



MEMO TO: Members of the City Council

FROM: Mayor John Marchione

DATE: June 25, 2019

SUBJECT: King County Comprehensive Solid Waste Management Plan

I. RECOMMENDED ACTION

Pat McLoughlin, Director of the King County Solid Waste Division, and Andy Rheaume, Public Works Operations Manager will provide a presentation on the 2019 King County Comprehensive Solid Waste Management Plan and respond to any Councilmember questions.

II. DEPARTMENT CONTACTS

Maxine Whattam, Interim Public Works Director	425-556-2529
Gary Schimek, Acting City Engineer	425-556-2742
Andy Rheaume, Operations Manager	425-556-2741

III. DESCRIPTION/BACKGROUND

Washington State law requires that each county, in cooperation with the cities located in the county, prepare a coordinated, comprehensive solid waste management plan (per RCW 70.95). The current King County Comprehensive Solid Waste Management Plan ("Comp Plan") was adopted in 2001. This plan establishes policy guidance for the King County solid waste system, which includes six urban transfer stations and four rural transfer facilities, the Cedar Hills landfill, and waste prevention and recycling programs. Policies in the plan address the following:

- Solid waste system planning
- Waste prevention, recycling and solid waste collection
- Solid waste transfer and processing system
- Landfill management and solid waste disposal
- Solid waste system finance and rates to support the system

The Comp Plan has been subject to review numerous times since 2001, with a draft submitted for public comment and review in 2009, another review occurring in 2013, and the most recent review occurring in 2018. In the intervening years, the County developed and adopted the 2007 Transfer Station and Waste Management Plan, which identified

transfer station upgrades that would be needed to address aging transfer station infrastructure, growth projections and resulting increases in solid waste tonnage.

The County and cities also updated and extended the Interlocal Agreement for the solid waste system, with this Agreement lasting through 2040. The economic recession that began in 2007 resulted in a prolonged decline in the amount of solid waste that was generated in King County. It is just in the last few years that tonnage has slowly increased.

The Solid Waste Division initiated the process of updating the Comp Plan in collaboration with the cities and two advisory committees, the Solid Waste Advisory Committee (SWAC) and the Metropolitan Solid Waste Management Advisory Committee (MSWMAC), of which Redmond is a member. King County Council approved the Comp Plan on April 24, 2019.

ANALYSIS

2019 Comp Plan:

The 2019 Comp Plan addresses similar areas as the current plan, including the transfer system, service level standards and sustainable materials management (a holistic approach to waste reduction and recycling). It is organized according to goals and policies which provide "broad direction," which should not change throughout the life of the plan, as well as "targeted, specific and time-based" actions that may be adapted to adjust to changing conditions.

There are three key policy issues in the Plan that will impact Redmond:

(1) Recycling Goal of 70%: The Plan sets forth a goal of achieving "Zero Waste" by 2030 - with an interim goal of diverting 70% away from the landfill to achieve the 70% goal. King County defines zero waste as having no recyclable materials going to the landfill. The Plan proposes several actions that range from waste prevention and recycling education to building code updates that provide adequate space at multi-family housing developments for recycling and composting collection. In contrast, the 2001 Comp Plan did not set an overall diversion goal, rather, it set targets for single-family, multifamily and commercial diversion.

Redmond's current overall diversion rate (percent of waste that is diverted from landfill) is 45%. Single family diversion rate is 67%, multi-family is 30%, and commercial is 37%. In the 2019-2020 budget, Council authorized one-time funds to increase the amount of diversion of recyclables and compost materials from multifamily and commercial sectors to help to reach the overall diversion rate goal of 70%.

(2) Northeast Transfer Station: The Houghton Transfer Station in Kirkland is identified for closure in the 2019 Comp Plan. The Houghton Transfer Station was built in the 1960's and is at the end of its useful life. A new transfer station will be built in the Northeast area of King County to serve this area prior to Houghton closing.

If the 2019 Comp Plan is approved by the cities, King County will initiate a process with the Northeast cities to site, design, develop and construct a new transfer station. The process will include extensive community involvement.

(3) Long-Term Disposal: The 2001 Plan assumed that the Cedar Hills landfill would reach capacity in 2012, however the life of the landfill has been extended due to more efficient practices, the development of new capacity, and a reduction in garbage tonnage (due in large part to the 2007 economic recession and resulting drop in garbage).

To address future disposal needs, King County considered three different options:

1. Waste Export: Transporting garbage by rail to a landfill located outside of King County,
2. Waste to Energy Facility: Developing a waste to energy facility that would incinerate garbage, and
3. Extend the life of the Cedar Hills landfill: by further developing the landfill to expand its capacity.

The 2019 Comp Plan directs that King County will extend the life of Cedar Hills landfill until 2040. The Comp Plan also directs the Solid Waste Division to identify the next disposal option for after 2040.

A comparison of the disposal options are shown below in Table 1.

Table 1 - Comparison of Disposal Options			
Comparative Attribute	Further Develop Cedar Hills	Waste to Export to An Out-of-County Landfill	Waste to Energy Facility
Cost per Ton	\$41	\$55	\$136
Annual Greenhouse Gas Emissions	91,000 metric tons of CO2 Equivalents	91,000 metric tons of CO2 Equivalents	1,200,000 metric tons of CO2 Equivalents
Recycling Rate	No change	No change	2% increase
Risks	SEPA, Permitting	Rail Capacity, Control	Siting, Sizing

The waste export option would rail waste to an out-of-county landfill after permitted capacity at Cedar Hills is used by 2028. This option was not recommended because it has higher costs than further development of the Cedar Hills landfill, requires modifying transfer stations for rail-ready transport, and requires sufficient lead time for contracting services.

The waste to energy facility option would direct all the region's solid waste to a new mass burn facility. This option was not recommended because it has the highest cost of the options considered, it requires guaranteed amounts of consistent feedstock, has the potential for inefficient operation in the early years, and it has the highest greenhouse gas emissions of the options considered.

The recommended option will further develop Cedar Hills to maximize disposal capacity, extending the division's over 50-year practice of managing waste locally. The increase capacity will be consistent with the terms and conditions of a Settlement Agreement between King County and the neighboring property owners about future development and management of the landfill.

Residents located near the Cedar Hills Landfill expressed concerns regarding development of the Landfill and maintaining the property buffer, odor management, and wildlife management. The Comp Plan was amended as a result of King County Council review to address these concerns. These amendments:

- Reinforce the requirement of a 1,000-ft buffer surrounding the landfill;
- Require the Solid Waste Division develop and implement a plan to manage the bird population at the landfill;
- Clarify and reiterate that the Solid Waste Division is required to make a good faith effort to keep the maximum height of 788 feet for Areas 5, 6, and 7 of the landfill; and
- Require that King County develop a plan for a long-term waste disposal method, with a progress report due to the Council by December 31, 2021.

The 2019 Comp Plan is available on King County's website:

<https://your.kingcounty.gov/dnrp/library/solid-waste/about/planning/2019-comp-plan.pdf>.

IV. PREVIOUS DISCUSSIONS HELD

COUNCIL ACTIONS/COMMUNICATION

Date (MM/DD/YYYY)	Action / Committee Presentation
02/27/2018	Study Session
06/11/2019	Planning and Public Works Committee of the Whole
Today	Study Session

V. IMPACT

A. Service/Delivery:

Implementation of the Comprehensive Solid Waste Management Plan will impact recycling services provided to City residents and businesses, disposal of solid waste at the Cedar Hills landfill, and the location of the North East transfer station.

B. Fiscal Note:

Solid waste fees charged to City residents and businesses will increase with implementation of the Comp Plan, as these fees pay for infrastructure and program improvements included in the plan.

VI. ALTERNATIVES TO STAFF RECOMMENDATION

None

VII. TIME CONSTRAINTS

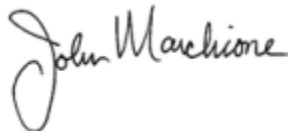
King County transmitted the Comp Plan to Redmond on May 20, 2019, which initiated a 120-day clock for Redmond to approve or disapprove the Plan or take no action. The Plan is approved if cities that represent 75% or more of the population approve the Plan within 120 days. The City Council must act on the Comp Plan by its September 10, 2019 Council meeting if it chooses to act.

VIII. LIST OF ATTACHMENTS

Attachment A: PowerPoint Presentation on the 2019 Comprehensive Solid Waste Management Plan



Maxine Whattam, Interim Public Works Director



Approved for Agenda _____
John Marchione, Mayor