

Northeast Recycling and Transfer Station Project

Broad Area Site Screening Report

Final

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King County Department of Natural Resources and Parks,
Solid Waste Division

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Acronyms and Abbreviations

BASS	broad area site screening
CARA	critical aquifer recharge area
Core Cities	cities of Kirkland, Redmond, Sammamish, and Woodinville
County	King County
ESJ	equity and social justice
FSS	focused site screening
GIS	geographic information system
I-405	Interstate 405
NE	northeast
NERTS	Northeast Recycling and Transfer Station
NW	northwest
RTS	recycling and transfer station
SAG	siting advisory group
SWD	Solid Waste Division
SVETA LV	Srivenkateswara Vedic Education and Training Academy Lakshmi Venkateswara Temple
USPS	United States Postal Service

1. Introduction

1.1 King County's Solid Waste Management System

The King County (County) Department of Natural Resources and Parks, Solid Waste Division (SWD) operates a system of eight transfer stations, two drop box facilities, and one regional landfill in King County, Washington (Figure 1-1). Solid waste from businesses and residences in unincorporated King County and 37 King County cities, all but Seattle and Milton, is delivered by commercial collection companies and self-haulers to the transfer stations and drop boxes, transferred into large tractor-trailers or shipping containers, and then transported to the Cedar Hills Regional Landfill in Maple Valley, Washington.

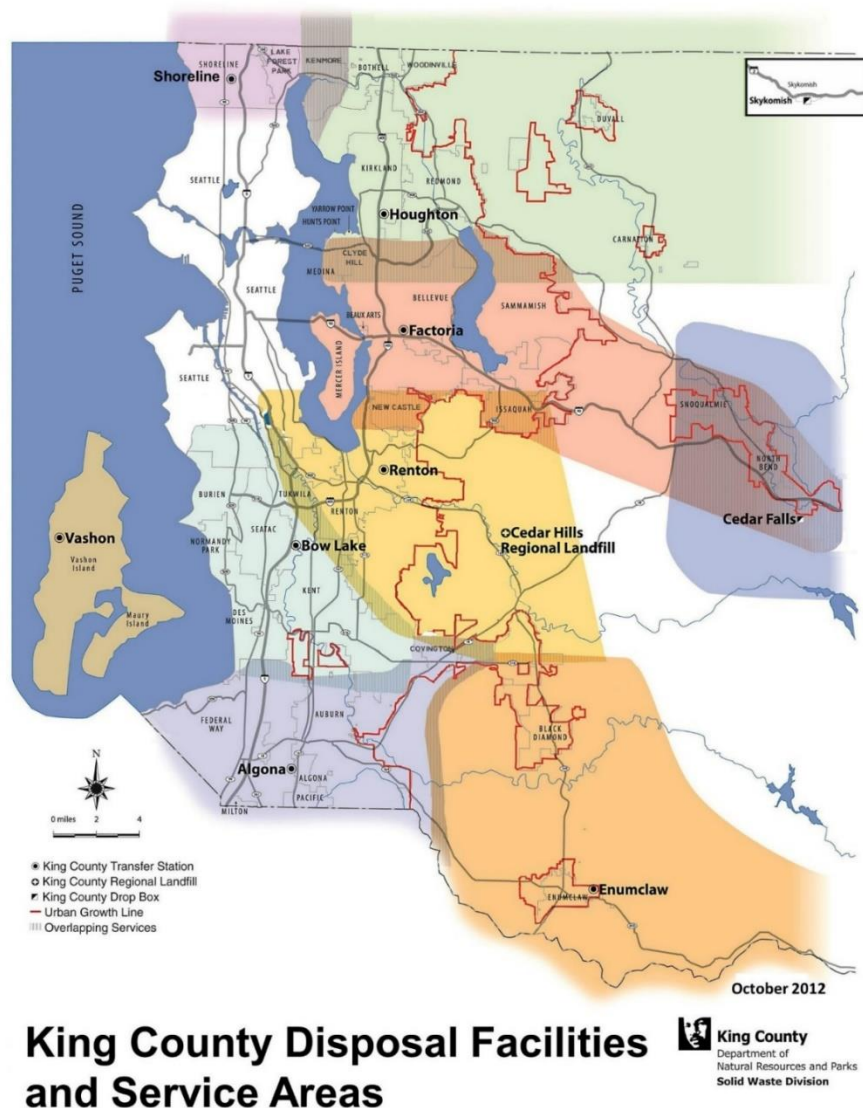


Figure 1-1. King County Disposal Facilities and Service Areas
Northeast Recycling and Transfer Station Project

1.2 Need for a New Recycling and Transfer Station

The 2006 *Solid Waste Transfer and Waste Management Plan* (County 2007), approved by King County Council in 2007, identified the need to replace the existing Houghton Transfer Station. The 50-year-old Houghton Transfer Station is one of the busiest in terms of tonnage and transactions, yet it is undersized and lacks capacity for the type of recycling and moderate risk waste disposal services that are increasingly in demand.

Also, the County's 2019 *Comprehensive Solid Waste Management Plan* (County 2019), which was adopted by 24 cities and the Washington State Department of Ecology, identified the need for a new station to replace the aging Houghton Transfer Station. The new recycling and transfer station (RTS) is proposed to be located in the northeast part of King County, including but not limited to the areas in or around the cities of Kirkland, Redmond, Sammamish, and Woodinville (Core Cities). The new facility will include an enclosed solid waste transfer and processing area; solid waste compactor units; a recycling collection and sorting area; employee facility; scalehouse and weigh station; fueling station; space for onsite customer queuing; and possible moderate risk waste disposal for products from homes and small qualifying businesses.

1.3 Project Schedule

The Northeast Recycling and Transfer Station (NERTS) project spans multiple phases from 2020 to 2027, when the station is anticipated to be operational. Community engagement work will be aligned with each major phase of the schedule: siting, environmental review and permitting, design, and construction. Figure 1-2 shows the master project schedule. As shown, the broad area site screening (BASS) process is one of the early steps in development of the new facility.

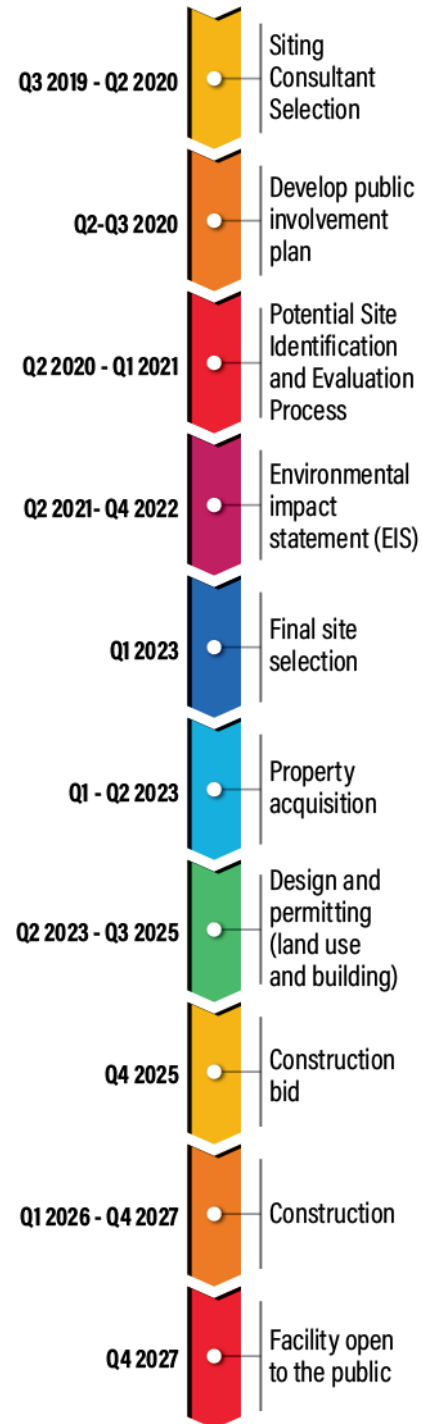


Figure 1-2. Project Schedule

Northeast Recycling and Transfer Station Project

2. Siting Process Overview

2.1 Steps in the Siting Process

As shown on Figure 2-1, there are six main steps in the siting process. The first three steps identify and screen potential sites within the study area using site selection criteria specifically developed for the project. Once these steps are finished, the sites that best meet the screening criteria are assessed on a comparative basis in step four, and the most desirable site(s) are identified for investigation in step five, which is the environmental review process. Finally, a site is selected by the County. This report covers the first two steps: potential site identification and the BASS.

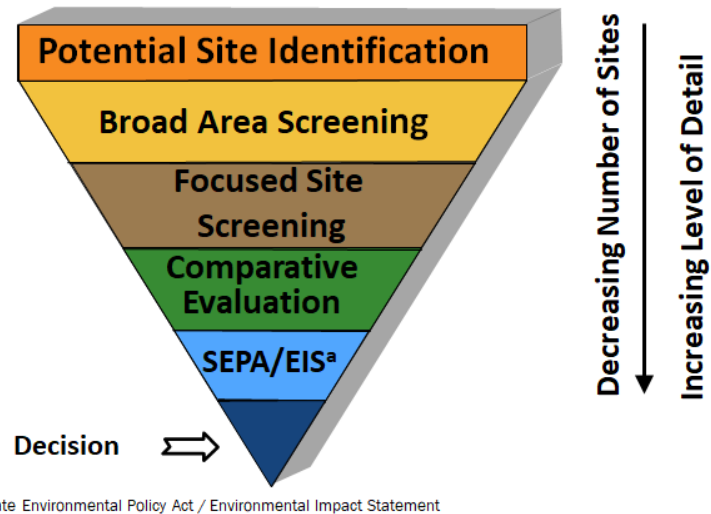


Figure 2-1. Six-Step Siting Process
Northeast Recycling and Transfer Station Project

2.2 Public Involvement

2.2.1 Overview

The communities in northeast King County have a vested interest in the siting, design, and development of this new transfer station; therefore, they will play a key role as the County moves forward with the project. In response, the County is implementing a public involvement process to involve the local communities in King County to understand and consider their aspirations, values, concerns, and insights about the transfer station siting, design, construction, and operation. Frequent and ongoing outreach and communications, proactively reaching out to key stakeholders and historically underrepresented communities, and an adaptive, informational approach will allow the project team (King County staff and consultants) to assess community concerns and adjust strategies, as necessary.

2.2.2 Core Cities

The County is holding regular meetings with representatives of the Core Cities within the NERTS study area, which are the cities of Kirkland, Redmond, Sammamish, and Woodinville. At these meetings senior staff and elected officials of the Core Cities will receive project updates and information and have the opportunity to provide input and feedback on siting, development, and programming and to engage with the County and each other.

2.2.3 Siting Advisory Group

The County established a 22-member siting advisory group (SAG) that includes 16 appointed members representing the Core Cities and unincorporated King County and 6 at-large members. The SAG helped develop and apply site selection criteria, identify community concerns and impacts, create public awareness of the project, provide general review and input, and express opinions and preferences to King County decision-makers. The project team and the Core Cities conducted several outreach activities to recruit members for the SAG, including the following:

- Series of stakeholder interviews;

- Postcards—printed in English, Spanish, Russian, and Simplified and Traditional Chinese—mailed to more than 115,000 homes, businesses, residents, and tenants in the siting area with information about how to apply for one of the six at-large seats for the SAG;
- Facebook post by the City of Redmond on September 23, 2020 promoting SAG recruitment;
- Information shared by the City of Kirkland about SAG recruitment in their weekly newsletter on September 23, 2020; and
- Information shared by the City of Woodinville about the project kick-off and SAG recruitment in their October *Woodinville Wire* newsletter

The SAG's members represent a variety of interests and perspectives in northeast King County. The group is scheduled to meet up to 10 times between mid-October 2020 and June 2021, when it will review and evaluate the top sites that result from the BASS. Figure 2-2 outlines the process followed for the first six of those meetings where SAG members will provide input to the siting process. Accessibility resources were provided to members that requested them. Meetings are open to the public to attend and a public comment period is included in each meeting.



Figure 2-2. Siting Advisory Group Site Evaluation Process
Northeast Recycling and Transfer Station Project

3. Broad Area Site Screening

3.1 Geographic Information System Search to Identify Potential Sites

Based on the County's mission, vision, and values, the following pass/fail criteria, also called exclusionary criteria, establish minimum standards that must be met for potential sites to qualify for further consideration. These criteria were used to identify an initial list of potential sites.

- PF1. Site is within the study area (as depicted in the *2019 Comprehensive Solid Waste Management Plan*; County 2019).
- PF2. Site is within the contiguous King County Urban Growth Area.
- PF3. Site is located outside of a Federal Emergency Management Agency-defined 100-year flood plain.
- PF4. Site is free of known historical, archeological, or cultural designations.
- PF5. Site is not designated as farmland preservation.

These criteria were used along with the following geographic information system (GIS) filters to identify sites for further analysis.

- GIS1. Site is at least 8 acres in size or a combination of smaller parcels totaling at least 8 acres.
- GIS2. Site is not zoned agricultural or residential.
- GIS3. Site is within 1 mile of a major arterial or highway with appropriate truck routes (this criterion may be refined after analysis).
- GIS4. Property cost is within project budget (based on assessed value).
- GIS5. Parcels designated as park or open space that meet other criteria will be reviewed to assess any potential opportunity.

The complete set of site selection criteria and the methodology used to evaluate sites is described in a Site Selection Criteria technical memorandum (Jacobs, 2021) available on the project website.¹

The initial GIS screening process identified 109 parcels of land of 8 to 20 acres in size that met the exclusionary criteria and GIS filters. A second GIS screening included searching for groupings of adjacent (or adjacent separated by right-of-way) 2-acre minimum parcels that could be combined to result in a potential site of at least 8 acres. A visual inspection of these parcel combinations resulted in 18 parcel combinations that were added to the 109 initial parcels and subject to further analysis.

Maps showing candidate parcels and parcel combinations resulting from the initial screening process are shown on Figures 3-1 and 3-2. Each map includes a boundary referencing the study area defined for this project.

¹ <https://kingcounty.gov/depts/dnrp/solid-waste/facilities/northeast.aspx>

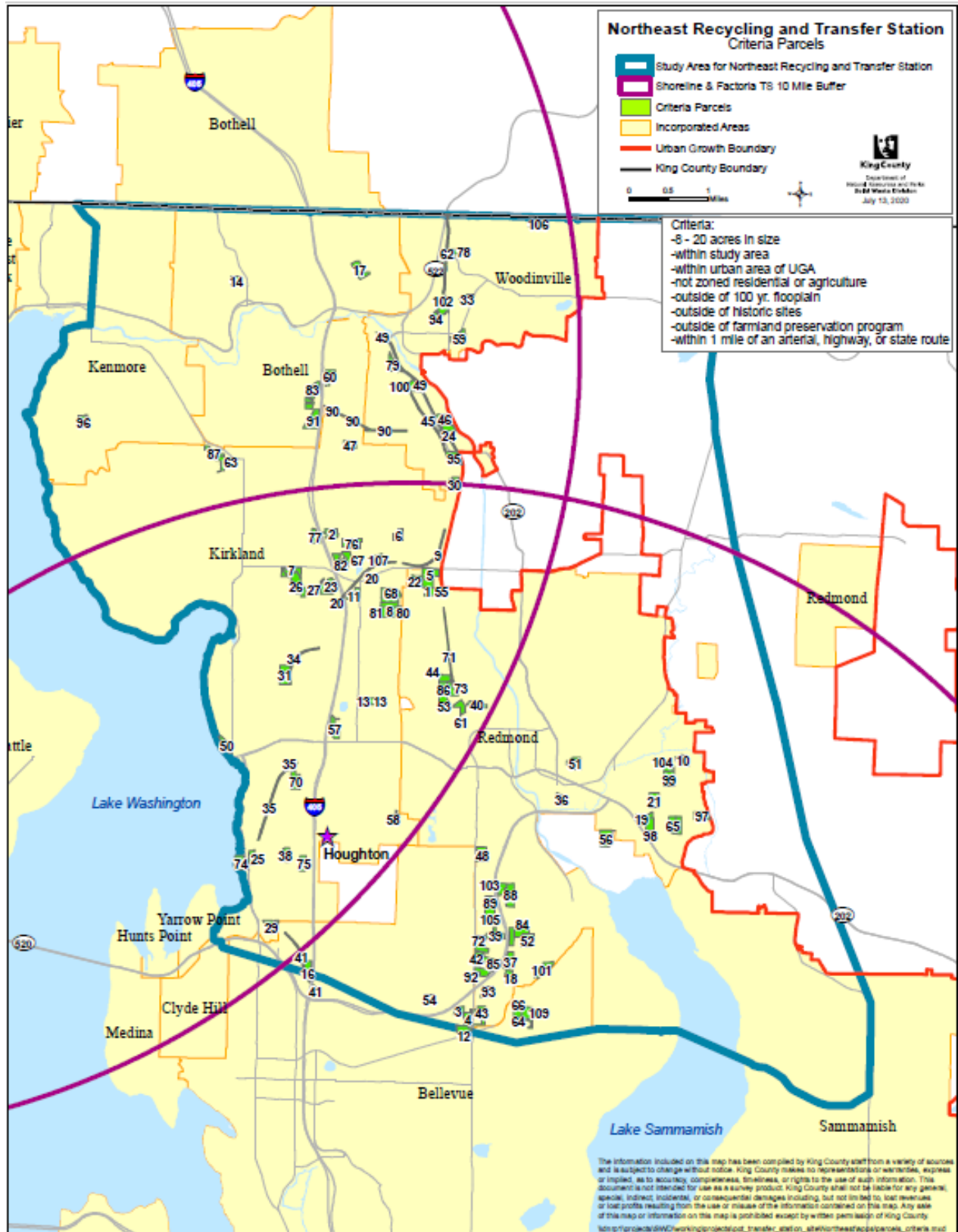


Figure 3-1. Results of Initial GIS Parcel Screening
Northeast Recycling and Transfer Station Project



3.2 Screening Approach to Select Top 15 Sites

A desktop review was conducted of each parcel and parcel combination to select sites for further evaluation. This review considered the following factors:

- **Site characteristics.** Is the site shape conducive to RTS development (that is, not too narrow)?
- **Cost.** Is the site unduly expensive (assessed value more than \$40 million)?
- **Environmental constraints.** Does the site contain critical areas (for example, streams, steep slopes) so significant that a RTS would be difficult-to-impossible to develop?
- **Nearby sensitive receptors and land uses.** Does the site have a current land use, or is it near land uses, that is incompatible with the activity and traffic associated with a RTS? Following are examples are the following:
 - High-traffic retail facilities important to a neighborhood or city such as small malls or a big box store.
 - Parcels that were part of a multi-parcel business or institution that could not be readily separated for use as an RTS (for example, parking and landscaping for an educational facility).
 - A church or dense residential uses nearby.

In addition, parcels adjacent to those initially identified were reviewed to consider if their addition could prove to be beneficial for RTS development. The result was narrowing the 109 parcels identified in the initial screening analysis to 15 parcels or parcel combinations for further analysis.

3.3 Top 15 Sites

The results of the GIS-based screening identified 15 sites (referred to as the top 15 sites) for further evaluation. Figure 3-3 shows the location of these sites. Table 3-1 lists the cities where these sites are located.

Table 3-1. Number of Top 15 Sites by City

Northeast Recycling and Transfer Station Project

Location	Number of Sites
Woodinville	2
Kirkland	5
Redmond	8

Table 3-2 describes the size, zoning, current use, and critical areas located on each of the top 15 sites. Note that Site 12 (Houghton Park-and-Ride) is considerably smaller in size than the other sites and the GIS screening criteria. For a variety of reasons (including the Park-and-Ride being underutilized when compared with others in the regional transit system), this site has been considered for some time as a potential location for NERTS and it was retained in the list of the top 15 sites. Appendix A provides four figures for each of the top 15 sites that include a location plan, site conditions and topography plan, photo plan, and site photos.



Table 3-2. Description of Top 15 Sites*Northeast Recycling and Transfer Station Project*

Site Name	City	Size (acres)	Zoning	Current Use	Critical Areas
1. Schuyler Rubber	Woodinville	41	Park	Industrial (general purpose), vacant (single family)	Erosion hazards exist; several unnamed streams; south side could be wet with streams, lowland fan
2. S Norway Hill Park	Kirkland	14.7	Park, Residential	Park, group home	Steep slopes
3. Willows Road and NE 124th Street	Redmond	15.4	Business Park	Vacant commercial	Mapped stream along southern boundary; steep slopes; seismic hazard on eastern boundary
4. South of Cadman	Redmond	17.8	Northeast Design District, Multi-Family Urban	Mining, quarry, ore processing	Potential landslide hazard; wetlands on western edge; Redmond CARA
5. Cadman/Olympian	Redmond	17.1	Industrial	Mining, quarry, ore processing	Groundwater source onsite; Redmond CARA
6. Crane Aerospace	Redmond	15.5	Business Park	High-tech / High-flex	Unnamed stream on northern boundary; steep grades
7. Physio-Control	Redmond	12.2	Business Park	High-tech / High-flex	Unnamed creeks onsite
8. Mini Storage	Kirkland	14.9	Commercial	Retail store	None identified
9. Winsome Trading	Woodinville	13.6	Industrial	Warehouse	Seismic hazard identified; potential stream – to be investigated
10. United States Postal Service	Redmond	13.6	Manufacturing Park	Post office, Post service	No mapped wetlands, depressional pond identified during site visit, Redmond CARA
11. Houghton Recycling and Transfer Station (and part of Landfill)	Kirkland	25.4	Park	Transfer station, ball fields	None identified (closed landfill)
12. Houghton Park-and-Ride	Kirkland	5.1	Park, Residential	Transfer station, Park-and-Ride	None identified
13. Corporate Park near Heronfield	Kirkland	15.9	Office, Park	High-tech / High-flex	Western parcel part of Heronfield Wetlands Park but no mapped wetlands; western portion of western parcel mapped as erosion hazard; tree clearing; potential depressional wetlands/ponds
14. Watson Asphalt and DTG Recycle	Redmond	17.5	Industrial	Industrial, vacant industrial	Evans Creek crosses northern and eastern portions of largest parcels; mapped floodway on all parcels (areas with a 1% annual chance of flooding); mapped wetland in northeast corner of parcel; Redmond CARA
15. Aerojet Rocketdyne	Redmond	25.4	Business Park	High-tech / High-flex	Unnamed streams mapped on site

CARA = critical aquifer recharge area

3.4 Screening Approach to Select Top Four Sites

During the BASS, the following criteria were used to develop a short list of four sites for further evaluation during focused site screening (FSS).

- BASS1. Appropriate site characteristics (size and shape accommodate the required features of a modern transfer station facility).
- BASS2. Few negative environmental considerations that cannot be mitigated (for example, sites with sensitive environmental areas, such as steep slopes, large wetlands, heavily wooded, or other environmental issues).
- BASS3. Few onsite property improvements that would require relocation (the presence of active onsite businesses or uses requiring relocation will make development more expensive and disruptive).
- BASS4. Relatively few nearby sensitive receptors (such as schools, parks, residences, and hospitals).
- BASS5. Site can be developed with no unresolved equity and social justice (ESJ) concerns. Any ESJ concerns are mitigated by the NERTS Equity Impact Review or other supplemental ESJ project.
- BASS6. Site can be developed with minimal known geotechnical concerns (including geohazards, landslides, seismic).
- BASS7. Any site located within a Critical Aquifer Recharge Area (CARA) will be noted for further assessment.

A windshield tour was conducted of each of the top 15 sites to view site characteristics. The project team then evaluated each of the sites against the BASS criteria.

3.4.1 Scoring Sites Against Criteria

The top 15 sites were scored by the project team against the BASS criteria using a scale of 1 to 5, where 1 is a poor score and 5 is an excellent score for each criterion. Table 3-3 further defines the meaning of low (1), medium (3), and high (5) scores for each criterion. As shown, criterion BASS7 was not scored, but sites located within the City of Redmond's CARA are noted for further evaluation. Also shown are two other considerations scored during the initial screening: city master plan alignment and few notable traffic impacts.

Table 3-4 provides an evaluation of each site against the BASS scoring criteria and the two other considerations. Scores in Table 3-4 are color-coded on a graduated scale from 1=red to 3=yellow to 5=green. Table 3-5 provides a rationale for each score assigned. These scores were considered by the project team in the screening process, along with input from the Core Cities about the sites.

Table 3-3. Description of Measurement Scales
Northeast Recycling and Transfer Station Project

Score	BASS Criteria							Other Considerations	
	1 Appropriate Site Characteristics	2 Few Negative Environmental Characteristics	3 Few Relocations Required	4 Few Nearby Sensitive Receptors	5 No Unresolvable ESJ Concerns	6 No Known Geotechnical Concerns	7 Site Located Within CARA	City Master Plan Alignment	Few Notable Traffic Impacts
1 Poor	Site may be feasible, but would likely require elimination of many desirable features.	Environmental issues exist that will be quite difficult or costly to mitigate and are likely to result in significant operating constraints.	More than five businesses or organizations would need to be relocated and characteristics of this location will make it challenging to relocate some of them successfully.	Multiple sensitive receptors (schools, parks, residences, or hospitals) are located within 100 feet of the site and mitigation of proximity impacts would be challenging and costly.	For the BASS evaluation, sites were scored relative to each other on a 1-5 scale based on an initial screening of relevant ESJ issues, such as environmental impacts,	Geotechnical issues exist that are likely to be more challenging and costly to address than experienced during development of any RTS.	Noted for further assessment.	Siting the RTS at this location would be in direct conflict with the relevant city master plan.	Very certain that notable traffic impacts would result from siting the RTS at this location, requiring extensive mitigation and likely resulting in notable community opposition.
3 Moderate	Site likely to allow for inclusion of most desirable features; some limitations may arise.	Some environmental issues exist that will require mitigation; some operating constraints are likely as a result.	One to four businesses or organizations would need to be relocated and characteristics of this location will make it somewhat difficult to relocate at least one of them successfully.	No more than one sensitive receptor (schools, parks, residences, or hospitals) is located within 500 feet of the site, and any impacts could be mitigated reasonably.	convenience to all, land stewardship, cost (could money be better used elsewhere in the community), historical events related to site, does it go against values of indigenous holders of knowledge. An equity impact review will be conducted of sites during environmental review.	Some known geotechnical concerns, but not unlike what has been present during development of other RTSS.		Siting the RTS at this location is somewhat inconsistent with the relevant city master plan.	Traffic impacts would result from siting the RTS at this location that would require some mitigation; some community opposition is likely.
5 Excellent	Site highly likely to allow for inclusion of all desirable features with few or no limitations.	Only very minor environmental issues exist. Mitigation will be straightforward and only minor operating constraints are likely.	No relocations would be required.	No sensitive receptors (schools, parks, residences, or hospitals) are located within 500 feet of the site.		No known geotechnical concerns.		Siting the RTS at this location would be completely consistent with the relevant city master plan.	Very certain that few notable traffic impacts would result from siting the RTS at this location.
BASS CARA ESJ RTS	broad area site screening critical aquifer recharge area equity and social justice recycling and transfer station								

Table 3-4. Evaluation of Top 15 Sites Against the BASS Criteria, 1-5 Scale

Northeast Recycling and Transfer Station Project

Site Name	BASS Criteria							Other Considerations	
	1 Appropriate Site Characteristics	2 Few Negative Environmental Characteristics	3 Few Relocations Required	4 Few Nearby Sensitive Receptors	5 No Unresolved ESJ Concerns	6 No Known Geotechnical Concerns	7 Locating Within CARA	City Master Plan Alignment	Few Notable Traffic Impacts
1. Schuyler Rubber	3.0	3.0	3.0	3.0	1.0	3.0	No	2.0	3.0
2. S Norway Hill Park	3.0	4.0	4.0	2.0	1.0	4.0	No	2.0	2.0
3. Willows Road and NE 124th Street	5.0	3.5	5.0	5.0	5.0	4.0	No	3.5	4.0
4. South of Cadman	4.0	3.5	5.0	3.0	3.0	4.0	CARA	3.5	2.0
5. Cadman/Olympian	5.0	5.0	2.0	5.0	3.0	3.0	CARA	5.0	3.0
6. Crane Aerospace	3.0	4.0	4.0	4.0	5.0	3.0	No	4.0	3.0
7. Physio-Control	4.0	4.0	4.0	3.5	3.0	4.0	No	4.0	3.0
8. Mini Storage	3.0	5.0	3.0	2.5	3.0	5.0	No	4.0	2.0
9. Winsome Trading	3.5	4.0	3.0	4.0	3.0	3.0	No	5.0	3.0
10. United States Postal Service	5.0	4.0	3.0	3.0	3.0	4.0	CARA	5.0	2.0
11. Houghton RTS (and part of Landfill)	5.0	5.0	5.0	2.0	3.0	5.0	No	3.0	2.0
12. Houghton Park-and-Ride	1.0	5.0	4.0	2.0	3.0	5.0	No	3.0	2.0
13. Corporate Park near Heronfield	3.5	4.0	1.0	3.0	5.0	4.0	No	2.5	3.0
14. Watson Asphalt and DTG Recycle	3.5	4.0	2.0	3.0	5.0	4.0	CARA	2.5	3.0
15. Aerojet Rocketdyne	3.5	3.0	4.0	3.5	2.0	3.0	No	4.0	2.0
BASS	broad area site screening								
CARA	critical aquifer recharge area								
ESJ	equity and social justice								
RTS	recycling and transfer station								

Table 3-5. Rationale for Scores Assigned to Top 15 Sites
Northeast Recycling and Transfer Station Project

Site ID	Site Name	Site Visit Notes	Appropriate Site Characteristics	Few Negative Environmental Characteristics	Few Nearby Sensitive Receptors	No Unresolvable ESJ Concerns	No Known Geotechnical Concerns ^a	City Master Plan Alignment	Few Notable Traffic Impacts
1	Park southwest of Woodinville	This site would be challenging to develop with a lot of concrete required, because the flat/low angle slope is very narrow, perhaps 100 to 200 feet, before it goes up an extremely steep bank.	The site is not great; sloped terrain would present a big challenge.	Erosion hazards and several unnamed streams exist; the south side could be wet with streams and lowland fan.	Residential area lies to the east; the western parcel mapped as King County park potential regional trail site.	This site has a great amount of acreage, but usable space is unknown. It was donated for a park, thus King County would not want the community to believe that a park was taken from them to create a transfer station. This site is not as central for access from south, either for services or for employee transit, training, and/or community gathering space.	Seismic design is C to E; liquefaction potential is very low to low/moderate.	Future land use designation is Public Park.	Principal arterials are used to reach regional system, but some impacts are likely.
2	South Norway Hill Park	Access off of 124th Avenue NE is needed. No access is available to the South Norway Hill Park was identified. From 124th Avenue NE going west, the site is relatively flat and usable then has dense trees with fairly steep slope going downhill from 124th Avenue NE in the park. The site likely could work, but it would be a major logging operation, and much of site would be infeasible and/or high cost because of slope. The park is lined with single-family residential homes, so buffers would have to remain.	The site is surrounded by residential receptors, which could limit options. Park zoning would require zoning modification. Public comments were received on park regarding homeless issues. Existing treatment center will need to be removed for access from 124th Avenue NE.	The site has steep slopes.	Low-density residential areas are on all sides of the site, which is designated as a park.	This site is currently greenspace, greenspace would be removed from the neighborhood. Second growth trees were observed. The RTS would not be the best use of space; rather, the site should be turned into usable greenspace through other mechanisms.	Seismic design is C to D; liquefaction potential is very low.	Comprehensive Plan Land Use designation is Park/Open Space.	The route includes a local street. The site is near residential neighborhoods, and strong community opposition is expected.
3	Willows and NE 124th Street	The site is owned by Quadrant, and a Quadrant sign was observed when driving by the site going up the hill.	This site has challenging slope and wetlands to work around.	A mapped stream is located along the southern boundary. Steep slopes and seismic hazard are located on eastern boundary.	No sensitive receptors have been Identified.	If stream can be enhanced a salmon habitat can be created or riparian habitat restored with enough usable space for both facility, greenspace, and community benefit space separately.	Seismic design is C to D; liquefaction potential is very low to low/moderate.	Comprehensive Plan Land Use designation is Design District, which could pose some difficulty for allowed use.	This site uses principal arterials to reach the regional system; congestion is near freeway entrance, and a new signal likely required.
4	South of Cadman	This site has wetlands then a steep slope (going west) to the Cadman gravel mine accessed on west side; to the east is a historical brick road (established 1913). Driving south, a sign was observed that said the site to the southeast is the Evans Creek Natural Area.	This site has challenging slope and wetlands to work around.	The site has a potential landslide hazard; wetlands are located on the site's western edge, located in CARA.	A residential area is adjacent to the southeastern boundary.	This site is located in the Redmond CARA. If mitigated, more contiguous forest could be created for community benefit and enhancement. However, water pollutant issues will be top concern.	Seismic design is C to D; liquefaction potential is very low.	Comprehensive Plan Land Use designation is Design District, which could pose some difficulty for allowed use.	This is a congested area; the route to the regional system passes through intersections likely to require mitigation; access via historic brick road.
5	North of Cadman	This is a very industrial area and has good road access, not far from SR 202 and SR 520. The location is not the best system wise, because it is in the southeast part of study area, which is much closer to Factoria than Shoreline.	This site has good size and shape.	A groundwater source is on site; this site is a groundwater management area.	No sensitive receptors have been Identified; Bear Creek Park is located approximately 1,200 feet north.	This site is located in the Redmond CARA.	Seismic design is C to E; liquefaction potential is low to moderate.	Comprehensive Plan Land Use designation is Manufacturing Park.	This is a congested area, but has a 4- to 5-lane road with high speed limit; route to the regional system passes through intersections that could require mitigation.
6	South Willows Road	Both buildings appear vacant, and BNB Builders is rebuilding something on the site. A fairly steep grade is on site and must be dealt with; this is not likely to be a willing seller considering rebuild in progress.	This site has challenging slopes to work around.	An unnamed stream is located on northern boundary with steep grades.	This site is adjacent to Redmond Central Connector and Willows Run Golf Course; however, on other side of Willows Road; parcels to west are designated single-family urban and/or constrained.	This site has excellent greenspace buffer. Stream for restoration and daylighting located at the back of parcels would be excellent elements of interpretive trail and community benefit.	Seismic design is C to E; liquefaction potential is very low to moderate.	Comprehensive Plan Land Use designation is Business Park.	This site is farthest from regional system; the route to regional system passes through intersections likely to require mitigation.
7	North Willows Road	The terraced parking by grade is not bad. The North building has power lines behind them (to the west) and another building about 150 yards west. North of the north building is an undeveloped field that does not appear to be wetlands.	An already sloping terrain is being excavation to allow for lower level compactor and loadout; steep entry road climb measures about 40 feet.	Unnamed creeks are located on site.	This site is adjacent to Redmond Central Connector and Sammamish Valley Park; however, on other side of Willows Road, single-family urban and /or constrained land use are to the west.	This site would be more difficult to imagine enhancing stream due to road location.	Seismic design is C to D; liquefaction potential is very low.	Comprehensive Plan Land Use designation is Business Park.	This site is the farthest from regional system; the route to the regional system passes through intersections likely to require mitigation.

Table 3-5. Rationale for Scores Assigned to Top 15 Sites
Northeast Recycling and Transfer Station Project

Site ID	Site Name	Site Visit Notes	Appropriate Site Characteristics	Few Negative Environmental Characteristics	Few Nearby Sensitive Receptors	No Unresolvable ESJ Concerns	No Known Geotechnical Concerns ^a	City Master Plan Alignment	Few Notable Traffic Impacts
8	South of Totem Lake	The mini-storage site is a reasonable, flat site comprising 14.6 acres close to NE 124th Street exit to I-405; local traffic is very congested. Comfortable site access for trailers, packers, and self-haul traffic is hard to conceptualize. The third parcel (11815 124th Avenue NE) measuring 9.3 acres) comprises a series of small businesses, mostly restaurants and similar small businesses.	This site would be a bit small but is otherwise reasonable.	No negative environmental characteristics were identified.	This site is adjacent to Cross Kirkland Corridor; Motel 6 is located across Cross Kirkland Corridor and a Montessori school is located on adjacent property to the south.	This site would relocate a number of businesses. The high expense would take funds away from community benefit and operations enhancement.	Seismic design is C; liquefaction potential is very low.	Comprehensive Plan Land Use designation is Commercial.	This site uses principal arterials to reach regional system; developing a RTS would conflict with transportation goals of the City Comprehensive Plan.
9	Warehouse southwest of Woodinville	Winsome has 36 loading bays with trucks from FedEx, UPS, other trailers. The building is only about 20 feet high but reusing part of the building for small self-haul is possible. Two small detention ponds are located to east of Winsome, measuring about 10 feet by 6 feet and 6 feet by 30' feet, respectively. Moving east is NW Utilities, which has honey buckets on site. Continuing east is some low-tech industrial business, then a big open field.	This site is good. Landslide mitigation issues were noted above slope at rear of property.	A seismic hazard has been identified; a potential stream will be determined.	This site is adjacent to a regional trail corridor to the west; located to the east (but on other side of Willows Road), a school is not far southeast of site across Redmond-Woodinville Road.	This site is not as central for access from south, either for services or for employee transit, training, and community gathering space. A stream runs through to Sammamish River. Daylighting and enhancing habitat is a priority.	Seismic design is D to E; liquefaction potential is low to moderate.	Future land use designation is Industrial.	The route to the regional system passes through intersections likely to require mitigation.
10	USPS	This site comprises a large wetland area at back of site (with loop road that goes around it) with good access.	This site is good size and shape.	No mapped wetlands are present, but depressional pond has been identified during site visit. No others have been identified.	Cedar Lawns Memorial Park and Funeral Home are adjacent to the west; Islamic Center of Redmond is to southwest; and SVETA LV Temple is to northwest, all between 500 to 1,000 feet.	Located in the CARA, this site poses a threat to groundwater resources; however, turning concrete area into greenspace would be a community benefit.	Seismic design is C to D; liquefaction potential is very low to moderate.	Comprehensive Plan Land Use designation is Manufacturing Park.	The route to the regional system passes through multiple intersections likely to require mitigation.
11	Houghton RTS + Landfill	Houghton RTS could be expanded to the north, but it would have to consider limits of closed landfill. If expanded, the development site may encroach on one or more ballfields. A “bench” looks to have been located where field could be relocated.	This site continues its existing use and provides buffer for residential areas. Existing landfill will require gas membrane under new construction.	No negative environmental characteristics were identified (closed landfill)	Bridle Trails State Park is across NE 60th Street; residential areas are on all other sides. Benjamin Franklin Elementary School is 2,200 feet east of NE 60th Street with little league fields.	Maintaining the existing community would benefit the space. Fields would need to be relocated or trade off of community benefit.	Seismic design is C to D; liquefaction potential is very low.	Comprehensive Plan Land Use designation is Park/Open Space and LDR surrounding uses.	This site is near residential neighborhoods and along street with 25-mph posted speed.
12	Houghton Park-and-Ride	This is a very small site. Ingress and egress would require some careful thought. A residential area is near the site border on its east site.	This site is very small, and some compromise to programming may be required. Some slope is located to the west, and most of site is paved.	No negative environmental characteristics were identified.	Residential areas are on three sides of the park-and-ride. The Holy Family School and Church is across main arterial, about three to four blocks northeast.	Losing a park-and-ride would lessen transportation access near the site.	Seismic design is C to D; liquefaction potential is very low.	Low-density residential is on site and for surrounding uses.	Site ingress and egress will be complex near the freeway on-ramp and along streets with 30-mph posted speed.
13	Corporate Park near Heronfield	This site could merge with Jasper's Dog Park, but that totals only 4.8 acres plus a bit more for the park; the rest of Heronfield Wetlands is very dense wetlands. A pretty daunting wetlands (about 30 feet deep) is part of the 11,429-acre parcel, so the 3.7 acres may be challenging construction. This site would require acquiring Jaspers Dog Park and finding some way to work around the wetlands and joining all parcels.	An already sloping terrain is being excavated to allow for lower-level compactor and loadout.	Western parcel is part of Heronfield Wetlands Park, but no wetlands are mapped. The western portion of the western parcel is mapped as erosion hazard. Tree clearing and potential depressional wetlands and/or ponds are also present.	Western parcel is part of Heronfield Wetlands Park, and single-family residential areas are to south.	This site has greenspace to connect to and add contiguous forest and greenspace. Does wetland impact usable space? The site is very central, close to I-405. Connecting with greenspaces on either side through interpretive trail is possible.	Seismic design is D; liquefaction potential is very low.	Comprehensive Plan Land Use designation is Park/Open Space and Office.	The route to the regional system passes through intersections likely requiring mitigation.

Table 3-5. Rationale for Scores Assigned to Top 15 Sites
Northeast Recycling and Transfer Station Project

Site ID	Site Name	Site Visit Notes	Appropriate Site Characteristics	Few Negative Environmental Characteristics	Few Nearby Sensitive Receptors	No Unresolvable ESJ Concerns	No Known Geotechnical Concerns ^a	City Master Plan Alignment	Few Notable Traffic Impacts
14	Recycling and Paving	This is a very industrial area with good road access; it is not far from SR 202 and SR 520. The location is not the best system wise, because it is in the southeast part of study area, much closer to Factoria than Shoreline.	This site is good size and shape.	Evans Creek crosses northern and eastern portions of largest parcels. A mapped floodway is on all parcels (these areas have a 1% annual chance of flooding). A mapped wetland is located in the northeast corner of the site.	Martins Park and Evans Creek Trail are to the east, and Arthur Johnson Park is to south.	This site is located in the Redmond CARA, and Evans Creek runs through one edge of property.	Seismic design is C to E. Liquefaction potential is low to moderate.	Comprehensive Plan Land Use designation is Manufacturing Park and Semi-Rural.	The route to the regional system passes through multiple intersections likely requiring mitigation; access includes a local road.
15	Central Willows Road	This site has a fairly steep access road (more than packers and trailers would prefer it but probably feasible). A long, flat bench is present that would work for a RTS, and then steep treed slope is present traveling east.	Some slopes would need to be worked around, but large bench could be worked with.	Unnamed streams are mapped on site.	Lake Washington Institute of Technology is located 2,000 feet to the northwest.	A great amount of usable space is available for the proposed facility, as is operations ease of use, community benefit, and ADA parking. The site has opportunity to engage nearby Lake Washington Institute of Technology. Daylighting and restoring stream habitat is a priority.	Seismic design is C to D. Liquefaction potential is very low.	Comprehensive Plan land use designation is Business Park. Parcels to west are designated Single-Family Urban/Semi-Rural.	This site is the farthest from regional system; the route to regional system passes through intersections likely to require mitigation.

^a Seismic design class provides some measure of the potential for strong shaking in a particular area during an earthquake. Site Class B represents a soft rock condition, where earthquake shaking is neither amplified nor reduced by the near-surface geology. Site Classes C, D, and E represent increasingly softer soil conditions that result in a progressively increasing amplification of ground shaking. Site Class F is reserved for unusual soil conditions, where prediction of the amplification of earthquake shaking can only be determined by a site-specific evaluation.

CARAcritical aquifer recharge area

I-405interstate 405

NEnortheast

NWnorthwest

RTSrecycling and transfer station

SRstate route

SVETA LV Srivenkateswara Vedic Education and Training Academy Lakshmi Venkateswara Temple

USPSUnited States Postal Service

3.4.2 City Input About Top 15 Sites

The top 15 sites were presented and discussed with city representatives at a series of Core Cities meetings. Notable preliminary comments and concerns expressed by the cities are summarized in Table 3-6. The cities' comments and concerns were considered by the project team during the scoring process.

Table 3-6. Preliminary City Comments and Concerns About Top 15 Sites
Northeast Recycling and Transfer Station Project

Site Name	City	Comment
1. Schuyler Rubber	Woodinville	Very steep property with landslide risk.
2. S Norway Hill Park	Kirkland	Parkland (South Norway Hill Park) surrounded on three sides by a medium- to high-density residential area. It would be a significant change in use and would likely be vigorously opposed by the residents abutting the property.
3. Willows Road and NE 124th Street	Redmond	Under design for development.
4. South of Cadman	Redmond	Under design for development. Located in Redmond CARA.
5. Cadman/Olympian	Redmond	Located in Redmond CARA.
6. Crane Aerospace	Redmond	Under design for development.
7. Physio-Control	Redmond	No notable initial comments.
8. Mini Storage	Kirkland	Located at the core of the Totem Lake Urban Center and would be in conflict with future economic development. Conflicts with transportation goals in the City Comprehensive Plan.
9. Winsome Trading	Woodinville	No notable initial comments.
10. United States Postal Service	Redmond	Located in Redmond CARA.
11. Houghton RTS (and part of Landfill)	Kirkland	City not opposed to further consideration of the current Houghton RTS property as a potential site for NERTS.
12. Houghton Park-and-Ride	Kirkland	City not opposed to further consideration of the Houghton Park-and-Ride site as a potential site for NERTS.
13. Corporate Park near Heronfield	Kirkland	Includes large wetland and critical areas, has much wildlife, has a high risk of landslide, and would be a significant change in use.
14. Watson Asphalt and DTG Recycle	Redmond	Located in Redmond CARA.
15. Aerojet Rocketdyne	Redmond	No notable initial comments.

CARA critical aquifer recharge area
NERTS Northeast Recycling and Transfer Station
RTS Recycling and Transfer Station

3.5 Top Sites

The project team presented the results shown in Section 3.4 to County decision-makers. After deliberation, the County elected to move forward the four sites shown in Table 3-7 to the next stage of evaluation, the FSS. Figure 3-4 present maps locating the top four sites.

Table 3-7. Top Sites for Evaluation in the Focused Site Screening
Northeast Recycling and Transfer Station Project

Site Name	City	Size (acres)
3. Willows Road and NE 124th Street	Redmond	15.4

Table 3-7. Top Sites for Evaluation in the Focused Site Screening*Northeast Recycling and Transfer Station Project*

Site Name	City	Size (acres)
9. Winsome Trading	Woodinville	13.6
11. Houghton RTS (and part of Landfill)	Kirkland	25.4
12. Houghton Park-and-Ride	Kirkland	5.1

RTS recycling and transfer station



3. Willows Road and NE 124th Street



9. Winsome Trading



11. Houghton RTS (& part of Landfill)



12. Houghton Park-and-Ride

Figure 3-4. Top Sites for Evaluation in the Focused Site Screening*Northeast Recycling and Transfer Station Project*

4. Focused Site Screening—Evaluation of the Top Sites

The top four sites from the BASS will be evaluated in more detail in the FSS. That evaluation will assess the sites from a number of perspectives including functional criteria, community criteria, and input from the Core Cities and the public. The result of the FSS will be selecting which sites will proceed into the environmental review process.

4.1 Evaluation Against Functional Criteria

During the FSS, the project team will conduct a more in-depth evaluation of the top four sites against a set of functional criteria. The functional criteria have been developed by the project team with input from the Core Cities. This evaluation will be a weighted criteria evaluation (using multi-objective decision analysis principles) that ranks the top sites (from “best” to “worst”).

4.2 Evaluation Against Community Criteria by the Siting Advisory Group

Concurrent with the evaluation of sites against the functional, the SAG will conduct a similar evaluation against criteria important to the community, and rank of the top sites from best to worst.

4.3 Core Cities and Public Input

County staff will present the screening evaluations to the Core Cities and request feedback about each site. An extensive public involvement effort will seek input from residents and other stakeholders within the NERTS study area.

4.4 Selecting Sites for Environmental Review

County SWD management will consider the results of the site rankings from the functional and community criteria evaluations, input from the Core Cities, and feedback from residents and other stakeholders within the NERTS study area. The SWD will then select sites to move forward into environmental review based on site rankings and other factors; the site rankings from the functional and community criteria evaluations do not indicate a preference by the County.

5. References

King County (County). 2007. *2006 Solid Waste Transfer and Waste Management Plan*. Department of Natural Resources and Parks, Solid Waste Management Division.

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<https://kingcounty.gov/depts/dnrp/solid-waste/about/planning/comp-plan.aspx>.

Jacobs Engineering Group Inc. (Jacobs). *Site Selection Criteria*. Technical Memorandum. Prepared for the Northeast Recycling and Transfer Station, Project E00633E19, King County Department of Natural Resources and Parks, Solid Waste Division, Seattle, Washington. March 22.

Appendix A

Figures and Photographs for Top 15 Sites²

² Assessed values reported in this appendix are from the King County Department of Assessments at <https://blue.kingcounty.com/Assessor/eRealProperty/default.aspx>.