

# South County Recycling and Transfer Station Project

## Draft Environmental Impact Statement



**King County**

Department of  
Natural Resources and Parks  
**Solid Waste Division**

Waste  
Prevention

Resource  
Recovery

Waste  
Disposal

[www.kingcounty.gov/solidwaste](http://www.kingcounty.gov/solidwaste)

February 4, 2016

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# Fact Sheet

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## **Project Title:**

South County Recycling and Transfer Station (SCRTS) Project

## **Nature and Location of Proposed Action:**

The *Solid Waste Transfer and Waste Management Plan* (Transfer Plan) recommends replacing the Algona Transfer Station with a new station in the south county area. The SCRTS will be an essential public facility, as defined in Revised Code of Washington 36.70A.200, replacing the function of the existing Algona Transfer Station and providing service enhancements. At a transfer station municipal solid waste is unloaded from collection vehicles and briefly held while it is reloaded onto larger long-distance transport vehicles for shipment to the landfill. The existing Algona Transfer Station was designed and constructed in the mid-1960s and does not meet today's standards for service, efficiency and safety. It cannot provide recycling services to meet King County's environmental goals, nor can it cost-effectively compact waste, which is necessary for efficient transport.

The SCRTS is anticipated to open for business in 2021 following a construction period of approximately 24 months. The station will be designed for an approximately 50-year lifespan. It is anticipated that decommissioning of the existing Algona Transfer Station would occur after a new SCRTS is constructed and operating.

## **Alternatives for SCRTS:**

An extensive screening process was used to find suitable sites for the SCRTS in and around the cities of Algona, Auburn, Federal Way, and Pacific in the south county area. After evaluating sites in the screening process, it was determined that, along with a No Action Alternative, two action alternatives would be evaluated in this Environmental Impact Statement (EIS). Under the No Action Alternative the division would continue to operate the existing Algona Transfer Station for as long as feasible. Alternative 1 would locate, construct and operate the SCRTS at 901 C Street SW in Auburn. Alternative 2 (King County Solid Waste Division's Preferred Alternative) would locate, construct and operate the SCRTS at 35101 West Valley Highway South in Algona.

This Draft EIS evaluates the common design, construction and operational features at both action alternative sites. Comparisons of local regulations, site-specific conditions, potential impacts and mitigation are identified for each element of the environment for the alternatives. Environmental elements evaluated in this Draft EIS include: earth, air, odor and greenhouse gases, water resources, vegetation and wetlands, wildlife and fish, energy and natural resources, noise, hazardous materials, land use, visual quality, cultural resources, transportation, and public services and utilities.

**Proponent:**

King County Solid Waste Division

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**Required Permits and Approvals:**

Construction and operation of a new station is anticipated to be regulated by federal, state, and local regulations identified in the table below.

Permit/Approval Type	Agency
<b>Federal and State</b>	
Cultural Resources Assessment (CRA) for Compliance with Section 106 of the National Historic Preservation Act	U.S. Army Corps of Engineers (USACE) and Washington Department of Archaeology and Historic Preservation (DAHP)
Nationwide Section 404 Permit for Compliance with the Clean Water Act (CWA)	USACE
Hydraulic Project Approval	Washington Department of Fish and Wildlife (WDFW)
Section 7 Endangered Species Act	U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries
Section 401 Certification for Compliance with the CWA	Washington Department of Ecology (Ecology)
National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit and Coverage	Ecology/U.S. Environmental Protection Agency (EPA)
Magnuson-Stevens Act Approval	NOAA Fisheries
Migratory Bird Act Compliance	U.S. Fish and Wildlife Service
Notice of Construction	Puget Sound Clean Air Agency (PSCAA)
Solid Waste Transfer Station Operating Permit	Ecology; Public Health – King County
<b>Local</b>	
Building Height Variance	City of Algona, City of Auburn
Building Permits	City of Algona, City of Auburn
Conditional Use Permit	City of Algona, City of Auburn
Demolition Permit	City of Algona
Grading and Filling Permit	City of Algona, City of Auburn

Permit/Approval Type	Agency
Street Rights-of-Way Vacation	City of Algona
Construction Permit	City of Auburn
Right-of-Way Permit	City of Auburn, City of Algona

**Draft EIS Issue Date:**

February 4, 2016

**Draft EIS Comment Period:**

The comment period for this Draft EIS will be from February 4, 2016 to March 9, 2016

**Location of Materials Incorporated by Reference**

Background materials incorporated by reference in this Draft EIS are available for review at the King County Solid Waste Division, 201 S. Jackson Street, Suite 701, Seattle, Washington.

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- B Noise Methodology and Model Output
- C Visual Quality Rating Analysis Matrix
- D Transportation Data and Figures

# Acronyms

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AkF	Alderwood and Kitsap Soils
AMEC	AMEC Environment & Infrastructure, Inc.
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
BGS	Below Ground Surface
BMPs	Best Management Practices
BPA	Bonneville Power Administration
BNSF	Burlington Northern Santa Fe
BTU	British Thermal Unit
C-1	Mixed Use Commercial Zone
C-3	Heavy Commercial Zone
CAD	Computer-aided Design
CADNA	Control of Accuracy and Debugging for Numerical Applications
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CF	Capital Facilities
CFR	Code of Federal Regulations
County Council	Metropolitan King County Council
CRA	Cultural Resources Assessment
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CRA	Cultural Resources Assessment
CWA	Clean Water Act
CY	Cubic Yards
DAHP	Department of Archaeology and Historic Preservation
dB	Decibel
dBA	A-Weighted Decibels
Division	King County Solid Waste Division
DNR	Washington State Department of Natural Resources
DOH	Washington State Department of Health
DPS	Distinct Population Segment
Ecology	Washington State Department of Ecology
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESA	Endangered Species Act
FAC	Facultative

FACU	Facultative Upland
FACW	Facultative Wetland
FEMA	Federal Emergency Management Agency
FFS	Free Flow Speed
FHWA	U.S. Department of Transportation, Federal Highway Administration
GHG	Greenhouse Gas
GIS	Geographic Information Systems
GLO	General Land Office
GMA	Growth Management Act
GPM	Gallons per Minute
GSA	General Services Administration
HCM	Highway Capacity Manual
HGM	Hydrogeomorphic
HHW	Household Hazardous Waste
HPI	Historic Property Inventory
HPU	Hydraulic Power Units
HRI	Historic Resource Inventory
HUD	U.S. Department of Housing and Urban Development
IBC	International Building Code
ILA	Interlocal Agreement
IPZ	Innovation Partnership Zone
ISO	International Organization for Standardization
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation Systems
KCC	King County Code
KCHPP	King County Historic Preservation Program
kV	Kilovolt
kWh	Kilowatt Hour
LED	Light-emitting Diode
LEED	Leadership in Energy and Environmental Design
Leq	Equivalent Sound Level
LID	Low Impact Development
Lmax	Maximum Sound Level
Ln	Percent Sound Level
LOS	Level of Service
LWD	Large Woody Debris
M-1	Light Industrial Zone
M-2	Heavy Industrial Zone
MEV	Million Entering Vehicles
MCTA	Model Toxic Control Act
MPH	Miles per Hour

MSL	Mean Sea Level
MSWMAC	Metropolitan Solid Waste Management Advisory Committee
MSW	Municipal Solid Waste
MTCA	Model Toxics Control Act
MTCO <sub>2e</sub>	Metric Tons of CO <sub>2</sub> Equivalents
MW	Megawatts
NAAQS	National Ambient Air Quality Standard
NEPA	National Environmental Protection Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Prevention Association
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NO <sub>x</sub>	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRCS	National Resources Conservation Service
NWI	National Wetlands Inventory
O <sub>3</sub>	Ozone
OBL	Obligate Wetland
OHWM	Ordinary High Water Mark
Operating Plan	<i>Algona Transfer and Recycling Station Operating Plan</i>
OS/CA	Open Space/Critical Area
P-1	Public Use District Zone
Pb	Lead
PCBs	Polychlorinated Biphenyl
PEM	Palustrine Emergent
PFO	Palustrine Forested
PM <sub>10</sub>	Particles less than 10 Microns in Diameter
PM <sub>2.5</sub>	Particles less than 2.5 Microns in Diameter
PNSN	Pacific Northwest Seismic Network
PPB	Parts per Billion
PPM	Parts per Million
PR	Public Rule
PSCAA	Puget Sound Clean Air Agency
PSE	Puget Sound Energy
PSRC	Puget Sound Regional Council
PSS	Palustrine Scrub-Shrub
Qal	Alluvium Deposits
Qpfc	Coarse-grained Deposits
Qpon	Underlying Fine Nonglacial Deposits

Qva	Advance Outwash Deposits
Qvt	Vashon Till
Qvu	Undifferentiated Deposits
Qyal	Younger Alluvium
R-1	Urban Residential
R-7	Residential 7 Dwelling Units per Acre
R-L	Low Density Residential
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
SCAs	Sanitary Control Areas
SCRTS	South County Recycling and Transfer Station
SDWA	Safe Drinking Water Act
SEPA	State Environmental Policy Act
Siting Plan	Solid Waste Facility Siting Plan
SO <sub>2</sub>	Sulfur Dioxide
SR	State Route
SWAC	Solid Waste Advisory Committee
SWMM	Surface Water Management Manual
TCE	Trichloroethylene
Transfer Plan	Solid Waste Transfer and Waste Management Plan
TSCA	Toxic Substances Control Act
TSOs	Transfer Station Operations
µg/m <sup>3</sup>	Micrograms per Cubic Meter
UFC	Uniform Fire Flow
UPL	Obligate Upland
UPRR	Union Pacific Railroad
Ur	Urban Soil
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
VPH	Vehicles per Hour
VRFA	Valley Regional Fire Authority
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WHPA	Wellhead Protection Area
WHR	Washington Heritage Register
WISAARD	Washington Information System for Architectural and Archaeological Records Data
WRIA	Water Resource Inventory Area



WSDOT  
WTD

Washington State Department of Transportation  
Wastewater Treatment Division

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# Glossary

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**Aboveground Storage Tank:** tanks or other containers that are aboveground or only partially buried.

**Alderwood and Kitsap Soils:** Alderwood soils contain gravel, sand and loam and Kitsap soils contain silt loams.

**Alluvium:** a deposit of clay, silt, sand and gravel left by flowing streams in a river valley.

**Asbestos:** group of minerals that occur naturally in the environment that was commonly used in the past for building and electrical insulation but has since been banned and that requires special disposal due to human health effects.

**Attainment Area:** an area that has air quality that meets the National Ambient Air Quality Standards as defined in the Clean Air Act.

**Aquifer:** an underground layer of water-bearing permeable rock or unconsolidated materials such as gravel, sand or silt.

**Best Management Practices:** measures used in conducting projects in an environmentally responsible manner.

**Clean Water Act:** primary federal law controlling water pollution in the United States.

**Comprehensive Environmental Response, Compensation, and Liability Act:** provides a Federal Superfund to clean up uncontrolled or abandoned hazardous waste sites and accidents, spills, and other emergency releases of pollutants and contaminants.

**Comprehensive Plan:** provides a legal framework for making decisions about land use in incorporated and unincorporated areas of a county.

**Critical Aquifer Recharge Areas:** defined in the Growth Management Act as areas with a critical recharging effect on aquifers used for potable water.

**Critical Areas:** defined in the Growth Management Act as wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas.

**Decibel levels:** measures sound intensities.

**Endangered Species Act:** provides for the conservation of species that are endangered or threatened throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend.

**Environmental Impact Statement:** a document required by the State Environmental Policy Act that describes the positive and negative environmental effects of a proposed action for one or more alternatives that may be chosen.

**Environmental Site Assessment:** identifies potential or existing environmental contamination liabilities.

**Erosion:** the transporting of soil and rock through wind, precipitation and other natural processes.

**Floodplain:** an area of land adjacent to a waterbody that may experience flooding during periods of high discharge.

**Filling:** transporting or placing fill material from, to or on any surface water, wetland, soil surface or other fill material.

**Greenhouse Gas Emissions:** any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere.

**Group A Public Water Systems:** water systems protected under the Washington State Department of Health regulations that serve more than 14 households, or more than 25 residents regardless of the number of connections, for 180 days or more within a calendar year.

**Group B Public Water Systems:** water systems protected under the Washington State Department of Health regulations that serve between 2 and 14 households, or commercial establishments that serve less than 25 people a day.

**Growth Management Act:** directs Washington State's most populous and fastest-growing counties and their cities to prepare comprehensive land use plans that anticipate growth over a 20-year horizon.

**Hazardous Materials:** waste in the form of liquids, solids, gases, or sludge that is dangerous or potentially harmful to our health or the environment.

**Hydrophytic Vegetation:** plant life growing in water, soil, or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

**Impaired Waterbody:** under Section 303(d) of the Clean Water Act are waters that are too polluted or otherwise degraded to meet the water quality standards set by Washington State.

**Impervious Surface:** roads, parking lots, compacted soils and other surfaces that reduce infiltration and increase surface runoff.

**Landslide:** downslope movement of a mass of soil or rock.

**Leadership in Energy and Environmental Design:** standards developed by the United States Green Building Council to set a rating system for design, construction and operation of high performance green buildings.

**Level of Service:** term used to qualitatively describe the operating conditions of a roadway based on factors such as speed, travel time, maneuverability, delay and safety.

**Low Impact Development:** planning and design approach to managing stormwater runoff.

**Model Toxics Control Act:** regulations established by the Washington State Department of Ecology relating to the cleanup of contaminated sites and the management of underground storage tanks.

**Municipal Solid Waste:** trash or garbage that consist of everyday items thrown away and received at a transfer station.

**National Ambient Air Quality Standards:** standards designed under the Clean Air Act to protect human health with an adequate level of safety.

**National Historic Preservation Act:** intended to preserve historical and archaeological sites in the United States.

**National Pollutant Discharge Elimination System:** permit program that controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

**No Further Action Determination:** Washington State Department of Ecology provides this opinion if no further remedial action under the Model Toxics Control Act is necessary at the property to clean up contamination associated with the site.

**Noxious Weed:** an invasive, non-native plant regulated under the Washington State Noxious Weed Control Board.

**Ordinary High Water Mark:** water mark found by examining the bed and banks of a waterbody and determining the location in ordinary years.

**Polychlorinated Biphenyl:** a synthetic organic chemical compound used in the past in electrical applications that was banned due to its environmental toxicity.

**Qal:** shallow unconfined aquifer that is found in the water bearing portions of alluvium.

**Qpfc:** sedimentary deposits from pre-Frasier glacial age.

**Qpon:** nonglacial deposits.

**Riparian Areas:** Areas where vegetation grows adjacent to sources of water that are thought to be hotspots of biological diversity.

**Safe Drinking Water Act:** Established to protect the drinking water in the United States.

**Sanitary Control Area:** A Washington State Department of Health requirement to prevent contaminants from entering the drinking water system by maintaining a protection buffer of 100 feet around wells and 200 feet around springs.

**Seattle Muck:** a stratified mucky peat to muck derived from grassy organic material.

**Siting Plan:** provides basic siting criteria, including both exclusionary criteria and siting requirements specific to transfer stations.

**Solid Waste Transfer and Waste Management Plan:** presents recommendations to guide the future of solid waste management, including the renovation of the urban transfer system.

**Spill Prevention, Control and Countermeasure Plan:** plan prepared to help prevent the discharge of oil into navigable waters.

**Stormwater:** water that originates from precipitation that flows over land or impervious surfaces and does not percolate into the ground.

**Stormwater Pollution Prevention Plan:** a site-specific written guide that identifies potential sources of stormwater pollution and describes practices to reduce pollutants in stormwater discharges from a site.

**Temporary Erosion and Sediment Control Plan:** on-site and off-site measures during construction to control the conveyance or deposition of earth, turbidity or pollutants.

**Trichloroethylene:** a volatile organic chemical used primarily as an industrial solvent.

**Underground Storage Tank:** a storage tank and any underground piping connected to the tank that is at least 90 percent underground.

**Vashon Advance Outwash Deposits:** consists of mostly well-sorted, fine grained sand with lenses of coarser sand and gravel.

**Vector Wildlife:** nuisance wildlife including rodents, insects, gulls, pigeons and crows.

**Visual Impact Analysis:** a visual analysis to identify environmental impacts and aesthetics from developing a project.

**Wellhead Protection Areas:** protection areas under the Washington State Department of Health regulations that are determined by the groundwater time-of-travel.

**Wetland:** a land area permanently or seasonally saturated with water.

**Zoning:** regulations that contain requirements and standards that govern the use and development of land within that zone or district.

# Chapter 1: Purpose and Need

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## 1.1 Introduction and Background

The King County (County) solid waste system serves the unincorporated areas of King County and 37 of the 39 cities in the county – only the cities of Seattle and Milton do not participate. In 2004, the Metropolitan King County Council (County Council) adopted Ordinance 14971 to establish a process for the cities in the county’s service area to collaborate with the Solid Waste Division (division) in solid waste system planning, including future transfer station alternatives. The Metropolitan Solid Waste Management Advisory Committee (MSWMAC) was formed with representatives and alternates appointed by the cities. In 2013 the committee was incorporated into the Amended and Restated Interlocal Agreement (ILA) between the County and participating cities.

MSWMAC joined the long-standing Solid Waste Advisory Committee (SWAC) in assisting the division in the development of policies, goals, and recommendations for the solid waste system. SWAC membership includes King County citizens; and representatives from public interest groups, labor, recycling businesses, the marketing sector, manufacturing, the waste management industry, and local elected officials.

Working with MSWMAC, SWAC, and other stakeholders, the division prepared the *Solid Waste Transfer and Waste Management Plan* (Transfer Plan), and the accompanying Environmental Impact Statement (EIS). The Transfer Plan was adopted by the County Council in 2007 (King County 2007) and updated in 2014 and 2015 (King County 2015a).

## 1.2 Purpose and Need for the Project

The purpose of the project is to site, design, construct and operate a solid waste transfer station in south King County. The new station would serve the areas surrounding and communities of Algona, Auburn, Federal Way and Pacific for the next 50 years.

The Transfer Plan sets forth the need for a new south county transfer station to be placed in service. Transfer facilities are essential public facilities and are vital to communities for the safe and efficient handling of their solid waste. The plan outlines the region’s long-term need for a new transfer station to replace the existing Algona Transfer Station. As set forth in the Transfer Plan, the existing Algona Transfer Station has outlived its useful life and provides an inadequate level of service to its customers. The existing transfer station failed to meet five of the six level-of-service criteria dealing with station capacity – only the hours of operation were sufficient – and did not meet goals for traffic impacts on local streets (see Table 1-1 for all criteria applied). The existing Algona Transfer Station cannot accommodate waste compaction or provide recycling services required by the *Draft Comprehensive Solid Waste Management Plan* (King County 2013a). Additionally, the existing station does not meet safety goals, requiring additional effort from staff and management to operate the station safely, which reduces system efficiency.

**Table 1-1  
Level-of-Service Criteria Applied to the Existing Algona Transfer Station**

Criteria <sup>1</sup>	Pass	Criteria <sup>1</sup>	Pass
1. Estimated time to a transfer station within the service area for 90% of users < 30 min = Yes	Yes	9. Minimum roof clearance of 25 feet	Yes
2. Time on-site meets standard for 90% of trips a. Commercial vehicles < 16 min = Yes b. Business self-haulers < 30 min = Yes c. Residential self-haulers < 30 min = Yes	No Yes Yes	10. Meets station safety goals	No <sup>2</sup>
3. Station hours meet user demand	Yes	11. Ability to compact waste	No
4. Recycling services meet policies a. Business self-haulers b. Residential self-haulers	No No	12. a. Meets goals for structural integrity b. Meets FEMA immediate occupancy standards	Yes Yes
5. Vehicle capacity a. Meets current needs b. Meets 20-year forecast needs	No No	13. Meets applicable local noise ordinance levels	Yes
6. Average daily handling capacity (tons) a. Meets current needs b. Meets 20-year forecast needs	No No	14. Meets PSCAA standards for odors	Yes
7. Space for 3 days' storage a. Meets current needs b. Meets 20-year forecast needs	No No	15. Meets goals for traffic on local streets a. Meets LOS standard b. Traffic does not extend onto local streets 95% of time	Yes No <sup>3</sup>
8. Space exists for station expansion a. Inside the property line b. On available adjacent lands through expansion	No Yes	16. 100-foot buffer between active area & nearest residence 17. Transfer station is compatible with surrounding land use	Yes Yes

Notes:

<sup>1</sup>Additional information pertaining to analysis of systems needs and capacity that was performed for Level-of-Service criteria is available in the Transfer Plan Appendix F, Report 2 (King County 2013a).

<sup>2</sup>The presence of these physical challenges does not mean that the stations operate in an unsafe manner. It does mean that it takes extra effort by staff and management, which reduces system efficiency, to ensure the facilities are operated safely.

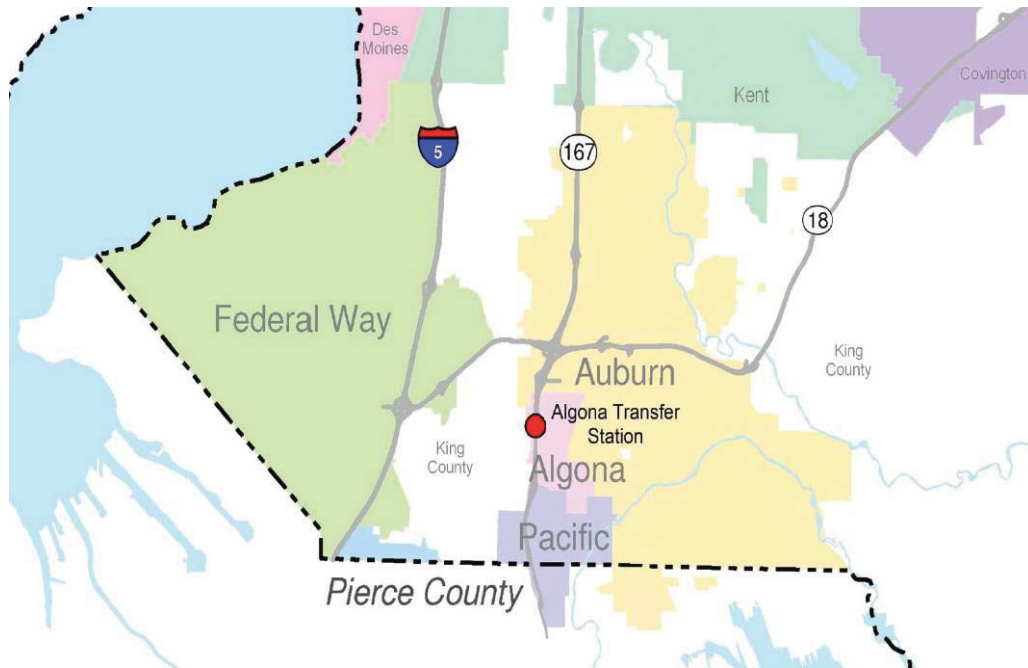
<sup>3</sup>Meets criterion on weekdays, but not on weekend days.

The SCRTS is needed to provide an efficient, modern transfer station to serve the south county customers currently using the existing Algona Transfer Station (see Figure 1-1).

The Draft EIS outlines each of the project alternatives for siting, constructing and operating a new recycling and transfer station. The document evaluates the potential impacts associated with each alternative and covers aspects of the built and natural resources, environmental health, land use, transportation, public services, and utilities.



**Figure 1-1: South County Vicinity Map**



## **1.3 Siting Process**

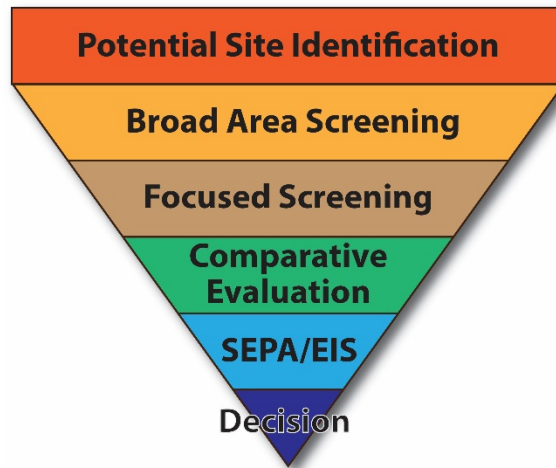
### **1.3.1 Siting Process Background**

The Transfer Plan established that transfer stations within the County system must be geographically distributed throughout the County in order to equitably serve all customers. Similar to the existing transfer station, any sited station should be placed in a location convenient to customers.

In 2012, the division conducted a search for potential sites for this essential public facility in and around the cities of Auburn, Algona, Pacific, and Federal Way that would be suitable for replacing the existing Algona Transfer Station (Figure 1-1). The division followed guidelines set forth in the *Solid Waste Facility Siting Plan* (Siting Plan), published as Appendix C of the Transfer Plan (King County 2007). The Siting Plan requires that the public be given the opportunity to understand and participate in the siting process.

Figure 1-2 shows the six steps involved in the *SCRTS Siting Report* (King County 2015b). The division went through the steps of potential site identification, broad area screening, focused screening, and comparative evaluation to determine the action alternatives that would be considered in the EIS in order to reach a decision.

**Figure 1-2: Siting Process**



### **1.3.2 Public Involvement during Siting**

The MSWMAC and SWAC were regularly briefed and given opportunities to provide input throughout the siting process. A Siting Advisory Committee was established in August 2012 to develop and rank community criteria for evaluating potential sites. Community criteria considered factors that are important to local communities such as traffic congestion on local roads or noise in residential areas. The committee was comprised of city officials, agencies, businesses, school districts, organizations, and citizens. The Siting Advisory Committee met three times prior to a public meeting to understand the project, and review siting criteria applied to four potential sites from the focused area screening and comparative evaluation.

The division launched a public website in August 2012 that contained background information and upcoming meeting and notification dates. A public meeting was held on September 27, 2012, in Auburn to introduce the SCRTS project to the public and present four potential sites. At this meeting, the division addressed comments and concerns raised by the public. Over 70 people attended the public meeting. The Siting Advisory Committee met in October 2012 to review feedback from the public meeting and assess the focused area screening and comparative evaluation efforts which are described below. See also Section 1.6.

### **1.3.3 Potential Site Identification**

The division began by identifying potential sites in the south county service area. The division used the County’s Geographic Information Systems (GIS), real estate services, and input from the Siting Advisory Committee and the public to identify potential locations. Site identification resulted in approximately 31 potential sites for review in the broad area screening.

### **1.3.4 Broad Area Screening**

The Broad Area Screening process resulted in the elimination of the less suitable sites from further consideration due to regulatory, environmental, or development constraints. After screening sites for these considerations, five potential sites moved forward for further consideration.

### 1.3.5 Focused Area Screening

Focused area screening evaluated and ranked the remaining five sites according to site availability, vehicular access and traffic patterns, land use compatibility, and site configuration. One site was eliminated from further consideration after it was determined that it was being developed for another public facility.

### 1.3.6 Comparative Evaluation

The four remaining potential sites were evaluated and ranked with the Siting Advisory Committee community criteria, functional criteria developed by the division, and input from the public meeting; and it was determined that the top two ranked potential sites would be considered in the EIS.

### 1.3.7 Conclusion

After evaluating sites in the siting process, it was determined that, along with a No Action Alternative, the sites in this EIS will include:

- 901 C Street SW, Auburn
- 35101 West Valley Highway South, Algona

## 1.4 Required Permits and Approvals

Table 1-2 shows the anticipated permits and approvals that would be needed for the SCRTS. Several permits would be the same if a transfer station was located in Algona or Auburn. Some permits would vary by site because of local regulatory processes and site conditions.

**Table 1-2  
Permits and Approvals for the SCRTS Project**

Permit/Approval Type	Agency
<b>Federal and State</b>	
Cultural Resources Assessment (CRA) for Compliance with Section 106 of the National Historic Preservation Act	U.S. Army Corps of Engineers (USACE) and Washington State Department of Archaeology and Historic Preservation (DAHP)
Nationwide Section 404 Permit for Compliance with the Clean Water Act (CWA)	USACE
Hydraulic Project Approval	Washington Department of Fish and Wildlife (WDFW)
Section 7 Endangered Species Act	U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries
Section 401 Certification for Compliance with the CWA	Washington State Department of Ecology (Ecology)
National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit and Coverage	Ecology/U.S. Environmental Protection Agency (EPA)
Magnuson-Stevens Act Approval	NOAA Fisheries
Migratory Bird Act Compliance	U.S. Fish and Wildlife Service

**Table 1-2 (Continued)  
Permits and Approvals for the SCRTS Project**

Permit/Approval Type	Agency
Notice of Construction	Puget Sound Clean Air Agency (PSCAA)
Solid Waste Transfer Station Operating Permit	Ecology; Public Health – King County
<b>Local</b>	
Building Height Variance	City of Algona, City of Auburn
Building Permits	City of Algona, City of Auburn
Conditional Use Permit	City of Algona, City of Auburn
Demolition Permit	City of Algona
Grading and Filling Permit	City of Algona, City of Auburn
Street Rights-of-Way Vacation	City of Algona
Construction Permit	City of Auburn
Right-of-Way Permit	City of Auburn, City of Algona

## 1.5 Regulatory Requirements

Regulations ensure that all solid waste facilities are operated in such a way as to mitigate potential impacts, regardless of location. The Washington Administrative Code (WAC) establishes requirements for the development and operation of solid waste handling facilities, including transfer stations. Additionally, Public Health – Seattle & King County (Public Health) regulates transfer stations under the Code of the King County Board of Health – Title 10: King County Solid Waste Regulations. The Puget Sound Clean Air Agency (PSCAA) regulates air quality in King County.

### 1.5.1 Washington Administrative Code (WAC)

The division operates transfer stations in accordance with state regulations that set standards for solid waste handling at transfer stations, including the following standards shown in Table 1-3.

**Table 1-3  
WAC Standards for Solid Waste Handling at Transfer Stations**

Section	Title
WAC 173-200	Water Quality Standards for Groundwaters of the State of Washington
WAC 173-201A	Water Quality Standards for Surface Waters of the State of Washington
WAC 173-216	State Waste Discharge Permit Program
WAC 173-220	National Pollutant Discharge Elimination System (NPDES) permit program
WAC 173-350	Solid Waste Handling Standards

WAC 173-350, Solid Waste Handling Standards, establishes minimum statewide design, construction, operation, and closure standards for interim solid waste handling facilities such as transfer stations. These criteria also implement rulemaking in the federal Resource Conservation and Recovery Act (RCRA), as amended in 1984, and Section 405(d) of the Clean Water Act (CWA), as amended, to ensure the protection of human health and the environment.

WAC 173-201A states that transfer stations may not discharge pollutants into waters of the state (including wetlands) that cause a violation of surface water quality standards.

Stormwater discharges from transfer station property must meet the requirements specified in the Washington State Department of Ecology's (Ecology) *2012 Stormwater Management Manual for Western Washington* and the Ecology Industrial Stormwater General Permit (ISWGP) to comply with requirements of WAC 173-200, WAC 173-201A, WAC 173-216 and WAC 173-220 (Ecology 2012a). The ISWGP specifies implementation of best management practices (BMPs) for maintaining on-site water quality, the quality of water discharges from the site, and water quality monitoring requirements for the station. A stormwater pollution prevention plan is also required by the ISWGP.

### **1.5.2 Public Health – Seattle & King County**

The division must operate its transfer stations in compliance with the King County Board of Health Solid Waste Regulations (Title 10), the conditions of the Solid Waste Permit issued by Public Health, and the approved Plan of Operations required by that permit. Title 10 adopts the rules contained in WAC 173-350 for intermediate solid waste handling facilities:

- Location standards: The regulations do not have specific location standards, but require that any transfer station must comply with all local, state, and federal laws and regulations.
- Design standards: The owner of any transfer station must prepare engineering reports/plans and specifications to address design standards that:
  1. Control public access and limit unauthorized vehicular traffic and illegal dumping
  2. Effectively control rodents, insects, birds and other vectors
  3. Effectively control dust and litter
  4. Provide protection from the wind rain or snow
  5. Provide pollution control measures to protect surface and ground water
  6. Provide pollution control measures to protect air quality
  7. Provide all-weather surfaces for vehicular traffic
- Operating standards: The owner of a transfer station must:
  1. Protect human health and the environment
  2. Prohibit the disposal of dangerous and other unacceptable waste
  3. Control vectors and litter
  4. Prohibit scavenging
  5. Prohibit open burning
  6. Control dust and nuisance odors
  7. Provide on-site attendants
  8. Post a sign that identifies the station and shows hours of operations
  9. Have communication capabilities to contact emergency personnel if needed
  10. Inspect and maintain the station
  11. Maintain daily operating records on the weights and types of waste received and removed from the station
  12. Develop, keep and abide by a plan of operation

- Closure requirements: The owner of a transfer station must notify Public Health 180 days in advance of closure. All waste shall be removed to a station that conforms to the applicable regulations for handling the waste.

### **1.5.3 Puget Sound Clean Air Agency**

PSCAA is the primary regulatory agency for ambient air quality in King County. It implements regulations promulgated by the EPA and Ecology under Regulations I, II, and III. These agencies have established ambient air quality standards for a group of air pollutants commonly referred to as criteria pollutants. Criteria pollutants that are relevant to municipal solid waste transfer stations include:

- Inhalable particulate matter or PM<sub>10</sub> (particles less than 10 microns [millionths of a meter] in diameter) and fine particulate matter or PM<sub>2.5</sub> (particles less than 2.5 microns in diameter), which is a small component of fugitive dust produced when vehicles and equipment operate on paved surfaces, and particulate emissions in engine exhaust.
- Sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs) and carbon monoxide (CO), which are present in the exhaust from transfer station-related vehicles and equipment.
- Ozone (O<sub>3</sub>), which is produced in the atmosphere when NO<sub>x</sub> and VOCs react in the presence of sunlight. As noted above, NO<sub>x</sub> and VOC emissions are present in the exhaust from transfer station-related vehicles and equipment.

In order to measure existing air quality, Ecology and PSCAA maintain a network of monitoring stations throughout Puget Sound. Based on monitoring information collected over a period of years, Ecology and EPA designate regions as either attainment or nonattainment areas for particular air pollutants. Attainment status is a measure of whether air quality in an area complies with the National Ambient Air Quality Standard (NAAQS). The project is located within an area designated by the EPA as an attainment area for all criteria air pollutants. This designation is given to areas within which the ambient standards have been met over a period of time.

During the construction phase of the SCRTS, the construction contractor will be required to comply with the PSCAA regulations requiring the control of odorous emissions so as to prevent undue interference with nearby uses (Regulation 1, Section 9.11). Contractors will also be required to comply with applicable regulations, and take all reasonable precautions to avoid or minimize fugitive dust emissions during construction (Regulation I, Section 9.15). The PSCAA considers transfer stations non-pollution generating sources, as emissions are based on mobile sources (i.e., transfer station users). Therefore, a Notice of Construction application is not required.

## **1.6 Public Involvement and Consultation**

The division initiated the SEPA scoping process by sending out a scoping notice on October 30, 2012 to agencies, Tribes, residents surrounding the sites, and other interested parties. The

purpose of the scoping process was to inform agencies and stakeholders about the SCRTS project and allow the public, organizations, agencies, and Tribes to provide comments regarding the scope of the project, the proposed action alternatives, probable significant adverse impacts, mitigation measures, and permits or other approvals that should be considered in the EIS. There was a 30-day period for scoping comments, which ended on November 30, 2012. A public scoping meeting was held on November 15, 2012, where additional comment letters and oral comments were received. Scoping comments were received from the cities of Algona, Auburn, and Federal Way, Auburn School District, Muckleshoot Tribe, 5 private businesses, and 19 individuals.

A second scoping comment period was initiated on January 31, 2013, and ended on February 21, 2013. The purpose of this scoping process was to inform agencies, Tribes, residents surrounding the sites, and other interested parties about the addition of a third alternative located at 28721 West Valley Highway South, including the two parcels immediately adjacent to the west, in Auburn. Scoping comments were received from the City of Kent, 2 private businesses, and 46 individuals.

A third scoping comment period began on February 22, 2013, and ended on April 5, 2013. The purpose of this scoping process was to extend the scoping comment period and hold an additional public scoping meeting. A public scoping meeting was held on March 27, 2013, where additional comment letters and oral comments were received. Scoping comments were received from the City of Kent, 5 private businesses, and 63 individuals.

A fourth scoping comment period began on November 3, 2015, and ended on November 24, 2015. The purpose of this scoping process was to inform agencies, Tribes, residents surrounding the sites, and other interested parties about the revised scope of the EIS, including the removal of the third alternative site at 28721 West Valley Highway South in Auburn. Environmental information received during the review process determined that the property located at 28721 West Valley Highway South in Auburn, is not a reasonable alternative and cannot feasibly attain the proposal's objectives. Information in a drainage assessment report indicated critical constraints on the ability to control and discharge storm water on and from this site. The report pointed out that the site has a high winter water table, problematic elevations relative to nearby surface water receiving bodies, and a history of flooding in the immediate vicinity. Scoping comments were received from the cities of Algona and Auburn, Auburn School District, Ecology, Washington State Department of Transportation, 2 private businesses, and 11 individuals.

Common comments received during the four scoping periods and two scoping meetings included:

- Odor and noise concerns for residences
- Property value concerns for residences/businesses
- Traffic concerns

Comments received from the public, organizations, agencies, and Tribes in all scoping periods are considered in this EIS. Public involvement and consultation will continue following the publication of the Draft EIS.

### **1.7 Station Decommissioning**

It is anticipated that closure and decommissioning of the existing Algona Transfer Station would occur after a new SCRTS is constructed and operating. The station may also be deconstructed. Should the Algona Transfer Station be deconstructed, the work would occur over approximately 6 months including 1 to 2 months of debris removal.

If the existing transfer station is deconstructed the work would entail removal and hauling off of above-ground structures, including the scale complex and the transfer building. Construction equipment would access the above-ground structures from existing pavement areas. About two hundred support piles would be cut at grade level or removed completely. If removed, a vibratory hammer would be clamped onto the top of the pile to loosen as the pile is pulled from the ground with a crane.

The stormwater system would remain in place to handle site runoff. Other utilities would be capped or disconnected. The existing gabion wall would remain in place at the base of the steep slope.

### **1.8 Preferred Alternative**

The King County Executive has identified Alternative 2 as the Preferred Alternative because of the relative impacts, efficiencies and flexibility it would provide. The site would meet the project purpose and system needs. State Route 167, West Valley Highway South, and adjacent topography buffer the site from other uses, such as parks, schools and residences. No commercial waste hauler collection routes would need to be changed so no additional collection cost would be incurred.

Both Alternative 1 and Alternative 2 are viable alternatives. Being the King County Executive's Preferred Alternative does not mean that Alternative 2 ultimately will be selected. The final decision will be based on several considerations: the analysis in this EIS; comments from federal, state and local agencies and tribal governments; comments from the public and from elected officials; and other factors such as cost and regional policies. It is anticipated that the Executive will make a final decision in late 2016 after completion of the Final EIS.



# Chapter 2: Alternatives

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## 2.1 Alternatives Considered

The division is considering two action alternatives in addition to the No Action Alternative for a new SCRTS (Figure 2-1). The alternatives are described in this chapter and the impacts of each are assessed in Chapter 3 of this Draft EIS. The alternatives are:

- No Action Alternative - 35315 West Valley Highway South, Algona
- Alternative 1 - 901 C Street SW, Auburn
- Alternative 2 - 35101 West Valley Highway South, Algona

### 2.1.1 No Action Alternative

The existing Algona Transfer Station is located at 35315 West Valley Highway South on parcel 3356407870. Under the No Action Alternative, the division would not site a new station in the south county service area. The division would continue to operate the existing Algona Transfer Station for as long as feasible.

If the station closed and a new SCRTS was not built transfer services would no longer be offered within the south county area; all former customers of the Algona Transfer Station (e.g., residential self-haul, business self-haul, and commercial) would be directed to transfer stations in adjacent service areas. This could increase travel time for customers and incrementally increase transportation cost, traffic congestion, and air pollution. The Algona Transfer Station site would become available for other uses.

The existing site is approximately 4.4 acres and is not large enough to accommodate necessary service improvements. Access to the site is from West Valley Highway South. Because there is insufficient queuing space on-site, entering vehicles sometimes back up onto the highway, endangering traffic.

The existing Algona Transfer Station was designed and constructed in the mid-1960s and does not meet today's building and environmental standards nor standards for service, operational efficiency, and customer and employee safety. It cannot provide recycling services to meet the County's environmental goals, nor can it cost-effectively compact waste which is necessary for efficient transport.

Maintenance and upgrades, including a roof replacement in 2002, have extended the life of the transfer building. Due to the ongoing deterioration of a number of the timber piles supporting the building, a major structural rehabilitation would be required to significantly extend the life of the building.

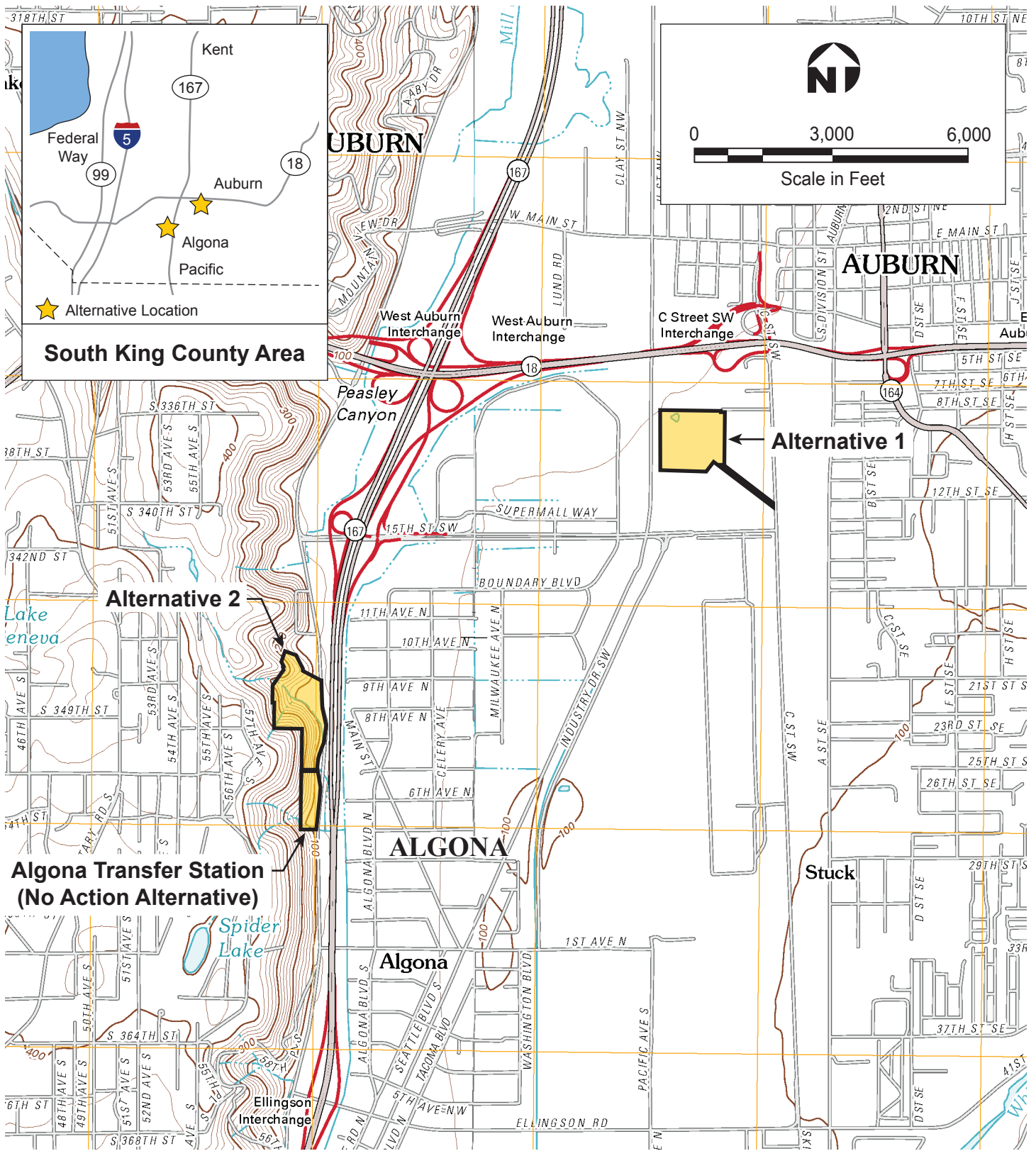


Figure 2-1  
**Alternative Locations and  
 South King County Area**

Steep slopes separate the site from R-1 Urban Residential-zoned properties in unincorporated King County to the west. West Valley Highway South and State Route (SR) 167 separate the site from properties to the east, which the City of Algona has zoned C-1 Mixed Use Commercial and R-L Low Density Residential.

Property adjacent to the site on the south and on the north is zoned C-3 Heavy Commercial by the City of Algona. Undeveloped land is located to the north, while a single-family residence (35371 West Valley Highway South) is located to the south.

The Algona Transfer Station was built to codes before the Leadership in Energy and Environmental Design (LEED) green building rating system was developed. It does not include green building and sustainable design features discussed below in Section 2.2.2.3 that are part of the action alternatives.

Chapter 1 describes the Level of Service (LOS) criteria for transfer stations that the division developed in collaboration with stakeholders. These criteria evaluated service to station users, the capacity of stations to handle garbage and recyclables both now and in the future, structural integrity, and the effects of stations on surrounding communities. Chapter 1 shows how the Algona Transfer Station, the No Action Alternative, scored poorly against these established LOS standards. In addition, if the station were to be closed the south county service area would fail all service criteria.

No permitting is anticipated to be required for this alternative.

### **2.1.2 Alternative 1**

Alternative 1 would construct and operate a recycling and transfer station on the property located at 901 C Street SW in Auburn (Figure 2-2), on parcels 2421049054 and 2421049001 owned by Segale Properties, LLC.

The City of Auburn has zoned this 18.7-acre site M-2 Heavy Industrial. Development as a transfer station would require permitting as a Conditional Use with approval through the city's essential public facility review process. Properties surrounding the site are zoned M-1 Light Industrial to the north, C-3 Heavy Commercial to the west and east, M-2 Heavy Industrial to the south, and P-1 Public Use District to the southeast.

The area adjacent to the site contains a mixture of land uses; including a school bus depot, a Supervalu grocery warehouse, and the General Services Administration (GSA) Park to the south, industrial warehouses to the east and north, a Western Plus Peppertree Inn, and commercial and residential properties to the north. The Outlet Collection Seattle, Wal-Mart, and Regal Cinemas are separated from the site to the west by the active Union Pacific Railroad and the Interurban Trail.

The relatively flat topography of the site is suitable for development as a recycling and transfer station. There is an existing wetland conservation easement and associated buffer and stormwater pond in the northwest corner of the site.

**Alternative 1 interior, looking northwest**



**Alternative 1 interior, looking west**



**Alternative 1, looking north along C Street SW**





Source: Google Earth Pro, imagery date: 7/5/2012

Prepared for King County by URS Corporation Consultants

Figure 2-2

## Alternative 1 Site Development Area

### **2.1.3 Alternative 2 (Preferred Alternative)**

Alternative 2 is the division's preferred alternative. Alternative 2 would construct and operate a recycling and transfer station on the property located at 35101 West Valley Highway South in Algona. This site, located north of the existing transfer station, is 18.9 acres and contains 9 parcels owned by King County: 3356407890; 3356407905; 3356407910; 3356407915; 3356407925; 3751601414; 3751601416; 3751601419; and 3751601429 (Figure 2-3).

There are portions of unopened road rights-of-way on the property, but no roads or public use were ever established on these rights-of-way. The road rights-of-way would be vacated through the City of Algona street vacation process.

With Alternative 2, road frontage improvements would occur on West Valley Highway South adjacent to the property along a 1/3-mile of roadway lying roughly between 9th Ave N and Broadway Boulevard. Road frontage improvements would include realignment of the curve bordering the site, widening the roadway width, frontage modifications, channelization via turn lanes for access into and out of the site; and curb, gutter, sidewalk, and related drainage improvements.

As part of Alternative 2 West Valley Highway South will receive pavement overlays north and south of the road frontage improvement area, between approximately 12th Ave N and 9th Ave N and between approximately Broadway Boulevard and 5th Ave N. The overlays would occur after construction and prior to operation of the SCRTS.

This site is zoned by the City of Algona as primarily C-3 Heavy Commercial. The steep slopes on the western portion of the property are zoned as Open Space/Critical Areas (OS/CA). A Conditional Use permit would be required to allow development of a recycling and transfer station. Approximately 9 acres are critical areas composed of steep slopes, which are undevelopable and typically require buffers, setbacks, and sensitive area tracts. The topography of the remaining area, approximately 10 acres, is gently sloping. Algona Creek 09.0054A and two wetlands and their associated buffers would likely be temporarily and permanently impacted on-site.

The steep slopes on the west side of the property separate the site from R-1 Urban Residential zoned properties in unincorporated King County to the west. West Valley Highway South and SR 167 separate the site from single-family residences and limited commercial uses to the east, which the City of Algona has zoned C-1 Mixed Use Commercial and R-L Low Density Residential. C-3 Heavy Commercial property is adjacent to the site on the south (currently in use as the Algona Transfer Station) and to the north in Auburn.

North of the site is Terra Dynamics, a landscape construction contractor, and the City of Auburn Vista Pointe Stormwater Facility. Farther north are commercial uses, including Allsports Cages & Netting, The Mustang Shop, Peltram Plumbing, Hinshaw's Motorcycle Store, Speedi Transmissions, JFC Racing, and Del's Farm Supply.

**Alternative 2, looking west**

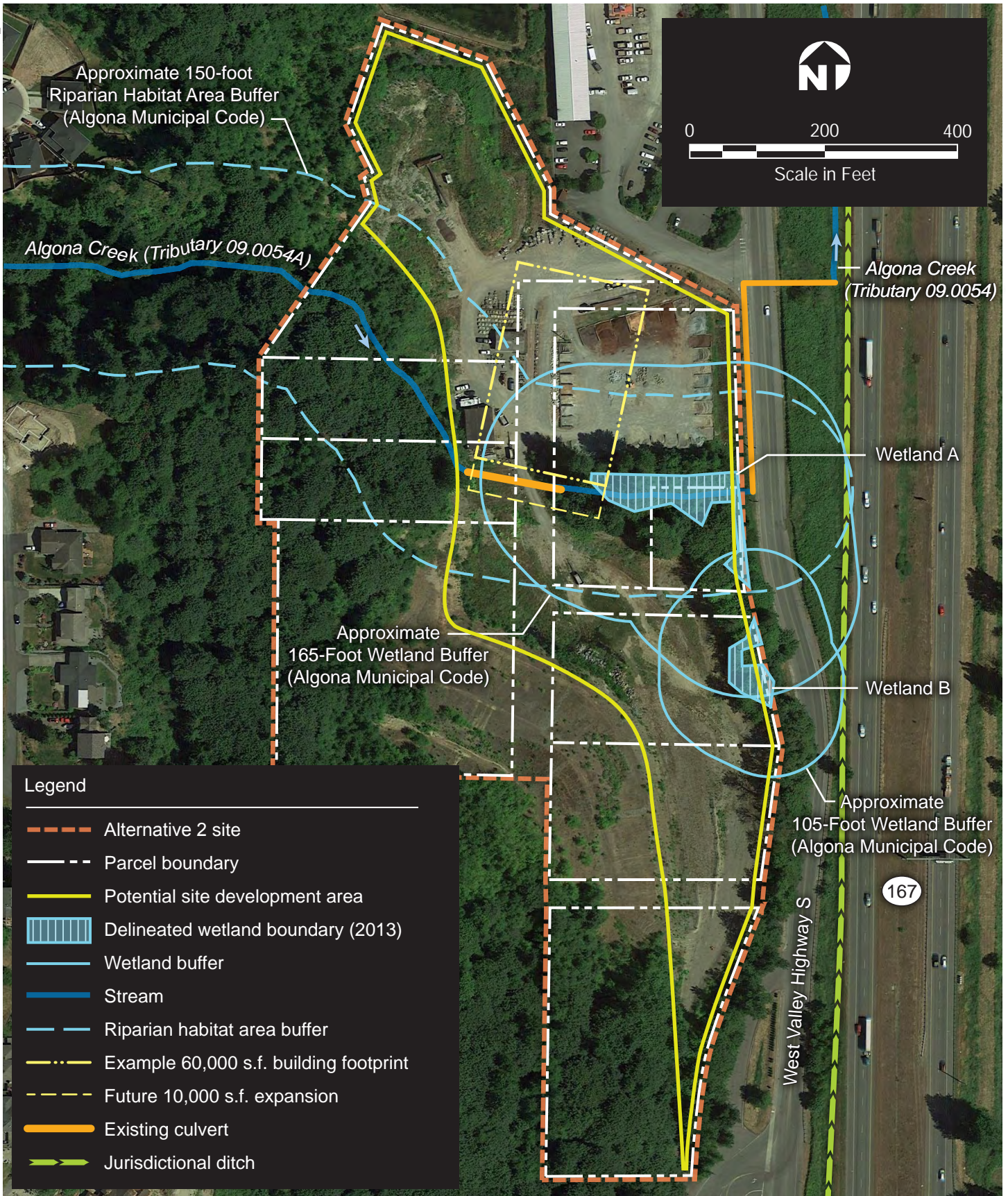


**Alternative 2 interior, looking south**



**Alternative 2, looking south**





Source: Google Earth Pro, imagery date: 7/10/2014

Prepared for King County by URS Corporation Consultants

Figure 2-3

### Alternative 2 Site Development Area



## 2.2 Elements Common to Alternatives 1 and 2

Alternatives 1 and 2 would have common elements for projected tonnage, design, construction, and operation.

### 2.2.1 Projected Tonnage

The *2015 Update of the King County Strategic Climate Action Plan*, approved by the King County Council, states that King County commits to achieving a 70 percent recycling rate in the solid waste service area by 2020 (King County 2015c). If the recycling rate increases to 70 percent by 2030 as anticipated, the total MSW and yard waste tonnage would decrease between 2020 and 2040 by 9,360 tons; and the truck round trips would decrease by 360 (Table 2-1).

**Table 2-1  
South County Station Projected Tonnage with  
70 Percent Recycling Rate by 2030**

Type	2020	2030	2040
Self-Haulers MSW	31,200	20,300	23,600
Commercial MSW	110,960	92,700	107,900
Yard Waste	3,700	4,300	5,000
Total Station Use	145,860	117,300	136,500
Hauling Trucks (Round Trips)	5,460	4,300	5,100

### 2.2.2 Common Elements of Design and Construction

With an expected life span of 50 years, Alternative 1 or Alternative 2 would be built to modern industry and green building standards. New transfer stations are more efficient than those built in the mid-20th century. They use compactors to reduce the volume of garbage before it is hauled to the landfill or other disposal facility. Compactors reduce the total number of transfer trailer trips to and from the station by nearly a third, which reduces the cost of operations and traffic impacts. Additionally, modern transfer stations are built as fully enclosed buildings, resulting in reduced external dust, noise, odor, and litter. New transfer stations offer sufficient queuing space for customers and storage space for waste, including dedicated areas for recycling services.

Alternatives 1 and 2 would include the following physical elements:

- Scale house and scales
- Enclosed transfer building for waste handling, sorting, and processing
- Waste compactors
- Recycling and material staging areas
- Administration and staff area
- Station perimeter fence
- Above-ground fuel tank and fueling station

- Roadways for customers and division vehicles
- Outdoor parking for full and empty waste transfer trailers
- Optional area for future household hazardous waste (HHW) collection
- Stormwater management
- Landscaping

### **2.2.2.1 Building Features**

The approximate footprint of the building area would be 60,000 square feet with 10,000 square feet for future expansion capabilities. This would provide space for solid waste, recycling administration, disaster event storage, and an optional HHW. Buffers between the active area of the station and neighboring uses would be appropriately sized and designed to reduce impacts.

The height of the new station would depend on site conditions and city building codes. The distance from the main tipping floor down to the compactor(s) would be approximately 20 feet, and may be partially below grade. The height from the main tipping floor to the highest point of the roof would be approximately 50 feet – the distance required for commercial garbage trucks to tip without hitting the overhead misting, fire sprinkler, and ventilation and other systems. The overall height of the new station would be approximately 70 feet above the lowest level.

Alternatives are anticipated to include a 2,500-gallon above-ground fuel station to provide diesel fuel for operational equipment.

Buildings, parking areas, and roadways at the new transfer station would result in up to 5 to 6 acres of impervious surfaces.

### **2.2.2.2 Level of Service Standards**

After construction, the new transfer station will meet all 17 of the division’s LOS standards established in the Transfer Plan and shown in Chapter 1 of this document.

### **2.2.2.3 LEED**

The LEED green building rating system is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Projects can obtain various levels of certification including Certified, Silver, Gold or Platinum – based on a point rating system. The new transfer station will target a LEED Platinum certification.

LEED emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED standards for the new station may include use of the following:

- Energy-efficient planning, design, and management.
- Water-efficient planning, design, and management.
- “Environmentally preferable products” whenever practicable. Environmentally preferable products are products that have a lesser or reduced effect on human health and the environment when compared with competing products that serve the same

purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product. An example is use of cement alternatives.

- Preservation and maintenance of natural on-site features, whenever possible.
- Construction BMPs, such as minimizing disturbance to on-site vegetation.
- Planting trees and other native vegetation impacted during development as a means of maintaining carbon storage to maximize carbon sequestration.

These features are consistent with the division's environmental focus and with the County's green building ordinance to promote the use of environmentally responsible design and construction practices in all of the County's building projects. The green building practices applied to this project are also expected to result in lower life cycle costs than in traditional building designs.

### **2.2.3 Common Elements of Operation**

#### ***2.2.3.1 Time of Operation***

The preferred alternative is anticipated to open for business in 2021 following a construction period of approximately 24 months. The SCRTS will be designed for about a 50-year lifespan.

Operating hours are set by County ordinance. It is assumed that the new station would operate 9.5 hours per day, opening not earlier than 6 a.m. on weekdays, not earlier than 8 a.m. on weekends, and closing no later than 6 p.m. on any day (the current operating hours at the existing Algona Transfer Station are 7 a.m. to 4:30 p.m. on weekdays, and 8:30 a.m. to 5:30 p.m. on weekends).

#### ***2.2.3.2 Staffing***

Staffing would depend on the day of the week, season of the year, and services provided. The assumption is that employees based at the station on any given day (e.g., scale operators, transfer station operations [TSOs], and on-site supervision) would range from 6 to 15 with transfer truck drivers, maintenance, and other staff on-site as needed.

#### ***2.2.3.3 Services Offered***

The following activities and services would be provided at the new station:

- Disposal and transfer of garbage from self-haul and commercial customers
- Acceptance of source separated waste from self-haul customers
  - Co-mingled recyclables (curb-side mix of paper, cardboard, tin, aluminum, plastic containers, glass bottles and jars)
  - Cardboard
  - Household sharps
  - Mixed yard and food waste

- Clean wood
- Plastic film
- Expanded polystyrene (Styrofoam)
- Scrap metal
- Mercury lighting (fluorescent tubes and compact fluorescent bulbs)
- Large appliances (refrigerant and non-refrigerant)
- Small appliances (anything with a cord)
- Additional recyclables, which may include bicycles and bicycle parts, CD/DVD/VCR players, rigid plastics, textiles, mattresses, carpet, gypsum wallboard, aggregates (bricks, pavers, porcelain sinks and toilets), asphalt shingles and other construction and demolition waste; and other materials targeted for diversion from disposal
- Potential removal of recyclables from mixed loads and/or construction and demolition waste loads
- Potential mixed waste sorting and processing
- Potential transfer of commercial yard waste and curbside recyclables
- Potential on-site organics sorting and processing
- Potential HHW service

If HHW service is offered at the new station for collection of Moderate Risk Waste, those materials would be stored in specialized containers on-site. Moderate Risk Waste includes hazardous waste generated by households and small businesses. Where the division currently provides HHW service, the following materials are accepted: pesticides; glues and adhesives; antifreeze; aerosols; automotive products; fuels; rechargeable batteries; button batteries; pool and spa chemicals; oil-based paints; hobby chemicals; mercury devices; thinners and solvents; fluorescent bulbs; toxic cleaning products; fuel cylinders (under 5 gallons); lithium batteries; and alkaline batteries. Individual loads are limited to 50 gallons and containers greater than 5 gallons are generally not accepted.

While providing recycling services remains an important element of the *Comprehensive Solid Waste Management Plan*, specific policies and goals change over time. To this end, transfer stations, which are meant to last for approximately 50 years must be designed to be flexible; with sufficient space to reconfigure operations as program requirements change over time.

#### **2.2.3.4 Operations Health and Safety**

The following measures are anticipated during operations for the health and safety of customers, employees, and neighbors:

- The transfer building will be fully enclosed except for the entry/exit points, reducing off-site odor and dust.

- A mechanical exhaust ventilation system will be incorporated into the transfer station building for odor and dust control.
- A misting system will be installed in the transfer building for odor and dust control.
- Fully loaded transfer trailers will be removed from the station in the order that they are filled.
- Transfer trailers will be fully enclosed and doors and door-seals will be maintained to reduce the potential for odor, spills and litter.
- Efficient on-site traffic flows will minimize vehicle queuing, reducing emissions.
- The station will be cleaned on a regular basis.

### **2.3 Summary of Potential Environmental Impacts**

A summary of potential environmental impacts for each alternative discussed in Chapter 3 is shown in Table 2-2. See Chapter 3 for more details.

### **2.4 Summary of Potential Mitigation Measures**

A summary of potential mitigation measures discussed in Chapter 3 are shown in Table 2-3. See the mitigation section included for each element of the environment in Chapter 3 for more details.

**Table 2-2  
Summary of Potential Environmental Impacts**

Environmental Element	Phase of the Project	Potential Impacts		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Earth</b>	Construction	No impacts	<p>Potential minor and temporary impacts from erosion.</p> <p>Potential minor and temporary impacts from erosion during possible deconstruction of the existing Algona Transfer Station.</p>	<p>Potential minor and temporary impacts from erosion; on-site steep slopes are susceptible to landslide during a strong earthquake event and erosion.</p> <p>Potential minor and temporary impacts from erosion during construction of West Valley Highway South road frontage improvements.</p> <p>Potential minor and temporary impacts from erosion during possible deconstruction of the existing Algona Transfer Station.</p>
	Operation	Adjacent steep slopes may be prone to landslide during a strong earthquake event.	No impacts	Adjacent steep slopes may be prone to landslide during a strong earthquake event.
<b>Air, Odor, and GHGs</b>	Construction	No impacts	Potential minor, temporary impacts from emissions (including GHG), dust, and odors during station construction and possible deconstruction of the existing Algona Transfer Station.	Potential minor, temporary impacts from emissions (including GHG), dust, and odors during station construction, construction of West Valley Highway South frontage and overlay improvements, and possible deconstruction of the existing Algona Transfer Station.
	Operation	Minor uncontrolled odor and dust; approximately 30 percent more truck trips are required to haul the waste to the landfill compared to a	Potential negligible impacts from emissions (including GHG), dust, and odors; potential minor impacts from off-site traffic emissions.	Same as Alternative 1

**Table 2-2 (Continued)  
Summary of Potential Environmental Impacts**

Environmental Element	Phase of the Project	Potential Impacts		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Air, Odor, and GHGs (cont.)</b>		modern transfer station handling the same tonnage of waste, resulting in greater amounts of vehicle emissions.		
<b>Water Resources</b>	Construction	<p><i>Groundwater</i> No impacts</p> <p><i>Streams</i> No impacts</p> <p><i>Floodplains</i> No impacts</p> <p><i>Stormwater and Water Quality</i> No impacts</p>	<p><i>Groundwater</i> Potential negligible to no impacts from clearing, grading, and spills or leaks; potential minor and temporary impacts if dewatering is required; potential impacts from being located in high groundwater contamination area; see Hazardous Materials below.</p> <p><i>Streams</i> No impacts</p> <p><i>Floodplains</i> No impacts</p> <p><i>Stormwater and Water Quality</i> Potential negligible and temporary impacts from construction runoff and erosion.</p>	<p><i>Groundwater</i> Potential negligible to no impacts from clearing, grading, and spills or leaks; potential minor and temporary impacts if dewatering is required; potential minor, temporary impacts to groundwater recharge from effects to Algona Creek Tributary 09.0054A and wetlands on-site; potential impacts from being located in area susceptible to groundwater contamination; see Hazardous Materials below.</p> <p><i>Streams</i> Minor to moderate impacts from relocating or realigning a segment of Algona Creek Tributary 09.0054A and/or replacing existing culverts at the new transfer station and crossing under West Valley Highway South.</p> <p><i>Floodplains</i> No impacts</p> <p><i>Stormwater and Water Quality</i> Potential minor and temporary impacts from construction runoff and erosion.</p>

**Table 2-2 (Continued)  
Summary of Potential Environmental Impacts**

Environmental Element	Phase of the Project	Potential Impacts		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Water Resources (cont.)</b>	Operation	<i>Groundwater</i> No impacts  <i>Streams</i> No impacts  <i>Floodplains</i> No impacts  <i>Stormwater and Water Quality</i> No impacts	<i>Groundwater</i> No impacts  <i>Streams</i> No impacts  <i>Floodplains</i> No impacts  <i>Stormwater and Water Quality</i> No impacts	<i>Groundwater</i> No impacts  <i>Streams</i> Negligible to minor impacts.  <i>Floodplains</i> No impacts  <i>Stormwater and Water Quality</i> No impacts
<b>Vegetation and Wetlands</b>	Construction	<i>Vegetation</i> No impacts          <i>Wetlands</i> No impacts	<i>Vegetation</i> Potential minor to no impacts from altering or removing riparian vegetation on C St SW Wetland buffer.          <i>Wetlands</i> Potential minor to no impacts from altering C St SW Wetland buffer.	<i>Vegetation</i> Permanent and minor to moderate impacts from altering or removing up to approximately 1.3-acres of vegetation from Wetlands A and B and Algona Creek Tributary 09.0054A and up to approximately 1.3-acres of upland vegetation south of Wetland B and on northern side of the Alternative 2 site.          <i>Wetlands</i> Permanently filling 0.38 acre in Wetlands A and B from development of Alternative 2 and West Valley Highway South frontage improvements; because wetlands have moderate function and value it is anticipated that mitigation would be an improvement over existing conditions.
	Operation	<i>Vegetation</i> No impacts  <i>Wetlands</i> No impacts	<i>Vegetation</i> No impacts  <i>Wetlands</i> No impacts	<i>Vegetation</i> No impacts  <i>Wetlands</i> No impacts



**Table 2-2 (Continued)  
Summary of Potential Environmental Impacts**

Environmental Element	Phase of the Project	Potential Impacts		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Wildlife and Fish</b>	Construction	No impacts	<p>Potential negligible impacts to wildlife due to vegetation alteration or removal on the C St SW Wetland buffer; potential negligible wildlife impacts from noise; potential negligible fish and wildlife impacts from erosion and runoff.</p> <p>Potential short-term negligible impacts to wildlife during possible deconstruction of the existing Algona Transfer Station.</p>	<p>Potential minor to moderate impacts to wildlife and fish due to vegetation alteration or removal on-site, for road frontage improvements, and around Wetlands A and B and Algona Creek Tributary 09.0054A; after mitigation overall impacts are anticipated to be negligible to minor; potential negligible wildlife impacts from noise; potential negligible to minor fish and wildlife impacts from erosion and runoff.</p> <p>Potential short-term negligible impacts to wildlife during possible deconstruction of the existing Algona Transfer Station.</p>
	Operation	No impacts	No impacts	Potential negligible wildlife impacts; no fish impacts.
<b>Energy and Natural Resources</b>	Construction	<p><i>Energy</i> No impacts</p> <p><i>Natural Resources</i> No impacts</p>	<p><i>Energy</i> Negligible impacts from energy use during station construction and possible deconstruction of the existing Algona Transfer Station.</p> <p><i>Natural Resources</i> Negligible impacts from natural resources use.</p>	<p><i>Energy</i> Negligible impacts from energy use during station construction, construction of the road frontage and overlay improvements and possible deconstruction of the existing Algona Transfer Station.</p> <p><i>Natural Resources</i> Same as Alternative 1</p>
	Operation	<p><i>Energy</i> No impacts to supplies; approximately 30 percent more truck trips required to haul waste to</p>	<p><i>Energy</i> No impacts</p>	<p><i>Energy</i> No impacts</p>

**Table 2-2 (Continued)  
Summary of Potential Environmental Impacts**

Environmental Element	Phase of the Project	Potential Impacts		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Energy and Natural Resources (cont.)</b>		landfill than with modern transfer station (Alternatives 1 and 2) resulting in greater amounts of diesel fuel consumed annually and associated emissions.  <i>Natural Resources</i> No impacts	<i>Natural Resources</i> No impacts	<i>Natural Resources</i> No impacts
	<b>Noise</b>	Construction	No impacts	Potential minor to no temporary impacts from heavy equipment and trucks from station construction.  Potential negligible to no temporary impacts from heavy equipment and trucks during possible deconstruction of the existing Algona Transfer Station.
	Operation	No impacts	Potential minor to no long-term impacts.	Same as Alternative 1
<b>Hazardous Materials</b>	Construction	No impacts	Potential low to moderate impacts depending on whether soil or groundwater contamination is encountered on-site from the Auburn Boeing Plant plume; the risk of encountering detectable levels of TCE in groundwater during construction was determined to be low to moderate; additional groundwater investigations and monitoring may be required before	Potential low to moderate impacts depending on whether soil or groundwater contamination is encountered on-site from minor spills or leaks during previous uses of the site.

**Table 2-2 (Continued)  
Summary of Potential Environmental Impacts**

Environmental Element	Phase of the Project	Potential Impacts		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Hazardous Materials (cont.)</b>			purchase of the property and construction at the site.  Potential encounter with asbestos containing materials and lead based paints during possible deconstruction of the existing Algona Transfer Station.	Potential encounter with asbestos containing materials and lead based paints during possible deconstruction of the existing Algona Transfer Station.
	Operation	No impacts	No impacts	No impacts
<b>Land Use</b>	Construction	No impacts	Minor and short-term impacts on adjacent land uses.	Same as Alternative 1
	Operation	No impacts	No impacts	No impacts
<b>Visual Quality</b>	Construction	No impacts	Potential minor and temporary impacts from construction equipment and trucks.	Same as Alternative 1
	Operation	No impacts	Minor impacts to Viewpoint 1-E.	Minor impacts to Viewpoints 2-C and 2-D.
<b>Cultural Resources</b>	Construction	No impacts	No known historic properties, landmarks, features, or other evidence of Indian or historic use are located on or near Alternative 1; potential impacts could occur.	Same as Alternative 1. In addition, potential impacts could also occur from construction of road frontage improvements.
	Operation	No impacts	No impacts	No impacts
<b>Transportation</b>	Construction	No impacts	Potential minor and temporary impacts to traffic volumes; potential roadway wear and tear.	Same as Alternative 1
	Operation	No impacts	Potential wear and tear to roadway.	Same as Alternative 1
<b>Public Services and Utilities</b>	Construction	No impacts	No impacts	No impacts
	Operation	No impacts	No impacts	No impacts

**Table 2-3  
Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
Earth	Construction	No mitigation measures are required.	<p>The division will comply with permits issued by the City of Auburn including development of a geologic hazards report, Stormwater Pollution Prevention Plan, and Temporary Erosion and Sedimentation Control plan.</p> <p>Construction best management practices (BMPs) for Alternative 1 will include: conducting earthwork during dry months, installing sediment containment facilities, minimizing soil exposure, covering material stockpiles, using crushed rock in access areas, spraying to control dust, controlling stormwater discharges and drain inlets, re-vegetating exposed areas, and other measures as appropriate.</p> <p>If the existing Algona Transfer Station is deconstructed, construction equipment will access the above-ground structures from pavement areas and stormwater BMPs will be implemented to minimize erosion.</p>	<p>A critical area report per the Algona Municipal Code will be prepared for geologically hazardous areas. A geotechnical study will be undertaken during the final design of the Alternative 2 site to determine any special foundation or construction techniques. Design of the Alternative 2 site and road frontage improvements will incorporate the recommendations of the hazards analysis and geotechnical engineering report.</p> <p>Same construction BMPs as Alternative 1. Prior to construction, clearing limits will be demarcated, borings will be made to determine vulnerability to seismicity, steel cable fencing or catchment walls will be installed along toe of bluff, if required, and other measures will be implemented to mitigate geologically hazardous areas as appropriate.</p> <p>If the existing Algona Transfer Station is deconstructed, construction equipment will access the above-ground structures from pavement areas and stormwater BMPs will be implemented to minimize erosion.</p>
	Operation	No mitigation measures are required.	Erosion at the Alternative 1 site will be controlled by the construction of a stormwater conveyance, detention and treatment system and by installing landscaping and ground cover in compliance with City of Auburn permit requirements.	Erosion at the Alternative 2 site will be controlled by the construction of a stormwater conveyance, detention and treatment system in compliance with City of Algona permit requirements.

**Table 2-3 (Continued)  
Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Air, Odor, and GHGs</b>	Construction	No mitigation measures are required.	<p>The project will be designed in accordance with King County’s Green Building Ordinance and King County Code Chapter 18.17. The division will pursue a Leadership in Energy and Environmental Design (LEED) Platinum certification; the transfer building will also be enclosed and include a ventilation system to minimize dust and odor emissions.</p> <p>Construction BMPs for the project will include: covering piles and using water to reduce dusts and debris, cleaning vehicles leaving the site and installing exit aprons, sweeping streets adjacent to the transfer station, maintaining and routing of construction machinery and vehicles, preserving and replanting trees, and other BMPs to control dust and emissions in compliance with applicable regulations.</p>	Same as Alternative 1
	Operation	No mitigation measures are required.	Operation BMPs for the Alternative 1 site will include: regularly cleaning transfer building and transfer trailers and restricting loads for odor and dust control, maintaining transfer trailer doors and seals, efficient on-site traffic flows, operation under LEED efficiency, and utilizing a ventilation system, spray systems, and odor neutralizing agent; the project will minimize vehicle idling and compact loads to reduce the number of transfer trailer trips.	Same as Alternative 1
<b>Water Resources</b>	Construction	No mitigation measures are required.	<p><i>Groundwater</i></p> <p>A mitigation plan will be prepared per the Auburn Municipal Code; construction BMPs will minimize the potential for impacts to groundwater.</p>	<p><i>Groundwater</i></p> <p>A level two assessment will be prepared per the Algona Municipal Code; construction BMPs will minimize the potential for impacts to groundwater.</p>

**Table 2-3 (Continued)  
Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
Water Resources (cont.)			<p><i>Streams</i> No mitigation measures are required.</p> <p><i>Floodplains</i> No mitigation measures are required.</p> <p><i>Stormwater and Water Quality</i> The NPDES Construction Stormwater General Permit will be followed during construction; a new stormwater management system will be designed to meet Auburn’s <i>Surface Water Management Manual</i>.</p>	<p><i>Streams</i> Mitigation for the impacted reach of Algona Creek Tributary 09.0054A and associated vegetation will be determined during site design; BMPs will be followed during construction to minimize impacts.</p> <p><i>Floodplains</i> No mitigation measures are required.</p> <p><i>Stormwater and Water Quality</i> A new stormwater management system with flow control and water quality treatment will be designed to meet Ecology’s <i>Stormwater Management Manual for Western Washington</i>.</p>
	Operation	No mitigation measures are required.	<p><i>Groundwater</i> Operation BMPs as appropriate will comply with the Auburn Municipal Code.</p> <p><i>Streams</i> No mitigation measures are required.</p> <p><i>Floodplains</i> No mitigation measures are required.</p> <p><i>Stormwater and Water Quality</i> Operation BMPs for the project will include stormwater facility treatment of runoff from impervious surfaces, LID features, and drip</p>	<p><i>Groundwater</i> Operation BMPs described under streams will minimize the potential for drainage and water quality impacts to groundwater; operation BMPs as appropriate will comply with the Algona Municipal Code.</p> <p><i>Streams</i> BMPs for water resources and steep slopes will be followed during operation to minimize impacts.</p> <p><i>Floodplains</i> No mitigation measures are required.</p> <p><i>Stormwater and Water Quality</i> Same as Alternative 1</p>

**Table 2-3 (Continued)  
Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
Water Resources (cont.)			zones at parking stalls draining to the sanitary sewer system.	
Vegetation and Wetlands	Construction	No mitigation measures are required.	<p><i>Vegetation</i> Vegetation associated with the C Street SW Wetland will be clearly marked and avoided to the extent practicable; potential impacts to the wetland buffer will comply with the Auburn Municipal Code; restoration and enhancement to potential vegetation impacts may include planting native trees and shrubs in landscaped areas and revegetation after construction.</p> <p><i>Wetlands</i> The C Street SW Wetland will be clearly marked and avoided; construction BMPs for stormwater and erosion will minimize the potential impacts to the wetland and its buffer.</p> <p>Temporary erosion and sediment controls during possible deconstruction of the existing Algona Transfer Station will be followed to minimize or eliminate impacts to Wetland C.</p>	<p><i>Vegetation</i> Potential vegetation impacts and mitigation will be further refined during preparation of critical areas reports per Algona Municipal Code; clearing limits will be implemented to preserve the forested hillside areas and to minimize vegetation clearing to only that permitted for construction; planting mitigation plans will include native plants in landscaped areas and re-vegetation; no non-indigenous plants will be used without federal/state approval.</p> <p><i>Wetlands</i> Potential wetland and buffer impacts and mitigation will be further refined during preparation of the critical areas report per Algona Municipal Code.</p> <p>Compensatory mitigation will be provided for Wetlands A and B and their buffers that requires replacing wetland function and area at a higher ratio than the impact area.</p> <p>Construction BMPs will be followed similar to Alternative 1.</p>
	Operation	No mitigation measures are required.	<p><i>Vegetation</i> Revegetated areas will be maintained during operation.</p>	<p><i>Vegetation</i> Same as Alternative 1</p>

**Table 2-3 (Continued)  
Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Vegetation and Wetlands (cont.)</b>			<p><i>Wetlands</i></p> <p>The C Street SW Wetland and its buffer will be clearly marked and avoided during operation; operation BMPs described under stormwater and water quality will minimize potential impacts to wetlands.</p>	<p><i>Wetlands</i></p> <p>Potential wetlands and buffers that remain on-site will be clearly marked and avoided during operation; operation BMPs described under stormwater and water quality will minimize the potential for drainage and water quality impacts to wetlands.</p>
<b>Wildlife and Fish</b>	Construction	No mitigation measures are required.	<p>Performance standards per the Auburn Municipal Code will be implemented where appropriate.</p> <p>The C Street SW Wetland and associated habitat will be clearly marked and avoided during construction and a qualified wildlife biologist will survey the site prior to vegetation clearing.</p>	<p>A critical areas report and habitat assessment for fish and wildlife habitat conservation areas will be developed per the Algona Municipal Code that will identify mitigation.</p> <p>The project will use construction BMPs for erosion and stormwater and water quality, a qualified wildlife biologist will survey the site prior to vegetation clearing, an on-site stream/ditch assessment will be conducted for potential salmonid presence or viable habitat, culverts will be designed to meet fish passage criteria, re-vegetate habitat, and implement other mitigation as appropriate to minimize wildlife and fish impacts.</p>
	Operation	No mitigation measures are required.	The C Street SW Wetland and associated habitat will be clearly marked and avoided during operation.	Algona Creek Tributary 09.0054A, remaining wetlands, and associated habitat will be clearly marked and avoided during operation.
<b>Energy and Natural Resources</b>	Construction	No mitigation measures are required.	<p>Energy usage will be reduced in the design of the transfer station by seeking LEED Platinum certification and through consideration of the following: transfer station orientation, energy efficient systems, translucent panels, day light sensors, and solar powered photovoltaic generation system and/or use of green power.</p> <p>Energy will be conserved by recycling and</p>	Same as Alternative 1



**Table 2-3 (Continued)  
Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
Energy and Natural Resources (cont.)			reusing materials, greater efficiency in material handling and routing of construction vehicles, and direct conservation through elimination of waste.	
	Operation	No mitigation measures are required.	<p>Energy will be reduced by using fuel efficient maintenance vehicles and equipment, using alternative fuels to the extent practicable, minimizing vehicle idling time, and using recyclable materials.</p> <p>The project will comply with the energy conservation requirements of applicable codes and regulations.</p>	Same as Alternative 1
Noise	Construction	No mitigation measures are required.	<p>Measures to reduce noise levels and achieve compliance for Alternative 1 will include: incorporating sound attenuating design features, installing absorptive acoustical treatment, utilizing wing walls near openings, and designing on-site traffic routes; design mitigation measures considered for the project will depend on the geometry of the site developed during final design.</p> <p>The Auburn Municipal Code and King County Noise Ordinance will be followed during construction activities; construction will be restricted to daytime hours and equipment use will be limited as need to meet regulated noise levels.</p>	<p>Same design mitigation as Alternative 1.</p> <p>Solid walls may be included where required at adjacent residentially-zoned property.</p> <p>The Algona Municipal Code and King County Noise Ordinance will be followed during construction activities; construction will be restricted to daytime hours and equipment use will be limited as need to meet regulated noise levels.</p>
	Operation	No mitigation measures are required.	Operation-related measures to reduce noise levels and achieve code compliance will include: ensuring all on-site equipment is fitted with adequate exhaust muffling devices, minimizing idling duration of on-site vehicles, utilizing rubber-tired vehicles, installing ambient-sensing broadband back-	Same operation-related measures as Alternative 1.

**Table 2-3 (Continued)  
Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Noise (cont.)</b>			<p>up alarms on all equipment that remain on-site, and limiting the use of equipment as needed to meet regulated noise levels.</p> <p>The Auburn Municipal Code and King County Noise Ordinance will be followed during operation.</p>	<p>up alarms on all equipment that remain on-site, and limiting the use of equipment as needed to meet regulated noise levels.</p> <p>The Algona Municipal Code and King County Noise Ordinance will be followed during operation.</p>
<b>Hazardous Materials</b>	Construction	No new mitigation measures are required.	<p>Storage facilities for the above-ground fuel station at the Alternative 1 site will be designed with comprehensive safety features to comply with requirements of the International Building Code, the International Fire Code, and state and local ordinances. The above-ground fuel station will be sited away from surface waters and associated buffers to the extent practicable.</p> <p>Measures and plans for the project will include pre-construction soil characterization, an abatement plan for hazardous materials, a contaminated media contingency plan, a Spill Prevention Control and Countermeasures plan, a Temporary Erosion and Sediment Control plan, and a Health and Safety Plan. These plans will present procedures, including BMPs, for construction activities.</p> <p>Measures will be in accordance with the Auburn Municipal Code.</p> <p>Construction activities will comply with PSCAA and EPA regulations requiring the control of any asbestos-containing or lead-containing materials for possible deconstruction of the existing Algona Transfer Station, if applicable.</p>	<p>Same as Alternative 1</p> <p>Measures will be in accordance with the Algona Municipal Code Title 8, Health and Safety and Chapter 16.18D, Critical Aquifer Recharge Areas.</p>

**Table 2-3 (Continued)  
Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Hazardous Materials (cont.)</b>	Operation	No mitigation measures are required.	Measures and plans for the project will include an Operating Plan, inspection requirements, secured storage and secondary containment, nuisance animal and insect controls, health and safety measures, maintenance and training, dust and odors control, waste screening, and the Hazardous Materials Emergency Response Plan.  If Household Hazardous Waste service is offered at the Alternative 2 site, design will comply with High-hazard (Group H) occupancy requirements per the International Building Code and it will be stored in specialized containers on-site.	
<b>Land Use</b>	Construction	No mitigation measures are required.	No mitigation measures are required.	No mitigation measures are required.
	Operation	No mitigation measures are required.	No mitigation measures are required.	No mitigation measures are required.
<b>Visual Quality</b>	Construction	No mitigation measures are required.	Proposed measures include: design to complement the visual character of the surrounding area including structural materials and colors, downward exterior building lights, planting native vegetation, vegetated buffers around the perimeter, and installing of artwork in accordance with King County's "1% for Art program."	Same as Alternative 1
	Operation	No mitigation measures are required.	Fully enclosed end-loaded containers will be used for solid waste to reduce spillage and litter about the Alternative 1 site.	Same as Alternative 1
<b>Cultural Resources</b>	Construction	No mitigation measures are required.	An unanticipated discovery plan will be drafted and an archaeological survey will be conducted on the Alternative 1 site after preliminary design. Results will be submitted to the Washington State Department of	Same station site and existing Algona Transfer Station measures as Alternative 1.  An archaeological survey will also be conducted on the West Valley Highway South

**Table 2-3 (Continued)  
Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
<b>Cultural Resources (cont.)</b>			<p>Archaeology and Historic Preservation (DAHP).</p> <p>Prior to possible deconstruction, the existing Algona Transfer Station will be evaluated for historic significance.</p>	frontage improvements area after preliminary design.
	Operation	No mitigation measures are required.	No mitigation measures are required.	No mitigation measures are required.
<b>Transportation</b>	Construction	No mitigation measures are required.	<p>Construction of the Alternative 1 site and possible deconstruction of the existing Algona Transfer Station will be coordinated to minimize effects to travelers along public roads.</p> <p>Construction vehicles will follow a route and schedule that would avoid the AM and PM peak hours as much as possible.</p>	<p>Construction of the Alternative 2 site, West Valley Highway South frontage and overlay improvements, and possible deconstruction of the existing Algona Transfer Station will be coordinated to minimize effects to travelers along West Valley Highway South.</p> <p>Road frontage improvements will occur after the majority of heavy construction and earthwork at the Alternative 2 site to minimize impacts on traffic and reconstruction. Construction vehicles would follow a route and schedule that would avoid the AM and PM peak hours as much as possible.</p> <p>West Valley Highway South will receive pavement overlays north and south of the road frontage area after construction and prior to operation.</p>
	Operation	No mitigation measures are required.	No mitigation measures are required.	No mitigation measures are required.
<b>Public Services and Utilities</b>	Construction	No mitigation measures are required.	<p><i>Public Services</i></p> <p>The division will coordinate with fire and police services; access to emergency facilities will be maintained; public outreach will be used for possible disruptions; and stormwater BMPs will be implemented.</p>	Same as Alternative 1

**Table 2-3 (Continued)**  
**Summary of Potential Mitigation Measures**

Environmental Element	Phase of the Project	Proposed Mitigation Measures		
		No Action Alternative	Alternative 1	Alternative 2 (Preferred Alternative)
Public Services and Utilities (cont.)			<i>Public Utilities</i> The division will coordinate with utilities; public outreach will be used for possible disruptions.	
	Operation	No mitigation measures are required.	No mitigation measures are required.	No mitigation measures are required.

## 2.5 Summary of Significant Unavoidable Adverse Impacts

Significant unavoidable adverse impacts are those adverse impacts that would remain even after applying mitigation measures, or for which no mitigation measures would be effective.

None of the alternatives are anticipated to result in significant unavoidable adverse impacts.

## 2.6 Summary of Indirect and Cumulative Impacts

Indirect impacts are caused by the proposed project and are reasonably foreseeable, but are later in time or farther removed in distance than direct impacts. Examples include changes in land use and economic vitality (e.g., induced new development, growth, and population), water quality and natural resources. Cumulative impacts are impacts that result from the incremental consequences of a project when added to other past or reasonable foreseeable future actions. The cumulative effects may be undetectable when viewed individually, but added to other disturbances, eventually lead to a measurable environmental change. Examples include changes to land use, the loss of wetland areas, and the elimination of wildlife habitats caused by a combination of new developments in areas that were formerly open space.

Table 2-4 summarizes the Indirect and cumulative impacts anticipated to be caused by each of the alternatives. See the Indirect and cumulative impacts section included for each element of the environment in Chapter 3 for more details.

**Table 2-4  
Summary of Indirect and Cumulative Impacts**

<b>Environmental Element</b>	<b>No Action Alternative</b>	<b>Alternative 1</b>	<b>Alternative 2 (Preferred Alternative)</b>
<b>Earth</b>	No impacts	No impacts	No impacts
<b>Air, Odor and GHGs</b>	No impacts	Adding recycling services may indirectly reduce GHG emissions.	Same as Alternative 1
<b>Water Resources</b>	No impacts	No impacts	Potential indirect impacts to Algona Creek and other downstream waterbodies.
<b>Vegetation and Wetlands</b>	Potential indirect impacts from introduction of non-native plants from yard waste.	Same as No Action Alternative	Potential indirect impacts from introduction of non-native plants from yard waste; potential indirect impacts to vegetation and hydrology if off-site wetland mitigation occurs; potential indirect impacts to

**Table 2-4 (Continued)  
Summary of Indirect and Cumulative Impacts**

<b>Environmental Element</b>	<b>No Action Alternative</b>	<b>Alternative 1</b>	<b>Alternative 2 (Preferred Alternative)</b>
			Algona Creek and surrounding vegetation.
<b>Wildlife and Fish</b>	No impacts	No impacts	Potential indirect impacts to Algona Creek and other downstream waterbodies that may affect fish and wildlife habitat.
<b>Energy and Natural Resources</b>	Would not benefit from energy efficiency in new transfer stations (Alternatives 1 and 2); would benefit from other energy and natural resource conservation practices in the region.	Solid waste compaction prior to transport would indirectly reduce energy use; would benefit from other energy and natural resource conservation practices in the region similar to the No Action Alternative.	Same as Alternative 1
<b>Noise</b>	No impacts	No impacts	No impacts
<b>Hazardous Materials</b>	No impacts	Potential indirect impacts to soil or groundwater contamination from Auburn Boeing Plant plume during construction activities.  Potential indirect impact to surrounding waste disposal sites.	Potential indirect impact to surrounding waste disposal sites.
<b>Land Use</b>	No impacts	No impacts	No impacts
<b>Visual Quality</b>	No impacts	No impacts	No impacts
<b>Cultural Resources</b>	No impacts	No impacts	No impacts
<b>Transportation</b>	No impacts	No impacts	No impacts
<b>Public Services and Utilities</b>	Potential indirect impacts to other facilities from the lack of capacity for materials collection.	No impacts	No impacts

## **2.7 Benefits and Disadvantages of Delaying Implementation of the Project**

### **2.7.1 Benefits of Delaying Implementation of the Project**

The benefits of delaying implementation of the project would include: environmental impacts (e.g. to geology and soils, air quality, water resources, biological resources, noise, energy and natural resources, and transportation) from construction of the project would be delayed, or eliminated if the project was never constructed.

### **2.7.2 Disadvantages of Delaying Implementation of the Project**

The disadvantages of delaying implementation of the project would include:

- Safety goals at the existing transfer station would continue to not be met requiring additional effort from staff and management.
- Vehicle and handling capacity would continue to not be met at the existing transfer station resulting in traffic backup on local roads.
- The existing transfer station does not accommodate waste compaction and additional transfer trailer trips would continue to be required to the landfill or other disposal facilities.
- Recycling and other services would continue to not be provided by the division in the south county service area.
- Transfer services would no longer be offered in the south county service area if the existing transfer station were to close. There would be an increase in travel time to other waste collection facilities for former Algona Transfer Station customers in the service area.

## **2.8 Alternatives Considered but not Advanced**

The Transfer Plan examined a number of alternatives for the future of solid waste transfer in the County, including alternatives to replacing the Algona Transfer Station. These alternatives, discussed below, were rejected when the Transfer Plan was adopted by County Council in 2007; a decision that was supported by both the SWAC and MSWMAC advisory committees.

### **2.8.1 Maintain Algona Transfer Station as Self-haul Only**

During the development of the Transfer Plan, the division considered operating Algona as a self-haul-only station. The analysis of this option is described fully in Chapter Two of Milestone Report Four of the Transfer Plan. By the consensus of the SWAC, MSWMAC, and division, this alternative was rejected.

Commercial customers bring more garbage to the transfer station than self-haulers, but the overall number of transactions is higher for self-haulers. Self-haul customers typically use the station more on weekends, while commercial transactions occur primarily on weekdays. Removing commercial traffic from the station would not eliminate crowding on weekends, and



would result in a station that is under-utilized on weekdays. It would also result in a decrease in the LOS to the largest customers, the commercial haulers, who would have to drive farther from their collection routes to reach a transfer station. The additional travel time and fuel use by commercial haulers driving to a more distant facility could result in higher rates for curbside collection customers.

### **2.8.2 Rebuild Algona Transfer Station On-site**

The existing station site is less than 5 acres. A new station designed for the site would not be large enough to house a waste compactor, adequate queuing space, and the additional trailers required to handle increased projected tonnage described below in Section 2.2.1. There would not be enough space to provide recycling services as desired by customers and as required in the *Draft Comprehensive Solid Waste Management Plan*.

### **2.8.3 Immediate Closure of the Algona Transfer Station**

The Algona Transfer Station provides transfer service for the south county service area. It meets the criterion for siting, which was defined as “estimated time of less than 30 minutes to a transfer station for 90 percent of users within the service area,” which means that the service provided is convenient to customers. Closing the existing station without a replacement would force station users to drive farther distances to dispose of their solid waste. This could impact curbside collection rates in the south county service area.

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