



**CITY OF KIRKLAND**  
**Department of Public Works**  
123 Fifth Avenue, Kirkland, WA 98033 425.587.3800  
[www.kirklandwa.gov](http://www.kirklandwa.gov)

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## MEMORANDUM

**To:** Kurt Triplett, City Manager

**From:** John MacGillivray, Solid Waste Programs Lead  
Ray Steiger, P.E., Public Works Director

**Date:** November 4, 2011

**Subject:** Solid Waste Debt Recommendation

### **RECOMMENDATION:**

Staff recommends that the City Council support a 30-year bonding period for the King County Solid Waste Division (KCSWD) to finance the transfer station system infrastructure upgrades.

### **BACKGROUND DISCUSSION:**

The region's transfer stations were built in the 1960's, are old, and inefficient having now been in operation for nearly 50 years. In 2006, KCSWD collaborated with cities in the region on the development of a new transfer station master plan that called for investment in new transfer stations that would have a potential life of 40+ years. The transfer system infrastructure upgrades identified in the Plan are expected to be completed by 2018 and were envisioned to be financed from bonds re-paid from the revenue received from disposal rates that are adopted by the King County Council.

Kirkland is one of 37 King County cities that signed an Interlocal Agreement (ILA) with King County in 1988. Per the agreement, ILA cities have agreed to direct all of their solid waste to the King County transfer system and pay disposal rates to the KCSWD for the transport and disposal of their solid waste. In return, the KCSWD owns, manages, and maintains its transfer stations, consolidates and transports solid waste, and ultimately disposes of solid waste at the County's only operating landfill at Cedar Hills. The 1988 ILAs expire in 2028, and without modification, KCSWD will not be able to sell bonds for the Transfer Station Plan that extend beyond the 2028 expiration, since they must have a reliable sources of revenue to secure and retire the bond debt.

The 2006 Transfer Station Plan will provide the opportunity for cities to continue to receive solid waste service from the KCSWD well beyond 2028. To accomplish that, the ILAs can be extended to a date more closely aligned with the useful life of the solid waste system or some other long-term date beyond 2028. The disposal system that will be used once the Cedar Hills Regional Landfill closes has yet to be determined. While the Cedar Hills Regional Landfill is expected to close in 2024, it is anticipated that decisions on the disposal system will be decided at least five years prior to the closure of the landfill. Transfer stations are anticipated to be needed regardless of the post-Cedar Hill disposal system.

Over the past several months, the Solid Waste ILA Review Committee, a subcommittee of the Metropolitan Solid Waste Management Advisory Committee (MSWMAC), has been negotiating the terms of a new ILA with the KCSWD. The City of Kirkland is represented on the subcommittee by MSWMAC Chairperson and Kirkland City Council Member Jessica Greenway. Through the process, there has been difficulty in building consensus between cities around a bonding period and subsequent ILA extension, and at this point, cities are being asked to weigh in on their recommendation for extension. The new draft ILA is substantially completed and will be presented to MSWMAC member cities at their November 17 meeting. Kirkland City Council feedback is requested.

### *FINANCING OPTIONS ANALYSIS AND DISCUSSION*

To finance the transfer station infrastructure upgrades, two bonding options have emerged as viable choices for cities to consider. The bonding period selected will directly impact the length of the ILA extension and the required funding levels. A detailed comparison of the bonding options are shown in two exhibits prepared by KCSWD: *Attachment 1 – Comparison of Solid Waste Bond Options and Fiscal Impact*, and *Attachment 2 – Rate Scenarios – 3 Debt Structures*.

#### *20-Year Bonding Period scenario*

This option would result in higher short and long term disposal rates through the 20 year period. Based upon 2010 data provided by the KCSWD, the tipping fee could increase by 14% in 2013 to approximately \$125/ton from the current \$109/ton (Attachment 2). At the time of the closure of the Cedar Hills Landfill in 2028 the disposal rate may increase by 42% to about \$155/ton.

This shorter bonding period would however provide for a comparably lower total interest payments of \$174 M. Due to the shorter bonding period, the required term of the ILA extension would be shorter and, consequently, cities would have more long term flexibility by not being tied to the ILA.

The projected 14% tipping fee increase in 2013 would translate to an increase to Kirkland's retail rates of about 4% and increase the cost for the weekly 35 gallon garbage cart service by about 80 cents per month (based on Kirkland's adopted 2012 rates).

#### *30-Year Bonding Period scenario*

This option would result in lower short and long term disposal rates for the next 20 years. With this bonding option, the tipping fee could increase by 12% to approximately \$122/ton in 2013 from the current \$109/ton. At the time of the closure of the Cedar Hill Landfill in 2028, the tipping fee may increase by 38% to about \$151/ton. The longer bond period would result in comparably higher total interest payments of \$276 M. Due to the longer bonding period, the required term of the ILA extension would be longer and, consequently, cities would have less flexibility as they would be tied to a longer ILA. This longer term option more closely aligns the bonding period with the anticipated 40+ year life span of the system upgrades.

Based upon the data provided in *Attachment 2*, a 12% tipping fee increase would translate to an increase to Kirkland's retail rates of about 3.5% and increase the cost for the weekly 35 gallon garbage cart service by about 69 cents per month (based on Kirkland's adopted 2012 rates).

However it is important to note that rates would be higher from years 21-30 in the 30-year scenario.

*STAFF RECOMMENDATION*

Both the 20-year and 30-year options are rational and defensible. However, the City of Kirkland, as a signatory to the ILA with King County and as a host transfer station City, has been an active system user and proponent of the economy of scale provided by the King County Solid Waste cooperative system which has kept solid waste rates low for all King County residents. An alternative transfer system, perhaps in which Kirkland constructs, owns and maintains its own transfer system and exports its waste to a distant landfill, would likely be vastly more expensive over the long and short term. Given this, the length of the bonding period, length of the ILA extension, and the resulting flexibility gained from the shorter term agreement are currently factors that are not as important for Kirkland. Consequently, rate impacts are the determining factor in choosing between a 20- and 30-year bonding periods. Kirkland's past practice has been to provide the greatest number of services to its customers for the lowest cost possible. Interest rates are at historic lows and securing those rates as long as possible is another factor. The 30-year bonding option will result in lower rates for Kirkland rate payers for the initial 20-year period relative to the 20-year bonding option. In the end, the staff conclusion is that this initial rate savings is worth the higher payments in the last ten years and the staff recommendation is to support the 30-year bonding proposal.



## Comparison of Solid Waste Bond Options & Fiscal Impact

**Hypothetical Example -- This is NOT a Detailed Rate Analysis**

Assume \$336,000,000 is needed for new Solid Waste capital facilities

Facility:	Cost:	Original Station Build Date:
Factoria Transfer	\$77,000,000	1963 to 1967
Bow Lake Transfer	\$92,000,000	1977
NE Transfer	\$86,000,000	Houghton - 1967
SW Transfer	\$81,000,000	Algona & Renton - 1963 to 1967
	\$336,000,000	Enumclaw - 1994 Vashon Island - 1999 Shoreline - 2008

Also assume: Annual system tonnage = 900,000

All capital costs must be recovered within utility rates - no county general fund money or major grants

Borrowing used for all capital costs; usually cash contribution from operating underexpenditure is used to reduce borrowing

Simple financial plan assumes one massive bond issue; usually projects are staggered over 10 years or so

All capital improvements have useful life of 30 to 40 years or more

King County Council will not authorize utility revenue bonds beyond ILA term, which is currently 2028

This is a simple analysis: ignore financing costs, bond coverage requirements, etc. for now

Simple debt analysis doesn't include offsetting operating savings from system efficiencies -- detailed rate analysis due in early 2011

Capacity enhancements at Cedar Hills landfill covered by reserves; doesn't include 10-year savings of @ \$80 million from extended landfill operations (2026).

Scenario:	10 YEAR BONDS	15 YEAR BONDS	20 YEAR BONDS	30 YEAR BONDS	40 YEAR BONDS
Loan Principle:	\$336,000,000	\$336,000,000	\$336,000,000	\$336,000,000	\$336,000,000
Interest Rate:	4.500%	4.500%	4.500%	4.500%	4.500%
Term (Years)	10	15	20	30	40
Annual Bond Payment:	\$41,787,006.41	\$30,844,529.40	\$25,508,422.85	\$20,429,551.69	\$18,126,373.60
Monthly Payment:	\$3,482,250.53	\$2,570,377.45	\$2,125,701.90	\$1,702,462.64	\$1,510,531.13
Est. Total Payments:	\$417,870,064.11	\$462,667,941.07	\$510,168,456.98	\$612,886,550.77	\$725,054,944.07
Est. Total Interest:	\$81,870,064.11	\$126,667,941.07	\$174,168,456.98	\$276,886,550.77	\$389,054,944.07
Debt Service rate impact:	\$46.43	\$34.27	\$28.34	\$22.70	\$20.14
Cost per can/ tipping fee component:	\$7.20	\$6.49	\$6.14	\$5.81	
Increase of \$ per can:	\$1.64	\$0.93	\$0.58	\$0.25	

### Policy Choices:

1. Build the Transfer Station system as approved by MSWMAC, SWAC, RPC & County with +/- 15 year bonds.
2. Extend the ILA agreements to match useful life of assets and to reduce near-term rate impacts.
3. Revisit "Transfer Station & Waste Export System Plan" and eliminate projects to reduce rate impacts within ILA constraints.

# Rate Scenarios - 3 Debt Structures

