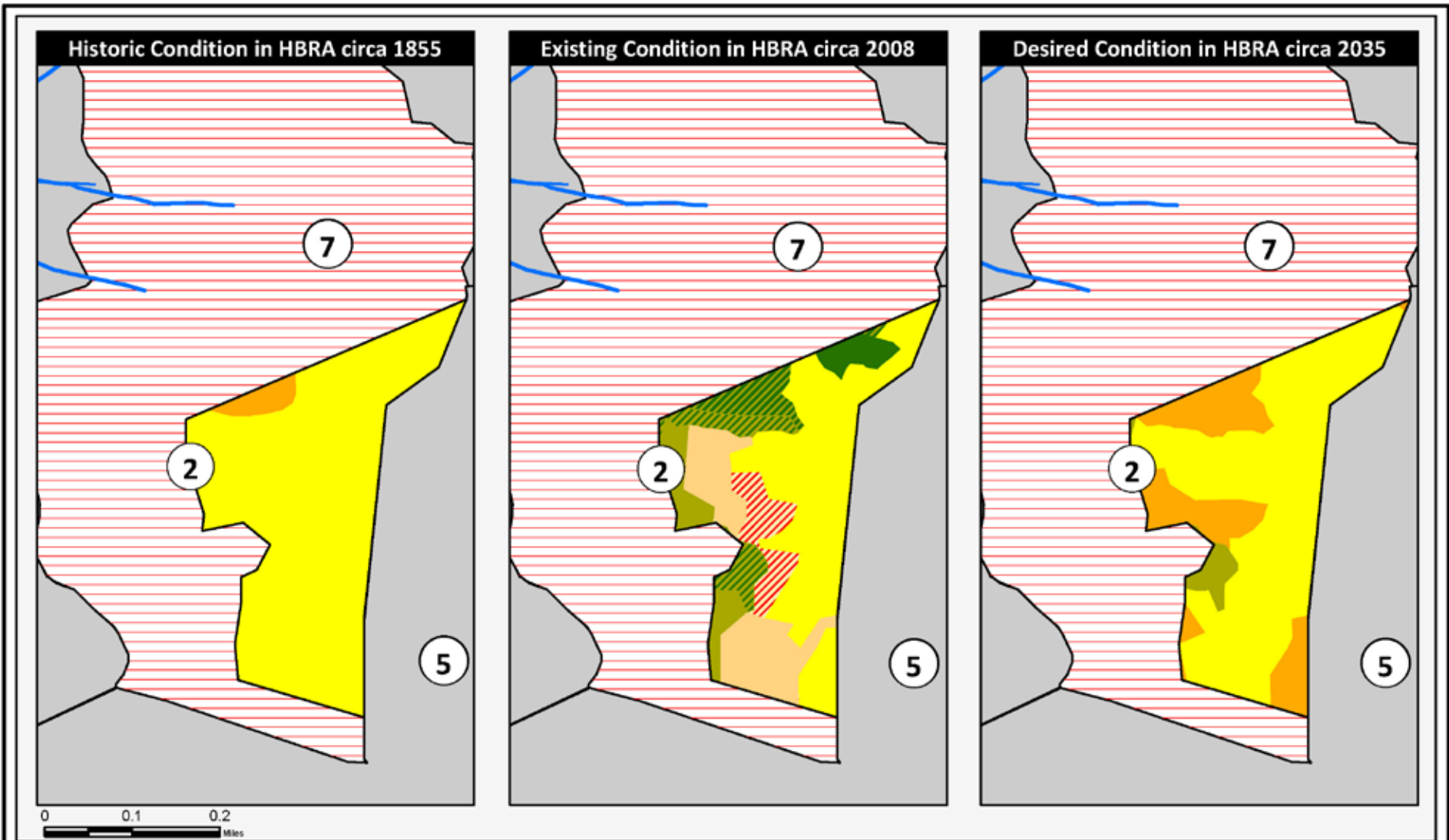


Focal Conservation Target or Other Habitat Net Change: Upper Canyon Creek Management Unit (108 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	23.0	32.4	73.3	9.4	40.9
Upland Prairie	85.0	3.4	8.6	-81.6	5.2
Wet Prairie	0	0	0		
Oak Woodland	0	35.2	24.6	35.2	-10.6
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	0	1.3	1.2	1.3	-0.1
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	35.7	0.3	35.7	-35.4

Stewardship Zone		Management Unit	Acres
Western Uplands		Upper Canyon Creek	108
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o manage invasive species
			o remove trees to establish desired future conditions
			o implement demonstration project including tours and presentations for the public and park users.
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects.
Goal 6	6.1	All conservation targets	o <u>Project 6.1.2</u> : Prepare prescribed burn plans. (2024).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
Goal 8	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
Goal 11	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.



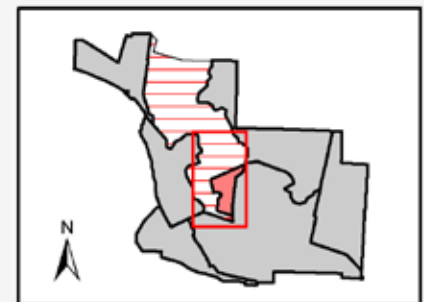
Stewardship Zone		Management Unit	Acres
Western Uplands		Upper Canyon Creek	108
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burn
<b>Goal 8</b>	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.



**Vesper Management Unit  
Western Uplands Stewardship Zone**

**Habitat or Land Cover**

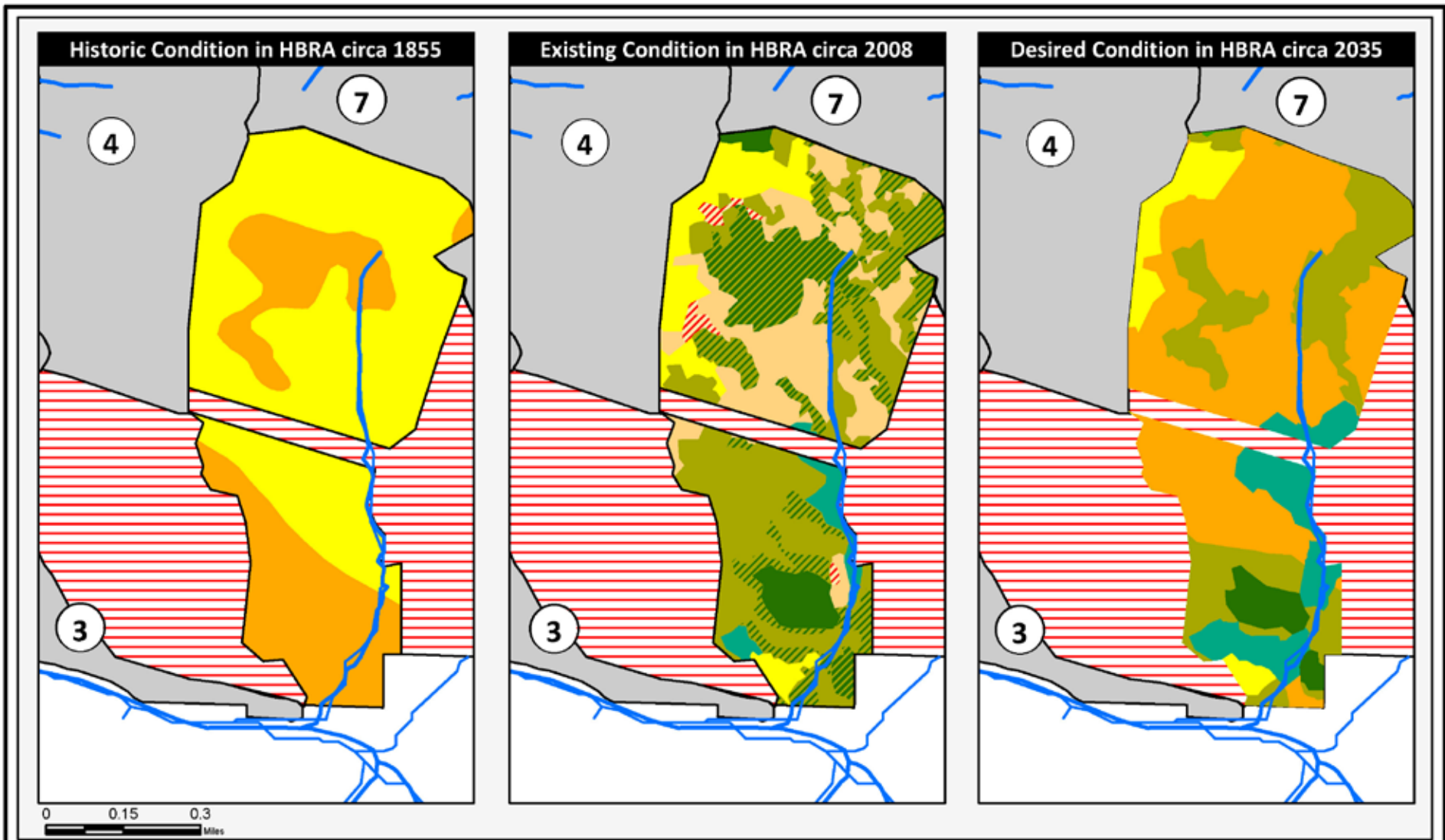
- |                      |                          |                       |                        |
|----------------------|--------------------------|-----------------------|------------------------|
| Upland Prairie       | Savanna - Good Condition | Upland Conifer Forest | 2: Mt Pisgah Arboretum |
| Oak Woodland         | Savanna - Fair Condition | Conifer-Oak Woodland  | 5: Southern Uplands    |
| Oak-Conifer Woodland | Savanna - Poor Condition | Western Uplands - SZ  | 7: Northern Forest     |



Focal Conservation Target or Other Habitat Net Change: Vesper Management Unit (45 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	1.6	12.6	11.3	11.0	-1.3
Upland Prairie	43.4	20.8	31.8	-22.6	11.0
Wet Prairie	0	0	0		
Oak Woodland	0	3.6	1.8	3.6	-1.8
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	0	1.7	0	1.7	-1.7
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	6.3	0	6.3	-6.3

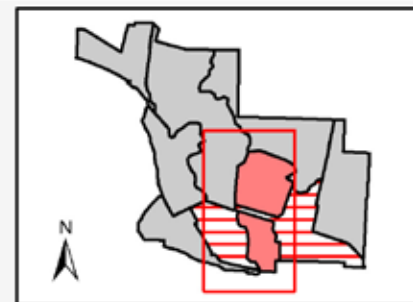
Stewardship Zone		Management Unit	Acres
Western Uplands		Vesper	45
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o manage patches of Maltese starthistle.
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
<b>Goal 5</b>	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects.
<b>Goal 6</b>	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.1</u> : Prepare prescribed burn plans (2022).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burn
<b>Goal 8</b>	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.2</u> : Broadcast native seed mixes or install native plants to establish cover of native species within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
<b>Goal 8</b>	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.

Stewardship Zone		Management Unit	Acres
Western Uplands		Vesper	45
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
<b>Goal 11</b>	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burn
<b>Goal 8</b>	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burn
<b>Goal 8</b>	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.



**Buck Brush Management Unit  
Southern Uplands Stewardship Zone  
Habitat or Land Cover**

- |                          |                             |                       |                      |
|--------------------------|-----------------------------|-----------------------|----------------------|
| Upland Prairie           | Oak Woodland                | Buckbrush Chaparral   | 3: South Bottomlands |
| Savanna - Good Condition | Oak-Ponderosa Pine Woodland | Upland Conifer Forest | 4: Western Uplands   |
| Savanna - Fair Condition | Oak-Conifer Woodland        | Southern Uplands      | 7: Northern Forest   |
| Savanna - Poor Condition | Conifer-Oak Woodland        |                       |                      |



Focal Conservation Target or Other Habitat Net Change: Buckbrush Management Unit (254 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	87.3	61.5	133.7	-25.8	72.2
Upland Prairie	166.4	29.5	16.4	-136.9	-13.1
Wet Prairie	0	0	0		
Oak Woodland	0	63.1	65.3	63.1	2.2
Buckbrush Chaparral	0	9.0	28.6	9.0	19.6
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	0	11.2	9.8	11.2	-1.4
Upland Hardwood Forest	0	0	0.1	-	0.1
Other Non-Conservation Target Cover Types	0	79.5	0	79.5	-79.5



Stewardship Zone		Management Unit	Acres
Southern Uplands		Buckbrush	254
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o manage false brome (2008)
			o manage Maltese starthistle
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects.
Goal 6	6.1	All conservation targets	o <u>Project 6.1.2</u> : Prepare prescribed burn plans (2025).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray regrowth of woody vegetation such as Armenian blackberry and Scotch broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie.
Goal 7	7.1	Buckbrush chaparral	o <u>Project 7.1.1</u> : Prepare burn plan for buckbrush patches within the Buckbrush MU.
	7.1	Buckbrush chaparral	o <u>Project 7.1.2</u> : Collaborate with Oregon Department of Forestry East Lane District, Rivers to Ridges partners, and other fire management organizations to implement prescribed burns within at least 4 distinct units within the buckbrush chaparral habitat type. Units should be at least 5 acres and no larger than 13 acres in size. The size and form of unit will be determined with consideration of slope, aspect, and proximity to established control features such as Buckbrush Creek, Trail 3, Trail 5, & Trail 6.

Stewardship Zone		Management Unit	Acres
Southern Uplands		Buckbrush	254
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	7.2	Buckbrush chaparral	o <u>Project 7.2.1</u> : Manage invasive vegetation and broadcast seed or plant buckbrush in designated areas of the Buckbrush MU.
Goal 8	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie throughout the HBRA.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
Goal 11	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.5	All conservation targets	o <u>Project 11.5.2</u> : Intensively manage Maltese Star Thistle as part of Management Unit specific restoration investments.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burn
Goal 8	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.

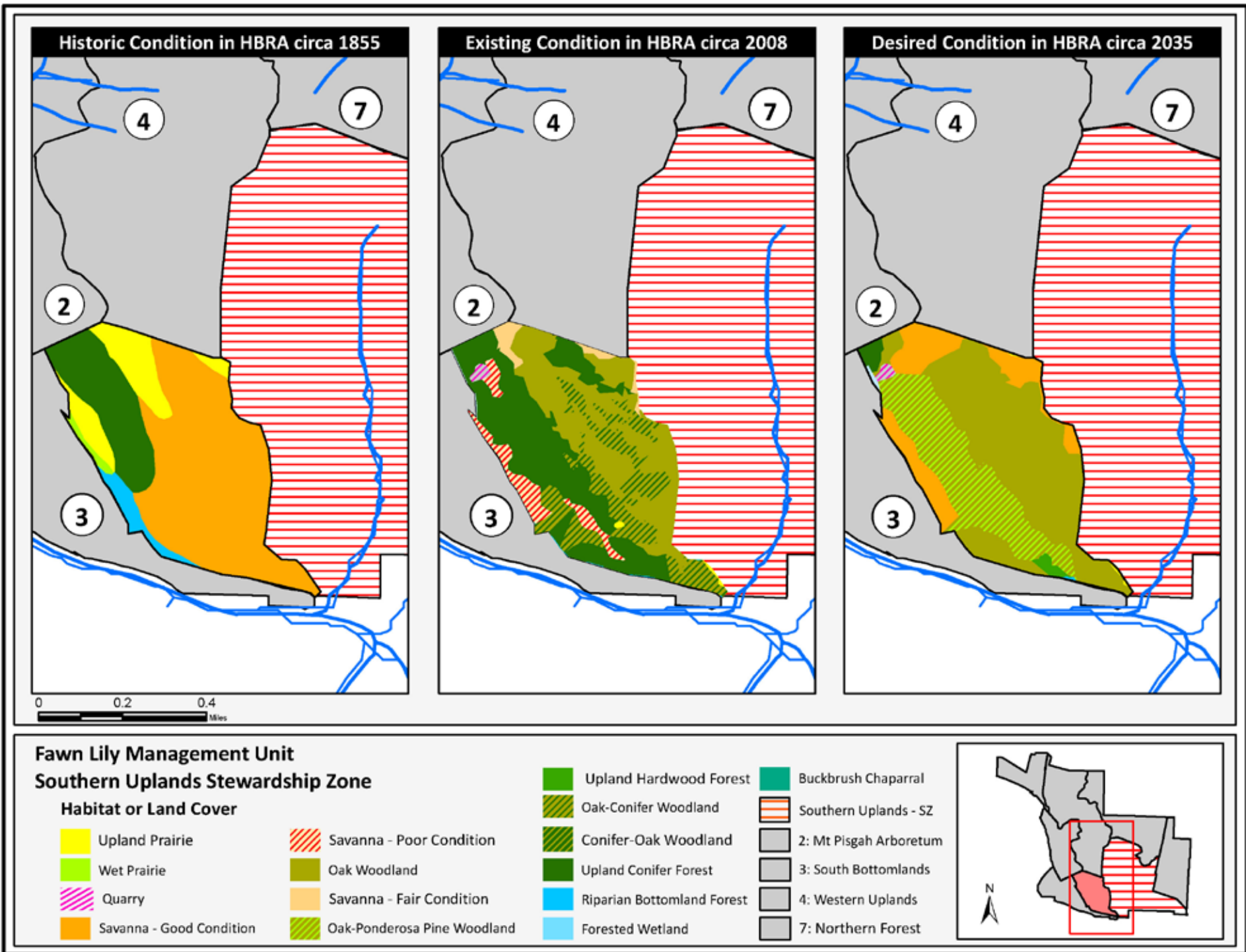


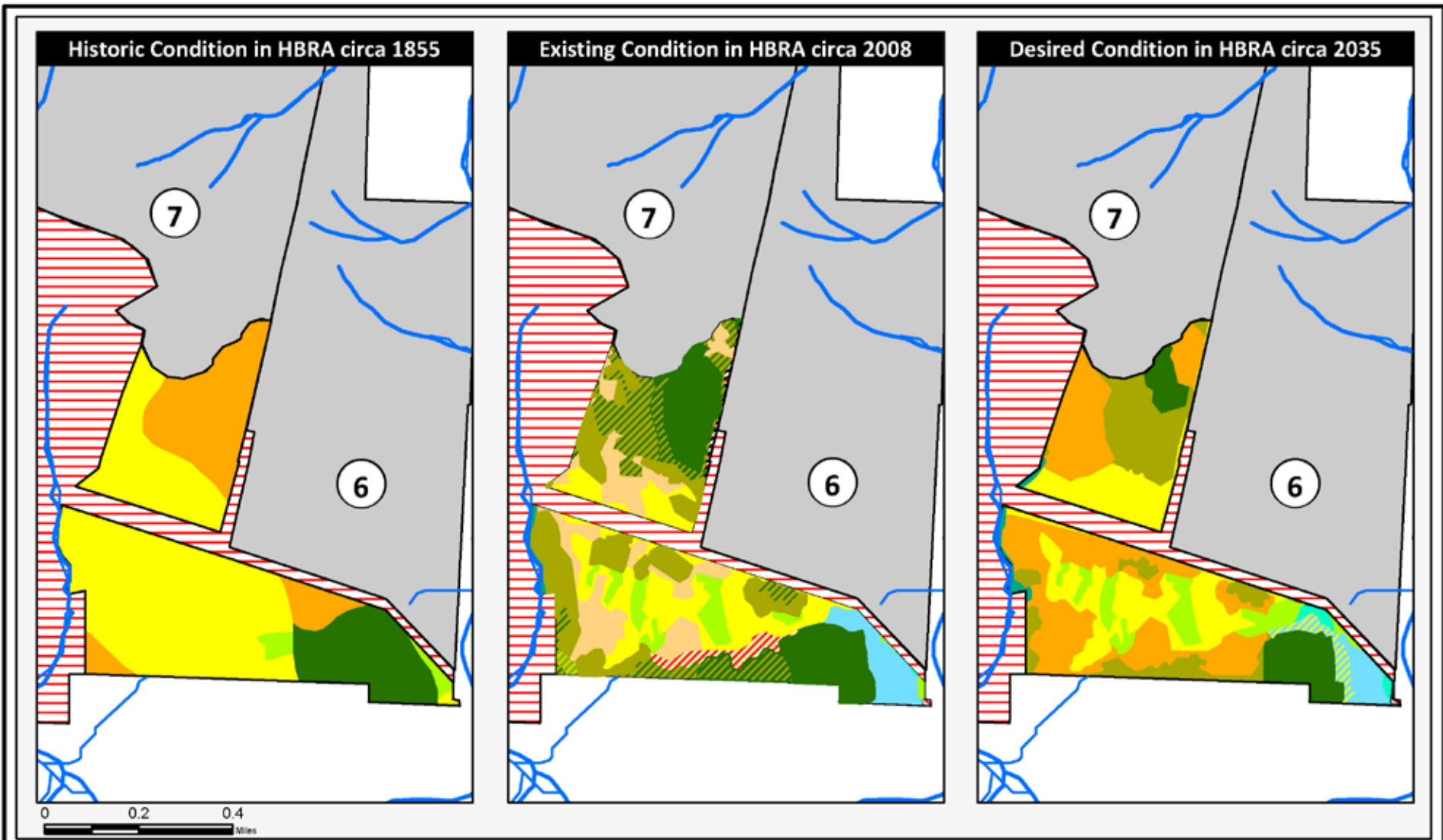
EXHIBIT E

Focal Conservation Target or Other Habitat Net Change: Fawn Lily Management Unit (139 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	84.6	13.2	22.6	-71.4	9.4
Upland Prairie	18.5	0.4	0.3	-18.1	-0.1
Wet Prairie	1.8	0.4	0	-1.4	-0.4
Oak Woodland	0	42.0	110.8	42.0	68.8
Buckbrush Chaparral	0	0.1	0.1	0.1	-
Forested Wetland	0	0.1	0.4	0.1	0.3
Riparian Bottomland Forest	5.9	0.1	0.1	-5.8	
Upland Conifer Forest	27.7	0	2.0	-27.7	2.0
Upland Hardwood Forest	0	0	1.0	-	1.0
Other Non-Conservation Target Cover Types	0	82.7	1.7	82.7	-81.0

Stewardship Zone		Management Unit	Acres
Southern Uplands		Fawn Lily	139
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o 2009: remove trees to establish desired future condition within 3ac treatment area.
			o manage invasive species
			o broadcast diverse seed mix and install plugs of native forbs
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions within the Fawn Lily MU.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects as outlined in Appendix E.
Goal 6	6.1	All conservation targets	o <u>Project 6.1.2</u> : Prepare prescribed burn plans (2026).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
Goal 7	7.1	Buckbrush chaparral	o <u>Project 7.1.2</u> : Collaborate with Oregon Department of Forestry East Lane District, Rivers to Ridges partners, and other fire management organizations to implement prescribed burns within at least 4 distinct units within the buckbrush chaparral habitat type. Units should be at least 5 acres and no larger than 13 acres in size. The size and form of unit will be determined with consideration of slope, aspect, and proximity to established control features.
Goal 8	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.

Stewardship Zone		Management Unit	Acres
Southern Uplands		Fawn Lily	139
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie throughout the HBRA.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
<b>Goal 9</b>	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.4</u> : Restore wet prairie within the balance of areas identified under the scope of project 9.1.1
	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.3</u> : Plant plugs and broadcast seed of Bradshaw's lomatium within 1x100sq ft. plot within the balance of areas identified under the scope of project 9.1.1
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.5	All conservation targets	o <u>Project 11.5.2</u> : Intensively manage Maltese Star Thistle as part of Management Unit specific restoration investments.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burn
<b>Goal 8</b>	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.





**Meadowlark South Management Unit  
Southern Uplands Stewardship Zone**

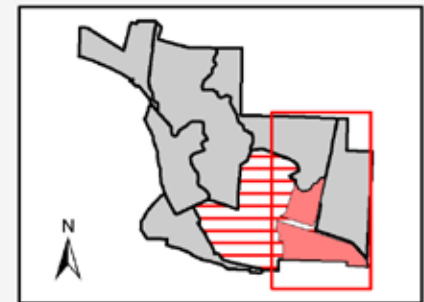
**Habitat or Land Cover**

- Upland Prairie
- Wet Prairie
- Buckbrush Chaparral
- Savanna - Good Condition

- Savanna - Fair Condition
- Savanna - Poor Condition
- Oak Woodland
- Oak-Ponderosa Pine Woodland
- Oak-Conifer Woodland

- Conifer-Oak Woodland
- Upland Conifer Forest
- Scrub Wetland
- Forested Wetland
- Alder Forest

- Powerline Scrub
- Parking & Roads
- Southern Uplands - SZ
- 6: Eastern Uplands
- 7: Northern Forest



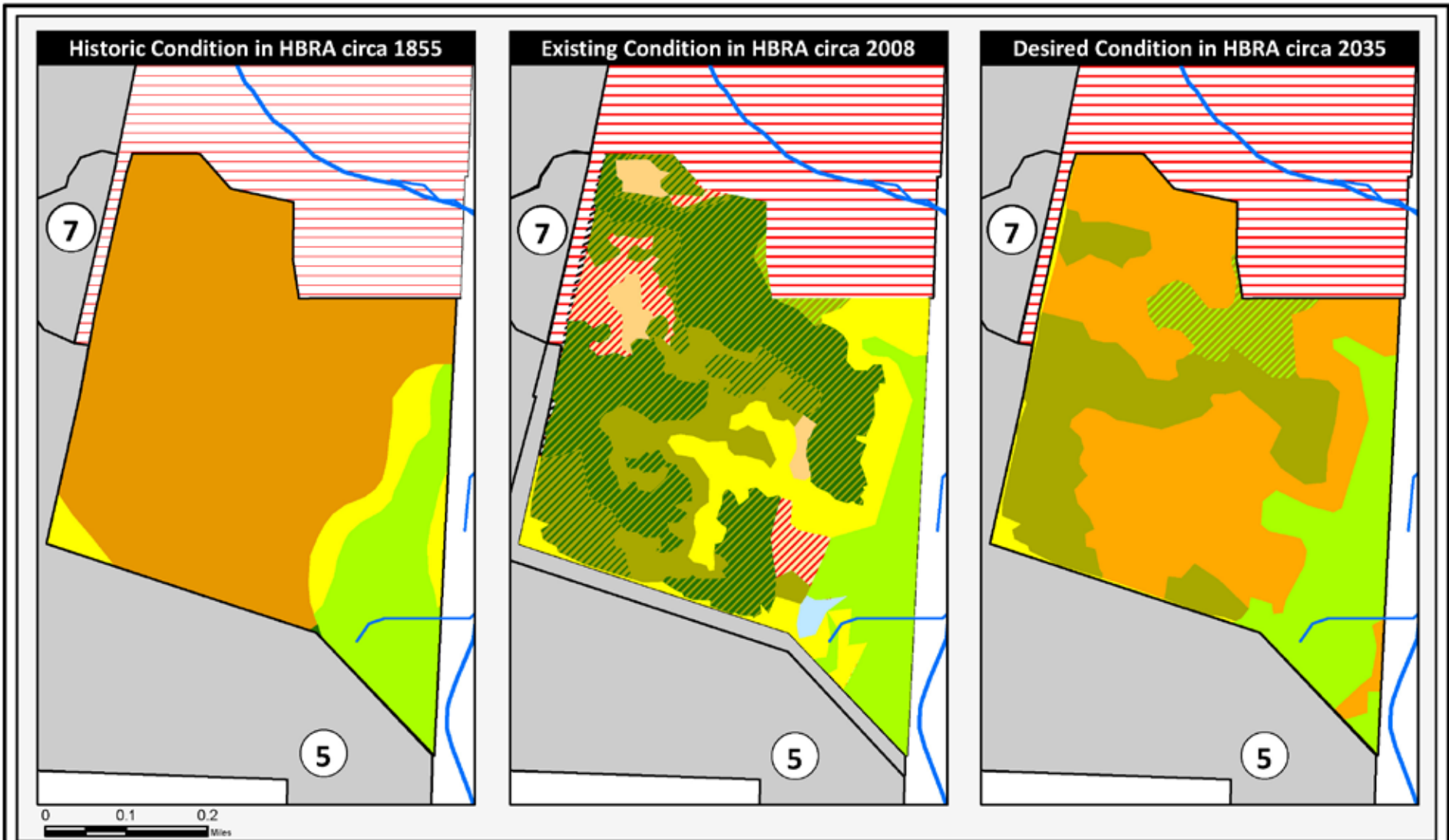


Focal Conservation Target or Other Habitat Net Change: Meadowlark South Management Unit (182 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0.1	0.3	0.1	0.2
Savanna	42.6	34.8	63.5	-7.8	28.7
Upland Prairie	108.3	38.4	42.4	-69.9	4.0
Wet Prairie	4.0	9.7	12.7	5.7	3.0
Oak Woodland	0	25.6	32.7	25.6	7.1
Buckbrush Chaparral	0	1.3	2.4	1.3	1.1
Forested Wetland	0	10.2	8.8	10.2	-1.4
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	27.1	27.4	17.1	0.3	-10.3
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	34.5	2.1	34.5	-32.4

Stewardship Zone		Management Unit	Acres
Southern Uplands		Meadowlark South	182
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o remove trees to establish desired future condition within oak woodland stand (2ac, 2008)
			o manage invasive species
			o prepare ecological burn plans and implement ecological burns
			o broadcast diverse seed mix following implementation of ecological burns
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
<b>Goal 5</b>	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions within Meadowlark South MU.
	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects as outlined in Appendix E.
<b>Goal 6</b>	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.1</u> : prepare prescribed burn plans (2018).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie.
<b>Goal 8</b>	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.

Stewardship Zone		Management Unit	Acres
Southern Uplands		Meadowlark South	182
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
<b>Goal 9</b>	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.1</u> : Identify areas where wet prairie was filled, drained, or modified.
	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.3</u> : Restore wet prairie(s) in identified project areas within the Meadowlark South MU.
	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.2</u> : Plant plugs and broadcast seed of Bradshaw's lomatium in 5x100sq ft. plots within wet prairie restoration sites.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread within the Meadowlark South MU or throughout the HBRA.
	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie.

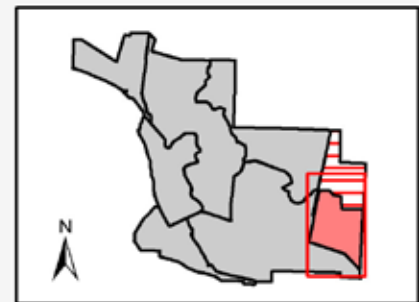
Stewardship Zone		Management Unit	Acres
Southern Uplands		Meadowlark South	182
Goal	Supporting Strategy	Benefitting Conservation Target	Project
Goal 7	7.1	Buckbrush chaparral	o <u>Project 7.1.2</u> : Collaborate with Oregon Department of Forestry East Lane District, Rivers to Ridges partners, and other fire management organizations to implement prescribed burns within at least 4 distinct units within the buckbrush chaparral habitat type. Units should be at least 5 acres and no larger than 13 acres in size. The size and form of unit will be determined with consideration of slope, aspect, and proximity to established control features such as Buckbrush Creek, Trail 3, Trail 5, & Trail 6.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns in all areas of the park managed for oak woodland, prairie, savanna, and wet prairie.



**Meadowlark East Management Unit  
Eastern Uplands Stewardship Zone**

**Habitat or Land Cover**

- |                          |                             |                       |                      |
|--------------------------|-----------------------------|-----------------------|----------------------|
| Upland Prairie           | Savanna - Fair Condition    | Oak-Conifer Woodland  | Eastern Uplands - SZ |
| Wet Prairie              | Savanna - Poor Condition    | Conifer-Oak Woodland  | 5: Southern Uplands  |
| Powerline Scrub          | Oak Woodland                | Upland Conifer Forest | 7: Northern Forest   |
| Savanna - Good Condition | Oak-Ponderosa Pine Woodland | Forested Wetland      |                      |



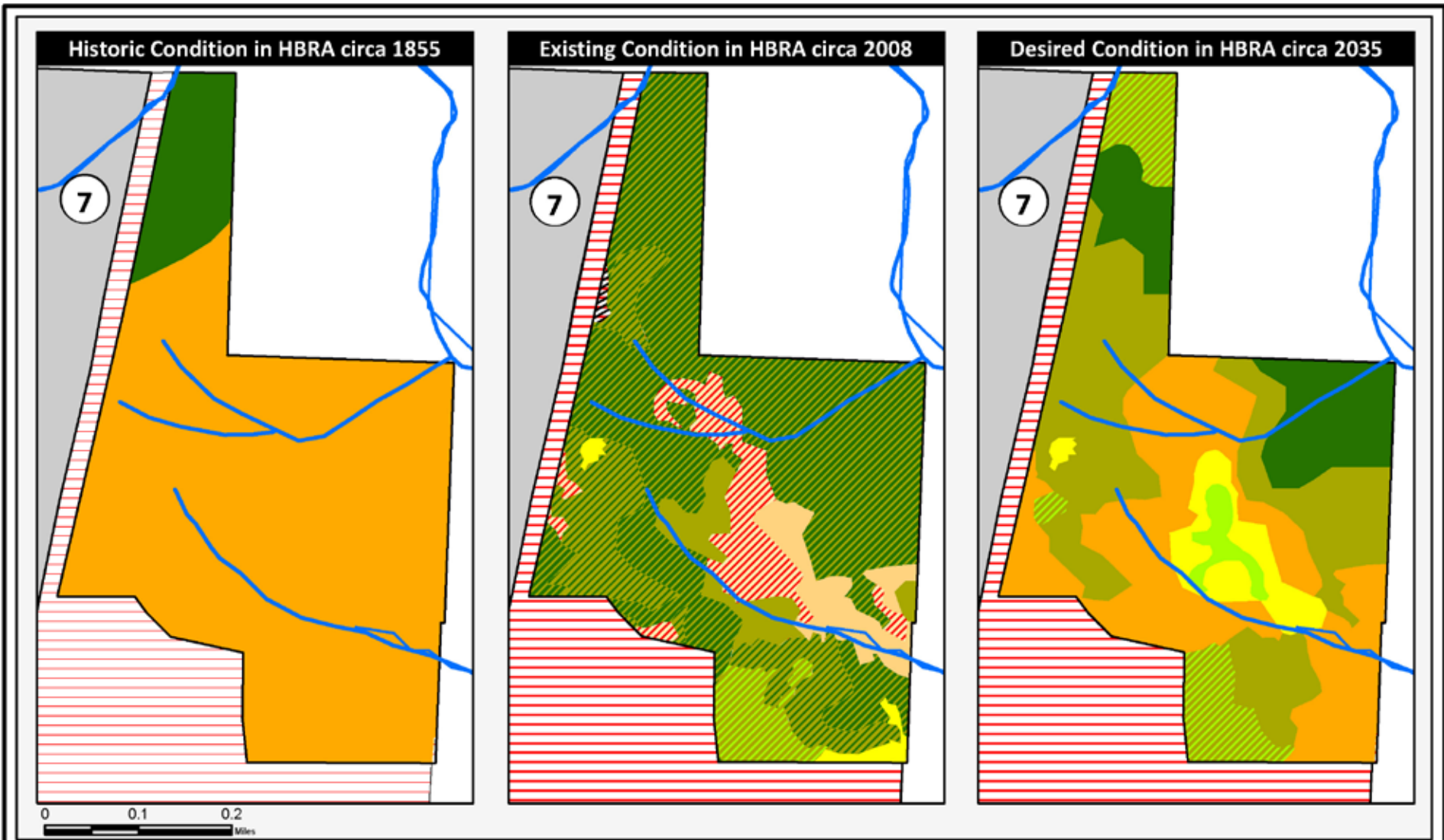
Focal Conservation Target or Other Habitat Net Change: Meadowlark East Management Unit (143 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	109.3	12.9	69.3	-96.4	56.4
Upland Prairie	10.2	25.0	2.2	14.8	-22.8
Wet Prairie	23.1	19.5	25.3	-3.6	5.8
Oak Woodland	0	16.7	46.0	16.7	29.3
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	1.0	0	1.0	-1.0
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	0.1	0	0	-0.1	-
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	67.9	0	67.6	-67.7

Stewardship Zone		Management Unit	Acres
Eastern Upland & Lowland		Meadowlark East	143
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o managed false brome populations throughout the management unit (2008).
			o implemented ecological burns within wet prairie and savanna (30ac)
			o removed trees to establish desired future condition for oak woodland, savanna, and wet prairie. (25ac, 2012))
			o managed invasive species
			o implemented ecological burns within wet prairie and savanna (30ac)
			o removed trees to establish desired future condition for oak woodland, savanna, and wet prairie. (100ac, 2016)
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
<b>Goal 5</b>	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions within each management unit.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects.
<b>Goal 6</b>	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.1</u> : Prepare prescribed burn plans (2020).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns
<b>Goal 8</b>	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.



Stewardship Zone		Management Unit	Acres
Eastern Upland & Lowland		Meadowlark East	143
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.2</u> : Broadcast native seed mixes or install native plants to establish cover of native species within at least one 10-acre patches of oak woodland, prairie, savanna, and wet prairie.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
<b>Goal 9</b>	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.1</u> : Identify areas where wet prairie was filled, drained, or modified.
	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.2</u> : Plant plugs and broadcast seed of Bradshaw's lomatium in 5x100sq ft. plots within wet prairie restoration sites.
	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom as part of Management Unit specific restoration investments.

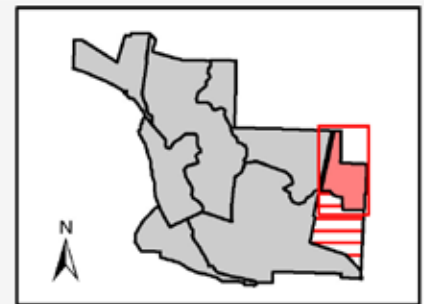
Stewardship Zone		Management Unit	Acres
Eastern Upland & Lowland		Meadowlark East	143
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns



**Ponderosa Management Unit  
Eastern Uplands Stewardship Zone**

**Habitat or Land Cover**

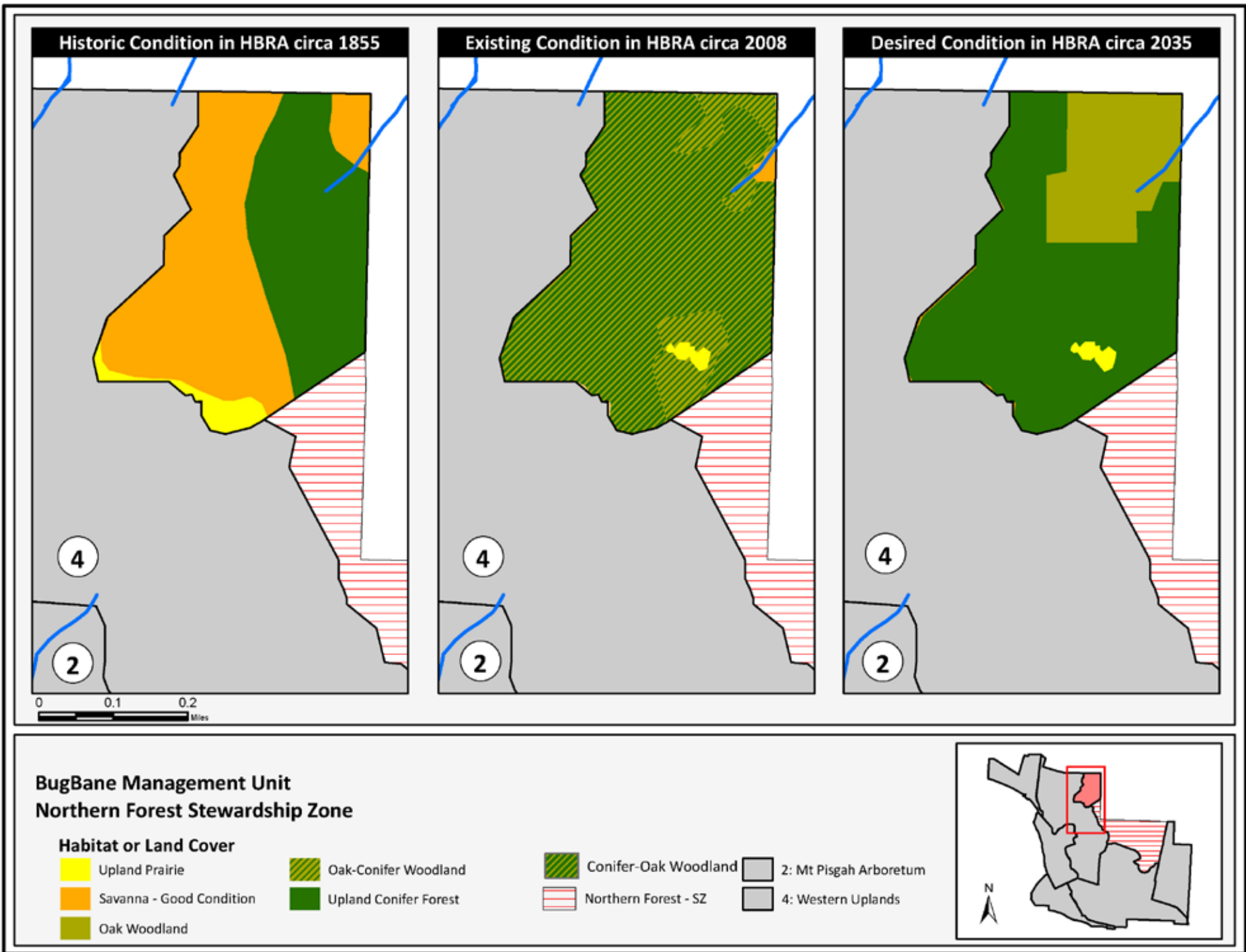
- |                          |                             |                      |                       |
|--------------------------|-----------------------------|----------------------|-----------------------|
| Upland Prairie           | Savanna - Fair Condition    | Oak-Conifer Woodland | Upland Conifer Forest |
| Wet Prairie              | Savanna - Poor Condition    | Conifer-Oak Woodland | Eastern Uplands - SZ  |
| Powerline Scrub          | Oak-Ponderosa Pine Woodland | Oak Woodland         | 7: Northern Forest    |
| Savanna - Good Condition |                             |                      |                       |



Focal Conservation Target or Other Habitat Net Change: Ponderosa Management Unit (109 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	98.0	16.8	35.8	-81.2	19.0
Upland Prairie	0	1.6	7.3	1.6	5.7
Wet Prairie	0	0	2.2	-	2.2
Oak Woodland	0	10.8	47.8	10.8	37.0
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	10.6	0.0	15.6	-10.6	15.6
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	79.3	0	79.3	-79.3

Stewardship Zone		Management Unit	Acres
Eastern Upland & Lowland		Ponderosa	109
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o managed false brome populations throughout the management unit.
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
<b>Goal 5</b>	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
	5.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.2.1</u> : Collaborate with partners to develop and conduct projects as outlined in Appendix E.
<b>Goal 6</b>	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.1</u> : Prepare prescribed burn plans (2020).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns.
<b>Goal 8</b>	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.1</u> : Remove and manage invasive species where cover is greater than 25% within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.1.2</u> : Broadcast native seed mixes or install native plants to establish cover of native species within at least one 10-acre patch of oak woodland, prairie, savanna, and wet prairie.
	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.

Stewardship Zone		Management Unit	Acres
Eastern Upland & Lowland		Ponderosa	109
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
<b>Goal 9</b>	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.1</u> : Identify areas where wet prairie was filled, drained, or modified.
	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.2</u> : Plant plugs and broadcast seed of Bradshaw's lomatium in 5x100sq ft. plots within wet prairie restoration sites.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns

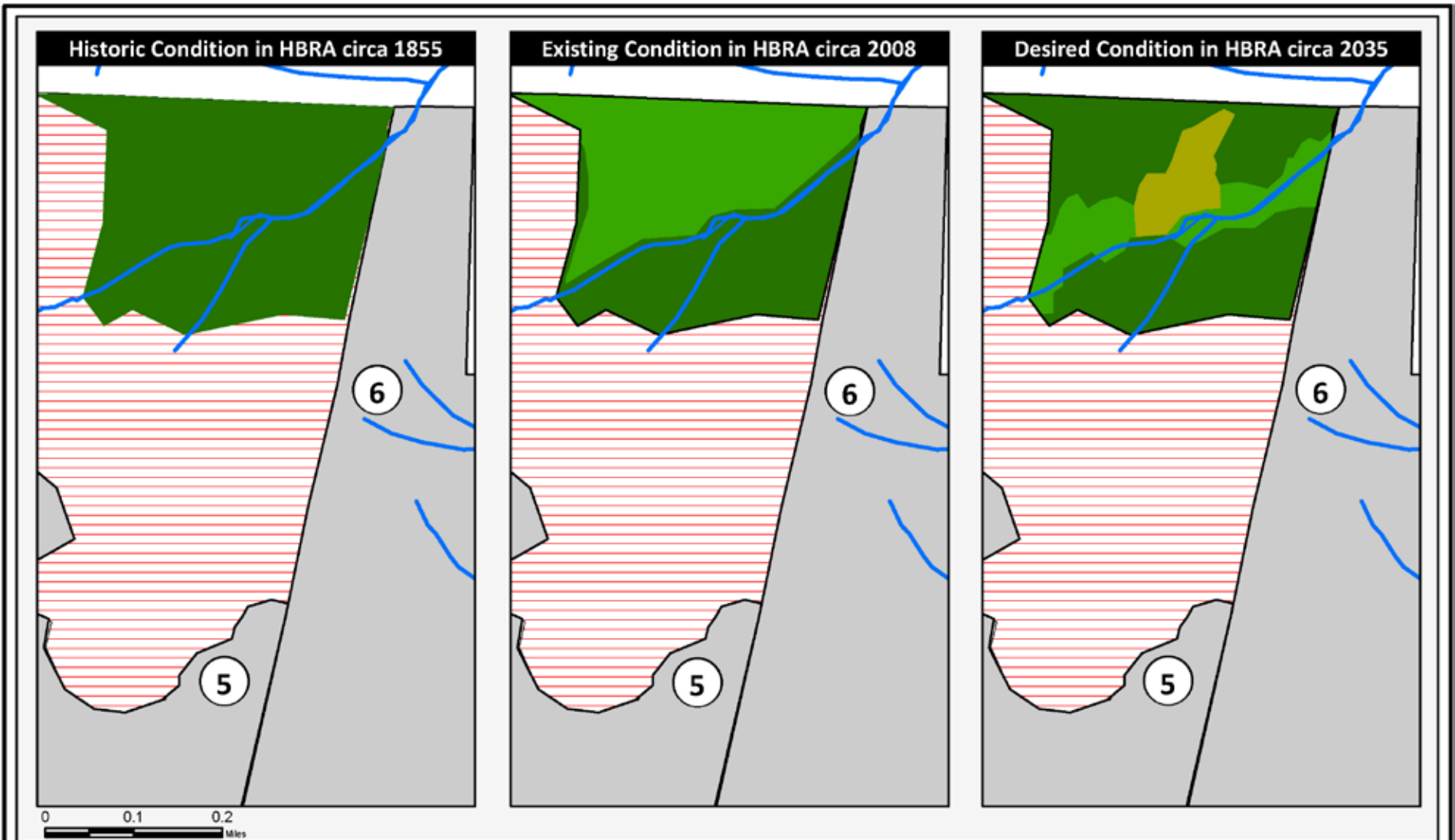




Focal Conservation Target or Other Habitat Net Change: Bugbane Management Unit (75 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	41.0	0.8	0.3	-40.2	-0.5
Upland Prairie	3.2	0.8	0.8	-2.4	-
Wet Prairie	0	0	0		
Oak Woodland	0	0	19.0	-	19.0
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	30.9	63.6	54.8	32.7	-8.8
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types	0	9.8	0	9.8	-9.8







Stewardship Zone		Management Unit	Acres
Northern Forest		Bugbane	75
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
Goal 8	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 6	6.1	All conservation targets	o <u>Project 6.1.2</u> : Prepare prescribed burn plans for the Bugbane MU (2023).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burn
Goal 8	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
Goal 11	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.

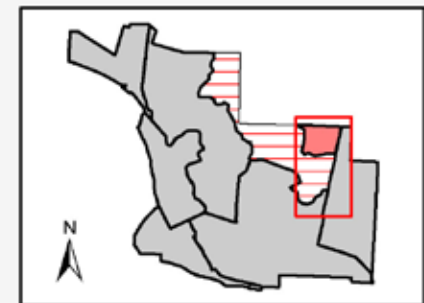
Stewardship Zone		Management Unit	Acres
Northern Forest		Bugbane	75
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
<b>Goal 6</b>	6.4	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.4.1</u> : Implement prescribed ecological burns.
<b>Goal 8</b>	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie following annual stewardship actions including burning and mowing.



**Eagle's Lair Management Unit  
Northern Forest Stewardship Zone**

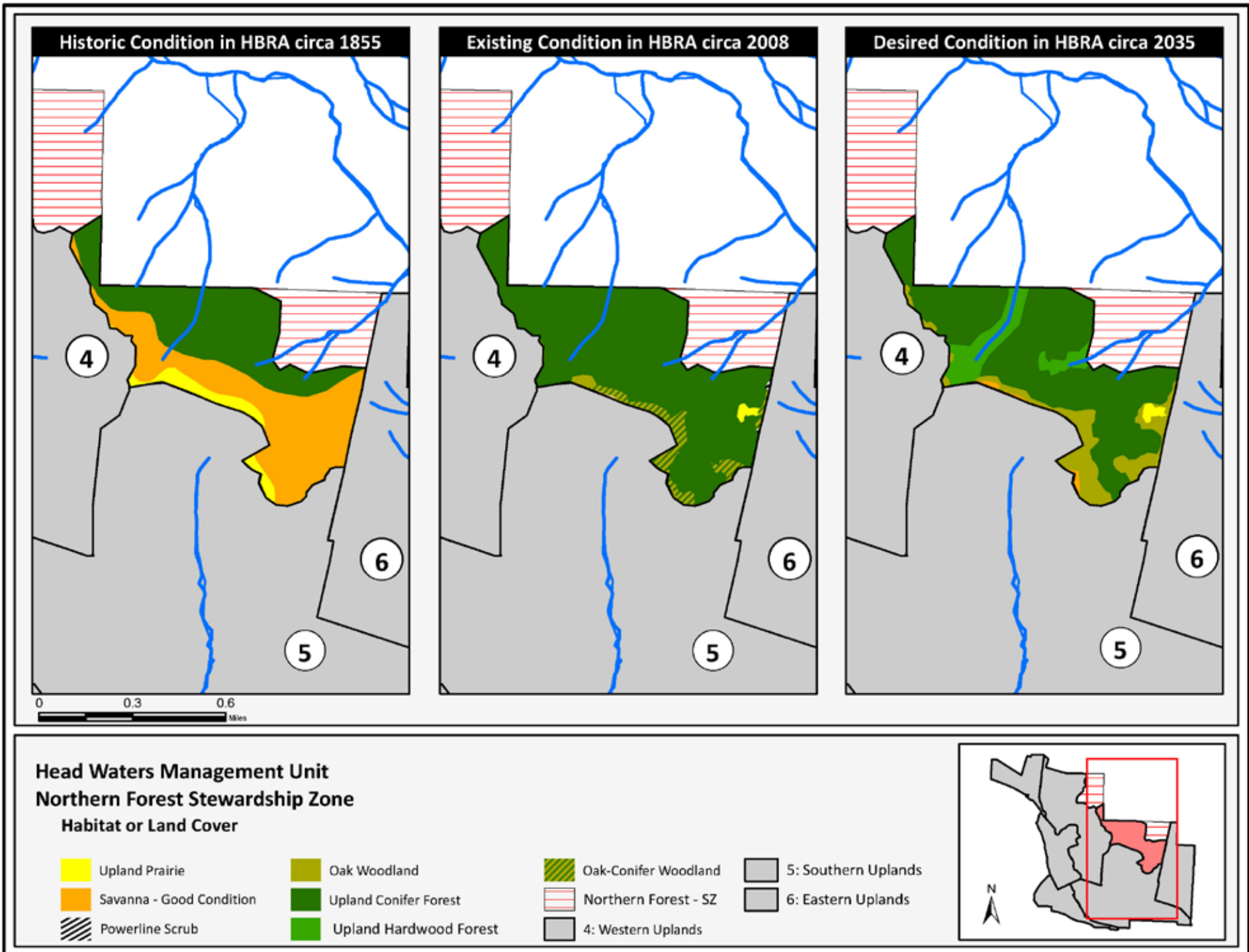
**Habitat or Land Cover**

- |   |  |   |
|---|--|---|
|  Oak Woodland          |  Upland Hardwood Forest |  5: Southern Uplands |
|  Upland Conifer Forest |  Northern Forest - SZ   |  6: Eastern Uplands  |



Focal Conservation Target or Other Habitat Net Change: Eagle's Lair Management Unit (50 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	0	0	0	-	-
Upland Prairie	0	0	0	-	-
Wet Prairie	0	0	0	-	-
Oak Woodland	0	0	5.4	-	5.4
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	50.0	23.0	34.2	-27.0	11.2
Upland Hardwood Forest	0.0	26.7	10.1	26.7	-16.6
Other Non-Conservation Target Cover Types	0	0	0	-	-

Stewardship Zone		Management Unit	Acres
Northern Forest		Eagle's Lair	50
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.2</u> : Identify areas where legacy trees are under immediate threat from encroachment of native vegetation or invasive species.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 11	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.3</u> : Prepare prescribed burn plans for Eagle's Lair MU & Headwaters MU (2029).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
Goal 8	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
Goal 11	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.





Focal Conservation Target or Other Habitat Net Change: Headwaters Management Unit (196 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	91.0	0.3	1.8	-90.7	1.5
Upland Prairie	14.1	1.7	2.0	-12.4	0.3
Wet Prairie	0	0	0	-	-
Oak Woodland	0	1.9	31.1	1.9	29.2
Buckbrush Chaparral	0	0	0	-	-
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	91.1	175.1	139.0	84.0	-36.1
Upland Hardwood Forest	0	0.2	22.2	0.2	22.0
Other Non-Conservation Target Cover Types	0	16.9	0	16.9	-16.9

Stewardship Zone		Management Unit	Acres
Northern Forest		Headwaters	196
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o managed false brome populations throughout the management unit.
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
Goal 5	5.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 5.1.1</u> : Remove woody vegetation as necessary to establish desired future conditions.
Goal 8	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie throughout the HBRA.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
Goal 8	8.2	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.2.1</u> : Annually steward high quality remnants of oak woodland, prairie, savanna, and wet prairie throughout the HBRA.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
Goal 6	6.1	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.1.3</u> : Prepare prescribed burn plans for the Eagle's Lair MU & Headwaters MU (2029).
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
	8.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 8.3.1</u> : Broadcast native seed mixes or install native plants to enhance the diversity and cover of native species within low quality patches of oak woodland, prairie, savanna, and wet prairie throughout the HBRA following annual stewardship actions including burning and mowing.
Goal 11	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.5	All conservation targets	o <u>Project 11.5.1</u> : Intensively manage false brome.
	11.6	All conservation targets	o <u>Project 11.6.1</u> : Identify areas of occupation and implement treatments to manage shining geranium, reed canary grass, and tansy ragwort, among other species growing within vicinity of rare, sensitive, and listed plants and animals.

Stewardship Zone		Management Unit	Acres
Northern Forest		Headwaters	196
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	11.7	All conservation targets	o <u>Project 11.7.1</u> : Identify areas of occupation and implement treatments to manage English hawthorn, domestic apple, black walnut, common hazel, common pear, myrobalan plum, and sweet cherry.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.

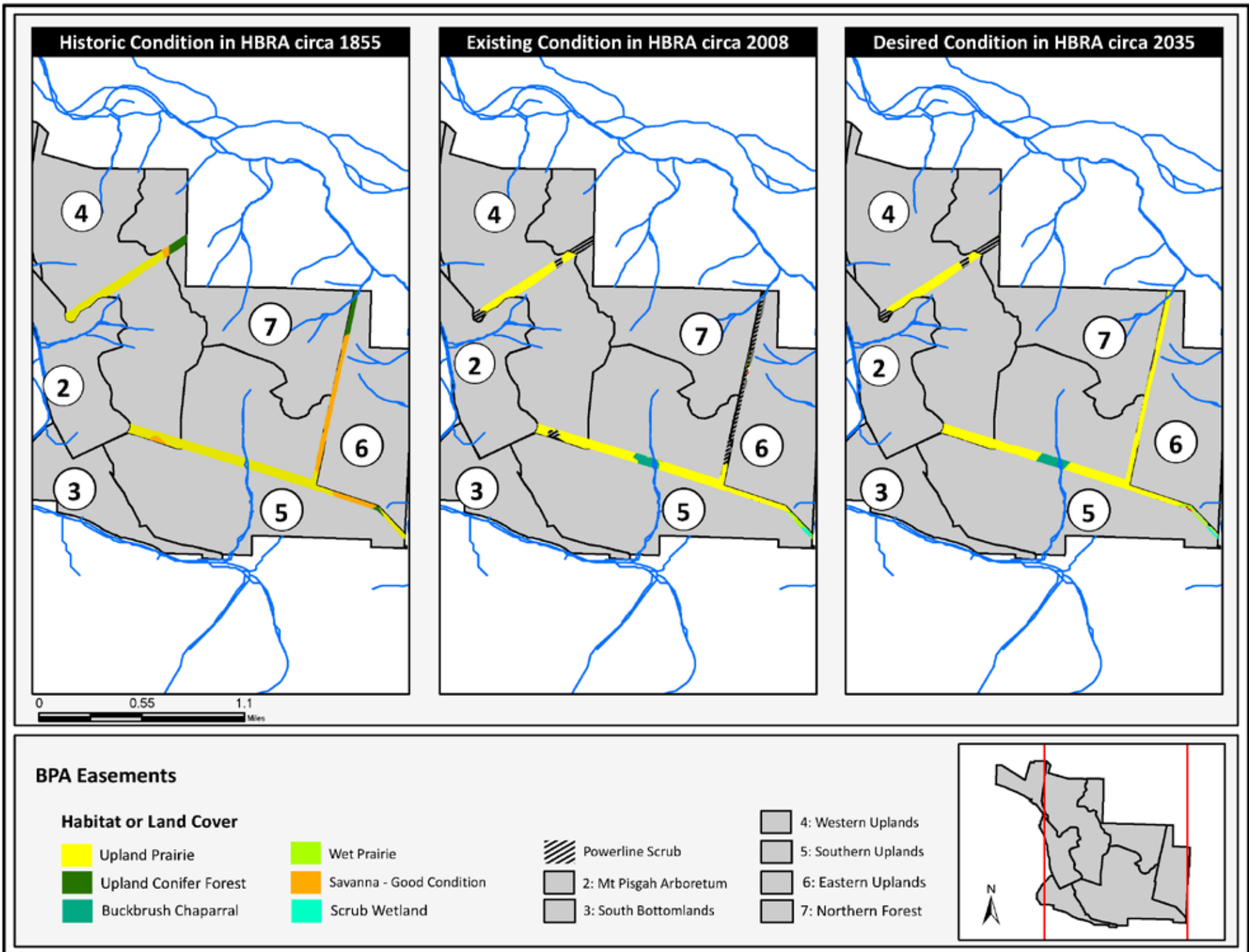


EXHIBIT E

Focal Conservation Target or Other Habitat Net Change: BPA Powerline Easements (75 acres)	Extent circa 1855 (ACRES)	Extent circa 2008 (ACRES)	Projected Extent circa 2035 (ACRES)	NET CHANGE 1855-2008 (ACRES)	NET CHANGE 2008-2035 (ACRES)
Visitor Experience - Park Facilities - Historic	0	0	0	-	-
Stewardship Facilities	0	0	0	-	-
Visitor Experience - Event Facilities	0	0	0	-	-
Visitor Experience - Parking Areas & Roads	0	0	0	-	-
Savanna	16.3	0	0	-16.3	-
Upland Prairie	51.7	46.9	61.2	-4.8	14.3
Wet Prairie		1.4	2.1	1.4	0.7
Oak Woodland	0	0	0	-	-
Buckbrush Chaparral	0	3.7	4.7	3.7	1.0
Forested Wetland	0	0	0	-	-
Riparian Bottomland Forest	0	0	0	-	-
Upland Conifer Forest	7.0	0	0	-7.0	-
Upland Hardwood Forest	0	0	0	-	-
Other Non-Conservation Target Cover Types (incl. Powerline Scrub)	0	23.0	7.0	23.0	-16.0

Stewardship Zone		Management Unit	Acres
Multiple SZ's		BPA Power Line Easements	75
Goal	Supporting Strategy	Benefitting Conservation Target	Project
<b>Summary of Projects completed 2008 - 2017</b>			
			o managed Maltese starthistle
			o treated blackberry and Scotch broom with mowing and herbicide applications
<b>Projects Scheduled for Implementation 2018 - 2022</b>			
<b>Goal 6</b>	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
<b>Goal 9</b>	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.1</u> : Identify areas where wet prairie was filled, drained, or modified.
	9.1	Bradshaw's lomatium & wet prairie	o <u>Project 9.1.3</u> : Restore wet prairie(s) in identified project areas within the Meadowlark South MU.
	9.3	Bradshaw's lomatium & wet prairie	o <u>Project 9.3.2</u> : Plant plugs and broadcast seed of Bradshaw's lomatium in 5x100sq ft. plots within wet prairie restoration sites.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread.
	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2023 - 2027</b>			
<b>Goal 6</b>	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.

Stewardship Zone		Management Unit	Acres
Multiple SZ's		BPA Power Line Easements	75
Goal	Supporting Strategy	Benefitting Conservation Target	Project
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread.
	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.
<b>Projects Scheduled for Implementation 2028 - 2032</b>			
<b>Goal 6</b>	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.1</u> : Use mechanical or manual methods to remove and/or masticate woody vegetation along the edge of closed woodland and forest.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.2</u> : Once vegetation is cleared, spot spray or remove regrowth of woody vegetation such as Armenian blackberry and Scot's broom.
	6.3	oak woodland, Oregon Vesper Sparrow, Prairie & Savanna, and wet prairie	o <u>Project 6.3.3</u> : Flush cut and paint or grind stumps of small trees along the edge of closed woodland and forest.
<b>Goal 11</b>	11.3	All conservation targets	o <u>Project 11.3.2</u> : Manage small patches of invasive species to suppress their spread.
	11.3	All conservation targets	o <u>Project 11.3.3</u> : Manage large areas occupied by invasive species.
	11.8	All conservation targets	o <u>Project 11.8.1</u> : Identify areas of occupation and implement treatments to manage non-native blackberry species and Scotch broom.



