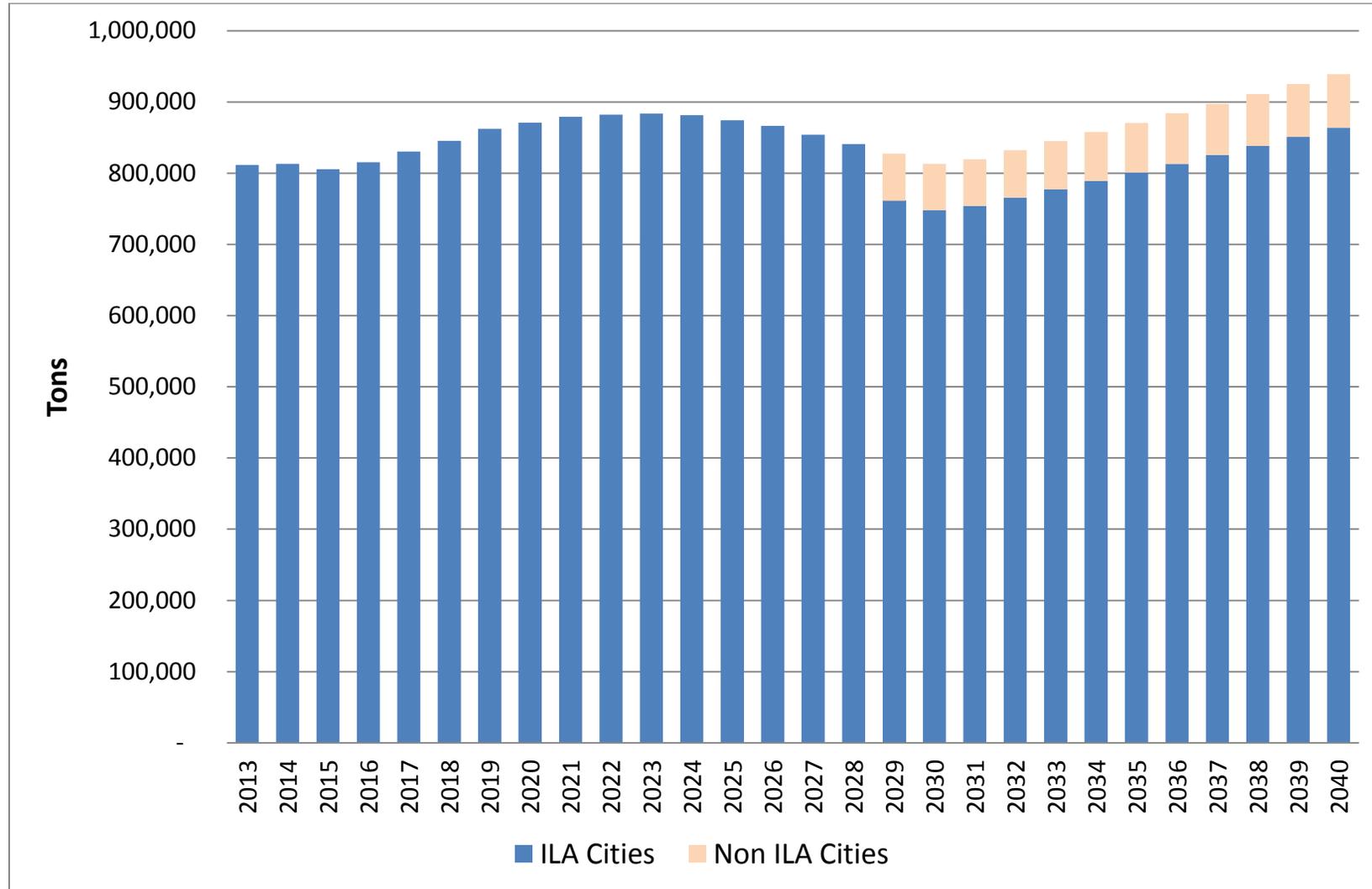


Long-term Tonnage Forecast of Waste Disposed

Assumes 1 percent recycling rate increase per year to 70 percent

Does not include garbage tons from Bellevue and 4 point Cities after July 2028



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Level-of-Service – Capacity

Capacity is the measure of a station's ability to accommodate the flow of both commercial and self-haul vehicles and tonnage. There is very little existing literature on how to quantify the capacity of a solid waste facility. The standard used in the 2006 Transfer System Plan was developed using transportation industry standards of measurement for capacity of roadways and intersections – called a level of service or LOS measurement. An LOS measurement is a qualitative measure based on quantitative data. For the 2006 Plan consultants were retained to refine methodology and to apply them to the transfer stations; for this analysis the division applied the methodology.

The methodology for rating actual vehicle and tonnage capacity was developed by determining each station's maximum sustainable operating capacity. Optimal operating capacity is defined as the maximum optimal number of vehicles or tonnage that can be processed through the station each hour based on the station design and customer mix.

The standard chosen for vehicle capacity is an LOS score of C (on a scale of A to F), which is defined as a steady flow of vehicles except during occasional peak periods. The LOS measurements are defined as follows:

- LOS A – Can easily accommodate vehicles/tonnage at all times of the day (optimal operating capacity exceeded <0.5% of operating hours).
- LOS B – Able to accommodate vehicles/tonnage at most times of the day (optimal operating capacity exceeded between 0.5% - 5% of operating hours).
- LOS C – Able to accommodate vehicles/tonnage all times of the day, except for occasional peak hour times (optimal operating capacity exceeded 5% - 10% of operating hours).
- LOS D – Beginning to have difficulty accommodating all vehicles/tonnage during peak hours (optimal operating capacity exceeded 10%-20% of operating hours).
- LOS E – Cannot accommodate vehicles/tonnage without off-site impacts or overloading on-site resources (optimal operating capacity exceeded 20 - 50% of operating hours).
- LOS F – Cannot accommodate vehicles/tonnage throughput without off-site impacts and overloading of on-site resources. Capacity exceeded most hours (optimal operating capacity exceeded >50% of operating hours).

Alternatives Summary

	Base (Transfer Plan)	A	A*	B	C	C**	D	D**	D***
Open facilities	Shoreline Bow Lake Factoria Northeast South County	Shoreline Bow Lake Factoria (expands to include Eastgate property) South County	Shoreline Bow Lake Factoria – limited self-haul Houghton – self-haul only South County	Shoreline Bow Lake Northeast (expanded) South County	Shoreline Bow Lake – limited self-haul Northeast (expanded)	Shoreline Bow Lake – limited self-haul Northeast (expanded) Algona – self-haul only	Shoreline Bow Lake – limited self-haul Factoria (expands to include Eastgate property)	Shoreline Bow Lake – limited self-haul Factoria (expands to include Eastgate property) Algona – self-haul only	Shoreline Bow Lake – limited self-haul Factoria Houghton – self-haul only Algona – self-haul only
Closed facilities	Algona Houghton Renton	Algona Houghton Renton	Algona Renton	Algona Factoria Houghton Renton	Algona Factoria Houghton Renton	Factoria Houghton Renton	Algona Houghton Renton	Houghton Renton	Renton
Do not build		Northeast	Northeast	Factoria	Factoria South County	Factoria South County	Northeast South County	Northeast South County	Northeast South County
Pre-load compaction	All	All	All except Houghton	All	All	All except Algona	All	All except Algona	All except Algona & Houghton
Storage capacity	3 days everywhere	3 days everywhere	3 days everywhere except Houghton	3 days everywhere	3 days everywhere	3 days everywhere except Algona	3 days everywhere	3 days everywhere except Algona	3 days everywhere except Algona & Houghton
Self-haul service	All stations, all hours	All stations, all hours	All hours: Shoreline Bow Lake Houghton South County Factoria weekends only	All stations, all hours	All hours: Shoreline Northeast Bow Lake weekends and limited weekday hours	All hours: Shoreline Northeast Algona Bow Lake weekends and limited weekday hours	All hours: Shoreline Factoria Bow Lake weekends and limited weekday hours	All hours: Shoreline Factoria Algona Bow Lake weekends and limited weekday hours	All hours: Shoreline Houghton Algona Factoria weekends only Bow Lake weekends and limited weekday hours
Recycling service	Recycling scenario 3 at all stations	Recycling scenario 3 at all stations	Recycling scenario 3: Shoreline Bow Lake Factoria South County Factoria weekends only Houghton limited materials	Recycling scenario 3 at all stations	Recycling scenario 3 at all stations Bow Lake weekends and limited weekday hours	Recycling scenario 3: Shoreline Bow Lake Northeast Bow Lake weekends and limited weekday hours Algona yard waste only	Recycling scenario 3 at all stations Bow Lake weekends and limited weekday hours	Recycling scenario 3: Shoreline Bow Lake Factoria Bow Lake weekends and limited weekday hours Algona yard waste only	Recycling scenario 3: Shoreline Bow Lake Factoria Factoria weekends only Houghton limited materials Bow Lake weekends and limited weekday hours Algona yard waste only
HHW service	Factoria 6 days/week	Factoria 6 days/week	Factoria 6 days/week	Northeast 6 days/week	Northeast 6 days/week	Northeast 6 days/week	Factoria 6 days/week	Factoria 6 days/week	Factoria 6 days/week
Map reference	1	2	3, 4, 5	6	7, 8	9, 10, 11	12, 13	14, 15, 16	17, 18, 19, 20

Transfer system packages considered for the 2006 Transfer System Plan:**Package Summary**

Pkg.	Full Service Facilities	Self-Haul Only	Commercial Only	Closed Facilities	Total # of Facilities
1	New South County New Bow Lake New Factoria/Eastgate New NE Lake WA	None	None	Algona Renton Houghton	9
1A	New South County New Bow Lake New Factoria (no Eastgate) New NE Lake WA	None	None	Algona Renton Houghton	9
2	New South County New Bow Lake New Factoria/Eastgate	Houghton	New NE Lake WA	Algona Renton	10
2A	New South County New Factoria/Eastgate	Houghton Renton	New NE Lake WA New Bow Lake	Algona	11
3	New South County New Bow Lake New NE Lake WA	Renton Houghton Factoria (no Eastgate)	None	Algona	11
4	New Factoria/Eastgate	Algona Renton Houghton	New South County New Bow Lake New NE Lake WA	None	12

Cost analysis presented in the 2006 Transfer System Plan:**Package Cost Information Through 2028**

Pkg.	Total CIP Cost of Package ⁽¹⁾ (2005 dollars)	Present Value of Net Capital Cost ⁽²⁾	Average Annual Net Capital Cost (2006-2028)	Annual Operating Cost for Package (2005 dollars)	Sum of Annual Net Capital Cost and Staffing
1	\$197,400,000	\$120,500,000	\$5,200,000	\$4,300,000	\$9,500,000
1A	No cost data – see package description*	No cost data – see package description*	No cost data – see package description*	\$4,300,000	No cost data – see package description*
2	\$181,300,000	\$108,000,000	\$4,700,000	\$4,700,000	\$9,400,000
2A	\$169,900,000	\$102,000,000	\$4,500,000	\$4,800,000	\$9,300,000
3	\$157,800,000	\$ 88,900,000	\$3,900,000	\$5,200,000	\$9,100,000
4	\$154,900,000	\$ 90,700,000	\$3,900,000	\$5,200,000	\$9,100,000

(1) For the purposes of this analysis, minimal capital investments were added for self-haul only options, which will leave the stations largely as is at the time of waste export. The exceptions to this are the Factoria and Algona stations. A new roof would need to be added to Factoria and a retaining wall is needed at Algona. It is important to note that long-term use of these stations may require capital investments to address specific structural and site issues since the facilities will be at least 50 years old in 2015.

(2) Net capital cost = debt service - lifecycle savings generated by compaction



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Transfer Plan Level-of-Service Criteria Applied to Alternatives¹

		Base	A	A*	B	C	C**	D	D**	D***
1. Estimated time to a transfer facility within the service area for 90% of users	< 30 min = YES	YES	YES	YES	YES	NO ²	YES	NO ³	YES	YES
2. Time on site meets standard for 90% of trips⁴										
a. commercial vehicles	< 16 min = YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
b. business self-haulers	< 30 min = YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
c. residential self-haulers	< 30 min = YES	YES	YES	NO	YES	NO	NO	YES	NO	NO
3. Facility hours meet user demand⁵	YES/NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
4. Recycling services meet Plan policies										
a. business self-haulers	YES/NO	YES	YES	NO	YES	NO	NO	NO	NO	NO
b. residential self-haulers	YES/NO	YES	YES	NO	YES	NO	NO	NO	NO	NO
5. Vehicle capacity⁶										
a. meets 2027 forecast needs	YES/NO	YES	YES	NO	YES	NO	NO	NO	NO	NO
b. meets 2040 forecast needs	YES/NO	YES	YES	NO	YES	NO	NO	NO	NO	NO
6. Average daily handling capacity (tons)										
a. meets 2027 forecast needs	YES/NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
b. meets 2040 forecast needs	YES/NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
7. Space for 3 days' storage										
a. at time of construction	YES/NO	YES	YES	NO	YES	YES	NO	YES	NO	NO
b. meets 2040 forecast needs	YES/NO	YES	YES	NO	YES	YES	NO	YES	NO	NO
8. Space to expand on-site⁷	YES/NO	YES	YES	NO	YES	YES	NO	YES	NO	NO
9. Minimum roof clearance of 25 ft.	YES/NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
10. Meets facility safety goals	YES/NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
11. Ability to compact waste	YES/NO	YES	YES	NO	YES	YES	NO	YES	NO	NO
12. Safety										
a. Meets goals for structural integrity	YES/NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
b. Meets FEMA immediate occupancy standards	YES/NO	YES	YES	NO	YES	YES	NO	YES	NO	NO
13. Meets applicable local noise ordinance levels	YES/NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
14. Meets PSCAA standards for odors	YES/NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
15. Meets goals for traffic on local streets⁸										
a. Meets LOS standard	YES/NO	YES	YES	NO	YES	YES	NO	YES	NO	NO
b. Traffic does not extend onto local streets 95% of the time	YES/NO	YES	YES	NO	YES	YES	NO	YES	NO	NO
16. 100 foot buffer between active area and nearest residence	YES/NO	YES	YES	NO	YES	YES	YES	YES	YES	NO
17. Transfer station is compatible with surrounding land use	YES/NO	YES	NO	NO	YES	YES	YES	NO	NO	NO

¹ Criteria applied to the overall system alternative – individual transfer stations may vary

² See drive time map 8

³ See drive time map 13

⁴ Analysis based on vehicle capacity LOS rating

⁵ Hours may be adjusted at some facilities to meet user demand

⁶ “NO” if one or more facilities in the alternative did not have an LOS score of at least a C – see vehicle capacity detail for information about each facility

⁷ This criterion has been adapted to indicate future flexibility to expand service, e.g., HHW, or to support waste conversion technology

⁸ Represents an assumed outcome; this criterion would need more thorough assessment

Current 7/1/2012 – 6/30/2013

	Factoria	Houghton	Renton	Algona	Bow Lake	Shoreline
weekday	B	D	A	D	A	A
weekend	C	D	C	E	A	A
overall	B	D	B	E	A	A
	Yes	No	Yes	No	Yes	Yes

Vehicle Capacity – Commercial

		2027				
Base	Factoria	NERTS	SCRTS	Bow Lake	Shoreline	
	weekday	B	B	A	A	A
	weekend	C	B	A	A	A
overall	Yes	Yes	Yes	Yes	Yes	

		2040				
Base	Factoria	NERTS	SCRTS	Bow Lake	Shoreline	
	weekday	A	B	A	A	A
	weekend	A	B	A	A	A
overall	Yes	Yes	Yes	Yes	Yes	

Vehicle Capacity – Self-haul

		2027				
Base	Factoria	NERTS	SCRTS	Bow Lake	Shoreline	
	weekday	C	B	B	A	A
	weekend	C	B	C	D	B
overall	C	B	B	B	B	
	Yes	Yes	Yes	Yes	Yes	

		2040				
Base	Factoria	NERTS	SCRTS	Bow Lake	Shoreline	
	weekday	A	B	C	A	A
	weekend	A	C	C	E	B
overall	A	B	C	B	B	
	Yes	Yes	Yes	Yes	Yes	

Vehicle Capacity – Commercial

2027

A	Factoria	SCRTS	Bow Lake	Shoreline
	A	A	A	A
	Yes	Yes	Yes	Yes

2040

	Factoria	SCRTS	Bow Lake	Shoreline
	A	A	A	A
	Yes	Yes	Yes	Yes

A*

2027

	Factoria	SCRTS	Bow Lake	Shoreline
	E	A	A	A
	No	Yes	Yes	Yes

2040

	Factoria	SCRTS	Bow Lake	Shoreline
	C	A	A	A
	Yes	Yes	Yes	Yes

Vehicle Capacity – Self-haul

2027

A	Factoria	SCRTS	Bow Lake	Shoreline
weekday	B	B	A	A
weekend	C	C	D	B
overall	B	B	B	B
	Yes	Yes	Yes	Yes

2040

A	Factoria	SCRTS	Bow Lake	Shoreline
weekday	A	C	A	A
weekend	B	C	E	B
overall	A	C	B	B
	Yes	Yes	Yes	Yes

A*

2027

	Factoria	SCRTS	Bow Lake	Shoreline	Houghton
weekday		B	A	A	F
weekend	C	C	D	B	E
overall	C	B	B	B	F
	Yes	Yes	Yes	Yes	No

2040

A*	Factoria	SCRTS	Bow Lake	Shoreline	Houghton
weekday		C	A	A	F
weekend	A	C	E	B	E
overall	A	C	B	B	F
	Yes	Yes	Yes	Yes	No

Vehicle Capacity – Commercial

2027

B	NERTS	SCRTS	Bow Lake	Shoreline
	A	A	A	A
	Yes	Yes	Yes	Yes

2040

	NERTS	SCRTS	Bow Lake	Shoreline
	A	A	B	A
	Yes	Yes	Yes	Yes

2027

C	NERTS	Bow Lake	Shoreline
	A	B	A
	Yes	Yes	Yes

2040

	NERTS	Bow Lake	Shoreline
	A	A	A
	Yes	Yes	Yes

Vehicle Capacity – Self-haul

2027

B	NERTS	SCRTS	Bow Lake	Shoreline
weekday	C	B	A	A
weekend	C	C	E	B
overall	C	B	B	B
	Yes	Yes	Yes	Yes

2040

B	NERTS	SCRTS	Bow Lake	Shoreline
weekday	B	C	A	A
weekend	A	C	E	B
overall	B	C	B	B
	Yes	Yes	Yes	Yes

2027

C	NERTS	Bow Lake	Shoreline
weekday	C	B	A
weekend	C	F	B
overall	C	D	B
	Yes	No	Yes

2040

C	NERTS	Bow Lake	Shoreline
weekday	B	C	A
weekend	A	F	B
overall	B	D	B
	Yes	No	Yes

Vehicle Capacity – Commercial

C**

2027		
NERTS	Bow Lake	Shoreline
A	B	A
Yes	Yes	Yes

2040		
NERTS	Bow Lake	Shoreline
A	A	A
Yes	Yes	Yes

D

2027		
Factoria	Bow Lake	Shoreline
C	B	A
Yes	Yes	Yes

2040		
Factoria	Bow Lake	Shoreline
B	A	A
Yes	Yes	Yes

Vehicle Capacity – Self-haul

C**

2027				
	NERTS	Bow Lake	Shoreline	Algona
weekday	C	A	A	E
weekend	C	A	B	F
overall	C	A	B	E
	Yes	Yes	Yes	No

C**

2040				
	NERTS	Bow Lake	Shoreline	Algona
weekday	B	A	A	E
weekend	A	A	B	F
overall	B	A	B	E
	Yes	Yes	Yes	No

D

2027			
	Factoria	Bow Lake	Shoreline
weekday	A	B	A
weekend	B	F	B
overall	B	D	B
	Yes	No	Yes

D

2040			
	Factoria	Bow Lake	Shoreline
weekday	A	C	A
weekend	A	F	B
overall	A	D	B
	Yes	No	Yes

Vehicle Capacity – Commercial

D**

2027		
Factoria	Bow Lake	Shoreline
C	B	A
Yes	Yes	Yes

2040		
Factoria	Bow Lake	Shoreline
B	A	A
Yes	Yes	Yes

D***

2027		
Factoria	Bow Lake	Shoreline
C	B	A
Yes	Yes	Yes

2040		
Factoria	Bow Lake	Shoreline
B	A	A
Yes	Yes	Yes

Vehicle Capacity – Self-haul

D**

2027				
	Factoria	Bow Lake	Shoreline	Algona
weekday	A	A	A	E
weekend	B	A	B	F
overall	A	A	B	E
	Yes	Yes	Yes	No

D**

2040				
	Factoria	Bow Lake	Shoreline	Algona
weekday	A	A	A	E
weekend	A	A	B	F
overall	A	A	B	E
	Yes	Yes	Yes	No

D***

2027					
	Factoria	Bow Lake	Shoreline	Algona	Houghton
weekday	A	A	A	E	F
weekend	B	A	B	F	E
overall	A	A	B	E	F
	Yes	Yes	Yes	No	No

D***

2040					
	Factoria	Bow Lake	Shoreline	Algona	Houghton
weekday	A	A	A	E	F
weekend	A	A	B	F	E
overall	A	A	B	E	F
	Yes	Yes	Yes	No	No

Tonnage Capacity

Current

7/1/2012 - 6/30/2013

Factoria	Houghton	Renton	Algona	Bow Lake	Shoreline
B	D	A	C	A	A
Yes	No	Yes	Yes	Yes	Yes

Base

2027 forecast

Factoria	NERTS	SCRTS	Bow Lake	Shoreline
A	A	A	A	A
Yes	Yes	Yes	Yes	Yes

2040 Forecast

Factoria	NERTS	SCRTS	Bow Lake	Shoreline
A	A	A	A	A
Yes	Yes	Yes	Yes	Yes

A

2027 Forecast

Factoria CH	Factoria SH	SCRTS	Bow Lake	Shoreline
A	A	A	A	A
Yes	Yes	Yes	Yes	Yes

2040 Forecast

Factoria CH	Factoria SH	SCRTS	Bow Lake	Shoreline
A	A	A	A	A
Yes	Yes	Yes	Yes	Yes

A*

2027 Forecast

Factoria	Houghton	SCRTS	Bow Lake	Shoreline
A	A	A	A	A
Yes	Yes	Yes	Yes	Yes

2040 Forecast

Factoria	Houghton	SCRTS	Bow Lake	Shoreline
A	A	A	A	A
Yes	Yes	Yes	Yes	Yes

Tonnage Capacity

B

2027 Forecast

NERTS	SCRTS	Bow Lake	Shoreline
B	A	A	A
Yes	Yes	Yes	Yes

2040 Forecast

NERTS	SCRTS	Bow Lake	Shoreline
B	A	A	A
Yes	Yes	Yes	Yes

C

2027 Forecast

NERTS	Bow Lake	Shoreline
B	C	A
Yes	Yes	Yes

2040 Forecast

NERTS	Bow Lake	Shoreline
C	C	A
Yes	Yes	Yes

C**

2027 Forecast

NERTS	Bow Lake	Shoreline	Algona
B	C	A	A
Yes	Yes	Yes	Yes

2040 Forecast

NERTS	Bow Lake	Shoreline	Algona
C	C	A	A
Yes	Yes	Yes	Yes

Tonnage Capacity

D

2027 Forecast

Factoria CH	Factoria SH	Bow Lake	Shoreline
B	A	C	A
Yes	Yes	Yes	Yes

2040 Forecast

Factoria CH	Factoria SH	Bow Lake	Shoreline
B	A	C	A
Yes	Yes	Yes	Yes

D***

2027 Forecast

Factoria CH	Factoria SH	Bow Lake	Shoreline	Algona	Houghton
B	A	C	A	A	A
Yes	Yes	Yes	Yes	Yes	Yes

2040 Forecast

Factoria CH	Factoria SH	Bow Lake	Shoreline	Algona	Houghton
B	A	C	A	A	A
Yes	Yes	Yes	Yes	Yes	Yes

D**

2027 Forecast

Factoria CH	Factoria SH	Bow Lake	Shoreline	Algona
B	A	C	A	A
Yes	Yes	Yes	Yes	Yes

2040 Forecast

Factoria CH	Factoria SH	Bow Lake	Shoreline	Algona
B	A	C	A	A
Yes	Yes	Yes	Yes	Yes

**Self-haul Recycling
Base -- Current Transfer Plan**

Curbside Mix	Shoreline	Bow Lake*	Factoria	Northeast	South County
Corrugated Cardboard					
Mixed Paper & Newspaper					
PET & HDPE Plastic Bottles					
Other Rigid Plastic Containers					
Plastic Film					
Aluminum Cans					
Tinned Food Cans					
Glass Containers					
Organics					
Yard Waste					
Food & Soiled Paper					
Metal					
Scrap Metal					
Appliances					
Construction & Demolition					
Clean Wood					
Gypsum Wallboard					
Asphalt Shingles					
Carpet & Carpet Pad					
Bulky					
Furniture					
Mattresses					
Tires					
Reusables					
Reusable Building Materials	events	events	events	events	events
Reusable Household Goods					
Textile: Clothes					
Bicycles					

	weekdays & weekends
	4:00 p.m. to 8:00 p.m. weekdays & weekends
	weekend only
	no service

*Bow Lake weekdays 6 a.m. to 8 p.m.



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Self-haul Recycling Alternative A

Curbside Mix	Shoreline	Bow Lake*	Factoria	South
Corrugated Cardboard				
Mixed Paper & Newspaper				
PET & HDPE Plastic Bottles				
Other Rigid Plastic Containers				
Plastic Film				
Aluminum Cans				
Tinned Food Cans				
Glass Containers				
Organics				
Yard Waste				
Food & Soiled Paper				
Metal				
Scrap Metal				
Appliances				
Construction & Demolition				
Clean Wood				
Gypsum Wallboard				
Asphalt Shingles				
Carpet & Carpet Pad				
Bulky				
Furniture				
Mattresses				
Tires				
Reusables				
Reusable Building Materials	events	events	events	events
Reusable Household Goods				
Textile: Clothes				
Bicycles				

	weekdays & weekends
	4:00 p.m. to 8:00 p.m. weekdays & weekends
	weekend only
	no service

*Bow Lake weekdays 6 a.m. to 8 p.m.



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Self-haul Recycling Alternative A*

Curbside Mix	Shoreline	Bow Lake*	Factoria	Houghton	South
Corrugated Cardboard					
Mixed Paper & Newspaper					
PET & HDPE Plastic Bottles					
Other Rigid Plastic Containers					
Plastic Film					
Aluminum Cans					
Tinned Food Cans					
Glass Containers					
Organics					
Yard Waste					
Food & Soiled Paper					
Metal					
Scrap Metal					
Appliances					
Construction & Demolition					
Clean Wood					
Gypsum Wallboard					
Asphalt Shingles					
Carpet & Carpet Pad					
Bulky					
Furniture					
Mattresses					
Tires					
Reusables					
Reusable Building Materials	events	events	events		events
Reusable Household Goods					
Textile: Clothes					
Bicycles					

	weekdays & weekends
	4:00 p.m. to 8:00 p.m. weekdays & weekends
	weekend only
	no service

*Bow Lake weekdays 6 a.m. to 8 p.m.



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Self-haul Recycling Alternative B

Curbside Mix	Shoreline	Bow Lake*	Northeast	South
Corrugated Cardboard				
Mixed Paper & Newspaper				
PET & HDPE Plastic Bottles				
Other Rigid Plastic Containers				
Plastic Film				
Aluminum Cans				
Tinned Food Cans				
Glass Containers				
Organics				
Yard Waste				
Food & Soiled Paper				
Metal				
Scrap Metal				
Appliances				
Construction & Demolition				
Clean Wood				
Gypsum Wallboard				
Asphalt Shingles				
Carpet & Carpet Pad				
Bulky				
Furniture				
Mattresses				
Tires				
Reusables				
Reusable Building Materials	events	events	events	events
Reusable Household Goods				
Textile: Clothes				
Bicycles				

	weekdays & weekends
	4:00 p.m. to 8:00 p.m. weekdays & weekends
	weekend only
	no service

*Bow Lake weekdays 6 a.m. to 8 p.m.



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Self-haul Recycling Alternative C

Curbside Mix	Shoreline	Bow Lake	Northeast
Corrugated Cardboard			
Mixed Paper & Newspaper			
PET & HDPE Plastic Bottles			
Other Rigid Plastic Containers			
Plastic Film			
Aluminum Cans			
Tinned Food Cans			
Glass Containers			
Organics			
Yard Waste			
Food & Soiled Paper			
Metal			
Scrap Metal			
Appliances			
Construction & Demolition			
Clean Wood			
Gypsum Wallboard			
Asphalt Shingles			
Carpet & Carpet Pad			
Bulky			
Furniture			
Mattresses			
Tires			
Reusables			
Reusable Building Materials	events	events	events
Reusable Household Goods			
Textile: Clothes			
Bicycles			

	weekdays & weekends
	4:00 p.m. to 8:00 p.m. weekdays & weekends
	weekend only
	no service

Self-haul Recycling Alternative C**

Curbside Mix	Shoreline	Bow Lake	Northeast	Algona
Corrugated Cardboard				
Mixed Paper & Newspaper				
PET & HDPE Plastic Bottles				
Other Rigid Plastic Containers				
Plastic Film				
Aluminum Cans				
Tinned Food Cans				
Glass Containers				
Organics				
Yard Waste				
Food & Soiled Paper				
Metal				
Scrap Metal				
Appliances				
Construction & Demolition				
Clean Wood				
Gypsum Wallboard				
Asphalt Shingles				
Carpet & Carpet Pad				
Bulky				
Furniture				
Mattresses				
Tires				
Reusables				
Reusable Building Materials	events	events	events	
Reusable Household Goods				
Textile: Clothes				
Bicycles				

	weekdays & weekends
	4:00 p.m. to 8:00 p.m. weekdays & weekends
	weekend only
	no service

Self-haul Recycling Alternative D

Curbside Mix	Shoreline	Bow Lake	Factoria
Corrugated Cardboard			
Mixed Paper & Newspaper			
PET & HDPE Plastic Bottles			
Other Rigid Plastic Containers			
Plastic Film			
Aluminum Cans			
Tinned Food Cans			
Glass Containers			
Organics			
Yard Waste			
Food & Soiled Paper			
Metal			
Scrap Metal			
Appliances			
Construction & Demolition			
Clean Wood			
Gypsum Wallboard			
Asphalt Shingles			
Carpet & Carpet Pad			
Bulky			
Furniture			
Mattresses			
Tires			
Reusables			
Reusable Building Materials	events	events	events
Reusable Household Goods			
Textile: Clothes			
Bicycles			

	weekdays & weekends
	4:00 p.m. to 8:00 p.m. weekdays & weekends
	weekend only
	no service

Self-haul Recycling Alternative D**

Curbside Mix	Shoreline	Bow Lake	Factoria	Algona
Corrugated Cardboard				
Mixed Paper & Newspaper				
PET & HDPE Plastic Bottles				
Other Rigid Plastic Containers				
Plastic Film				
Aluminum Cans				
Tinned Food Cans				
Glass Containers				
Organics				
Yard Waste				
Food & Soiled Paper				
Metal				
Scrap Metal				
Appliances				
Construction & Demolition				
Clean Wood				
Gypsum Wallboard				
Asphalt Shingles				
Carpet & Carpet Pad				
Bulky				
Furniture				
Mattresses				
Tires				
Reusables				
Reusable Building Materials	events	events	events	
Reusable Household Goods				
Textile: Clothes				
Bicycles				

	weekdays & weekends
	4:00 p.m. to 8:00 p.m. weekdays & weekends
	weekend only
	no service

Self-haul Recycling Alternative D***

Curbside Mix	Shoreline	Bow Lake	Factoria	Houghton	Algona
Corrugated Cardboard					
Mixed Paper & Newspaper					
PET & HDPE Plastic Bottles					
Other Rigid Plastic Containers					
Plastic Film					
Aluminum Cans					
Tinned Food Cans					
Glass Containers					
Organics					
Yard Waste					
Food & Soiled Paper					
Metal					
Scrap Metal					
Appliances					
Construction & Demolition					
Clean Wood					
Gypsum Wallboard					
Asphalt Shingles					
Carpet & Carpet Pad					
Bulky					
Furniture					
Mattresses					
Tires					
Reusables					
Reusable Building Materials	events	events	events		
Reusable Household Goods					
Textile: Clothes					
Bicycles					

	weekdays & weekends
	4:00 p.m. to 8:00 p.m. weekdays & weekends
	weekend only
	no service

Houghton Renovation Project Cost Summary

Phase/ Cost Elements	Base Estimate	% Contingency	Contingency	Base Estimate + Contingency
Planning:				
Admin (SW-ESS)	\$22,000			
A/E Consultant	\$5,000			
Subtotal Planning Phase	\$27,000	15%	\$4,050	\$31,050
Preliminary Design:				
A/E Consultant	\$40,000			
Admin	\$16,000			
Subtotal Preliminary Design Phase	\$56,000	35%	\$19,600	\$75,600
Final Design:				
A/E Consultant	\$50,000			
Admin	\$16,000			
PCSS	\$10,000			
Permits	\$10,000			
Subtotal Final Design Phase	\$86,000	25%	\$21,500	\$107,500
Implementation :				
A/E Consultant	\$50,000			
Admin	\$21,000			
Contractor	\$1,200,000			
Subtotal Implementation Phase	\$1,271,000	15%	\$190,650	\$1,461,650
Closeout:				
Admin (SW-ESS)	\$15,000			
A/E Consultant	\$35,000			
Subtotal Close-out Phase	\$50,000	10%	\$5,000	\$55,000
Total Cash Flow (Outturn)Cost	\$1,490,000			\$1,730,800

Algona Renovation Project Cost Summary

Phase/ Cost Elements	Base Estimate	% Contingency	Contingency	Base Estimate + Contingency
Planning:				
Admin (SW-ESS)	\$52,000			
A/E Consultant	\$195,000			
<i>Subtotal Planning Phase</i>	\$247,000	15%	\$37,050	\$284,050
Preliminary Design:				
A/E Consultant	\$150,000			
Admin	\$21,000			
<i>Subtotal Preliminary Design Phase</i>	\$171,000	35%	\$59,850	\$230,850
Final Design:				
A/E Consultant	\$220,000			
Admin	\$26,000			
PCSS	\$15,000			
Permits	\$35,000			
<i>Subtotal Final Design Phase</i>	\$296,000	25%	\$74,000	\$370,000
Implementation :				
A/E Consultant	\$200,000			
Admin	\$26,000			
Contractor	\$6,500,000			
<i>Subtotal Implementation Phase</i>	\$6,726,000	15%	\$1,008,900	\$7,734,900
Closeout:				
Admin (SW-ESS)	\$25,000			
A/E Consultant	\$210,000			
<i>Subtotal Close-out Phase</i>	\$235,000	10%	\$23,500	\$258,500
Total Cash Flow (Outturn)Cost	\$7,675,000			\$8,878,300