

Lane County Waste Management Transfer Station Site Analysis

Prepared by Good Company and Columbia Business Resources

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- Lane Forest Products, Oren Posner
- Paktech, Gary Panknin
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- Sanipac (Waste Connections), Brian White & Aaron Donley
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- NextStep Recycling, Roy Nelson
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Government and higher education stakeholders

- City of Eugene Planning, Alissa Hansen
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- Lane County Planning, Keir Miller & Amber Bell
- Lane County Master Recycling Program, Kelly Bell
- Lane Community College, Mike Sims
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1. Introduction

***Can we move the central station?
Do we need all services in one place?***

Project Description

For over a decade, the City of Springfield has communicated to the county their desire to re-zone the Glenwood area to create a dense urban mixed-use neighborhood. This is in obvious conflict with the presence of a full-service recycling and transfer station that is considered a visual and odor liability.

Recently however, the City of Springfield has acted with partners to develop a similar vision for Franklin Boulevard on the north side of the Glenwood facility, two hotels have been built adjacent to the facility and the City of Springfield has started redeveloping the Franklin Boulevard infrastructure to support the development of this new urban environment. Further – Oregon DOT intends to develop the interchange at exit 191 into the Gateway of the Metro Area – driving further activity through the Glenwood area.

These circumstances, along with the age and limitations of the current facility, have driven Lane County Waste Management to consider moving its operations, while providing a level of service that will meet current and future demand. While the current Glenwood location provides many logistical advantages, a move to a new location could provide the opportunity to not just modernize operations, but also to accommodate advanced sorting and recovery – owned by the county or not, and the potential for materials manufacturers to locate adjacent to or lease space to add value to the recovered materials.

The challenge is to find a new location where these opportunities can happen either in one location, or in several, while the facility (or facilities) are central enough to serve its primary functions, meet the needs of the public and the vision or ever more recovery shared by the Department and its partners.

Methodology

In order to achieve a thorough understanding of the requirements, wants, and interests involved in siting a new transfer station, the research team used these methods to develop this report:

- Staff surveys and meetings
- Interviews with business partners, nonprofit groups, and higher education
- Interviews with local agency planning staff
- Interviews with local agency economic development staff
- Reuse & repair leadership interviews and a group meeting
- Developing facility functions & site criteria from all the people above
- Assessing and ranking sites

Detailed methodology information is available in the appendix.

2. Interview Results

What service needs should the transfer facility accommodate and where should it be located?

ONE STOP DROP FOR THE PUBLIC

Generally speaking, all stakeholders – internal and external – requested improved infrastructure for better recovery of *reusable items* and recovery of useful *materials*. The initial framing question for this study was “what can one site hold, and where could it be?” Along the way, the stakeholders shared that putting everything in one place may make for a site that is so large, it would be hard to find that site. This might lead to considering what features of the solid waste and recovery system should be located in different places.

One nearly unanimous interest is in an expansion of collection of reusable things, rather than just material recovery. This would require an attendant that could direct what is reusable, what is recyclable and what is landfill material. This direct education and quality control are a must for this concept to succeed. These things could be re-sold as is or sorted and graded for higher value. All of the non-profits that provide these services agreed that the potential supply was large enough to help every organization. Example – clothing, house parts and imperfect bicycles that don’t become landfill, wood waste or metal recycling.

SAFETY AND SEPARATION OF USER TYPES

Further, nearly every stakeholder described the need for separation of user types and services to match the system assets, waste flow and safety. For example, the Waste Management Division staff focused on operational and safety improvements and wondered whether a commingled sort line or a single stream sort line would be better. For those haulers that move specific materials were most interested in the logistics of picking up trailers and driving them out of the future site with ease and safety. These haulers said that their current transaction time was fast enough but wanted to ensure at least this level of efficiency and safety would be met in a new facility.

HAULERS AND WHAT WOULD HELP THEM SERVE THE COMMUNITY

The major waste and recycling haulers felt that a transfer station as currently defined was irrelevant to them since they must haul their loads directly to Short Mountain Landfill already. Most of the large generators do not use the Glenwood facility for anything except dropping off materials such as glass.

The two things that the haulers generally did agree on were: 1. Additional sorting is a good idea with private parties that have existing private infrastructure to leverage. For example – EcoSort, Rexus and Lane Forest Products and 2. Putting a station at the Northwest corner of Eugene, with a true compaction and transfer station would make for a more efficient haul – and might also consolidate growing demand in Veneta and perhaps support collection from Junction City.

Note: Currently, the City of Eugene has a study underway (by the research team of this study) to see if creating territories for the Haulers would provide transportation efficiencies. If Eugene were to establish territories, the case for a NW Eugene transfer station would be stronger.

DROP OFF HOUSEHOLD HAZARDOUS WASTE OPERATIONS

Nearly everyone interviewed identified the ongoing need for this service and that the “by appointment” model defeated the purpose due to the inconvenience.

GLENWOOD IS THE PREFERRED LOCATION FOR NEARLY ALL STAKEHOLDERS

All stakeholders interviewed noted the Glenwood location is well located and likely has more room than it needs if the whole site were to be reconfigured. Ideas for improvement included putting the solid waste and organics in a building to control odors, developing a commingled MRF at the adjacent privately owned MRF, having a mixed waste sort line at the landfill, and expanding the reuse drop-off areas. One major concern was the loss of efficiencies of the nearby private and nonprofit facilities that have intentionally located near the current Glenwood facility.

3. Implied Facility Scale and Layout

Comments and general feedback from the stakeholder interview process not only provided an excellent background into the current and future needs of community but also was consistent among those taking part in the interviews. The categories, or “service pods” can be broken down into three category groupings that serve as an inventory of needs and desires when looking at how the future solid waste system will be operated.

All three categories (A + B + C) could be co-located on one large site, developed as separate remote categories of services or combined for facilitate operating synergies, public convenience and/or environmental fit. For example, categories A and B could be combined on one site and offer a great deal of convenience and operating efficiency, while category C is likely best developed at Short Mountain Landfill to better concentrate environmental controls (air, water, vectors), safety and residual disposal issues. Many facility components are already offered at the Glenwood facility but could be significantly expanded or improved upon.

Summary

Category A suite of services, what we call the Materials Convenience Center, would require an estimated 92k square feet of covered structure (not including required setbacks, clearances or common area/pathways), or approximately 2.5 acres in total.

Category B, the Material Recovery Facility, would require an estimated 50k square feet of covered structure (not including outside storage, electrical room, required setbacks, clearances or common area/pathways), or about 1.75 acres.

Category C, the Mixed Waste Recovery and Organics Recovery Facility, would require approximately 120k square feet of covered structure (not including outside storage, electrical room, required setbacks, clearances or common area/pathways), or about 3.5 – 4 acres.

We estimate that Categories A + B could be combined on a 7 – 8 acre site. However, the County would be better served by planning for a site of at least 10 – 12 acres allowing for peak queuing, potential expansion and the safe movement of traffic.

CATEGORY A: MATERIALS CONVENIENCE CENTER

Public Self-Haul (Hand Unload) Unloading | **EXISTING** | (8 – 12k square foot covered building, open on 2 sides with concrete pads, railing and a lower “pit”), where material is aggregated and loaded by County staff into transfer trailers bound for Short Mountain Landfill. The configuration and square footage necessary may vary based on the number of “unloading lanes” desired but should not be less than 250 lineal feet on each side. Some mechanical (e.g. loader operator) sorting of large or bulky items could be done, but the material could also go through the Mixed Waste Recovery Facility (see “C” below) for further recovery under safer conditions.

Commercial/Loads of 6 Cubic Yards or Greater Unloading | **EXISTING** | (8 – 12k square foot covered building open on 2 sides with concrete pads, railing and a lower “pit”). In order to facilitate safe unloading during peak times and anticipate trailer backing, the number of unloading stations or lanes should not be less than 250 lineal feet on each side. This assumes such an area is not located at Short Mountain Landfill and MSW haulers direct haul to landfill. Ideally this area would be co-located with the

Public Self-Haul Unloading activity but separated for ingress, egress and queuing purposes. Similar to the Public Self-Haul Unloading area, the material would be loaded by County staff into transfer trailers and taken to Short Mountain Landfill. Another option for this activity would be to make it part of the Mixed Waste Recovery Facility (which could be at the landfill), realizing that the additional traffic from this activity could create safety issues.

White Goods and Bulky Items Drop-off | EXISTING, NEEDS EXPANSION | (2k square foot covered area with concrete pad) next to Public Self-Haul Unloading area where the general public or small commercial could drop-off white goods that would be hauled away by third parties for reuse or further scrap processing.

Note: Public Self Haul and Commercial Unloading could be combined in a 15 – 16k square foot building with a wall separating the two activities. Such a wall would be non-permanent so it could be moved to reconfigure facility and balance space as needed.

Recyclables Dropoff | EXISTING, NEEDS EXPANSION | (3 – 4k square foot covered area with concrete staging pad, railing and lower area where multiple roll-off boxes for each commodity would be stored). Facility attendants would swap boxes when full and transfer contents to on-site or remote MRF for processing. If the County intends to allow third party recyclers and reuse companies to remain on site and continue to be able to segregate for recycling and reuse, then the necessary space must be significantly more than stated above, with a minimum of 25k square feet to safely accommodate the same activities that are currently taking place.

Reuse (“Last Chance”) Dropoff | EXISTING, NEEDS EXPANSION | (4k square foot covered enclosed building on concrete slab with roll-up doors), where the general public could directly drop-off reusable items and County staff could also transport reusable items recovered from the public self-haul area to be aggregated, stored and distributed out to third-party community partners for reuse. There were several comments during the survey and interview process suggesting that this feature be expanded and potentially even take on a “swap meet” approach (which would necessitate a substantially larger footprint than we are suggesting). We caution the County to the risk/safety potential inherent in any such endeavor

Household Hazardous Waste | EXISTING, NEEDS EXPANSION | (“HHW”) (10 – 12k square foot covered enclosed building with concrete slab and roll-up doors), separate from other buildings in complex, that would be staffed and operated during hours consistent with the posted hours for the site. The County currently maintains surge capacity storage at Glenwood that also accommodates HHW collected from multiple sites around the County, given the fact that the next closest option is in Marion County. In order to ensure that all materials can be stored in a secure and dry area, we are suggesting a larger footprint for this service.

The final five categories in this section represent ancillary activities or facilities that are either necessary at such a facility (e.g. scales) or make sense to include when thinking about the future solid waste infrastructure scope.

Maintenance and Equipment Storage Building | EXISTING, NEEDS EXPANSION | (10 – 12k square foot enclosed building on 12” concrete slab with roll-up doors) to service and/or store on-site equipment. This building would provide growth capacity and also accommodate transfer trailer maintenance which is currently being done elsewhere on the Glenwood site.

Scales | **EXISTING** | (2k+ square foot building on concrete slab) to accommodate scalehouse attendants and computer equipment, break room and restrooms. Could be built on two levels to accommodate conference room and load-check inspection area/deck upstairs. Two inbound scales and one outbound scale would be the minimum required, but we would suggest leaving expansion capacity to accommodate additional scales should activity justify it.

Fuel Island | **EXISTING** | (2k square feet) providing slightly more space than is currently being used for the same purpose. Consideration should also be given to allocating expansion space of up to 3k additional square feet should the County desire to utilize/provide alternative fuels.

Administration | **EXISTING, NEEDS EXPANSION** | (4k – 8k square foot building) to accommodate administration, education classroom, employee break room, lockers/restroom/showers), conference room and records storage. The building could be two stories and accommodate more offices and conference rooms while not expanding the necessary footprint.

Vector/Decant Building | **EXISTING** | (10k square feet) providing slightly more space than is currently being used. This activity ideally belongs at the closest wastewater treatment facility, but should it remain at Glenwood or an alternative County waste facility, the current footprint should be adequate.

CATEGORY B: MATERIAL RECOVERY FACILITY (COMMINGLED)

Single Stream Material Recovery Facility | **NEW COMPONENT** | (40 – 60k square foot enclosed building on 12-18” concrete slab), which would include a single stream automated sorting system to process residential and commercial single stream recyclables. The building would include indoor and outdoor storage for baled commodities and a loading dock for finished bales to be transported off-site. The residual would be accumulated in a compactor and hauled to Short Mountain Landfill. If separate from the “Materials Convenience Center,” the facility would need inbound and outbound scales. Ideally, this facility would be co-located on the same site as the Materials Convenience Center but could be operated under a third-party operating agreement by a qualified contractor. The building size would be determined by the projected daily material volumes and the design and size of the sorting system.

CATEGORY C: MIXED WASTE AND ORGANICS RECOVERY FACILITY

Mixed Waste Recovery Facility | **NEW COMPONENT** | (60 – 100k square foot covered enclosed building on 18” concrete slab with multiple roll-up doors allowing large truck drive through capability). This facility would process certain loads characterized as “potentially rich” in recoverable material (e.g. OCC, wood, metals), with residuals proceeding to Short Mountain Landfill. The estimated size of the building would accommodate approximately 120 – 150 thousand tons per year, depending on shift limitations and days of operation. In addition, a larger building could accommodate additional sorting equipment to capture certain organics from specific loads (e.g. commercial restaurants, grocery stores and food processors) with organics moving by conveyor to the organics aggregation area.

Organics Aggregation | **NEW COMPONENT** | (20k square foot covered enclosed building with roll-up doors and drive through capability), where pure organic loads and/or organics captured from the mixed waste processing activity would be aggregated for transportation to a third party (or in-house) for further processing (e.g. composting, anaerobic digestion).

Note: Mixed Waste Recovery and Organics Aggregation could be combined in an 80 – 120k square foot building with a wall separating the two activities. Such a wall would be non-permanent so it could be moved/reconfigure facility and balance space as needed.

4. Zoning & Location Considerations

For all possible locations of a transfer station, there are two major considerations for location:

1. Where is the most central location to the future metro area?
2. Where can the facility reasonably be located?

How the Metro area is planned to grow and where could a new facility be located

SPRINGFIELD'S population is growing and is expected to increase to 77,577 by 2050¹. The general plan for accommodating residential and commercial growth is to develop denser and taller structures along the major transportation corridors. This implies roughly the same geographic dispersion of loads with an increase in residential loads along dense corridors and ultimately trips made to a transfer station from the same places we know today.

To accommodate the industrial growth, the city will expand its UGB Southward toward 30th boulevard and will have heavy industrial lands filling in along the East side of I-5 northward towards the McKenzie River. Also, the area south of 28th street – the Jasper Natron area – may have sites but could require soil remediation. Generally speaking, old lumber mill sites are the most logical place to site a new facility as well as the area south of Main street and west of 28th street. Further, recycling facilities are permitted uses in Heavy Industrial (dark purple) lands without a hearing or compatible use study.

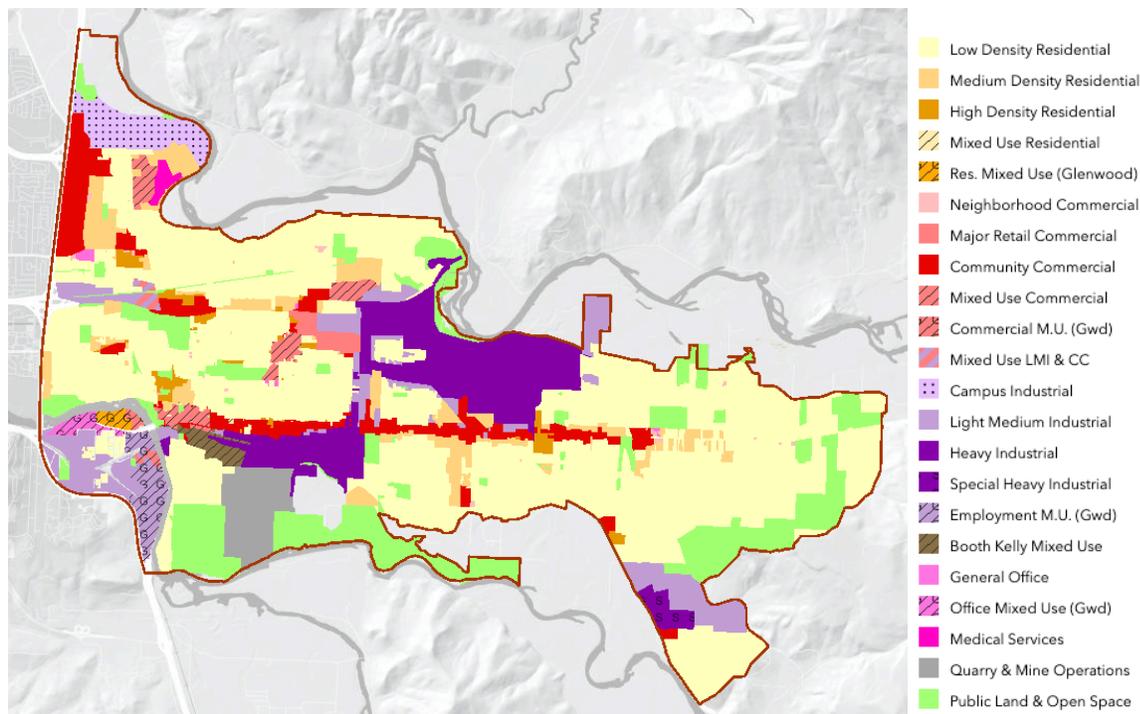


Figure 1: Springfield zoning map – see appendix for larger version.

¹ Population growth estimates: <https://www.pdx.edu/prc/current-documents-and-presentations> (Table)

EUGENE is growing rapidly as well and has planned for increased density and building height along transportation corridors, downtown and in nodes. By 2050, the population is expected to increase to 241,823². This implies similar but more frequent hauler routes and residential populations in the same general locations. The industrial land supply generally runs along first and second streets west of Highway 99 and along the north side of Highway 99 towards the airport. The proper zoning for a recycling and transfer station is indicated in dark purple (heavy industrial).

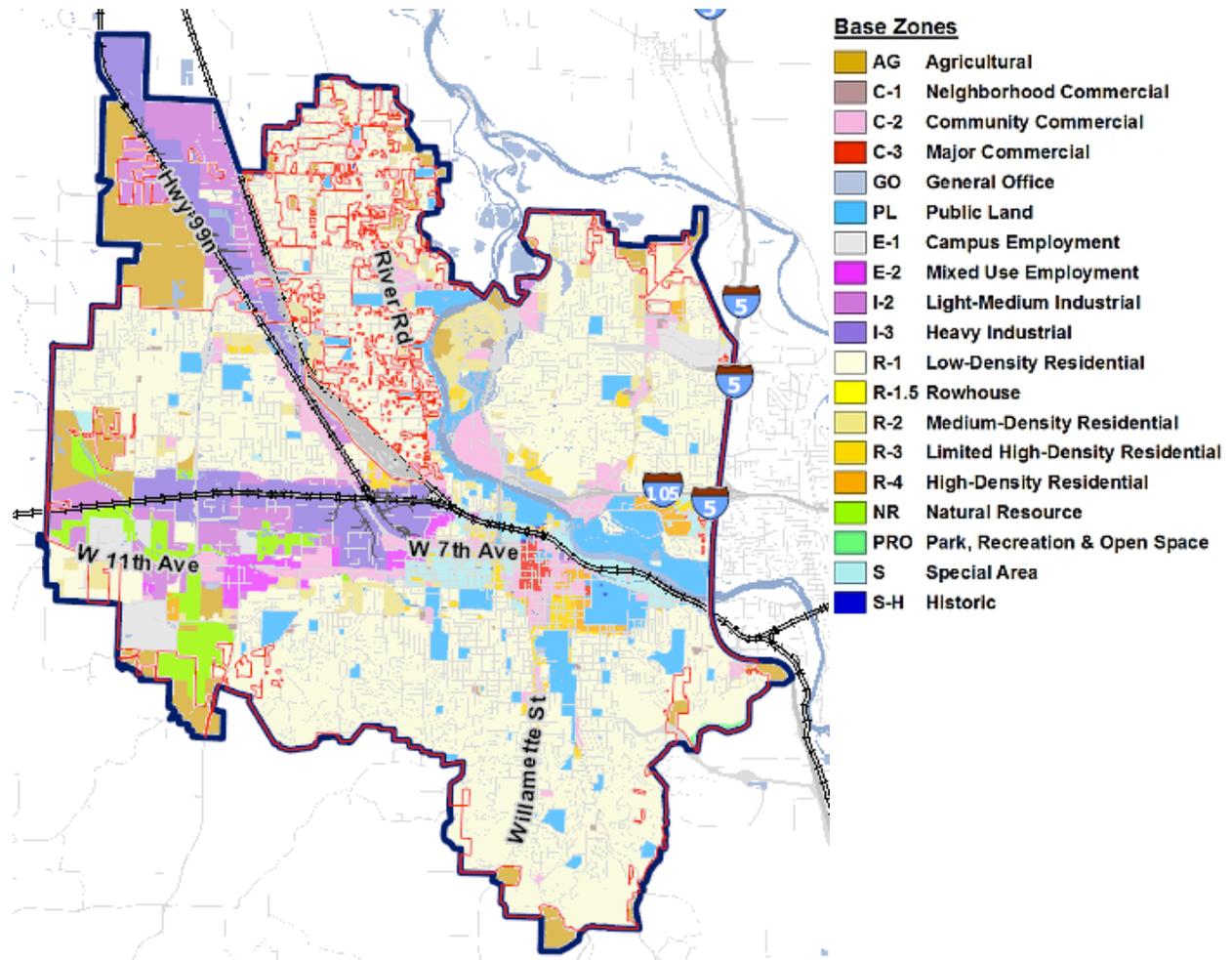


Figure 2: Eugene Zoning Map – see appendix for larger version.

² Population growth estimates: <https://www.pdx.edu/prc/current-documents-and-presentations> (Table)

LANE COUNTY

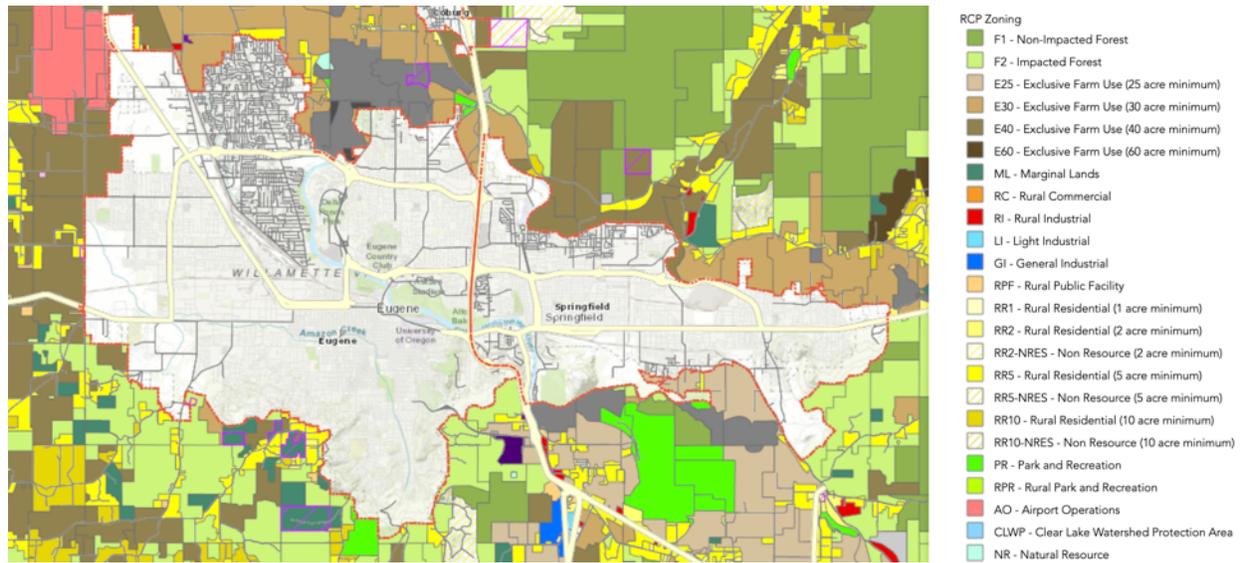


Figure 3: Lane County zoning map focused on the Eugene-Springfield metro area – see appendix for larger version.

Most of the sites that would be central to the current and future metro area are in Springfield or Eugene and likely precludes a site in Lane County’s jurisdiction.

Public Facility Lands are likely viable – These lands likely allow outright use without hearings or compatibility studies. That said, choosing a location that would avoid nuisance to the neighbors with noise, odor, dust or traffic will still be important.

Short Mountain Landfill is a good location for a material sort line – It’s likely that the existing landfill permit would be sufficient for locating a commingled recycling sort line or a sort line for mixed solid waste that could pull materials that were not separated at the curb. Also, organics could be pulled in this kind of sort line, be put into an anaerobic digestion vessel to gather the greatest methane potential and the digestate could be composted as landfill cover.

NEARBY GROWTH IMPACTING THE METRO AREA^{3,4}

- **Growth in Veneta** – Veneta had a July 2018 population of 4,790. Veneta is expected to have the highest growth rate in the county at 1.3%. By 2050, the population is estimated to become 7,079.
- **Growth in Coburg** – Coburg had a July 2018 population of 1,195. Coburg also has a high population growth rate for Lane County, estimated at 1%. Coburg’s 2050 population is estimated to become 1,747.
- **Growth in Junction City** – Junction City had a July 2018 population of 6,125. With an estimated population growth rate of 1.1%, the population is expected to be 9,589 by 2050.

Lane County will want to take this growth surrounding the metro area into consideration. Other areas of the County have transfer stations that can grow or will be expanded to grow in their communities.

³ Current population: <https://www.pdx.edu/prc/population-reports-estimates> (Certified Population Estimates)

⁴ Population growth estimates: <https://www.pdx.edu/prc/current-documents-and-presentations> (Table & Report)

Challenges for Siting a Facility

GENERAL CHALLENGES

Floodway and Floodplain – “Critical Facilities” such as a transfer station, are prohibited in these areas. FEMA and National Marine Fisheries Service will release new flooding and endangered species protection maps in the Winter of 2019-2020.

Willamette Greenway Buffer – This buffer requires similar protections for water quality and habitat to the Endangered Species Act protections that come from NIMFS. These overlays would apply to properties near the Willamette such as the old Wildish site along Franklin Boulevard south of Glenwood.

Odor, Dust and Noise – Many of these concerns are abated by zoning, enclosure in a building and avoiding heavy industrial zoning near retail or housing.

Public Perception – Community convenience has to balance community impacts.

SPRINGFIELD CHALLENGES

Drinking water protection overlays – First and foremost, the city is named due to the low groundwater depth and the prominent springs that emerge throughout the area. This is the source of drinking water overlays that may preclude siting a facility on a properly zoned site or historic industrial site due to flooding potential and the risks of contamination from hazardous materials. One such location is the mill complex by 42nd and Highway 126. While there is available industrial property, the nearby dike has been determined to not have seismic strength and will likely become a challenge once the FEMA and endangered species maps are introduced this upcoming winter.

EUGENE CHALLENGES

Airport overlay – This zoning overlay prevents the siting of a facility that would attract birds in large numbers that could be a safety risk to the flights. *Note that avian vectors have not been a significant issue at the Glenwood site, and an enclosed space would likely have even fewer problems.*

Transfer station may be ambiguous in the code – Recycling and collection is allowed outright in Heavy Industrial zoning. There is no specific language on waste collection and transfer in the code.

Public land designation is possible, but many of these sites have incompatible adjacent zoning. Much of this land is centered in the urban core.

Annexation maybe required along Highway 99 – While this would add time and effort to siting a new facility, annexation is likely and is not anticipated to be a challenge.

Requirement of a Cost Benefit analysis for a Western Eugene siting of a transfer site. Eugene Land Use Codebook page 209, (16) Public Facilities and Services, b) *If a transfer site in the western portion of the metropolitan area is desired, a cost-benefit analysis shall be conducted to determine its effectiveness before any siting plans are considered. (Solid Waste Service subsection, Policy 1).*

LANE COUNTY CHALLENGES

Lane County Code defines transfer station as “disposal.” This implies that the facility, if it were located outside of cities, would have to be zoned Industrial and would require a compatible use review and public hearings.

5. Site Visits and Assessment

Introduction

Based on the comments and feedback received during the stakeholder interview process, and consistent with the County's Solid Waste Management Plan, the research team provided parameters for a potential site to a licensed commercial real estate broker. The idea was to provide a broad enough definition to satisfy the key attributes the County is looking for, while still being open to hybrid combinations as potential solutions. The high-level criteria included the following attributes:

- Located within central Lane County;
- Ten acres or greater of cleared property;
- Zoned industrial or heavy industrial;
- Good to excellent freeway access.

While there was a preference for certain characteristics such as: the absence of legacy environmental issues, potentially adverse permitting conditions, adequate buffer zones and/or absence of residential neighborhoods and potential traffic impacts, such conditions did not eliminate any of the properties that were considered in this exercise.

The real estate broker identified seven properties that generally met the high-level criteria stated above and toured the research team on August 28, 2019. One of these sites turned out to be substantially impacted by wetlands and grading issues and was eliminated due to the permitting risk and potential cost of mitigation work.

Over the next pages are summary table of results of the six properties benchmarked against the current Glenwood site. *The appendix includes individual results of each property.*

KEY FOR SITE POTENTIAL:

- Category A: Materials Convenience Center potential components
 - Public Self-Haul (Hand Unload) Unloading
 - Commercial/Loads of 6 Cubic Yards or Greater Unloading
 - White Goods and Bulky Items Drop-off
 - Recyclables Dropoff
 - Reuse ("Last Chance") Dropoff
 - Household Hazardous Waste
 - Maintenance and Equipment Storage Building
 - Scales
 - Fuel Island
 - Administration
 - Vactor/Decant Building (should ideally be located at the wastewater treatment facility)
- Category B: Material Recovery Facility
 - Single stream material recovery facility
- Category C: Mixed Waste Recovery and Organics Recovery Facility
 - Mixed Waste Recovery Facility
 - Organics Aggregation

Highlights	Glenwood	East Enid	48 th Street	Roosevelt	Irving Road	Hampton Road	Highway 58
Address	3100 East 17th Ave., Eugene (Glenwood)	East Enid Rd. near Highway 99, Eugene	800 48th St., Springfield	Roosevelt Blvd. at Bertelsen Rd., Eugene	Northwest Expressway at Irving Rd., Eugene	33910 Hampton Rd., Goshen	152 Highway 58, Goshen
Size in acres	13 inside fence (20 total)	26.49	40.57 (half wooded)	13.74 buildable (15.81 total)	9.22	26.61	24.91
List price	\$0	\$2,495,000	\$3,595,000	\$2,665,000	\$1,810,000	\$2,315,000	\$1,995,000
Price per sq. ft.	\$0	\$2.16	\$2.03	\$3.87	\$4.51	\$2.00	\$1.84
Zoning and jurisdiction	Zoned LMI, Springfield	Zoned I-3, Eugene	Zoned HI, Springfield	Zoned I-3, Eugene	Zoned I-2, Eugene	Zoned GI, Lane County	Zoned LI, Lane County
Needs further study	<ul style="list-style-type: none"> Site re-design opportunities for functionality and future community acceptance Review commingled sortline suitability Review current component suitability 	<ul style="list-style-type: none"> Overlay Commercial Airport Safety Zone and Urbanizable Land Research traffic and adjacent rail Phase I Environmental Assessment needed Stormwater analysis needed Use as MSW transfer to landfill 	<ul style="list-style-type: none"> Review Environmental Phase I and II Assessments Stormwater trench analysis needed Near levee with unknown timeline for relicensing or reconstruction Potentially in flood plain Onsite groundwater protections 	<ul style="list-style-type: none"> Traffic impacts Wetland mitigation and cost/credits 	<ul style="list-style-type: none"> Overlay Commercial Airport Safety Zone and Urbanizable Land Site could work as a scaled down version of Glenwood Transfer Station. Design and layout would be critical. 	<ul style="list-style-type: none"> Review Environmental Phase I and II Assessments Drainage and stormwater analysis needed Potential for adverse neighborhood impact 	<ul style="list-style-type: none"> Review Environmental Phase I and II Assessments Drainage and stormwater analysis needed Property line review
Location	Glenwood	East Enid	48 th Street	Roosevelt	Irving Road	Hampton Road	Highway 58
Distances	<ul style="list-style-type: none"> 2.7 miles to I-5 & 105/126 interchange 6.8 miles to landfill 9.6 miles to Thurston 9.0 miles to Santa Clara 4.7 miles to South Eugene 	<ul style="list-style-type: none"> 10 miles to I-5 & 105/126 interchange 18.0 miles to landfill 16.1 miles to Thurston 3.2 miles to Santa Clara 6.9 miles to South Eugene 	<ul style="list-style-type: none"> 6.0 miles to I-5 & 105/126 interchange 14.3 miles to landfill 1.4 miles to Thurston 12.5 miles to Santa Clara 11.2 miles to South Eugene 	<ul style="list-style-type: none"> 10.3 miles to I-5 & 105/126 interchange 18.4 miles to landfill 16.6 miles to Thurston 5.1 miles to Santa Clara 4.0 miles to South Eugene 	<ul style="list-style-type: none"> 7.5 miles to I-5 & 105/126 interchange 15.6 miles to landfill 13.8 miles to Thurston 1.4 miles to Santa Clara 5.2 miles to South Eugene 	<ul style="list-style-type: none"> 7.3 miles to I-5 & 105/126 interchange 2.1 miles to landfill 13.3 miles to Thurston 12.8 miles to Santa Clara 8.4 miles to South Eugene 	<ul style="list-style-type: none"> 6.8 miles to I-5 & 105/126 interchange 1.9 miles to landfill 12.8 miles to Thurston 12.3 miles to Santa Clara 7.9 miles to South Eugene
Transportation	<ul style="list-style-type: none"> Excellent freeway access 	<ul style="list-style-type: none"> Good freeway access Peak traffic flow and queueing likely to be an issue Rail spur access possible 	<ul style="list-style-type: none"> Very good freeway access 	<ul style="list-style-type: none"> Very good freeway access Unknown traffic impacts on two busy streets. Potential for both customer & third-party freight adverse traffic impacts. 	<ul style="list-style-type: none"> Good freeway access Rail spur access Should not cause any adverse traffic impacts on weekdays, but peak traffic flow and queueing likely to be an issue 	<ul style="list-style-type: none"> Excellent freeway access Ingress/egress concerns Weekend queues may be an issue due to narrow projected entrance; likely to back-up onto the street based on the property angles. 	<ul style="list-style-type: none"> Excellent freeway access Weekend queues may be an issue and likely to back-up onto the street based on the property angles.

Site potential	Glenwood	East Enid	48 th Street	Roosevelt	Irving Road	Hampton Road	Highway 58
What can fit on the site?	Full scale A+B+C	Full scale A+B+C	Full scale A+B+C	A+B, organics collection may be possible	A+B, organics collection may be possible	A+B, organics collection may be possible	Full scale A+B+C
Opportunities and advantages	<ul style="list-style-type: none"> • Large enough to accommodate all Lane County needs if reconfigured • Property is owned and in use • Strategic partners are adjacent and own the properties • Most of the features could be built inside large buildings 	<ul style="list-style-type: none"> • Large enough to accommodate all Lane County needs • Rail opportunity for waste and recyclables import • Zero to limited grading necessary • Could serve as bulk MSW transfer from Veneta, Junction City and NW Eugene. 	<ul style="list-style-type: none"> • More than enough space to accommodate full complement of services • Potential to lease out at least half the property to a third party as a vehicle or container storage yard or for private materials processing partner • Fenced and partially paved • Berms and Vegetation as visual barrier 	<ul style="list-style-type: none"> • Berm on Roosevelt Boulevard side of property creates visual barrier • Some minor grading needed 	<ul style="list-style-type: none"> • No grading necessary. 	<ul style="list-style-type: none"> • Limited grading necessary. • Property is fenced. • Site is substantially paved though would need topical treatment. 	<ul style="list-style-type: none"> • No grading necessary. • Property is fenced. • Site is substantially paved though would need topical treatment.
Weaknesses, risks, cons, or problems	<ul style="list-style-type: none"> • Would require grading and reconstruction, which may impact services during the construction phase • City of Springfield would like to develop Glenwood as an urban mixed-use neighborhood that will conflict. 	<ul style="list-style-type: none"> • Possibility of permitting for higher use, but doubtful 	<ul style="list-style-type: none"> • Some grading necessary • May need an easement with International Paper, which could be an issue with weekend traffic queueing • Floodplain and groundwater protection concerns 	<ul style="list-style-type: none"> • Scattered wetlands would have to be mitigated, but there is a seller credit to assist in defraying costs • Layout of property would not accommodate all amenities desired, nor a long weekend queue without backing up onto Bertelsen Road 	<ul style="list-style-type: none"> • Likely entrance not wide enough to accommodate multiple traffic lanes and weekend queue • Property likely too small to accommodate all amenities desired • May not be adequate space for trailers to back-up and turn around (would have to be a unique public drop-off area design) 	<ul style="list-style-type: none"> • Not currently for sale, price estimated • Multiple owners with odd-shaped parcels, likely to cause challenges for design, traffic, and functionality 	<ul style="list-style-type: none"> • Angles of the site make a material portion of property unusable for anything but storage

Community Context	Glenwood	East Enid	48 th Street	Roosevelt	Irving Road	Hampton Road	Highway 58
Strengths	<ul style="list-style-type: none"> Identified by waste stakeholders as preferred location Many strategic partners are located adjacent to the existing facility on owned property Remains central to metro area as it grows southward. Neighbors accustomed to current use, reconfigured and put into buildings would improve odor and visual disamenities 	<ul style="list-style-type: none"> Creates infrastructure hub in growing underserved area that could create efficiencies in the overall waste system Paired with Short Mountain Landfill and network of smaller satellite drop-off sites, would be consistent with long term plan Could create synergies or partnerships with neighbors (biomass power plant, plywood mill and u-pick auto scrap, metal recycling, plastics molder) Opportunity to be transfer station for routes operating in vicinity 	<ul style="list-style-type: none"> Large site that has been heavy industrial use for decades Room for co-locators and strategic partners Could create synergies or partnerships with neighbors (biomass power plant, composter, paperboard plant etc.) Visual and potential sound buffer from berm and vegetated perimeter 	<ul style="list-style-type: none"> Could create synergies or partnerships with neighbors (biomass power plant, tire crumb product manufacturer, wood products, metals recycler, Sorting equipment manufacturers, Food banks, resale collection centers and Could be considered as a potential satellite drop-off station (only) for recyclables with some surge space for storage, due to its location 	<ul style="list-style-type: none"> Could create synergies or partnerships with neighbors (biomass power plant, composter, metal recycling, plastics molder, auto scrap, Could be considered as a potential satellite drop-off station (only) for recyclables with some surge space for storage, due to its location 	<ul style="list-style-type: none"> The smaller parcel by itself could be considered as a potential facility to replace some of the activities currently taking place at Glenwood TS, due to its close geographic location, or it could be a satellite drop-off location that is paired with one of the larger sites on the NW corner of Eugene (and Short Mountain Landfill) Size of site could be ideal for surge storage space or future alternative use. 	<ul style="list-style-type: none"> The smaller parcel by itself could be considered as a potential facility to replace some of the activities currently taking place at Glenwood TS, due to its close geographic location, or it could be a satellite drop-off location that is paired with one of the larger sites on the NW corner of Eugene (and Short Mountain Landfill) Size of site could be ideal for surge storage space or future alternative use.
Weaknesses	<ul style="list-style-type: none"> .2 miles to residential area 	<ul style="list-style-type: none"> .3 miles to residential 	<ul style="list-style-type: none"> Residential area across street on one side but buffered with berms and vegetation 	<ul style="list-style-type: none"> Residential presence directly across the street 	<ul style="list-style-type: none"> Residential presence directly across Expressway 	<ul style="list-style-type: none"> Too close to Short Mountain Landfill to provide system synergies Neighbors directly across the street 	<ul style="list-style-type: none"> Too close to Short Mountain Landfill to provide system synergies Neighbors directly across the street

Site Prioritization

TWO SITES COULD ACCOMMODATE ALL NEEDS AND FUTURE GROWTH

Of the six qualified sites, three were large enough to accommodate the entire suite of activities and services outlined in Section 3 (Sites 1, 2 and 6). One (Site 6) of those three sites, however, is not ideal from a design standpoint due to lot line angles, which would likely make it difficult to develop an efficient facility. The other three sites (Sites 3, 4 and 5) were deemed not large enough to accommodate the full suite of activities and services, but could be considered as alternatives for some of the activities currently taking place at the Glenwood Transfer Station and work in combination with space available at Short Mountain Landfill and/or with one of Sites 1 or 2.

Sites 1 and 2 are the preferred sites for a complete (all features) transfer station site. That said, site 1 would require a cost benefit analysis as required by code and site 2 may have floodway and floodplain concerns and / or groundwater protection concerns.

SMALLER SITES COULD ACCOMMODATE SOME OF THE CURRENT SERVICES THAT GLENWOOD PROVIDES

Four (Sites 1, 2, 3 and 4) of the six sites toured are located fifteen or more miles from Short Mountain Landfill, which could give the County a geographic presence in moderate to high growth areas. At least two (Sites 1 and 2) of the four sites are also large enough to operate a small MSW transfer station to receive residential and commercial route trucks from the immediate area and transfer to Short Mountain Landfill. In addition, rail spur accessibility is available on Site 1, should the County desire to consider out-of-county MSW importation or export of commodities.

6. Conclusions and Recommendations

Conclusions

DESIRED FEATURES AND SAFETY CONTROLS FOR WMD STAFF, PARTNERS, & STAKEHOLDERS

- **Category A suite of services, what we call the Materials Convenience Center**, would require an estimated 92k square feet of covered structure (not including required setbacks, clearances or common area/pathways), or approximately 2.5 acres in total. In order to accommodate all of the Category A services, allow room for future expansion, a larger queuing area for peak traffic and the safe movement of traffic, the County should plan on 8 undeveloped acres at minimum, and up to 10 acres should the Category B Material Recovery Facility be added to the scope of provided services.
 - Public Self Haul Unloading (8 – 12k square foot covered building, open on 2 sides with concrete pads, railing and a lower “pit”) with approximately 250 lineal feet for drop lanes.
 - Commercial/Loads of 6 Cubic Yards or Greater Unloading (8 – 12k square foot covered building open on 2 sides with concrete pads, railing and a lower “pit”), with approximately 250 lineal feet for drop lanes.
 - White Goods and Bulky Items Drop-off (2k square foot covered area with concrete pad).
 - Recyclables Dropoff (3 – 4k square foot covered area with concrete staging pad, railing and lower area where multiple roll-off boxes for each commodity would be stored). Should the County desire to continue to allow third parties to participate in the recycling and reuse operation, the current footprint of approximately 25k square feet would remain necessary.
 - Reuse (“Last Chance”) Dropoff (4k square foot covered enclosed building on concrete slab with roll-up doors).
 - Household Hazardous Waste (10 – 12k square foot covered enclosed building with concrete slab and roll-up door).
 - Maintenance and Equipment Storage Building (10 – 12k square foot enclosed building on 12” concrete slab with roll-up doors), to accommodate growth and storage.
 - Scales (2k+ square feet) Two inbound scales and one outbound scale would be the minimum required, but we would suggest leaving expansion capacity to accommodate additional scales, or the County may want to consider a different enlarged design with more scale flexibility to accommodate peak hour traffic, particularly if the operation will remain at Glenwood since there is limited opportunity to expand the queueing area.
 - Fuel Island (2k square feet), with footprint expansion capability to 4k square feet should the County desire to offer alternative fuels option in the future.
 - Administration (4k square foot building), expandable to 8k total square feet with second story addition.
 - Vactor/Decant Building (10k square feet) This activity ideally belongs at the wastewater treatment facility, but should it remain, the current footprint should be adequate.
- **Category B, the Material Recovery Facility**, would require an estimated 60k square feet of covered structure (not including outside storage, electrical room, required setbacks, clearances or common area/pathways), or about 1.75 acres.
- **Category C, the Mixed Waste Recovery and Organics Recovery Facility**, would require approximately 120k square feet of covered structure (not including outside storage, electrical room, required setbacks, clearances or common area/pathways), or about 3.5 – 4 acres.

- Mixed Waste Recovery Facility (60 – 100k square foot covered enclosed building on 18” concrete slab with multiple roll-up doors allowing large truck drive through capability).
- Organics Aggregation (20k square foot covered enclosed building with roll-up doors and drive through capability),

TWO EXISTING SITES COULD ACCOMMODATE ALL OF THESE INTERESTS IN ONE LOCATION

1. **East Enid Road, Eugene – 27 Acres - \$2,495,000** – Requires a cost benefit analysis for Eugene Code Compliance. Easily developed site, could also accommodate waste consolidation and transfer from Veneta, NW Eugene, Junction City Etc.
2. **800 48th Street, Springfield – 40.57 acres - \$3,595,000** – Room enough for everything. Great visual buffer. Some concern about flooding / ground water and the stability of the local levee during an earthquake. Longtime neighborhood across the street from the location.

WASTE MANAGEMENT’S PARTNERS AND STAKEHOLDERS PREFER TO KEEP THE GLENWOOD LOCATION DUE TO:

- Central location for the Metro area.
- Freeway access.
- Co-location of major private and non-profit partners nearby that helps make the solid waste and recycling system function. A move would significantly devalue their investments or require substantial efforts to keep truck trips down. The adjacent and nearby partners include:
 - Sanipac’s hauling yard, shops and offices
 - EcoSort’s Private Recovery Facility
 - BRING
- If reconfigured and rebuilt, could likely serve the future needs of residents, small commercial and recovery operations especially if the sort lines were located on private property or at the Landfill.

Recommendations

STRONG DEMAND FOR CONVENIENCE FOR RESIDENTS, COMMERCIAL AND ALL SELF HAUL CUSTOMERS

- One Stop Drop “Materials Convenience Center” – Expanded collection of reusable goods that would be sorted and recovered by local non-profit partners to divide and support reduced consumption of goods.
- Household Hazardous waste station that is open when the Transfer station is open.

CONSIDER BREAKING APART THE DESIRED FUNCTIONS INTO SEPARATE FACILITIES

- Commingled sorting could be located at existing or future private facilities or at the landfill.
- Mixed solid waste sorting, organics recovery and anaerobic digestion could be located at Short Mountain Landfill and would make sense for permitting, logistics, climate benefit and revenue generation opportunities.
- An expanded reuse and recycling system at Glenwood in a *newly configured and built facility* that shrinks the footprint, increases throughput and safety and is enclosed to reduce odor, dust and noise. Upgrade and make the staff and administration buildings permanent.

CONSIDER A WASTE TRANSFER CENTER IN NORTHWEST EUGENE

With the growth of Veneta, Junction City and Coburg, a northwest site that receives solid waste from residents and haulers could provide logistical benefits including reduced trips, trucking emissions and greenhouse gases.

IF ALL SERVICES AND FACILITIES ARE DESIRED IN ONE LOCATION, CONSIDER THE TOP TWO SITES ONLY. STUDY THEM MORE CAREFULLY.

- Both sites are near to biomass power operations that may be the best outlets for wood waste.
- The Enid Road Site appears to be the best option given price, flatness, neighbors and the potential to consolidate haulers loads.
- The 48th street site has many features making it attractive – including room for co-locators and substantial visual buffers.

APPENDIX

Methodology

STAFF SURVEYS AND INTERVIEWS

The research team met with, called and sent out surveys to County Division staff at remote transfer stations to get their best thinking on what facility features are needed and what questions need to be answered.

INTERVIEWS WITH STAKEHOLDERS

The research team interviewed suggested stakeholders, which included haulers, local businesses, nonprofits, and educational institutions.

INTERVIEWS WITH LOCAL PLANNING STAFF

The research team conducted interviews with local planning officials in order to identify general areas of the Eugene-Springfield metro area that could that would have appropriate zoning and conditions for a transfer station such as environmental overlays. The Planning staff also showed us where the future population growth would occur to help the team visualize where the future center and edges of the metro area would be. The team interviewed staff from the City of Eugene, City of Springfield, and Lane County.

INTERVIEWS WITH ECONOMIC DEVELOPMENT STAFF

The research team interviewed city economic development staff from both Eugene and Springfield to determine what industries are being recruited which indicates the types of waste that will be generated in the future beyond residential waste.

REUSE & REPAIR STAKEHOLDER INTERVIEWS AND FACILITATED MEETING

After the initial interviews, it became clear that reuse and repair of household goods is not only a value for stakeholders and residents but is truly a need given the newly adopted Solid Waste Management Plan and Oregon DEQ's direction for Materials Management. Subsequently, the team invited nonprofit groups and reuse/repair stakeholders to discuss how to best make it convenient for residents to get all of their unwanted things into the highest and best use – from items ready for use to items needing fixing to items that are only useful as a material to be recovered.

FACILITY FUNCTIONS & SITE CRITERIA

The research team took all the requests and needs for the sites and determined the square footage for each facility function based on Jon Angin's professional experience as an operator of transfer stations and landfills and as a solid waste management consultant (Former VP of Waste management NW and VP of Tetra Tech's Solid Waste North American practice).

SITE VISITS, ASSESSMENT AND RANKING

The research team engaged a commercial real estate agent and gave him the criteria of what an ideal site would have. He selected six sites that fit the most parameters and toured the sites with the research team as well as providing technical data on each site. Each site was assessed according to the criteria

and ranked. In addition to the six selected sites, the Glenwood site was also assessed to provide a comparison.

Survey Questions and Responses

STAFF AND STAKEHOLDERS

1. What services are you looking for in the existing or new transfer station?

The top request was a one-stop drop for reuse and repairable items, with recycling and waste drop-off to accommodate the residents that are doing a clean-out of their house such as a move. This was also a request from the University campus recycling manager who said the quantities are significant from each dorm and apartment at the end of each school year.

There was a strong request from both county staff and stakeholders to keep the Household Hazardous waste facility open all times the facility is open. The appointment only drop-off model is a major barrier to proper disposal.

There was no alignment on whether or not organics should be accepted at the public facility or if it should be sent to private facilities.

2. What new wastes may come with future industries that are being planned for both cities are similar and include these industries named in Eugene’s comprehensive plan and were echoed by Springfield and the County:

- Advanced manufacturing – Electronic hardware
- Food and beverage manufacturing
- Health and wellness
- Clean technology and renewable energy
- Software and educational technology
- Biomedical and biotechnology

3. What recyclable materials are commonly thrown out (staff observations)?

- Wood
- Rubble
- Scrap metals
- Reusable items
- Receipts from commercial facilities/paper
- Glass
- Plastics – hay ties, bags etc.

4. Should there be a sorting facility for commingled materials?

Generally, there is near complete support for this asset and what it can do for the public, but most stakeholders mentioned the existence of EcoSort and that what the area needs is better sorting equipment and a place to house them. Some expressed concern about contamination of materials and requested that we return to curbside separated materials.

There is general interest by staff and stakeholders in recovering materials and energy from the materials such as anaerobic digestion for organics.

Any stakeholder that wanted *additional sorting of solid waste* suggested that the sort line would occur at the landfill. Some expressed concern about the financial viability of a private mixed

waste sort line. It should be noted that a sort line at the landfill would still receive the full tip fee.

5. Other site needs

- Toilets for staff with handwashing sinks – not portables – every staff requested this.
- More room for dump-bed access for wood and organics.
- Larger compost areas.
- 3-4 scales – full length so large trailers aren't maneuvering and bottlenecking.
- Fee booths that are big enough for several people to work in; larger windows and more counter space with more plugs for electronics.
- Drop arms for controlling traffic at scales and booths.
- Secure room for counting the money in the booths.
- Smoking area (*note that smoking is prohibited at all Lane County facilities*).
- Odor reduction.
- Better traffic control and speed signage – too many close calls with people walking.

6. Site layout features

The most common request was for the truck movements to be easier and to be fully separate from the activities of the residential drop-off. There were a few requests for the facility to be in a building to avoid odor and stormwater concerns. Improvement of visibility across the site and perhaps from viewing areas was the last patterned request.

Staff recommends these flow changes:

- An exit for recyclers only that avoids the fee booths and scales. – Listed by everyone.
- Trash only path.
- Recycling and trash pathway.
- Weigh trucks after recycling, then after dumping.
- Two people in the booths during peak times.
- Faster processing credit card machines to reduce congestion.
- Signage for having payment ready when at window.
- Ensure traffic flows don't cross each other.
- Two fee booths before the waste area – one for weighed loads, one for charged items such as tires, mattresses, batteries etc.
- Mark lanes with color or words to keep people in the right lane going to the right place.
- Separate employee entrance to avoid customers coming in when employees do before the facility is open.

7. Location of New Facility

Nearly everyone stated that Glenwood was the best site for the job. The next most requested location was, "Anywhere near Interstate 5." Other suggestions included:

- Existing landfill
- Old Wildish site on Franklin
- 30th and I-5 area
- Eugene Sand and Gravel at Delta Oaks
- Sierra Pine facility at International Paper

8. What does the public need to know about this?

Everyone felt that the public needed to know what can be dropped off where.

Economic Development Takeaways

QUESTIONS

1. What kind of businesses/industries are you looking for or actively recruiting?
2. Any in particular that might have a symbiotic relationship with transfer station activities or outputs? Such as recycling; anaerobic digestion; compost; wood and/or construction waste; goods or material reuse, repurpose or repair; waste products, etc.
3. What kind of waste might they produce? Construction & demolition, wood waste, recyclables, organics, hazardous?

SPRINGFIELD

The City of Springfield is actively conducting Business Retention & Expansion efforts for wood products, food, and beverage specialties. Medical industries including medical tech, medical supply, and medical services are of interest for recruitment and retention/expansion of existing businesses, alongside general tech industry. Existing wood and biomass businesses are already feeling substantial political and financial pressure to actively consume their own waste on-site, such as through combined heat and power components. At times they are not producing enough waste for their power needs and occasionally purchase waste wood biomass/chips.

Springfield has an industrial land constraint, with the remaining industrial land having site challenges, contamination, or other issues. There may be a need for the City to assist in the clean-up of the vacant sites, which may lead to an increase in hazardous waste.

EUGENE

The City of Eugene is not currently recruiting any specific businesses or industries, but staff are keeping in mind the City's competitive advantages. There is a diverse economy including government, health, offices, and manufacturing. The food and beverage industry is growing along with technology; wood products is not growing. Food and organic waste and office waste may grow and coupled with the existing wood industry could lend to energy and compost opportunities.

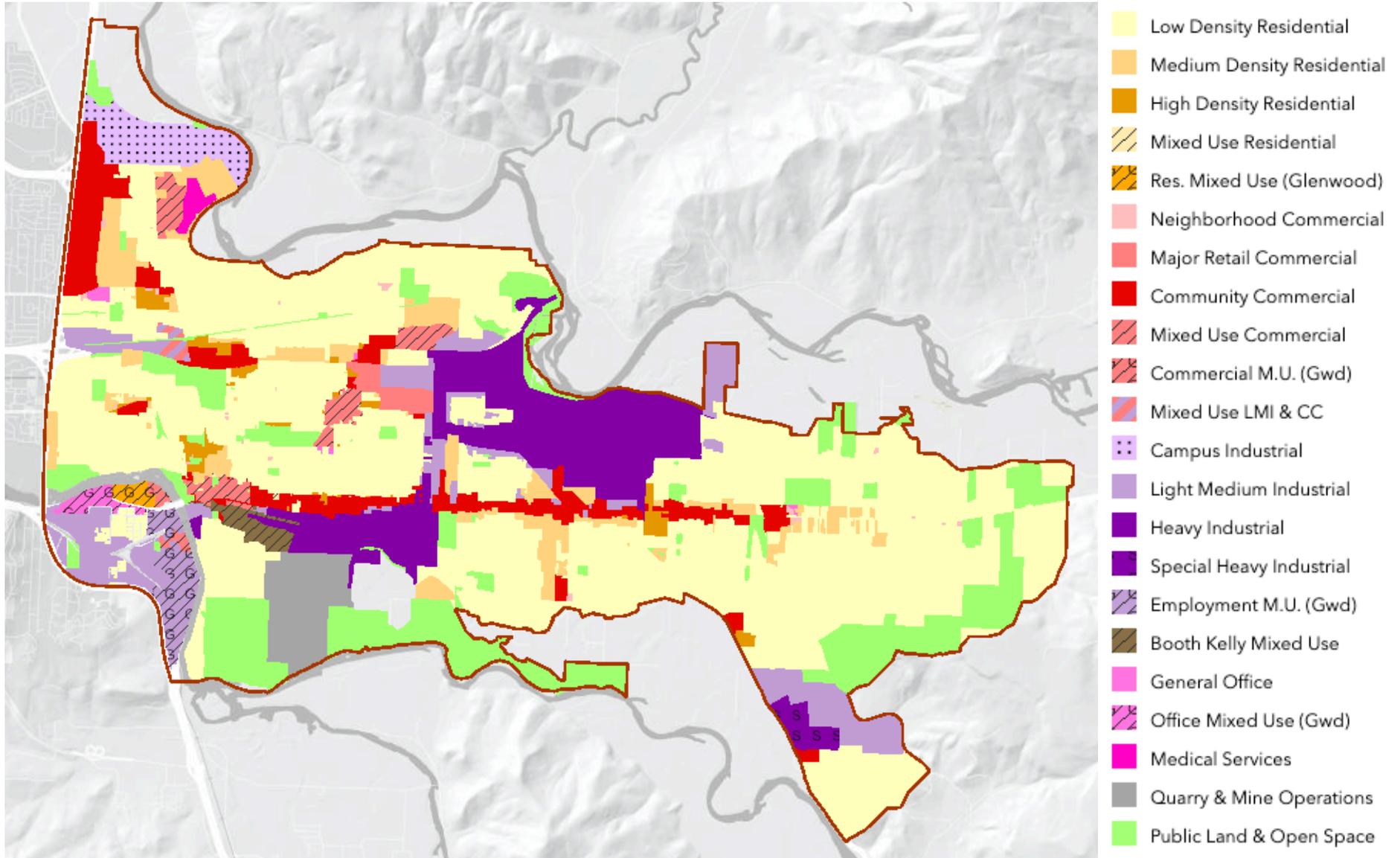
Special Reuse & Repair Meeting Takeaways

After the initial stakeholder interviews, it became clear that reuse and repair of household goods is not only a value for stakeholders and residents, but truly a need within the community as well as for the county to work towards its goals and actions in the newly adopted Solid Waste Management Plan. Subsequently, the research team convened a meeting with nonprofit groups and reuse/repair stakeholders to discuss how to best integrate opportunities for community members to easily drop off reusable items. Many of the reuse groups in the area brought up the concept of one-stop drop in order to create convenience, which should increase donation/reuse and recovery rates. Ideas and takeaways include:

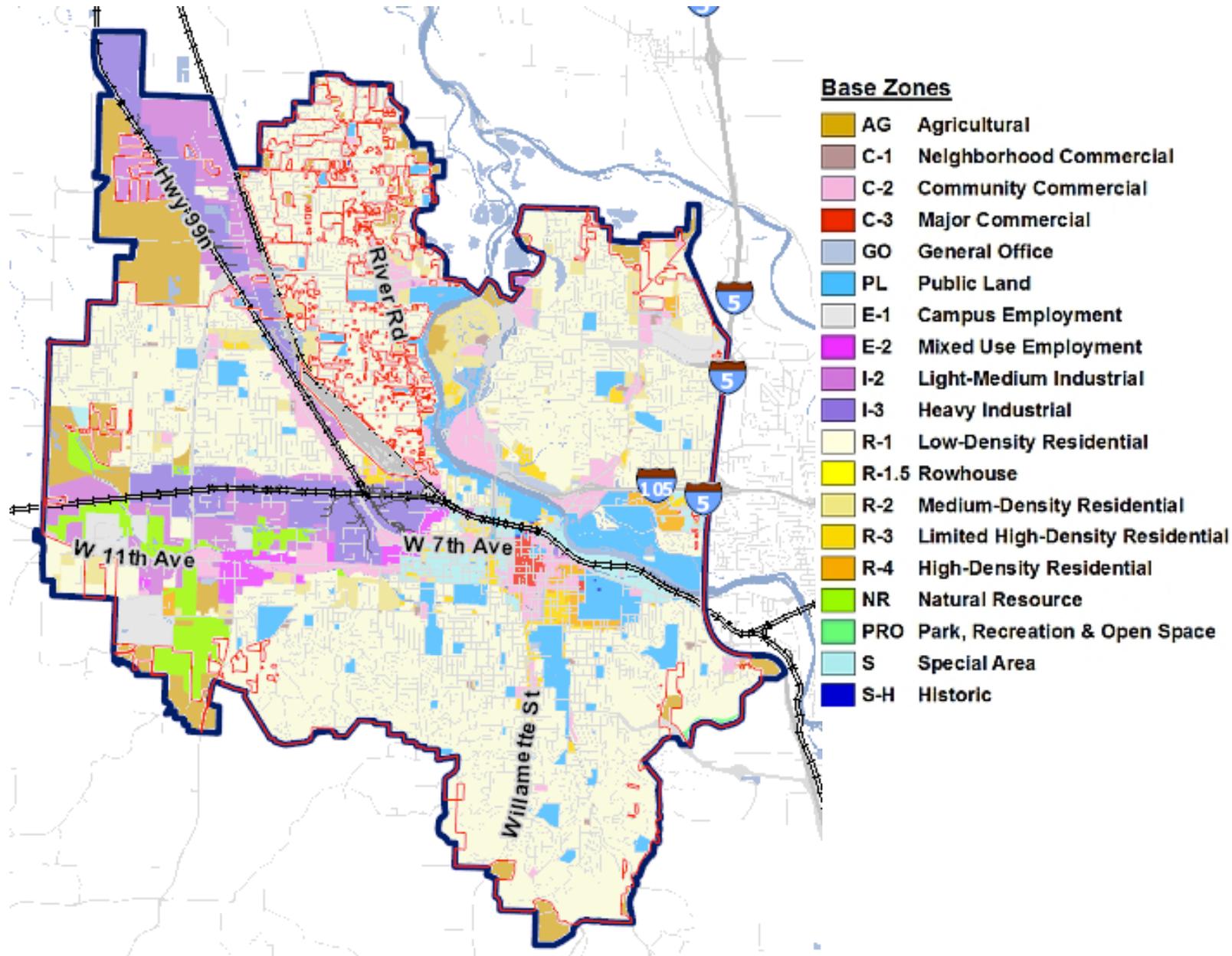
- Key need: curator or experienced “load checker” that can look at loads and direct what is reusable vs recyclable. Would also help avoid wasted materials.
- Storage to allow for time to go between collections.
- Building, or at minimum a covered area.
- Figure out how to serve donors first.
- Consistent message about what is acceptable for reuse and recycling that is uniform and comes from county but is based on specs/norms/needs to resellers.
- Some kind of accommodation depending on reseller for pallets, gaylords, forklift, super sacks to get items into box-trucks/vans.
- Swap area for nonsalable, reusable goods (tie to repair shops and makers).
- Need more regular swap meets and flea markets that are predictable, especially if themed.
- Everyone agrees that it has to be centrally located and convenient. Glenwood is still the preferred option, or at least along I-5.
- About 10% of donated items are landfilled – both the numbers of donated items and rate of wasted items are increasing.
- Commercial sources – they throw out, recycle, and donate but they don’t buy.

Zoning Maps

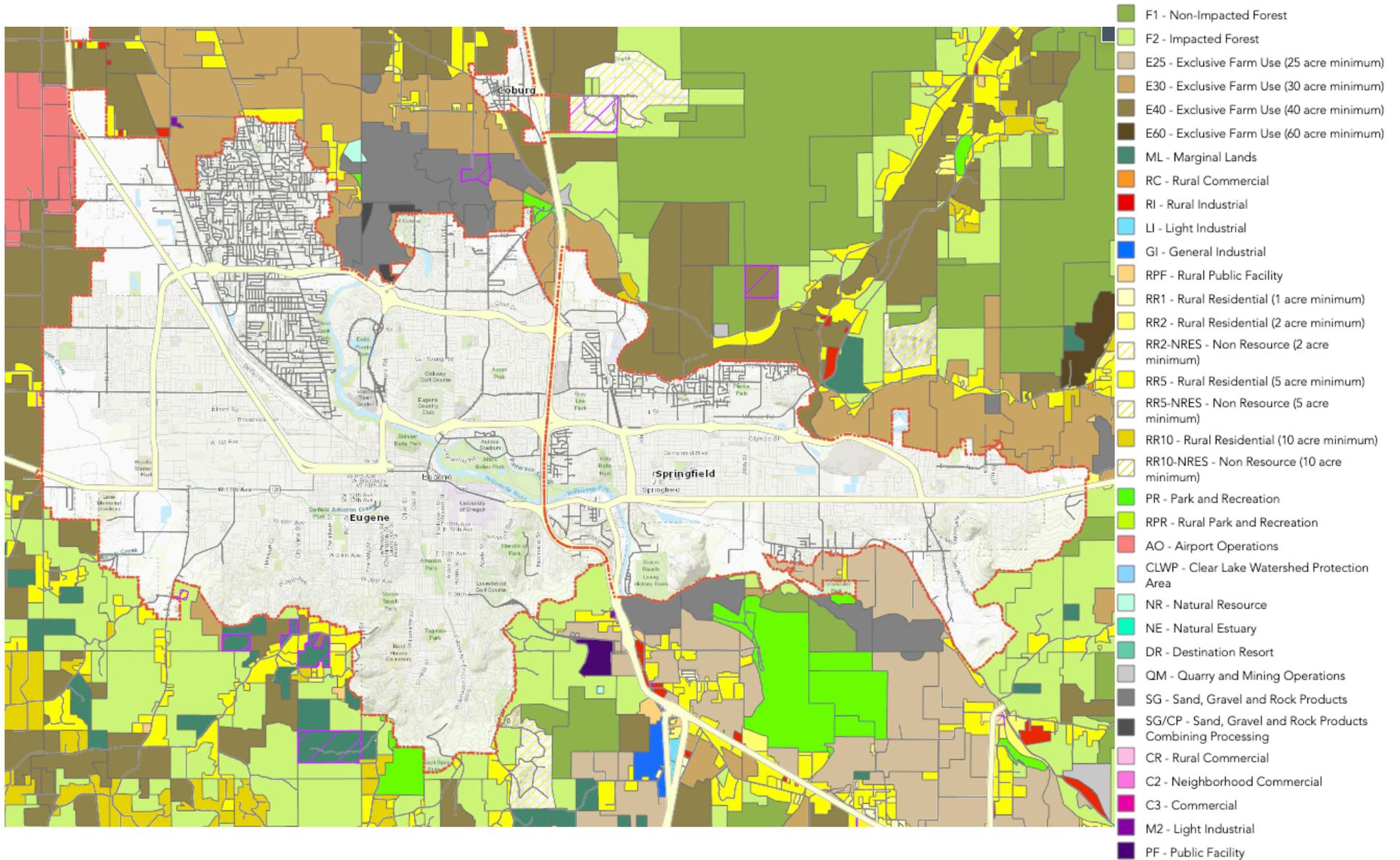
CITY OF SPRINGFIELD



CITY OF EUGENE



LANE COUNTY



Area Map



Individual Site Results

GLENWOOD: 3100 E 17TH AVE, EUGENE



Acreage	20 acres
Total price	N/A, currently owned
Price per sq. ft.	N/A
Distances	<ul style="list-style-type: none"> • 2.7 miles to I-5 & 105/126 interchange • 6.8 miles to landfill • 9.6 miles to Thurston (Main Street at 126) • 9.0 miles to Santa Clara (Irving and River Road) • 4.7 miles to South Eugene (18th and Chambers)
Quick stats	<ul style="list-style-type: none"> • Excellent highway access • Zoned Light-Medium Industrial, no zoning or permitting issues
System components	Site is large enough to accommodate full complement of facilities noted in Section 3, including: Materials Convenience Center for public and/or commercial; Single Stream Material Recovery Facility, and Mixed Waste and Organics Recovery Facility. In addition, the site could accommodate a full scale MSW transfer station if so desired. Property provides adequate growth potential, storage capacity and scale/queueing space.
Advantages	<ul style="list-style-type: none"> • Large enough to accommodate all Lane County needs if redesigned • Excellent freeway access • Strategic partners are adjacent and own the properties
Risks, cons, or problems	<ul style="list-style-type: none"> • Would require grading and reconstruction.
Unique considerations	This site has been in continuous use for quite some time and some of the features that currently consume space could be removed to accommodate new features. Most of the features could be built inside large buildings.
What needs further study	<ul style="list-style-type: none"> • Determine if commingled or MSW sortlines would be desired onsite or at private locations or the landfill. • Would potential buyers pay enough to create a suitable site that leaves the county whole? • Could the old RDF and stormwater pump out dewatering areas be relocated? • Of the facilities desired could a total re-layout out of the site with new buildings meet the needs of the public and make it attractive and controlled enough to stay in place as Glenwood evolves to more mixed use?

SITE 1: EAST ENID ROAD, EUGENE



Acreage	26.49 acres
Total price	\$2,495,000
Price per sq. ft.	\$2.16
Distances	<ul style="list-style-type: none"> • 10 miles to I-5 & 105/126 interchange • 18.0 miles to landfill • 16.1 miles to Thurston (Main Street at 126) • 3.2 miles to Santa Clara (Irving and River Road) • 6.9 miles to South Eugene (18th and Chambers)
Quick stats	<ul style="list-style-type: none"> • Excellent highway access • Zoned I-3
System components	Site is large enough to accommodate full complement of facilities noted in Section 3, including: Materials Convenience Center for public and/or commercial; Single Stream Material Recovery Facility, and Mixed Waste and Organics Recovery Facility. In addition, the site could accommodate a full scale MSW transfer station if so desired. Property provides adequate growth potential, storage capacity and scale/queueing space with entrance off East Enid Road.
Advantages	<ul style="list-style-type: none"> • Large enough to accommodate all Lane County needs • Adequate freeway access • Zero to limited grading necessary • Creates infrastructure hub in underserved area that could create other efficiencies in the overall waste system • Zoning and neighbors should not create adverse impact • Paired with Short Mountain Landfill and network of smaller satellite drop-off sites, would be consistent with long term plan.
Risks, cons, or problems	<ul style="list-style-type: none"> • Possibility of permitting for higher use, but doubtful. • Traffic flow and potential for heavy improvements.
Unique considerations	This site would represent a presence in an underserved area of the County that is expected to see future growth. It is far enough from the Short Mountain Landfill to consider also utilizing it as an MSW transfer station for commercial and residential routes operating in that vicinity. Rail spur access possible, if County was interested in future waste import.

What needs further study

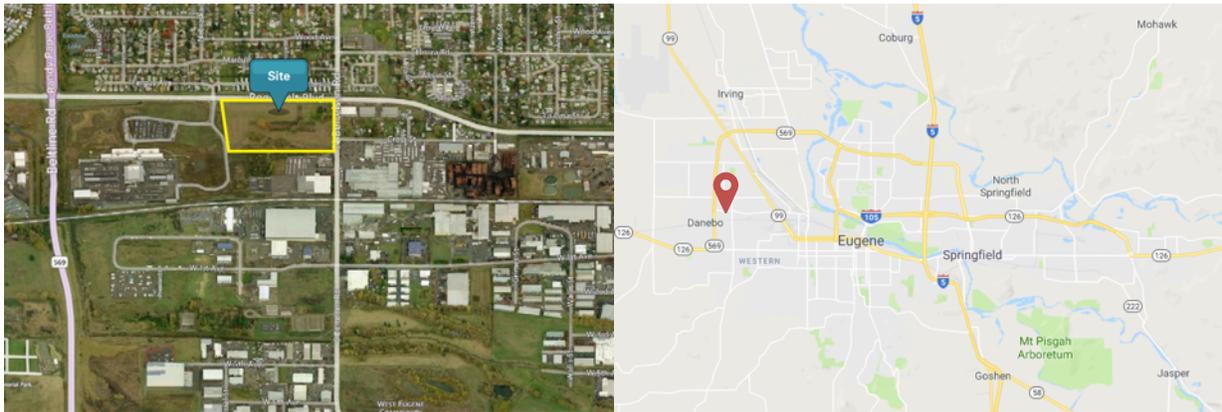
- Research traffic and usage of adjacent rail to ensure entrance would not be adversely impacted by at-grade crossings.
- Could be synergies/partnerships with neighbors (biomass power plant, plywood mill and u-pick auto dismantler).
- Unclear how wide the property is on East Enid and how it would be configured for multiple lane entry.
- Phase I Environmental Assessment and stormwater analysis needed.

SITE 2: 800 48TH STREET, SPRINGFIELD



Acreage	40.57 acres, approximately 1/3 wooded buffer.
Total price	\$3,595,000
Price per sq. ft.	\$2.03
Distances	<ul style="list-style-type: none"> • 6.0 miles to I-5 & 105/126 interchange • 14.3 miles to landfill • 1.4 miles to Thurston (Main Street at 126) • 12.5 miles to Santa Clara (Irving and River Road) • 11.2 miles to South Eugene (18th and Chambers)
Quick stats	<ul style="list-style-type: none"> • Adequate freeway access • Zoned HI
System components	Site is easily large enough to accommodate full complement of facilities noted in Section 3, including: Materials Convenience Center for public and/or commercial; Single Stream Material Recovery Facility, and Mixed Waste and Organics Recovery Facility. In addition, the site could accommodate a full scale MSW transfer station if so desired. Property provides adequate growth potential, storage capacity and scale/queueing space on site.
Advantages	<ul style="list-style-type: none"> • More than enough space to accommodate full complement of services. • Potential to lease out at least half the property to a third party as a vehicle or container storage yard. • Fenced and partially paved.
Risks, cons, or problems	<ul style="list-style-type: none"> • Previous use and environmental impacts. • Some grading necessary. • May be an easement with International Paper, which could be an issue with weekend traffic queueing. • Residential area across street on one side but buffered with berms and vegetation
Unique considerations	<ul style="list-style-type: none"> • Permitting Agency: Springfield
What needs further study	<ul style="list-style-type: none"> • Appears to be a brownfield site formerly used by International Paper • Former power transformer has been removed from property. • Review Environmental Phase I and II assessments to determine potential site risks. • Flood concerns: Appears to be stormwater trench on at least one side of property which needs to be assessed. Near levee with unknown timeline for relicensing or reconstruction. Potentially in flood plain

SITE 3: ROOSEVELT BOULEVARD AND BERTELSEN ROAD, EUGENE



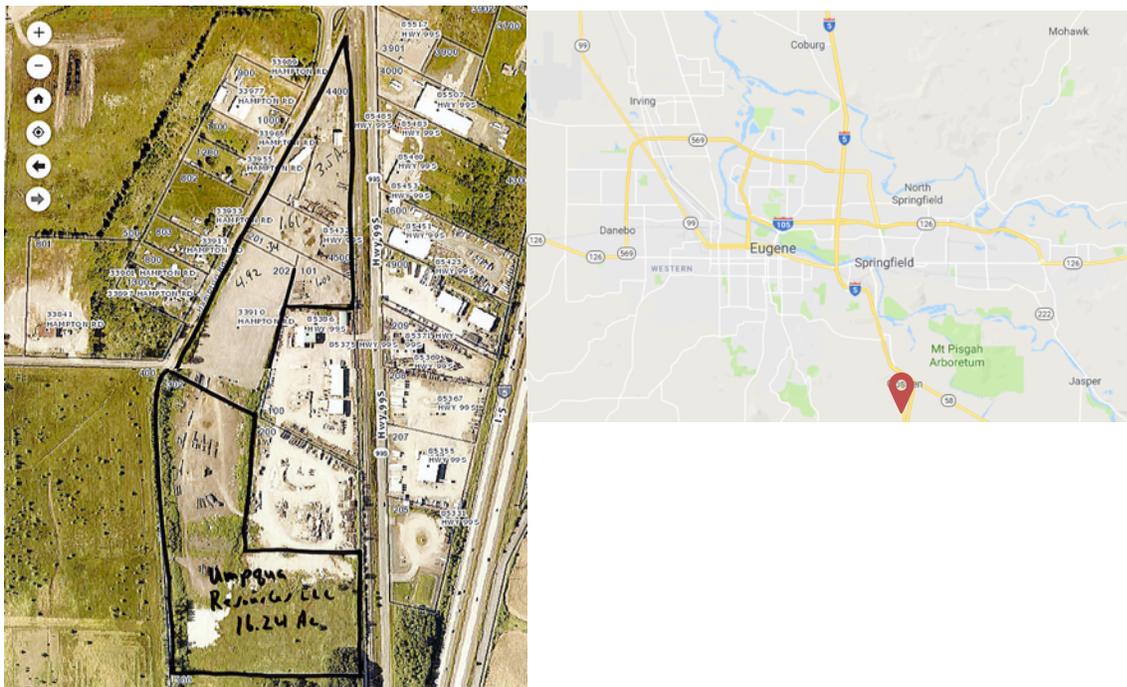
Acreage	15.81 acres
Total price	\$2,665,000
Price per sq. ft.	\$3.87
Distances	<ul style="list-style-type: none"> • 10.3 miles to I-5 & 105/126 interchange • 18.4 miles to landfill • 16.6 miles to Thurston (Main Street at 126) • 5.1 miles to Santa Clara (Irving and River Road) • 4.0 miles to South Eugene (18th and Chambers)
Quick stats	<ul style="list-style-type: none"> • Zoned I-3
System components	Site could be configured to the following components noted in Section 3: Materials Convenience Center for public only (with limited maintenance building) and Single Stream Material Recovery Facility. A consolidation pad for organics is possible but the potential for odors with a residential development so close would be a risk. Scales and queueing area could be accommodated with the right design. All of the above are contingent upon successful wetlands mitigation.
Advantages	<ul style="list-style-type: none"> • Creates infrastructure hub in underserved area that could create other efficiencies in the overall waste system • If paired with Short Mountain Landfill and network of smaller satellite drop-off sites, would be consistent with long-term plan. • Berm on Roosevelt Boulevard side of property creates barrier. • No grading necessary.
Risks, cons, or problems	<ul style="list-style-type: none"> • Wetlands are scattered (not contiguous – 2.68 acres) on property and would have to be mitigated to accommodate building and traffic, but there is a seller credit to assist in defraying costs. • Layout of property would not accommodate all amenities desired, nor a long weekend queue without backing up onto Bertelsen Road. • Potential for both customer & third-party freight adverse traffic impacts. • Large residential presence across the intersection.
Unique considerations	Could be considered as a potential satellite drop-off station (only) for recyclables with some surge space for storage, due to its location.
What needs further study	<ul style="list-style-type: none"> • Unknown traffic impacts on two busy streets. • Ability to mitigate wetlands at a reasonable cost. • More details needed on mitigation cost credit available from seller.

SITE 4: NW EXPRESSWAY AND IRVING ROAD, EUGENE



Acreage	9.22 acres
Total price	\$1,810,000
Price per sq. ft.	\$4.51
Distances	<ul style="list-style-type: none"> • 7.5 miles to I-5 & 105/126 interchange • 15.6 miles to landfill • 13.8 miles to Thurston (Main Street at 126) • 1.4 miles to Santa Clara (Irving and River Road) • 5.2 miles to South Eugene (18th and Chambers)
Quick stats	<ul style="list-style-type: none"> • Excellent freeway access • Zoned I-2 • Rail spur
System components	Site could be configured to the following components noted in Section 3: Materials Convenience Center for public only (with limited maintenance building) and Single Stream Material Recovery Facility. A consolidation pad for organics is also possible. Scales and queueing area could be accommodated with the right design.
Advantages	<ul style="list-style-type: none"> • Freeway access highly desirable. • Should not cause any adverse traffic impacts. • Creates infrastructure hub in underserved area that could create other efficiencies in the overall waste system. Paired with movement of certain activities to Short Mountain Landfill and network of smaller satellite drop-off sites, would be consistent with long term plan. • No grading necessary.
Risks, cons, or problems	<ul style="list-style-type: none"> • Likely entrance not wide enough to accommodate multiple traffic lanes and weekend queue (potential to acquire adjacent property would alleviate issue but may be cost prohibitive). • Property likely too small to accommodate all amenities desired. • Potential traffic safety issues on weekends (e.g. visibility) • May not be adequate space for trailers to back-up and turn around (would have to be a unique public drop-off area design).
Unique considerations	Could be considered as a potential satellite drop-off station (only) for recyclables with some surge space for storage, due to its location.
What needs further study	<ul style="list-style-type: none"> • Site could work as a scaled down version of Glenwood Transfer Station. Design and layout would be critical.

SITE 5: 33910 HAMPTON ROAD, GOSHEN



Acreage	10.37 acres (multiple tax lots, common owner – see top triangular shape in image) contiguous to additional 16.24 acres (different owner – L shape). Estimated only 15 – 17 acres buildable of 26.61 total.
Total price	Approximately \$900,000 for 10.37 acres; Approximately \$1,415,000 for 16.24 acres; Total estimated aggregate \$2,315,000 for all 26.61 acres
Price per sq. ft.	Approximately \$2/square foot estimated value
Distances	<ul style="list-style-type: none"> • 7.3 miles to I-5 & 105/126 interchange • 2.1 miles to landfill • 13.3 miles to Thurston (Main Street at 126) • 12.8 miles to Santa Clara (Irving and River Road) • 8.4 miles to South Eugene (18th and Chambers)
Quick stats	<ul style="list-style-type: none"> • Goshen Forest Products (adjacent to property owned by Umpqua Resources) • Excellent freeway access • Permitting Agency: Lane County • Zoned G1
System components	Site could be configured to the following components noted in Section 3: Materials Convenience Center for public only (with limited maintenance building and truck wash area) and Single Stream Material Recovery Facility. A consolidation pad for organics is also possible, though the proximity to Short Mountain Landfill makes such a feature less desirable. Scales and queueing area could be accommodated with right design but would be a challenge.
Advantages	<ul style="list-style-type: none"> • Freeway access is excellent. • Limited grading necessary. • Property is fenced. • Site is substantially paved though would need topical treatment.

Risks, cons, or problems

- Too close to Short Mountain Landfill to provide system synergies.
- Multiple odd-shaped parcels make a full-scale facility difficult to design efficiently and is likely to create traffic safety issues.
- Angles of the site make a material portion of property unusable for anything but storage.
- Weekend queues may be an issue due to narrow projected entrance; likely to back-up onto the street based on the property angles.
- Neighbors, within visible distance.

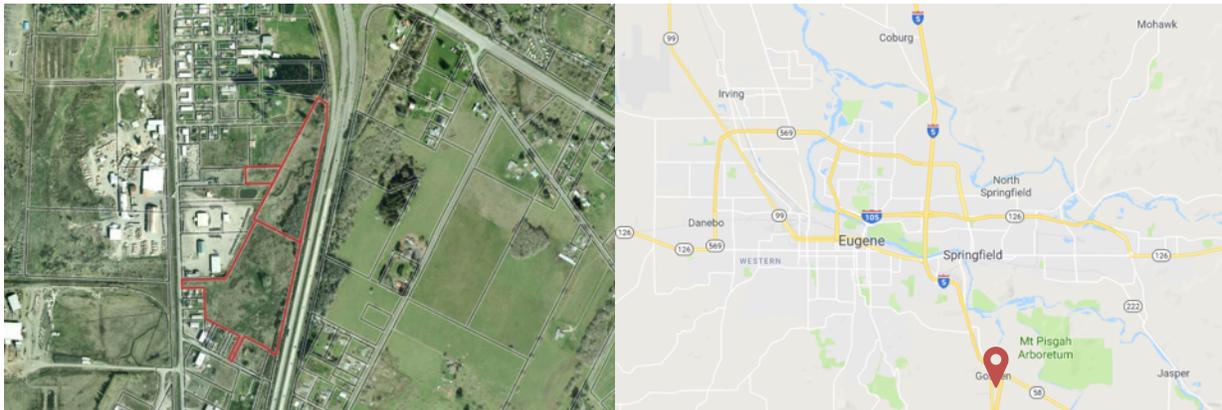
Unique considerations

The smaller parcel by itself could be considered as a potential facility to replace some of the activities currently taking place at Glenwood TS, due to its close geographic location, or it could be a satellite drop-off location that is paired with one of the larger sites on the other end of Eugene (and Short Mountain Landfill).

What needs further study

- Is it possible to design a facility that flows properly and provides enough ingress and egress?
- Previous site use (review Environmental Phase I and II).
- Adjacent drainage ditches and stormwater issues must be further investigated.
- Potential for adverse neighborhood impact.

SITE 6: 152 HIGHWAY 58, GOSHEN



Acreage	24.91 acres (5 tax lots)
Total price	\$1,995,000
Price per sq. ft.	\$1.84
Distances	<ul style="list-style-type: none"> • 6.8 miles to I-5 & 105/126 interchange • 1.9 miles to landfill • 12.8 miles to Thurston (Main Street at 126) • 12.3 miles to Santa Clara (Irving and River Road) • 7.9 miles to South Eugene (18th and Chambers)
Quick stats	<ul style="list-style-type: none"> • Good freeway access • Permitting Agency: Lane County • Zoned LI
System components	Site is large enough to accommodate full complement of facilities noted in Section 3, including: Materials Convenience Center for public and/or commercial; Single Stream Material Recovery Facility, and Mixed Waste and Organics Recovery Facility. In addition, the site could accommodate a full scale MSW transfer station if so desired. Property provides limited growth potential and limited storage capacity. Weekend public queueing could be a challenge.
Advantages	<ul style="list-style-type: none"> • Freeway access is excellent. • No grading necessary. Site is substantially paved but would need treatment. • Property is fenced. • No adverse neighborhood impacts.
Risks, cons, or problems	<ul style="list-style-type: none"> • Too close to Short Mountain Landfill to provide system synergies. • Weekend queues may be an issue and likely to back-up onto the street based on the property angles. • Site angles make a large portion of property unusable for anything but storage.
Unique considerations	This site could be considered as a potential facility to replace some of the activities currently taking place at Glenwood TS, due to its close geographic location, or it could be a satellite drop-off location that is paired with one of the larger sites on the other end of Eugene (and Short Mountain Landfill). Size of site could be ideal for surge storage space or future alternative use.
What needs further study	<ul style="list-style-type: none"> • Previous site use (review Environmental Phase I and II). • Adjacent drainage ditches and stormwater issues must be further investigated. • Need better clarity on property lines.