ENVIRONMENT COMMITTEE AGENDA

July 11, 2019 – North Conference Room

21630 11th Avenue South – Des Moines 98198

5:30 PM – 6:50 PM

1. Approval of the minutes of 6.13.2019 meeting (Chair to call the meeting to order at 5:30 pm)

2. 2019 Comprehensive Solid Waste Management Plan (Informational – 5:30 to 5:50 pm)

   Staff will provide an overview of the comprehensive plan, the Interlocal Agreement between Des Moines and King County, and the adoption process.

3. Water District 54 Comprehensive Plan (Informational - 5:50 to 6:50 pm)

   Representatives from Water District 54 will provide an informational update to the Committee in regards to their Draft Comprehensive Plan.

DRAFT MINUTES - ENVIRONMENTAL COUNCIL COMMITTEE MEETING 6.13.2019

The meeting was called to order @ 6:00 PM, Thursday, June 13, 2019, in the South Conference Room @ 21630 11th Avenue South, Des Moines with the following in attendance:

Council Members	City Staff
Traci Buxton (Chair)	Dan Brewer – Chief Operations Officer
Robert Back	Brandon Carver, PW Director
Matt Pina	Loren Reinhold, SWM Utility Manager
	Tyler Beekley, Civil Engineer II
	Matt Hutchins, Assistant City Attorney
	Beth Anne Wroe, Finance Director
	Eric Mandelas, Accountant
	Peggy Volin, Admin Asst. II

AGENDA:

1. Approval of 5.09.2019 Minutes
2. CIP Project Updates
3. Draft 2020-2025 SWM CIP

MEETING:

1. Approval of the minutes of 5.09.2019 meeting – unanimous approval.
2. CIP Project Updates: Tyler Beekley, Civil Engineer II provided an update to the Committee on the status of current CIP projects for 2019 which includes the North Fork McSorely Creek Division Project; the 6th Avenue/S 239th Pipe Replacement; the 8th Avenue S (264th to 265th) Project; the Soundview Drive Project; and the Deepdene Outfall Project. Also, at tonight's Council meeting there will be a new CIP Project proposed to repair the failing pipe section located on the north side of S 251st Avenue by the 251st Street Outfall Project.
3. Draft 2020-2025 SWM CIP: Loren Reinhold, SWM Utility Manager briefed the Committee on the 2020-2025 SWM CIP which also included projects that had been completed in 2018 and projects that will be for design in 2019 and the following years 2020-2024 along with construction dates for said projects.

Meeting adjourned at 6:50 pm
Minutes respectfully Submitted by: Peggy Volin, Admin Asst II

Memo

Date: July 11, 2019

To: Council Environment Committee

From: Laura Techico, AICP – Principal Planner

RE: 2019 Comprehensive Solid Waste Management Plan

Purpose

The purpose of this memorandum is to provide the Council Environment Committee with an update on the adoption process for the 2019 Comprehensive Solid Waste Management Plan (Comprehensive Plan).

Background

State Requirements

RCW 70.95.080 requires each county and city to prepare a coordinated, comprehensive solid waste management plan to consider and plan for the handling methods and services for recyclables, organics and nonrecyclable wastes. Cities may prepare their own plans or enter into an agreement with the county in which the city participates in preparing a joint city-county plan for solid waste management.

King County Des Moines Interlocal Agreement

King County entered into interlocal agreements with Des Moines and 36 other King County cities to cooperatively manage solid waste and to work collaboratively to periodically update the comprehensive plan adopted pursuant to chapter 70.95 RCW. The Amended and Restated Solid Waste Interlocal Agreement was approved by motion of the City Council on January 24, 2013 (Attachment 1).

Metropolitan Solid Waste Management Advisory Committee

The ILA creates an advisory committee comprised of representatives from cities known as the Metropolitan Solid Waste Management Advisory Committee (MSWMAC). Cities may designate a representative and alternate(s). MSWMAC advises the King County Council, King County Executive, Solid Waste Advisory Committee and other jurisdictions on all policy aspects of solid waste management and planning, including assisting in the development of the Comprehensive Plan.

2019 Comprehensive Solid Waste Management Plan

Over the last few years, MSWMAC, SWAC (interdisciplinary advisory committee that includes industry and public participants) and King County have been coordinating on development of the Comprehensive Plan. A link to the plan is below. King County Solid Waste Division's responses to frequently asked questions are provided (Attachment 2).

2019 Comprehensive Solid Waste Management Plan:
https://your.kingcounty.gov/dnrp/library/solid-waste/about/planning/2019-comp-plan.pdf

Process and Timeline

4/24/19 Metropolitan King County Council passed Ordinance 18893, adopting the Comprehensive Plan.

5/20/19 King County Solid Waste Division transmitted the Comprehensive Plan to the 37 ILA cities, marking the beginning of the 120-day action period, which ends on 9/16/19.

Direction

Staff requests the Committee's input and direction related to adoption of the Comprehensive Plan. A draft resolution was provided by King County (Attachment 3). Per the ILA, the plan is considered "adopted" by all ILA cities within the meaning of the agreement when it is approved by three-quarters of the population of the incorporated jurisdictions taking formal action within the 120 day timeline. Staff recommends adoption of the plan to demonstrate Des Moines' support of the plan and development process and compliance with RCW 70.95.080. The draft resolution could be added to the August 8, 2019 Consent Calendar.

King County

Solid Waste Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 701
Seattle, WA 98104-3855
206-296-6542 Fax 206-296-0197
TTY Relay: 711

RECEIVED
NOV 07 2013
CITY OF DES MOINES
CITY CLERK

November 6, 2013

City of Des Moines
City Clerk
21630 11th Ave S, Suite D
Des Moines, WA 98198

Dear City Clerk,

Enclosed for your records is the City's signed solid waste interlocal agreement. If you have any questions about the agreement, please contact me at 206-477-5212 or Diane.yates@kingcounty.gov.

Sincerely,

Diane Yates
Intergovernmental Relations Liaison
King County Solid Waste Division

Encl.

AMENDED AND RESTATED SOLID WASTE INTERLOCAL AGREEMENT

This Amended and Restated Solid Waste Interlocal Agreement ("Agreement") is entered into between King County, a political subdivision of the State of Washington and the City of **Des Moines**, a municipal corporation of the State of Washington, hereinafter referred to as "County" and "City" respectively. Collectively, the County and the City are referred to as the "Parties." This Agreement has been authorized by the legislative body of each jurisdiction pursuant to formal action as designated below:

King County: Ordinance No. 17617

City: **Motion of the City Council on January 24, 2013**

PREAMBLE

A. This Agreement is entered into pursuant to chapter 39.34 RCW for the purpose of extending, restating and amending the Solid Waste Interlocal Agreement between the Parties originally entered into in **1988** (the "Original Agreement"). The Original Agreement provided for the cooperative management of Solid Waste in King County for a term of forty (40) years, through June 30, 2028. The Original Agreement is superseded by this Amended and Restated Agreement, as of the effective date of this Agreement. This Amended and Restated Agreement is effective for an additional twelve (12) years through December 31, 2040.

B. The Parties intend to continue to cooperatively manage Solid Waste and to work collaboratively to maintain and periodically update the existing King County

Comprehensive Solid Waste Management Plan (Comprehensive Plan) adopted pursuant to chapter 70.95 RCW.

C. The Parties continue to support the established goals of Waste Prevention and Recycling as incorporated in the Comprehensive Solid Waste Management Plan, and to meet or surpass applicable environmental standards with regard to the Solid Waste System.

D. The County and the Cities agree that System-related costs, including environmental liabilities, should be funded by System revenues which include but are not limited to insurance proceeds, grants and rates;

E. The County, as the service provider, is in the best position to steward funds System revenues that the County and the Cities intend to be available to pay for environmental liabilities; and

F. The County and the Cities recognize that at the time this Agreement goes into effect, it is impossible to know what the ultimate environmental liabilities could be; nevertheless, the County and the Cities wish to designate in this Agreement a protocol for the designation and distribution of funding for potential future environmental liabilities in order to protect the general funds of the County and the Cities.

G. The County began renting the Cedar Hills Landfill from the State of Washington in 1960 and began using it for Disposal of Solid Waste in 1964. The County acquired ownership of the Cedar Hills Landfill from the State in 1992. The Cedar Hills Landfill remains an asset owned by the County.

H. The Parties expect that the Cedar Hills Landfill will be at capacity and closed at some date during the term of this Agreement, after which time all Solid Waste under this Agreement will need to be disposed of through alternate means, as determined by the

Cities and the County through amendments to the Comprehensive Solid Waste Management Plan. The County currently estimates the useful life of the Cedar Hills Landfill will extend through 2025. It is possible that this useful life could be extended, or shortened, by System management decisions or factors beyond the control of the Parties.

I. The County intends to charge rent for the use of the Cedar Hills Landfill for so long as the System uses this general fund asset and the Parties seek to clarify terms relative to the calculation of the associated rent.

J. The County and Cities participating in the System have worked collaboratively for several years to develop a plan for the replacement or upgrading of a series of transfer stations. The Parties acknowledge that these transfer station improvements, as they may be modified from time-to-time, will benefit Cities that are part of the System and the County. The Parties have determined that the extension of the term of the Original Agreement by twelve (12) years as accomplished by this Agreement is appropriate in order to facilitate the long-term financing of transfer station improvements and to mitigate rate impacts of such financing.

K. The Parties have further determined that in order to equitably allocate the benefit to all System Users from the transfer station improvements, different customer classes may be established by the County to ensure System Users do not pay a disproportionate share of the cost of these improvements as a result of a decision by a city not to extend the term of the Original Agreement.

L. The Parties have further determined it is appropriate to strengthen and formalize the advisory role of the Cities regarding System operations.

The Parties agree as follows:

I. DEFINITIONS

For purposes of this Agreement the following definitions shall apply:

"Cedar Hills Landfill" means the landfill owned and operated by the County located in southeast King County.

"Cities" refers to all Cities that have signed an Amended and Restated Solid Waste Interlocal Agreement in substantially identical form to this Agreement.

"Comprehensive Solid Waste Management Plan" or "Comprehensive Plan" means the Comprehensive Solid Waste Management Plan, as approved and amended from time to time, for the System, as required by chapter 70.95.080 RCW.

"County" means King County, a Charter County and political subdivision of the State of Washington.

"Disposal" means the final treatment, utilization, processing, deposition, or incineration of Solid Waste but shall not include Waste Prevention or Recycling as defined herein.

"Disposal Rates" means the fee charged by the County to System Users to cover all costs of the System consistent with this Agreement, all state, federal and local laws governing solid waste and the Solid Waste Comprehensive Plan.

"Divert" means to direct or permit the directing of Solid Waste to Disposal sites other than the Disposal site(s) designated by King County.

"Energy/Resource Recovery" means the recovery of energy in a usable form from mass burning or refuse-derived fuel incineration, pyrolysis or any other means of using the heat of combustion of Solid Waste that involves high temperature (above 1,200 degrees F) processing. (chapter 173.350.100 WAC).

"Landfill" means a Disposal facility or part of a facility at which Solid Waste is placed in or on land and which is not a land treatment facility.

"Metropolitan Solid Waste Advisory Committee" or "MSWAC" means the advisory committee composed of city representatives, established pursuant to Section IX of this Agreement.

"Moderate Risk Waste" means waste that is limited to conditionally exempt small quantity generator waste and household hazardous waste as those terms are defined in chapter 173-350 WAC, as amended.

"Original Agreement" means the Solid Waste Interlocal Agreement first entered into by and between the Parties, which is amended and restated by this Agreement. "Original Agreements" means collectively all such agreements between Cities and the County in substantially the same form as the Original Agreement.

"Parties" means collectively the County and the City or Cities.

"Recycling" as defined in chapter 70.95.030 RCW, as amended, means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill Disposal or incineration.

"Regional Policy Committee" means the Regional Policy Committee created pursuant to approval of the County voters in 1993, the composition and responsibilities of which are prescribed in King County Charter Section 270 and chapter 1.24 King County Code, as they now exist or hereafter may be amended.

"Solid Waste" means all putrescible and nonputrescible solid and semisolid wastes including but not limited to garbage, rubbish, ashes, industrial wastes, swill, commercial waste, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged materials, discarded commodities and recyclable materials, but shall not include dangerous, hazardous, or extremely hazardous waste as those terms are defined in chapter 173-303 WAC, as amended; and shall further not include those

wastes excluded from the regulations established in chapter 173-350 WAC, more specifically identified in Section 173-350-020 WAC.

"Solid Waste Advisory Committee" or "SWAC" means the inter-disciplinary advisory forum or its successor created by the King County Code pursuant to chapter 70.95.165 RCW.

"System" includes King County's Solid Waste facilities used to manage Solid Wastes which includes but is not limited to transfer stations, drop boxes, landfills, recycling systems and facilities, energy and resource recovery facilities and processing facilities as authorized by chapter 36.58.040 RCW and as established pursuant to the approved King County Comprehensive Solid Waste Management Plan.

"System User" or "System Users" means Cities and any person utilizing the County's System for Solid Waste handling, Recycling or Disposal.

"Waste Prevention" means reducing the amount or type of waste generated. Waste Prevention shall not include reduction of already-generated waste through energy recovery, incineration, or otherwise.

II. PURPOSE

The purpose of this Agreement is to foster transparency and cooperation between the Parties and to establish the respective responsibilities of the Parties in a Solid Waste management System, including but not limited to, planning, Waste Prevention, Recycling, and Disposal. .

III. DURATION

This Agreement shall become effective as of 11/6/13 and shall remain in effect through December 31, 2040.

IV. APPROVAL

This Agreement will be approved and filed in accordance with chapter 39.34 RCW.

V. RENEGOTIATION TO FURTHER EXTEND TERM OF AGREEMENT

5.1 The Parties recognize that System Users benefit from long-term Disposal arrangements, both in terms of predictability of System costs and operations, and the likelihood that more cost competitive rates can be achieved with longer-term Disposal contracts as compared to shorter-term contracts. To that end, at least seven (7) years before the date that the County projects that the Cedar Hills Landfill will close, or prior to the end of this Agreement, whichever is sooner, the County will engage with MSWAC and the Solid Waste Advisory Committee, among others, to seek their advice and input on the Disposal alternatives to be used after closure of the Cedar Hills Landfill, associated changes to the System, estimated costs associated with the recommended Disposal alternatives, and amendments to the Comprehensive Solid Waste Management Plan necessary to support these changes. Concurrently, the Parties will meet to negotiate an extension of the term of the Agreement for the purpose of facilitating the long-term Disposal of Solid Waste after closure of the Cedar Hills Landfill. Nothing in this Agreement shall require the Parties to reach agreement on an extension of the term of this Agreement. If the Parties fail to reach agreement on an extension, the Dispute Resolution provisions of Section XIII do not apply, and this Agreement shall remain unchanged.

5.2 Notwithstanding any other provision in this Agreement to the contrary, the Parties may, pursuant to mutual written agreement, modify or amend any provision of this Agreement at any time during the term of said Agreement.

VI. GENERAL OBLIGATIONS OF PARTIES

6.1 King County

6.1.a Management. The County agrees to provide Solid Waste management services, as specified in this Section, for Solid Waste generated and collected within the City, except waste eliminated through Waste Prevention or waste recycling activities. The County agrees to dispose of or designate Disposal sites for all Solid Waste and Moderate Risk Waste generated and/or collected within the corporate limits of the City which is delivered to the System in accordance with all applicable Federal, State and local environmental health laws, rules, or regulations, as those laws are described in Subsection 8.5.a. The County shall maintain records as necessary to fulfill obligations under this Agreement.

6.1.b Planning. The County shall serve as the planning authority for Solid Waste and Moderate Risk Waste under this Agreement but shall not be responsible for planning for any other waste or have any other planning responsibility under this Agreement.

6.1.c Operation. King County shall be or shall designate or authorize the operating authority for transfer, processing and Disposal facilities, including public landfills and other facilities, consistent with the adopted Comprehensive Plan as well as closure and post-closure responsibilities for landfills which are or were operated by the County.

6.1.d Collection Service. The County shall not provide Solid Waste collection services within the corporate limits of the City, unless permitted by law and agreed to by both Parties.

6.1.e Support and Assistance. The County shall provide support and technical assistance to the City consistent with the Comprehensive Solid Waste Management Plan for a Waste Prevention and Recycling program. Such support may include the award of grants to support programs with System benefits. The County shall develop educational materials related to Waste Prevention and Recycling and strategies for maximizing the usefulness of the educational materials and will make these available to the City for its use. Although the County will not be required to provide a particular level of support or fund any City activities related to Waste Prevention and Recycling, the County intends to move forward aggressively to promote Waste Prevention and Recycling.

6.1.f Forecast. The County shall develop Solid Waste stream forecasts in connection with System operations as part of the comprehensive planning process in accordance with Article XI.

6.1.g Facilities and Services. The County shall provide facilities and services pursuant to the Comprehensive Solid Waste Management Plan and the Solid Waste Transfer and Waste Management plan as adopted and County Solid Waste stream forecasts.

6.1.h Financial Policies. The County will maintain financial policies to guide the System's operations and investments. The policies shall be consistent with this Agreement and shall address debt issuance, rate stabilization, cost containment, reserves, asset ownership and use, and other financial issues. The County shall primarily use long term bonds to finance transfer System improvements. The policies shall be developed and/or revised through

discussion with MSWAC, the Regional Policy Committee, the County Executive and the County Council. Such policies shall be codified at the same time as the Comprehensive Plan updates, but may be adopted from time to time as appropriate outside the Comprehensive Plan process.

6.2 City

6.2.a Collection. The City, an entity designated by the City or such other entity as is authorized by state law shall serve as operating authority for Solid Waste collection services provided within the City's corporate limits.

6.2.b Disposal. The City shall cause to be delivered to the County's System for Disposal all such Solid Waste and Moderate Risk Waste which is authorized to be delivered to the System in accordance with all applicable Federal, State and local environmental health laws, rules or regulations and is generated and/or collected within the corporate limits of the City and shall authorize the County to designate Disposal sites for the Disposal of all such Solid Waste and Moderate Risk Waste generated or collected within the corporate limits of the City, except for Solid Waste which is eliminated through Waste Prevention or waste Recycling activities consistent with the Comprehensive Solid Waste Management Plan. No Solid Waste generated or collected within the City may be Diverted from the designated Disposal sites without County approval.

6.3 JOINT RESPONSIBILITIES.

6.3.a Consistent with the Parties' overall commitment to ongoing communication and coordination, the Parties will endeavor to notify and coordinate with each other on the development of any City or County plan, facility, contract, dispute, or other Solid Waste issue that could have potential significant impacts on the County, the System, or the City or Cities.

6.3.b The Parties, together with other Cities, will coordinate on the development of emergency plans related to Solid Waste, including but not limited to debris management.

VII. COUNTY SHALL SET DISPOSAL RATES AND OPERATING RULES FOR DISPOSAL; USE OF SYSTEM REVENUES

7.1 In establishing Disposal Rates for System Users, the County shall consult with MSWAC consistent with Section IX. The County may adopt and amend by ordinance rates necessary to recover all costs of the System including but not limited to operations and maintenance, costs for handling, processing and Disposal of Solid Waste, siting, design and construction of facility upgrades or new facilities, Recycling, education and mitigation, planning, Waste Prevention, reserve funds, financing, defense and payment of claims, insurance, System liabilities including environmental releases, monitoring and closure of landfills which are or were operated by the County, property acquisition, grants to cities, and administrative functions necessary to support the System and Solid Waste handling services during emergencies as established by local, state and federal agencies or for any other lawful solid waste purpose, and in accordance with chapter 43.09.210 RCW. Revenues from Disposal rates shall be used only for such purposes. The County shall establish classes of customers for Solid Waste management services and by ordinance shall establish rates for classes of customers.

7.2. It is understood and agreed that System costs include payments to the County general fund for Disposal of Solid Waste at the Cedar Hills Landfill calculated in accordance with this Section 7.2, and that such rental payments shall be established based on use valuations provided to the County by an independent-third party Member, Appraisal Institute (MAI) certified appraiser selected by the County in consultation with MSWAC.

7.2.a A use valuation shall be prepared consistent with MAI accepted principles for the purpose of quantifying the value to the System of the use of Cedar Hills Landfill for Disposal of Solid Waste over a specified period of time (the valuation period). The County shall establish a schedule of annual use charges for the System's use of the Cedar Hills Landfill which shall not exceed the most recent use valuation. Prior to establishing the schedule of annual use charges, the County shall seek review and comment as to both the use valuation and the proposed payment schedule from MSWAC. Upon request, the County will share with and explain to MSWAC the information the appraiser requests for purposes of developing the appraiser's recommendation.

7.2.b Use valuations and the underlying schedule of use charges shall be updated if there are significant changes in Cedar Hills Landfill capacity as a result of opening new Disposal areas and as determined by revisions to the existing Cedar Hills Regional Landfill Site Development Plan; in that event, an updated appraisal will be performed in compliance with MAI accepted principles. Otherwise, a reappraisal will not occur. Assuming a revision in the schedule of use charges occurs based on a revised appraisal, the resulting use charges shall be applied beginning in the subsequent rate period.

7.2.c The County general fund shall not charge use fees or receive other consideration from the System for the System's use of any transfer station property in use as of the effective date of this Agreement. The County further agrees that the County general fund may not receive payments from the System for use of assets to the extent those assets are acquired with System revenues. As required by chapter 43.09.210 RCW, the System's use of assets acquired with the use of other separate County funds (e.g., the Roads Fund, or other funds)

will be subject to use charges; similarly, the System will charge other County funds for use of System property.

VIII. LIABILITY

8.1 Non-Environmental Liability Arising Out-of-County Operations. Except as provided in this Section, Sections 8.5 and 8.6, the County shall indemnify and hold harmless the City and shall have the right and duty to defend the City through the County's attorneys against any and all claims arising out of the County's operations during the term of this Agreement and settle such claims, provided that all fees, costs, and expenses incurred by the County thereby are System costs which may be satisfied from Disposal Rates as provided in Section VII herein. In providing such defense of the City, the County shall exercise good faith in such defense or settlement so as to protect the City's interest. For purposes of this Section "claims arising out of the County's operations" shall mean claims arising out of the ownership, control, or maintenance of the System, but shall not include claims arising out of the City's operation of motor vehicles in connection with the System or other activities under the control of the City which may be incidental to the County's operation. The provisions of this Section shall not apply to claims arising out of the sole negligence or intentional acts of the City. The provisions of this Section shall survive for claims brought within three (3) years past the term of this Agreement established under Section III.

8.2 Cooperation. In the event the County acts to defend the City against a claim under Section 8.1, the City shall cooperate with the County.

8.3 Officers, Agents, and Employees. For purposes of this Section VIII, references to City or County shall be deemed to include the officers, employees and agents of either Party,

acting within the scope of their authority. Transporters or generators of waste who are not officers or employees of the City or County are not included as agents of the City or County for purposes of this Section.

8.4 Each Party by mutual negotiation hereby waives, with respect to the other Party only, any immunity that would otherwise be available against such claims under the Industrial Insurance provisions of Title 51 RCW.

8.5 Unacceptable Waste

8.5.a All waste generated or collected from within the corporate limits of the City which is delivered to the System for Disposal shall be in compliance with the Resource Conservation and Recovery Act (42 U.S.C. § 6901 et seq.) (RCRA), chapters 70.95 and 70.105 RCW, King County Code Title 10, King County Board of Health Rules and Regulations, the Solid Waste Division operating rules, and all other Federal, State and local environmental health laws, rules or regulations that impose restrictions or requirements on the type of waste that may be delivered to the System, as they now exist or are hereafter adopted or amended.

8.5.b For purposes of this Agreement, the City shall be deemed to have complied with the requirements of Subsection 8.5.a if it has adopted an ordinance requiring waste delivered to the System for Disposal to meet the laws, rules, or regulations specified in Subsection 8.5.a. However, nothing in this Agreement is intended to relieve the City from any obligation or liability it may have under the laws mentioned in Subsection 8.5.a arising out of the City's actions other than adopting, enforcing, or requiring compliance with said ordinance, such as liability, if any exists, of the City as a transporter or generator for improper transport or Disposal of regulated dangerous waste. Any environmental liability the City may have for

releases of pollutants or hazardous or dangerous substances or wastes to the environment is dealt with under Sections 8.6 and 8.7.

8.5.c The City shall hold harmless, indemnify and defend the County for any property damages or personal injury caused solely by the City's failure to adopt an ordinance under Subsection 8.5.b. In the event the City acts to defend the County under this Subsection, the County shall cooperate with the City.

8.5.d The City shall make best efforts to include language in its contracts, franchise agreements, or licenses for the collection of Solid Waste within the City that allow for enforcement by the City against the collection contractor, franchisee or licensee for violations of the laws, rules, or regulations in Subsection 8.5.a. The requirements of this Subsection 8.5.d shall apply to the City's first collection contract, franchise, or license that becomes effective or is amended after the effective date of this Agreement.

8.5.d.i If waste is delivered to the System in violation of the laws, rules, or regulations in Subsection 8.5.a, before requiring the City to take any action under Subsection 8.5.d.ii, the County will make reasonable efforts to determine the parties' responsible for the violation and will work with those parties to correct the violation, consistent with applicable waste clearance and acceptance rules, permit obligations, and any other legal requirements.

8.5.d.ii If the violation is not corrected under Subsection 8.5.d.i and waste is determined by the County to have been generated or collected from within the corporate limits of the City, the County shall provide the City with written notice of the violation. Upon such notice, the City shall take immediate steps to remedy the violation and prevent similar future violations to the reasonable satisfaction of the County which may include but not be

limited to removing the waste and disposing of it in an approved facility; provided that nothing in this Subsection 8.5.d.ii shall obligate the City to handle regulated dangerous waste, as defined in WAC 173-351-200(1)(b)(i), and nothing in this Subsection shall relieve the City of any obligation it may have apart from this Agreement to handle regulated dangerous waste. If, in good faith, the City disagrees with the County regarding the violation, such dispute shall be resolved between the Parties using the Dispute Resolution process in Section XII or, if immediate action is required to avoid an imminent threat to public health, safety or the environment, in King County Superior Court. Each Party shall be responsible for its own attorneys' fees and costs. Failure of the City to take the steps requested by the County pending Superior Court resolution shall not be deemed a violation of this Agreement; provided, however, that this shall not release the City for damages or loss to the County arising out of the failure to take such steps if the Court finds a City violation of the requirements to comply with applicable laws set forth in Subsection 8.5.a.

8.6 Environmental Liability.

8.6.a Neither the County nor the City holds harmless or indemnifies the other with regard to any liability arising under 42 U.S.C. § 9601-9675 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) or as hereafter amended or pursuant to chapter 70.105D RCW (MTCA) or as hereafter amended and any state legislation imposing liability for System-related cleanup of contaminated property from the release of pollutants or hazardous or dangerous substances and/or damages resulting from property contaminated from the release of pollutants or hazardous or dangerous substances ("Environmental Liabilities").

8.6.b Nothing in this Agreement is intended to create new Environmental Liability nor release any third-party from Environmental Liability. Rather, the intent is to protect the general funds of the Parties to this Agreement by ensuring that, consistent with best business practices, an adequate portion of Disposal Rates being collected from the System Users are set aside and accessible in a fair and equitable manner to pay the respective County and City's Environmental Liabilities.

8.6.c The purpose of this Subsection is to establish a protocol for the setting aside, and subsequent distribution of, Disposal Rates intended to pay for Environmental Liabilities of the Parties, if and when such liabilities should arise, in order to safeguard the Parties' general funds. To do so, the County shall:

8.6.c.i Use Disposal Rates to obtain and maintain, to the extent commercially available under reasonable terms, insurance coverage for System-related Environmental Liability that names the City as an Additional Insured. The County shall establish the adequacy, amount and availability of such insurance in consultation with MSWAC. Any insurance policy in effect on the termination date of this Agreement with a term that extends past the termination date shall be maintained until the end of the policy term.

8.6.c.ii Use Disposal Rates to establish and maintain a reserve fund to help pay the Parties' Environmental Liabilities not already covered by System rates or insurance maintained under Subsection 8.6.c.i above ("Environmental Reserve Fund"). The County shall establish the adequacy of the Environmental Reserve Fund in consultation with MSWAC and consistent with the financial policies described in Article VI. The County shall retain the Environmental Reserve Fund for a minimum of 30 years following the closure of the Cedar Hills Landfill (the "Retention Period"). During the Retention Period, the Environmental Reserve Fund

shall be used solely for the purposes for which it was established under this Agreement. Unless otherwise required by law, at the end of the Retention Period, the County and Cities shall agree as to the disbursement of any amounts remaining in the Environmental Reserve Fund. If unable to agree, the County and City agree to submit disbursement to mediation and if unsuccessful to binding arbitration in a manner similar to Section 39.34.180 RCW to the extent permitted by law.

8.6.c.iii Pursue state or federal grant funds, such as grants from the Local Model Toxics Control Account under chapter 70.105D.070(3) RCW and chapter 173-322 WAC, or other state or federal funds as may be available and appropriate to pay for or remediate such Environmental Liabilities.

8.6.d If the funds available under Subsections 8.6.c.i-iii are not adequate to completely satisfy the Environmental Liabilities of the Parties to this Agreement then to the extent feasible and permitted by law, the County will establish a financial plan including a rate schedule to help pay for the County and City's remaining Environmental Liabilities in consultation with MSWAC.

8.6.e The County and the City shall act reasonably and quickly to utilize funds collected or set aside through the means specified in Subsections 8.6.c.i-iii and 8.6.d to conduct or finance response or clean-up activities in order to limit the County and City's exposure, or in order to comply with a consent decree, administrative or other legal order. The County shall notify the City within 30 days of any use of the reserve fund established in 8.6.c.iii.

8.6.f In any federal or state regulatory proceeding, and in any action for contribution, money expended by the County from the funds established in Subsections 8.6.c.i-iii and 8.6.d. to pay the costs of remedial investigation, cleanup, response or other action required

pursuant to a state or federal laws or regulations shall be considered by the Parties to have been expended on behalf and for the benefit of the County and the Cities.

8.6.g In the event that the funds established as specified in Subsections 8.6.c.i-iii and 8.6.d are insufficient to cover the entirety of the County and Cities' collective Environmental Liabilities, the funds described therein shall be equitably allocated between the County and Cities to satisfy their Environmental Liabilities. Factors to be considered in determining "equitably allocated" may include the size of each Party's System User base and the amount of rates paid by that System User base into the funds, and the amount of the Solid Waste generated by the Parties' respective System Users. Neither the County nor the Cities shall receive a benefit exceeding their Environmental Liabilities.

8.7 The County shall not charge or seek to recover from the City any costs or expenses for which the County indemnified the State of Washington in Exhibit A to the Quitclaim Deed from the State to the County for the Cedar Hills Landfill, dated February 24, 1993, to the extent such costs are not included in System costs.

IX. CITY ADVISORY COMMITTEE

9.1 There is hereby created an advisory committee comprised of representatives from cities, which shall be known as the Metropolitan Solid Waste Advisory Committee ("MSWAC"). The City may designate a representative and alternate(s) to serve on MSWAC. MSWAC shall elect a chair and vice-chair and shall adopt bylaws to guide its deliberations. The members of MSWAC shall serve at the pleasure of their appointing bodies and shall receive no compensation from the County.

9.2 MSWAC is the forum through which the Parties together with other cities participating in the System intend to discuss and seek to resolve System issues and concerns. MSWAC shall assume the following advisory responsibilities:

9.2.a Advise the King County Council, the King County Executive, Solid Waste Advisory Committee, and other jurisdictions as appropriate, on all policy aspects of Solid Waste management and planning;

9.2.b Consult with and advise the County on technical issues related to Solid Waste management and planning;

9.2.c Assist in the development of alternatives and recommendations for the Comprehensive Solid Waste Management Plan and other plans governing the future of the System, and facilitate a review and/or approval of the Comprehensive Solid Waste Management Plan by each jurisdiction;

9.2.d Assist in the development of proposed interlocal Agreements between King County and cities for planning, Waste Prevention and Recycling, and waste stream control;

9.2.e Review and comment on Disposal Rate proposals and County financial policies;

9.2.f Review and comment on status reports on Waste Prevention, Recycling, energy/resources recovery, and System operations with inter-jurisdictional impact;

9.2.g Promote information exchange and interaction between waste generators, cities, recyclers, and the County with respect to its planned and operated Disposal Systems;

9.2.h Provide coordination opportunities among the Solid Waste Advisory Committee, the Regional Policy Committee, the County, cities, private waste haulers, and recyclers;

9.2.i Assist cities in recognizing municipal Solid Waste responsibilities, including collection and Recycling, and effectively carrying out those responsibilities; and

9.2.j Provide input on such disputes as MSWAC deems appropriate.

9.3 The County shall assume the following responsibilities with respect to MSWAC;

9.3.a The County shall provide staff support to MSWAC;

9.3.b In consultation with the chair of MSWAC, the County shall notify all cities and their designated MSWAC representatives and alternates of the MSWAC meeting times, locations and meeting agendas. Notification by electronic mail or regular mail shall meet the requirements of this Subsection;

9.3.c The County will consider and respond on a timely basis to questions and issues posed by MSWAC regarding the System, and will seek to resolve those issues in collaboration with the Cities. Such issues shall include but are not limited to development of efficient and accountable billing practices; and

9.3.d. The County shall provide all information and supporting documentation and analyses as reasonably requested by MSWAC for MSWAC to perform the duties and functions described in Section 9.2.

X. FORUM INTERLOCAL AGREEMENT

10.1 As of the effective date of this Agreement, the *Forum Interlocal Agreement* and *Addendum to* Solid Waste Interlocal Agreement *and Forum Interlocal Agreement* by and between the City and County continue through June 30, 2028. After 2028 responsibilities assigned to the Forum shall be assigned to the Regional Policy Committee. The Parties agree that Solid Waste System policies and plans shall continue to be deemed regional countywide policies

and plans that shall be referred to the Regional Policy Committee for review consistent with King County Charter Section 270.30 and chapter 1.24 King County Code.

XI. COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

11.1 King County is designated to prepare the Comprehensive Solid Waste Management Plan (Comprehensive Plan) and this plan shall include the City's Solid Waste Management Comprehensive Plan pursuant to chapter 70.95.080(3) RCW.

11.2 The Comprehensive Plan shall be reviewed and any necessary revisions proposed. The County shall consult with MSWAC to determine when revisions are necessary. King County shall provide services and build facilities in accordance with the adopted Comprehensive Plan.

11.3 The Comprehensive Plans will promote Waste Prevention and Recycling in accordance with Washington State Solid Waste management priorities pursuant to chapter 70.95 RCW, at a minimum.

11.4 The Comprehensive Plans will be prepared in accordance with chapter 70.95 RCW and Solid Waste planning guidelines developed by the Department of Ecology. The plan shall include, but not be limited to:

11.4.a Descriptions of and policies regarding management practices and facilities required for handling all waste types;

11.4.b Schedules and responsibilities for implementing policies;

11.4.c Policies concerning waste reduction, Recycling, Energy and Resource Recovery, collection, transfer, long-haul transport, Disposal, enforcement and administration; and

11.4.d Operational plan for the elements discussed in Item c above.

11.5 The cost of preparation by King County of the Comprehensive Plan will be considered a cost of the System and financed out of the rate base.

11.6 The Comprehensive Plans will be "adopted" within the meaning of this Agreement when the following has occurred:

11.6.a The Comprehensive Plan is approved by the King County Council; and

11.6.b The Comprehensive Plan is approved by cities representing three-quarters of the population of the incorporated population of jurisdictions that are parties to the Forum Interlocal Agreement. In calculating the three-quarters, the calculations shall consider only those incorporated jurisdictions taking formal action to approve or disapprove the Comprehensive Plan within 120 days of receipt of the Plan. The 120-day time period shall begin to run from receipt by an incorporated jurisdiction of the Forum's recommendation on the Comprehensive Plan, or, if the Forum is unable to make a recommendation, upon receipt of the Comprehensive Plan from the Forum without recommendation.

11.7 Should the Comprehensive Plan be approved by the King County Council, but not receive approval of three-quarters of the cities acting on the Comprehensive Plan, and should King County and the cities be unable to resolve their disagreement, then the Comprehensive Plan shall be referred to the State Department of Ecology and the State Department of Ecology will resolve any disputes regarding Comprehensive Plan adoption and adequacy by approving or disapproving the Comprehensive Plan or any part thereof.

11.8 King County shall determine which cities are affected by any proposed amendment to the Comprehensive Plan. If any City disagrees with such determination, then the City can request that the Forum determine whether or not the City is affected. Such

determination shall be made by a two-thirds majority vote of all representative members of the Forum.

11.9 Should King County and the affected jurisdictions be unable to agree on amendments to the Comprehensive Plan, then the proposed amendments shall be referred to the Department of Ecology to resolve any disputes regarding such amendments.

11.10 Should there be any impasse between the Parties regarding Comprehensive Plan adoption, adequacy, or consistency or inconsistency or whether any permits or programs adopted or proposed are consistent with the Comprehensive Plan, then the Department of Ecology shall resolve said disputes.

XII. MITIGATION

12.1 The County will design, construct and operate Solid Waste facilities in a manner to mitigate their impact on host Cities and neighboring communities pursuant to applicable law and regulations.

12.2 The Parties recognize that Solid Waste facilities are regional facilities. The County further recognizes that host Cities and neighboring communities may sustain impacts which can include but are not limited to local infrastructure, odor, traffic into and out of Solid Waste facilities, noise and litter.

12.3 Collaboration in Environmental Review. In the event the County is the sole or co-Lead Agency, then prior to making a threshold determination under the State Environmental Policy Act (SEPA), the County will provide a copy of the SEPA environmental checklist, if any, and proposed SEPA threshold determination to any identifiable Host City (as defined below) and adjacent or neighboring city that is signatory to the Agreement and that may be affected by the

project ("Neighboring City") and seek their input. For any facility for which the County prepares an Environmental Impact Statement (EIS), the County will meet with any identified potential Host City (as defined below) and any Neighboring City to seek input on the scope of the EIS and appropriate methodologies and assumptions in preparing the analyses supporting the EIS. However, nothing in this Section shall limit or impair the County's ability to timely complete the environmental review process.

12.4 Collaboration in Project Permitting. If a new or reconstructed Solid Waste facility is proposed to be built within the boundaries of the City ("Host City") and the project requires one or more "project permits" as defined in chapter 36.70B.020(4) RCW from the Host City, before submitting its first application for any of the project permits, the County will meet with the Host City and any Neighboring City, to seek input. However, nothing in this Section shall limit or impair the County's ability to timely submit applications for or receive permits, nor waive any permit processing or appeal timelines.

12.5 Separately, the County and the City recognize that in accordance with 36.58.080 RCW, a city is authorized to charge the County to mitigate impacts directly attributable to a County-owned Solid Waste facility. The County acknowledges that such direct costs include wear and tear on infrastructure including roads. To the extent that the City establishes that such charges are reasonably necessary to mitigate such impacts, payments to cover such impacts may only be expended only to mitigate such impacts and are System costs. If the City believes that it is entitled to mitigation under this Agreement, the City may request that the County undertake a technical analysis regarding the extent of impacts authorized for mitigation. Upon receiving such a request, the County, in coordination with the City and any necessary technical consultants, will develop any analysis that is reasonable and appropriate to identify impacts. The cost for such

analysis is a System cost. The City and County will work cooperatively to determine the appropriate mitigation payments and will document any agreement in a Memorandum of Agreement. If the City and the County cannot agree on mitigation payments, the dispute resolution process under chapter 36.58.080 RCW will apply rather than the dispute resolution process under Section XII of the Agreement.

XIII. DISPUTE RESOLUTION

13.1 Unless otherwise expressly stated, the terms of this Section XIII shall apply to disputes arising under this Agreement.

13.2 Initial Meeting.

13.2.a Either Party shall give notice to the other in writing of a dispute involving this Agreement.

13.2.b Within ten (10) business days of receiving or issuing such notice, the County shall send an email notice to all Cities.

13.2.c Within ten (10) business days of receiving the County's notice under Subsection 13.2.b, a City shall notify the County in writing or email if it wishes to participate in the Dispute Resolution process.

13.2.d Within not less than twenty-one (21) days nor more than thirty (30) days of the date of the initial notice of dispute issued under Subsection 13.2.a, the County shall schedule a time for staff from the County and any City requesting to participate in the dispute resolution process ("Participating City") to meet (the "initial meeting"). The County shall endeavor to set such initial meeting a time and place convenient to all Participating Cities and to the County.

13.3 Executives' Meeting.

13.3.a If the dispute is not resolved within sixty (60) days of the initial meeting, then within seven (7) days of expiration of the sixty (60)-day period, the County shall send an email notice to all Participating Cities that the dispute was not resolved and that a meeting of the County Executive, or his/her designee and the chief executive officer(s) of each Participating City, or the designees of each Participating City (an "executives' meeting") shall be scheduled to attempt to resolve the dispute. It is provided, however, that the County and the Participating Cities may mutually agree to extend the sixty (60)-day period for an additional fifteen (15) days if they believe further progress may be made in resolving the dispute, in which case, the County's obligation to send its email notice to the Participating Cities under this Subsection that the dispute was not resolved shall be within seven (7) days of the end of the extension. Likewise, the County and the Participating Cities may mutually conclude prior to the expiration of the sixty (60)-day period that further progress is not likely in resolving the dispute at this level, in which case, the County shall send its email notice that the dispute was not resolved within seven (7) days of the date that the County and the Participating Cities mutually concluded that further progress is not likely in resolving the dispute.

13.3.b Within seven (7) days of receiving the County's notice under Subsection 13.3.a each Participating City shall notify the County in writing or email if it wishes to participate in the executives' meeting.

13.3.c Within not less than twenty-one (21) days nor more than thirty (30) days of the date of the notice of the executives' meeting issued under Subsection 13.3.a, the County shall schedule a time for the executives' meeting. The County shall endeavor to set such

executives' meeting a time and place convenient to all Participating Cities that provided notice under Subsection 13.3.b and to the County.

13.4. Non-Binding Mediation.

13.4.a If the dispute is not resolved within thirty (30) days of the executives' meeting, then any Participating City that was Party to the executives' meeting or the County may refer the matter to non-binding meditation by sending written notice within thirty-five (35) days of the initial executives' meeting to all Parties to such meeting.

13.4.b Within seven (7) days of receiving or issuing notice that a matter will be referred to non-binding mediation, the County shall send an email notice to all Participating Cities that provided notice under Subsection 13.3.b informing them of the referral.

13.4.c Within seven (7) days of receiving the County's notice under Subsection 13.4.b, each Participating City shall notify the County in writing if it wishes to participate in the non-binding mediation.

13.4.d The mediator will be selected in the following manner: The City(ies) electing to participate in the mediation shall propose a mediator and the County shall propose a mediator; in the event the mediators are not the same person, the two mediators shall select a third mediator who shall mediate the dispute. Alternately, the City(ies) participating in the mediation and the County may agree to select a mediator through a mediation service mutually acceptable to the Parties. The Parties to the mediation shall share equally in the costs charged by the mediator or mediation service. For purposes of allocating costs of the mediator or mediation service, all Cities participating in the mediation will be considered one Party.

13.5 Superior Court. Any Party, after participating in the non-binding mediation, may commence an action in King County Superior Court after one hundred eighty (180) days from

the commencement of the mediation, in order to resolve an issue that has not by then been resolved through non-binding mediation, unless all Parties to the mediation agree to an earlier date for ending the mediation.

13.6 Unless this Section XIII does not apply to a dispute, then the Parties agree that they may not seek relief under this Agreement in a court of law or equity unless and until each of the procedural steps set forth in this Section XIII have been exhausted, provided, that if any applicable statute of limitations will or may run during the time that may be required to exhaust the procedural steps in this Section XIII, a Party may file suit to preserve a cause of action while the Dispute Resolution process continues. The Parties agree that, if necessary and if allowed by the court, they will seek a stay of any such suit while the Dispute Resolution process is completed. If the dispute is resolved through the Dispute Resolution process, the Parties agree to dismiss the lawsuit, including all claims, counterclaims, and cross-claims, with prejudice and without costs to any Party.

XIV. FORCE MAJEURE

The Parties are not liable for failure to perform pursuant to the terms of this Agreement when failure to perform was due to an unforeseeable event beyond the control of either Party ("force majeure"). The term "force majeure" shall include, without limitation by the following enumeration: acts of nature, acts of civil or military authorities, terrorism, fire, accidents, shutdowns for purpose of emergency repairs, industrial, civil or public disturbances, or labor disputes, causing the inability to perform the requirements of this Agreement, if either Party is rendered unable, wholly or in part, by a force majeure event to perform or comply with any obligation or condition of this Agreement, upon giving notice and reasonably full particulars to

the other Party, such obligation or condition shall be suspended only for the time and to the extent practicable to restore normal operations.

XV. MERGER

This Agreement merges and supersedes all prior negotiations, representation and/or agreements between the Parties relating to the subject matter of this Agreement and constitutes the entire contract between the Parties [except with regard to the provisions of the Forum Interlocal Agreement]; provided that nothing in Section XV supersedes or amends any indemnification obligation that may be in effect pursuant to a contract between the Parties other than the Original Agreement; and further provided that nothing in this Agreement supersedes, amends or modifies in any way any permit or approval applicable to the System or the County's operation of the System within the jurisdiction of the City.

XVI. WAIVER

No waiver by either Party of any term or condition of this Agreement shall be deemed or construed to constitute a waiver of any other term or condition or of any subsequent breach whether of the same or a different provision of this Agreement.

XVII. THIRD PARTY BENEFICIARY

This Agreement is not entered into with the intent that it shall benefit any other entity or person except those expressly described herein, and no other such person or entity shall be entitled to be treated as a third-party beneficiary of this Agreement.

XVIII. SURVIVABILITY

Except as provided in Section 8.1, 8.2, 8.3, Section 8.6.c, except 8.6.ciii and Section 8.6d, no obligations in this Agreement survive past the expiration date as established in Section III.

XIX. NOTICE

Except as otherwise provided in this Agreement, a notice required to be provided under the terms of this Agreement shall be delivered by certified mail, return receipt requested or by personal service to the following person:

For the City:

Anthony A. Piasecki, City Manager
City of Des Moines
21630 11th Avenue South, Suite A
Des Moines, WA 98198

For the County:

Pat D. McLaughlin, Director
King County Solid Waste Division
201 South Jackson Street, Suite 701
Seattle, Washington 98104

IN WITNESS WHEREOF, this Agreement has been executed by each Party on the date set forth below:

CITY of **DES MOINES**

(Mayor/City Manager)

3/6/13
Date

Clerk-Attest
Approved as to form and legality

City Attorney

3/6/2013
Date

KING COUNTY

King County Executive Christie True

11/6/2013
Date

Clerk-Attest
Approved as to form and legality

King County Deputy Prosecuting Attorney

10-31-13
Date

Planning for the Future of Regional Waste Management

Frequently Asked Questions on the 2019 Comprehensive Solid Waste Management Plan

Responsible waste management is a top priority as we plan for the economic and environmental future of our region.

The *2019 Comprehensive Solid Waste Management Plan* (Comp Plan) adopted by the King County Council on April 24, 2019, was developed in close cooperation with local jurisdictions, private sector waste management experts, and the input of numerous stakeholders and community members. While it addresses many topics, the plan zeroes in on three key priorities:

- Increasing the regional recycling rate from the present 54 percent to 70 percent so these materials can be made into new products.
- Expanding and modernizing services at current garbage and recycling transfer stations, and adding new facilities in underserved areas such as northeast and south King County.
- Identifying how to dispose of garbage after 2028 when the currently built areas at the Cedar Hills Regional Landfill are expected to be full.

This document outlines responses to common issues and questions about the Comp Plan and landfill management.

Contents

BIRD and WILDLIFE MANAGEMENT 2
BUFFERS/PROPERTY ACQUISITION/FORESTRY 2
COMMUNITY ENGAGEMENT 3
COMP PLAN ADOPTION and UPDATES 4
COST and FINANCES (Comp Plan Alternatives) 6
ENVIRONMENTAL HEALTH 7
LANDFILL COVER MATERIAL 8
LANDFILL GAS MANAGEMENT 8
ODOR MANAGEMENT/AIR QUALITY 9
RECYCLING RATES 10
SEISMIC CONCERNS 11
WASTE-TO-ENERGY 12
WATER QUALITY/AQUIFER 12

BIRD and WILDLIFE MANAGEMENT

What steps are taken to keep animals, especially large birds like eagles, out of the garbage at the Cedar Hills Regional Landfill?

Operations staff work closely with biologists from the consulting firm Innovative Wildlife Solutions to ensure bird and wildlife protection, and to deter scavenging by the animals. Active areas of the landfill are covered daily to keep animals and birds out of the garbage. Bird control techniques include trapping and culling, and deterrents such as scarecrows and drones. Pyrotechnics are also used from time to time.

Eagles' dietary preferences are spawning trout and salmon, followed by other animals and carrion. They are mainly attracted to the landfill because of warmth and absence of human activity.

Eagles are protected under the Federal Bald and Golden Eagle Protection Act, so while our operations cannot harass or harm the birds, they can and do take steps approved by wildlife biologists to make the landfill a less desirable habitat option.

Who determines if wildlife control progress is satisfactory?

The Comp Plan requires the Solid Waste Division to track and report on its bird management practices.

I suspect animals or birds are carrying landfill garbage onto my property. What do I do?

Landfill neighbors can call the division at 206-477-4466 to request assistance with removal of refuse deposited by wildlife. Operations will also investigate ways to reduce future incidents.

BUFFERS/PROPERTY ACQUISITION/FORESTRY

How much buffer separates the landfill from nearby properties?

When the Cedar Hills Regional Landfill was originally permitted in the early 1960s, County Commissioners decided it should have a 1,000 foot buffer instead of the 250 foot buffer required by state laws in place at the time.

Was there ever encroachment on the buffer?

Aerial photos from 1966 show that garbage was improperly buried within the 1,000-foot-buffer on the eastern border near 22 homes. There is no county record to indicate why that was done.

Is King County acquiring homes from property owners near the area where the buffer was reduced?

King County has already worked with four willing sellers to purchase their homes, and our offer remains open to the other property owners in that particular area who would be interested in selling.

Are there any efforts to improve the buffer zone?

Yes. Long term efforts to improve the quality of the buffer include working with a landscape architect from King County Roads to add more trees to the western buffer, and maintaining/restoring the size of the east buffer by acquiring properties from willing sellers along the east buffer.

COMMUNITY ENGAGEMENT

What does King County do to understand landfill neighbor concerns?

Staying connected with the public, and especially our facility neighbors, is core to our commitment to customer service excellence. Examples of our community engagement since the beginning of 2018 include a 60-day public comment period on the Comp Plan that coincided with a well-advertised online open house and three in-person open houses including one for landfill neighbors.

Over the past year, there was one public landfill tour; two semi-annual landfill neighbor meetings; participation in a councilmember's open house last October 2019 for landfill neighbors; public notification plus a two-week comment period on a proposal to temporarily extend hours at Cedar Hills during the Viaduct closure; nine e-newsletters to 590 neighbor subscribers and two mailed letters to about 900 neighbors; and multiple correspondence, phone calls, and face-to-face conversations with neighbors. There is another semi-annual landfill neighbor community meeting scheduled on June 20, 2019.

How do the public or cities give feedback to the division?

The division has two advisory committees – the Metropolitan Solid Waste Advisory Committee (MSWAC) and the Solid Waste Advisory Committee (SWAC). MSWAC comprises staff and elected officials from the cities that participate in the county's regional solid waste system. MSWAC members are appointed by their respective cities. SWAC members are appointed by the Executive and confirmed by the King County Council. SWAC members represent the diverse interests of residents, waste management companies, the recycling industry, public interest groups, labor, local elected officials, recyclable markets, and manufacturers located in King County. SWAC would be the committee landfill neighbors could serve on.

Are community members invited to serve on the committees or attend the meetings?

MSWAC and SWAC monthly meetings are open to the public, and agendas are typically published a week in advance. Minutes are taken at every meeting to summarize presented material, document deliberative discussion of committee business, and to record motions approved by the committee. Meeting minutes from the prior month are presented to committee members for review, and members have the opportunity to request amendments and corrections before minutes are approved by the chair.

Landfill neighbors have served on SWAC in the past and we are currently recruiting for a specific committee vacancy to be filled by a landfill neighbor. Serving on the committee does require a commitment – meetings are held each month, usually in downtown Seattle at King Street Center. Although no landfill neighbors have yet expressed an interest, we are hopeful that we will soon benefit from their additional perspective on this important advisory committee.

I've heard there has been legal action against the landfill in the past. What's the history there?

Cedar Hills was originally permitted at a time when there were few regulations in place to govern the design and operation of landfills. There were also very few neighbors around the facility when it first opened in 1965. Since then, environmental regulations have become increasingly rigorous. As the community around the landfill grew, expectations for how essential public facilities should operate were also raised substantially.

Our regulators and elected officials today hold Cedar Hills Landfill accountable for meeting stringent environmental and operational requirements, and for taking all reasonable measures to reduce impacts to the community.

Regrettably, problems with landfill operations in years past prompted legal action by people who lived nearby. We've taken a number of corrective actions to address the issues that led to legal settlements, and we are committed to honoring the terms of these agreements moving forward.

We have and will continue to honor our settlement agreements.

COMP PLAN ADOPTION and UPDATES

What is the current situation with regard to capacity at the Cedar Hills Regional Landfill?

According to population and economic projections, and current recycling rates, the existing cells at the Cedar Hills Regional Landfill will be full around 2028. The Comp Plan directs King County to extend

the life of the landfill and gives us the needed time to identify and evaluate the best future disposal alternatives.

How is King County planning to further develop the landfill?

King County will not expand the landfill beyond its current boundaries. Our long-term plan centers on extending the life of the landfill by maximizing capacity on the existing footprint. This would entail building a new cell, relocating support facilities to a different location on the landfill property, and using that space for solid waste disposal. This could extend the landfill's operational life nearly two decades, and provide enough of a planning window to have a new alternative in place when the landfill closes.

What long-term waste disposal alternatives were considered in the Comp Plan?

The Comp Plan presented Waste-to-Energy and waste export by rail as alternatives to further landfill development. These alternatives are workable options that come with tradeoffs around cost, environmental impact, community impact and risk.

A Waste-to-Energy (mass burn) facility, which would incinerate garbage to generate electricity, offers opportunities to explore advanced technologies for waste disposal. It is the most technically and financially complex option outlined.

Rail transport to an out-of-county landfill is a viable alternative. The City of Seattle transports its collected waste to landfills in eastern Washington and Oregon. But rail capacity has limitations, and the increasing demand for rail transport among both public and private entities as our region keeps growing adds uncertainty to the cost and feasibility of this option.

After considering the alternatives, the Comp Plan recommends that the Cedar Hills Landfill be further developed, maximizing its capacity as we continue working with public and private partnerships to increase the volume and value of recycling. Further development of the landfill is the most cost-effective and feasible option to serve our region's need for responsible waste disposal at this point in time.

The Cedar Hills Regional Landfill will eventually fill up. Future Comp Plan updates will explore alternatives for when local landfill capacity is no longer available.

Will the Cedar Hills Regional Landfill ever be allowed to build above its current permitted height?

It's important to emphasize that the landfill currently has permitted height requirements, and that King County would not violate the terms of permits or settlement agreements around landfill

development, including height limitations. Any future development at the landfill would be subject to a project planning and permitting process that would involve public notification as well as the opportunity to provide comment or input that would inform design guidelines.

How can I get more information on the Solid Waste Comp Plan, or make my views known?

People can read the Comp Plan online at www.kingcounty.gov/SWDCompPlan. The Comp Plan is currently undergoing review and approval by the 37 cities that contract with King County for regional waste disposal services. Also, many projects featured in the Comp Plan will have their own unique public processes related to siting, design, permitting and construction. People will continue to have opportunities to be informed and involved in the implementation of projects and programs outlined in the Comp Plan.

COST and FINANCES (Comp Plan Alternatives)

What is the cost difference between the three disposal options identified in the comp plan?

The financial and environmental costs of the viable disposal alternatives were evaluated in the Comp Plan, which is outlined in Table 6-1 on Page 162.

Table 6-1. Comparison of key disposal option characteristics (planning level estimates)

Comparative Attribute	Further Develop Cedar Hills	Waste Export To An Out-of-County Landfill	Waste To Energy Facility
Cost per Ton[1]	$41	$55	$136
Life Cycle Greenhouse Gas Emissions (EPA's WARM Model)	(134,000)[2] MTCO2e	(78,000)[2] MTCO2e	12,000 to 80,000[3] MTCO2e
Annual Greenhouse Gas Emissions (EPA's eGGRT)	91,000[4] MTCO2e/year	91,000[4] MTCO2e/year	1,200,000 MTCO2e/year
Recycling Rate	No change	No change	2% increase
Risks	SEPA, Permitting	Rail Capacity, Control	Siting, Sizing

1 Estimated cost per ton in 2029.

2 WARM model calculation for 2029. (King County SWD). For more information, see Appendix D.

3 WARM model calculation.(Normandeau 2017).

4 Landfill options show estimated emissions in 2029.

Extending the life of the landfill is the most cost-effective and has the lowest climate impact while we plan for the future of regional waste management after the landfill is full.

ENVIRONMENTAL HEALTH

What about the health and safety of neighbors?

The Cedar Hills Regional Landfill is staffed 24/7 with skilled professionals who are trained and certified in the best management practices established by the Solid Waste Association of North America, or SWANA. By far the most commonly reported issue is odor.

Protecting our workers and the public is a top priority. Our landfill operations are subject to permit conditions and regulations by Public Health – Seattle & King County, the US Environmental Protection Agency (EPA), Puget Sound Clean Air Agency (PSCAA) and the Washington State Department of Ecology to safeguard public health, the environment, and the nearby community. SWD Operations is responsible for ensuring compliance for 33 groundwater monitoring wells near an aquifer, seven stormwater monitoring points, and over 700 gas wells.

We regularly monitor and report on the quality of the air, groundwater, leachate (landfill wastewater) and stormwater, and we restrict or prohibit the disposal of many types of waste that could be harmful or toxic.

Greater detail about our environmental monitoring is available in the Cedar Hills Landfill 2018 Annual Report, which is online at https://your.kingcounty.gov/dnrp/library/solid-waste/facilities/CHRLF-annual-report-2018.pdf. People can also call us at 206-477-4466 to request an emailed or paper copy.

What does King County do to reduce impacts of the landfill to nearby communities?

To control odors and reduce potential for wildlife to get into and carry away garbage, the active areas at the landfill are covered before the end of each working day. Staff also monitor for odors, and specially trained Nasal Rangers on staff do around-the-clock odor checks five times a day. People who notice odors, or any other issue they feel is related to the landfill operations, can call the Solid Waste Division at 206-477-4466 to get a response right away. People should always call 911 first if they believe there is a potential emergency, or a risk to public safety, health or property.

Are there unlined areas at the landfill?

Environmental controls have been in place at Cedar Hills since the 1980s, and that includes installation of protective bottom linings, as well as covering refuse areas daily to reduce impacts like odors and birds. There are two unlined areas of the landfill – the Main Hill and the Southeast Pit. Both are located on the east side of the landfill and were developed before regulations requiring bottom liners were established. Those two areas are equipped with environmental controls, including having a cap on top to prevent infiltration, as well as leachate and landfill gas collection.

LANDFILL COVER MATERIAL

What type of cover material is used at the landfill?

King County takes daily action to prevent odors, control wildlife, and deter rodents and pests by covering active areas of the landfill daily. The cover also improves gas collection, which works on a vacuum system.

Active area side slopes are covered with soil, and a thick, durable cloth tarp is placed on the top at the end of each working day. When the tarp is covering the area, the landfill gas collection pipes are operating on a vacuum to capture landfill gas and send it to Bio Energy Washington for processing.

The type of cover the division is allowed to use is decided by regulators. The Comp Plan directs King County to implement best practices around landfill cover, which is consistent with our current practices, but includes additional reporting requirements.

LANDFILL GAS MANAGEMENT

What is the status of energy recovery at the landfill now?

It's important to point out that innovation is already happening at our current facilities. Through partnerships with Puget Sound Energy and Bio Energy Washington, landfill gas collected at Cedar Hills produces enough renewable energy to heat 19,000 homes annually, which reduces greenhouse gas emissions and supports broader County goals to address climate change. Some of the gas produced is converted to electricity, some gas is cleaned of impurities and returned to the regional pipeline.

Revenue from the landfill gas-to-energy partnership brought in $8 million in 2017 which helps offset solid waste disposal operational costs.

How is landfill gas managed?

High-tech equipment is used to monitor, control, and measure the landfill gas characteristics and volume as it is captured within the vacuum-based system. King County performs quarterly surface scans of the landfill to seek out potential fugitive emissions and address them as appropriate. It is the frequent re-evaluation of the system performance and maintenance that ensures the system is well-managed and functions optimally.

Once collected, landfill gas is conveyed via pipeline to Bio Energy Washington for processing. Some of the gas is converted to electricity for use on site by Bio Energy Washington, however most is cleaned of impurities and made into compressed natural gas and sold to Puget Sound Energy.

While international standards for measuring landfill gas vary from country to country, in the U.S., the EPA serves as the chief regulator and establishes the measurement models. To inform the most accurate data points for input to the EPA models, King County conducts periodic waste characterization studies.

What about landfill gas odors?

At Cedar Hills, all supervisors, leads and landfill gas operators have been trained to recognize odors and evaluate the source and concentration levels of reported and detected odors. The training also features tools and techniques specifically designed to counteract desensitization to certain odors. The landfill gas staff has developed a site-wide monitoring program to include daily site-wide odor observations five times a day, day and night. These observations are recorded on paper as well as in an electronic database.

Anyone who detects the smell of natural gas, or believes there is a gas leak or any other emergency related to landfill operation should call 911.

ODOR MANAGEMENT/AIR QUALITY

How is air quality managed around the landfill, especially controlling odors?

The Cedar Hills Regional Landfill is staffed 24/7 with skilled professionals who are trained and certified in the best management practices established by the Solid Waste Association of North America, or SWANA. Around-the-clock odor checks are conducted five times a day on and offsite on weekdays and three times a day on weekends by operations experts trained in odor detection. In addition to these regularly scheduled checks, specially trained staff monitor areas commonly associated with prior odor complaints.

What tools or monitoring devices are used to detect and control odors?

The division uses Nasal Ranger training and technology to monitor and detect odors. The Nasal Ranger system is used across many sectors including state and local governments, wastewater treatment operations, landfill operations, environmental health agencies, and even police departments to determine presence and strength of odors. Use of the equipment takes the subjectivity out of odor measurement and provides a consistent standard for field staff to document odor strength. The Nasal Ranger training data is even used as a guide for regulatory enforcement in some jurisdictions.

Prevention is our most effective strategy. To control odors, and reduce potential for wildlife to get into and carry away garbage, the active areas at the landfill are covered before the end of each working day.

Who permits air quality for the Cedar Hills Regional Landfill?

Puget Sound Clean Air Agency (PSCAA) serves as the regulator over SWD's operations for all matters relating to air quality. People can call PSCAA to report complaints, but we also ask that they call our 24/7 hotline at 206-477-4466 so we can diagnose and correct any issues that might be related to landfill operation.

How many odor complaints were reported in the past year?

Puget Sound Clean Air Agency reported 160 complaints called in in 2018. By contrast, in 2018 the division received 14 complaints to SWD's odor hotline. An analysis of the 2018 neighborhood odor checks confirms that refuse accounts for less than five percent of the odors detected.

Though neighbors always have the option to contact PSCAA, we encourage them to contact us as well because if there is a problem related to our operation, we can take corrective action right away.

I live near the landfill. If I detect odors of garbage or natural gas, who do I call?

Anyone who detects the smell of natural gas, or believes there is a gas leak or any other landfill-related emergency should call 911.

Neighbors are encouraged to report a non-emergency problem by calling our 24/7 hotline at 206-477-4466. Complaints to the issue-reporting hotline receive immediate response.

RECYCLING RATES

How does the Comp Plan address recycling?

The Comp Plan identifies strategies for how the County will manage recycling for the next six to 20 years. Developed with the division's partnering cities and two advisory committees, a main priority of the 2019 Plan is how to achieve a 70 percent recycling rate.

The current recycling rate in King County is 54 percent, far exceeding the national average of 34 percent. But we can do more. We estimate as much as 70 percent of what goes to the landfill every day – about 95 semi-truckloads – is recyclable or reusable material.

What are some specific examples of recycling actions outlined in the Comp Plan?

The 2019 Plan provides a menu of recycling actions cities and the county can take to enhance recycling in their jurisdictions.

For example, about a third of the material that goes to the landfill is food waste that could be composted and used to nourish crops and return nutrients to the soil. King County convened an Organics Summit earlier this spring comprised of cities, haulers, waste management experts and academics to identify strategies to develop markets for this material.

Construction and demolition waste (C&D) makes up one-third of the solid waste generated in the county. King County requires that readily recyclable C&D materials (metal, cardboard, wood, concrete, asphalt, brick and drywall) be recycled, which furthers the division's Zero Waste and carbon emissions reduction efforts. In 2018, the division added an additional C&D recycling facility to the privately managed locations that manage C&D, bringing the total number of approved facilities to fourteen.

Education is also part of our strategy. A record 245 King County schools (more than 151,000 students) are currently participating in the Green Schools program that helps teach students important lessons on recycling and conservation. New features of the program include a food rescue initiative that diverts unopened and uneaten food from being wasted. In 2018, nearly 13,000 of food and drinks were rescued and redistributed to communities in need.

Finally, we're making our services more accessible and affordable as part of our commitment to equity and social justice. The new Cleanup LIFT program, modeled after Metro Transit's Orca LIFT, provides a $12 discount to low-income self-haul customers who recycle yard waste, clean wood and refrigerant-type appliances at a County recycling and transfer station.

Which areas have the highest recycling rates?

Recycling rates vary among our regional communities. Single family recycling rates range from a high of 65 percent in some areas to as low as 34 percent. For multi-family housing, rates range from 61 percent to as low as 5 percent.

Education is an important part of recycling, as is ongoing coordination with haulers and cities. People can make the biggest environmental impact by recycling right. That means making sure recyclable materials are empty, clean and dry before being put in the bin.

SEISMIC CONCERNS

Are there known faults on or close to the landfill?

According to the most recent studies to inform landfill development, there are no known earthquake faults within a mile of the Cedar Hills Landfill. The new landfill cells are not located in any known seismic impact zone nor within a mile of any Holocene faulting (activity in the last 11,000 years), which is a Washington Administrative Code (WAC) requirement.

WASTE-TO-ENERGY

Is King County considering a Waste-to-Energy facility?

King County is open to the possibility of new technologies for regional waste management, and future comprehensive plan updates could further explore new alternatives, including a Waste-to-Energy option. But without further development, the landfill is currently slated to reach capacity by 2028 and a nine-year time frame to site, permit, build, finance and commission a complex facility is not realistic. A Waste-to-Energy facility still requires landfill disposal capacity.

What about the possibility of a waste-to-energy facility in the future after Cedar Hills is full?

The Comp Plan directs King County's Performance, Strategy, and Budget (PSB) office to work with the Solid Waste Division to prepare a progress report by December 31, 2021 on long-term disposal options.

Concurrently, PSB is managing a consultant contract for a waste-to-energy study that is scheduled for completion by October 2019. The study will help inform future work.

In consultation with our city partners, it is anticipated that the post-Cedar Hills disposal method will be selected as part of the next Comp Plan update.

King County is open to the possibility of new technologies for regional waste management, and future comprehensive plan updates could further explore new alternatives, including a Waste-to-Energy option.

We recognize many in our region are supporters of this option, and invite them to engage in with other stakeholders and community members in regional discussions around future planning efforts.

WATER QUALITY/AQUIFER

What steps does King County take to protect water quality?

The division is responsible for routine water quality monitoring and reporting on 68 groundwater wells onsite and around the site perimeter.

A regional aquifer flows beneath portions of the Cedar Hills Regional Landfill from the South to the Eastern border. SWD monitors the regional aquifer at 19 wells on a quarterly basis and monitors an additional 14 wells semi-annually. Incoming water quality is impacted by the former Queen City Farm, a Superfund site Boeing is responsible to clean up, which is located just to the south of Cedar Hills. Our monitoring shows that groundwater leaving the landfill site is in compliance with federal drinking water standards.

I heard that an aquifer near the landfill is at risk of contamination by 2058. Is that true?

No. The aquifer beneath the landfill is not at risk of contamination in 2058 because action is underway now to address legacy contamination that originated at a Boeing-managed Superfund site south of the landfill. A remediation study is being developed to identify the most appropriate cleanup actions of the historic contamination and to ensure it doesn't leave the site. Portions of the study have already been approved by Ecology while exploration of additional efforts is pursued.

The former Queen City Farm, now a Superfund site Boeing is responsible to clean up, was found to have contributed to historic contamination discovered at Cedar Hills in the 1980s that was confined to areas of the landfill that continue to be closely monitored. King County continues to send our quarterly groundwater reports and annual reports to the EPA and Boeing.

Alternate formats available: 206-477-4466, TTY Relay: 711

CITY OF _____

RESOLUTION NO. _____

A RESOLUTION of the City Council of the City of _____, Washington, approving the 2019 Comprehensive Solid Waste Management Plan for the King County Solid Waste System

WHEREAS, the purpose of the 2019 Comprehensive Solid Waste Management Plan (2019 Plan) is to plan for solid waste and materials reduction, collection, and handling and management services and programs in the geographic area for which King County has comprehensive planning authority for solid waste management by law or by interlocal agreement, or both, and

WHEREAS, the 2019 Plan was prepared in accordance with RCW 70.95.080, which requires that each county within the state, in cooperation with the various cities located within such county, prepare and periodically update a coordinated, comprehensive solid waste management plan, and

WHEREAS, King County and all cities in King County except Seattle and Milton have executed the 2013 Amended and Restated Interlocal Agreement ("the interlocal agreement"). Under the interlocal agreement, King County serves as the planning authority for solid waste, and

WHEREAS, King County worked with the city representatives serving on the Metropolitan Solid Waste Management Advisory Committee to develop the 2019 Plan, and

WHEREAS, the 2019 Plan updates and replaces the 2001 Comprehensive Solid Waste Management Plan approved by City Ordinance/ Motion/ Resolution _____ adopted on _____, and

WHEREAS, on April 17, 2019 the King County Regional Policy Committee, acting as the Metropolitan King County Council Solid Waste Interlocal Forum, recommended adoption of Ordinance 18893 for approval of the 2019 Plan; and

WHEREAS, on April 24, 2019 the Metropolitan King County Council adopted Ordinance 18893, which approved the 2019 Plan, and

WHEREAS, the interlocal agreement sets a 120-day period for cities to take action on the 2019 Plan. The 2019 Plan cannot receive final approval unless cities representing at least 75 percent of the incorporated population of the cities that take action in the 120-day period approve the Plan. The 120-day period runs from receipt by a city of the Plan recommended by the Regional Policy Committee and approved by the Metropolitan King County Council, and

WHEREAS, after city approval the 2019 Plan is further subject to final approval by the Washington State Department of Ecology;

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF _____, WASHINGTON, AS FOLLOWS:

SECTION 1. The 2019 Comprehensive Solid Waste Management Plan, Attachment A to this resolution, is hereby approved.

DATED and SIGNED this _____ day of _____, 2019.

_____

Mayor

ATTEST:

_____

City Clerk

APPROVED AS TO FORM:

_____

City Attorney

Attachment A: 2019 Comprehensive Solid Waste Management Plan updated April 17, 2019

7.11.2019 Enviro Agenda Item #3

KING COUNTY WATER DISTRICT NO. 54

Comprehensive Water System Plan

G&O #18422
May 2019

Gray & Osborne, Inc.

EXECUTIVE SUMMARY

King County Water District 54 operates a water system that serves downtown Des Moines and a portion of the southern portion of Normandy Park. The District supplies unchlorinated groundwater to its customers. The District has a staff of three.

The District was formed in 1935 to serve 300 people and now serves a population of approximately 5,200 on 755 connections. Of those, 102 connections serve 1,630 multi-family units including apartment/condominium buildings with another 158 non-residential connections.

The District is bordered by Puget Sound on the west and Highline Water District on all other sides. Most of the parcels within the District are developed, thus growth in the District is anticipated to be slow, mostly through redevelopment on existing lots. The current number of ERU is anticipated to increase from 2,205 in 2018 to 2,417 in 2039.

The District's source capacity is estimated at 910 gpm. The District has sufficient water rights and pumping capacity to serve the anticipated demand for the 20-year planning period, Table 1.

TABLE E-1

Production and Water Rights

Year	Production		Water Rights	
	Annual (ac-ft/yr)	Maximum Day (gal/min)	Annual (ac-ft/yr)	Instantaneous (gal/min)
2017	368	431	1,319	1,850
2039	433	564		

The quality of the District's water is excellent, with the caveat that manganese is present at the secondary MCL of 0.050 mg/L. Manganese has caused the occasional "brown water" complaint. For a period from 2013 through 2016 the District was required to chlorinate the water as a result of two positive coliform samples one of which was E. coli positive. During this period the brown water complaints increased substantially, from a few per year to a few per week. Since the chlorination ceased the brown water complaints have decreased to pre-chlorination levels.

The District has sufficient storage for the planning period. However, the District's elevated reservoir is in need of substantial maintenance, and should be seismically upgraded. If the District elects to remove the reservoir, in lieu of the maintenance and upgrades, there will be a modest storage deficit which will need to be replaced either by new onsite storage, or storage acquisition from Highline Water District.

The District's distribution system operates in one hydraulic zone. Pressures vary from slightly above 30 psi to over 100 psi along the waterfront. The requisite fire flow is provided throughout the system with the exception of the low pressure area of North Hill and at the end of short cul-de-sacs that have undersized water mains.

Three capital projects are identified which may be paid for out of existing, or anticipated, District reserves without loan funding:

- Replacement of the 8th Avenue South water main;
- Replacement of the 11th Avenue South water main;
- Removal of the elevated reservoir and replacement with a 150,000-gallon low level reservoir.

Unfunded, identified, capital projects include the North Hill Booster station, a new office and water main replacement. In total the identified, unfunded capital projects total to $4,137,000, in 2018 dollars.

The largest challenge facing Water District 54 is its aging infrastructure and obtaining the necessary funding to complete infrastructure repair and upgrade projects.

CHAPTER 9

CAPITAL IMPROVEMENT PROGRAM

INTRODUCTION

This Chapter presents the 10-year and 20-year Capital Improvement Plans (CIP) in accordance with the requirements of WAC 246-290-100. Water system capital improvements have been scheduled and prioritized on the basis of water quality concerns, growth, regulatory requirements, component reliability, system benefit, and financial availability. For the proposed projects indentified in this Chapter, preliminary project cost estimates are presented in Appendix O. A water system base map illustrating the location of the proposed improvement projects is included as Figure 9-1.

Other capital improvement projects may arise in the future that are not identified as part of the District's CIP presented in this Chapter. Such projects may be deemed necessary for ensuring water quality, preserving emergency water supply, accommodating transportation improvements proposed by other agencies, or addressing unforeseen problems with the District's water system. Due to budgetary constraints, the construction of these projects may require that the proposed completion date for projects in the CIP be rescheduled. When new information becomes available, the District retains the flexibility to reschedule proposed projects and to expand or reduce the scope of the projects, as best determined by the District's Commissioners. Additionally, future planning efforts by the City of Des Moines or the City of Normandy Park may affect land use zoning and demand distributions within the District. Road work performed by these agencies may force the District to construct or relocate water mains. Future development may create streets or provide alignments and locations of facilities that are different than shown in the Plan. Each capital improvement project will be reevaluated to consider the most recent planning efforts as the proposed completion date for the project approaches.

PROPOSED IMPROVEMENTS YEAR 0 TO 10

P-1: 8TH AVENUE SOUTH (2019)

The District plans to install a new 8-inch water main under 8th Avenue South from South 233rd Street to South 227th Street 8-inch connections from 8th Avenue to the 12-inch water mains on South 225th Street and South 266th Street. This project is prioritized due to recent water main breaks and concerns regarding the integrity of the pipe. The project includes the installation of approximately 1,400 linear feet of 8-inch water main under 8th Avenue South and approximately 100 lineal feet of 8-inch water main under each of South 225th and South 226th. Services and hydrants will be replaced.

Estimated Project Cost $831,000

P-2: 11TH AVENUE SOUTH

The District plans to replace an existing undersized 6-inch steel water main in the area of 11th Avenue South and South 220th Street. The area near this water main has received a relatively high volume of brown water complaints. This project will consist of an 8-inch ductile iron water main extending south on 11th Avenue South from South 220th Street to South 222nd Street, west on South 222nd Street to 10th Place South, south on 10th Place South to connect with the existing main on South 223rd Street, then continuing south on 11th Avenue South to South 224th Street, and east on South 224th Street to connect at 12th Avenue South. This project will install approximately 1,700 LF of 8-inch ductile iron water main.

Total Project Cost Estimate: $664,000

P-3: ELEVATED RESERVOIR

The District commissioned a report in 2014 to review the maintenance and structural upgrade needs of the elevated reservoir. The report concluded that the reservoir does not meet seismic code and that it needed to be recoated. As an alternative to rehabilitating the reservoir an option was to tear it down and purchase or rent the resulting storage deficit, approximately 150,000 gallons, from Highline Water District. The cost presented includes an assumed present value to rent storage for 20-years from Highline Water. The rental cost will need to be determined based upon a cost analysis study. This project will require specific DOH approval.

Total Project Cost Estimate: $1,033,000

PROPOSED IMPROVEMENTS BEYOND YEAR 10

P-4: NORTH HILL PRESSURE ZONE

The North Hill area of the District currently experiences marginal static pressures during peak hour demands. This is due to the high elevation of this area relative to the District's Elevated Reservoir. The project consists of the installation of two vaults with check valves and a booster pump station to supply domestic pressure. Particulars regarding this project, such as pump sizing, check valve location, and peak hour pressures, will be determined in a predesign report. This project will require specific DOH approval.

Total Project Cost Estimate: $730,000

P-5: NEW OFFICE BUILDING

The District's current office building is reaching the end of its useful life span and is undersized for the needs of the District. This project will replace the office building with a larger one on the same site as the existing office. The current building is 864 square feet. The new headquarters is expected to be approximately 1,200 square feet.

Total Project Cost Estimate: $793,000

P-6: MARINE VIEW DRIVE INTERSECTION CROSSING AT 7TH PLACE SOUTH

The District plans to install a new water main to connect the 12-inch water main that crosses the bridge at the north end of the District with the 12-inch water main that runs down South 216th Street. This project will include 170 linear feet of 12-inch water main directional drilled under the intersection. This project will improve flow availability to the northwest portion of the District.

Total Project Cost Estimate: $215,300

P-7: CLIFF AVENUE SOUTH

The District plans to replace an existing water main along Cliff Avenue South from S 223rd Street and 6th Avenue South to Dock Street. This project will involve the installation of 800 LF of 12-inch ductile iron water main. This project will improve available flow in the Marina area.

Total Project Cost Estimate: $406,000

P-8: RAINBOW LANE

The District plans to replace an undersized water main on Rainbow Lane west of 12th Avenue South. This project will consist of replacing the existing 4-inch AC water main with approximately 350 linear feet of new 8-inch ductile iron water main as well as replacing the fire hydrant. This project will improve flow availability and replace aging pipe.

Total Project Cost Estimate: $189,000

P-9: 226TH PLACE SOUTH

The District plans to replace an undersized water main on 226th Place South east of 10th Avenue South. This project will consist of replacing the existing 4-inch AC water main with approximately 350 linear feet of new 8-inch ductile iron water main as well as

replacing the fire hydrant. This project will improve flow availability and replace aging pipe.

Total Project Cost Estimate: $205,000

P-10: 13TH AVENUE SOUTH

The District plans to replace an undersized water main on 13th Avenue South north of South 216th Street. This project will consist of replacing the existing 4-inch AC water main with approximately 550 linear feet of new 8-inch ductile iron water main as well as replacing three fire hydrants. This project will improve flow availability and replace aging pipe.

Total Project Cost Estimate: $314,000

P-11: SOUTH 229TH STREET

The District plans to replace an undersized water main on South 229th Street east of 12th Avenue South. This project will consist of replacing the existing 4-inch water main with approximately 650 lineal feet of new 8-inch ductile iron water main as well as replacing two fire hydrants. This project will improve flow availability and replace aging pipe.

Total Project Cost Estimate: $303,000

P-12: SOUTH 216TH STREET FROM 1ST COURT SOUTH TO 6TH AVENUE SOUTH

The District plans to replace an undersized water main on South 216th Street from 1st Court South across 1st Avenue South to 6th Avenue South. This project will consist of replacing the existing 6-inch water main with approximately 1,450 linear feet of new 8-inch ductile iron water main as well as replacing four fire hydrants. This project will improve flow availability and replace aging pipe.

Total Project Cost Estimate: $775,000

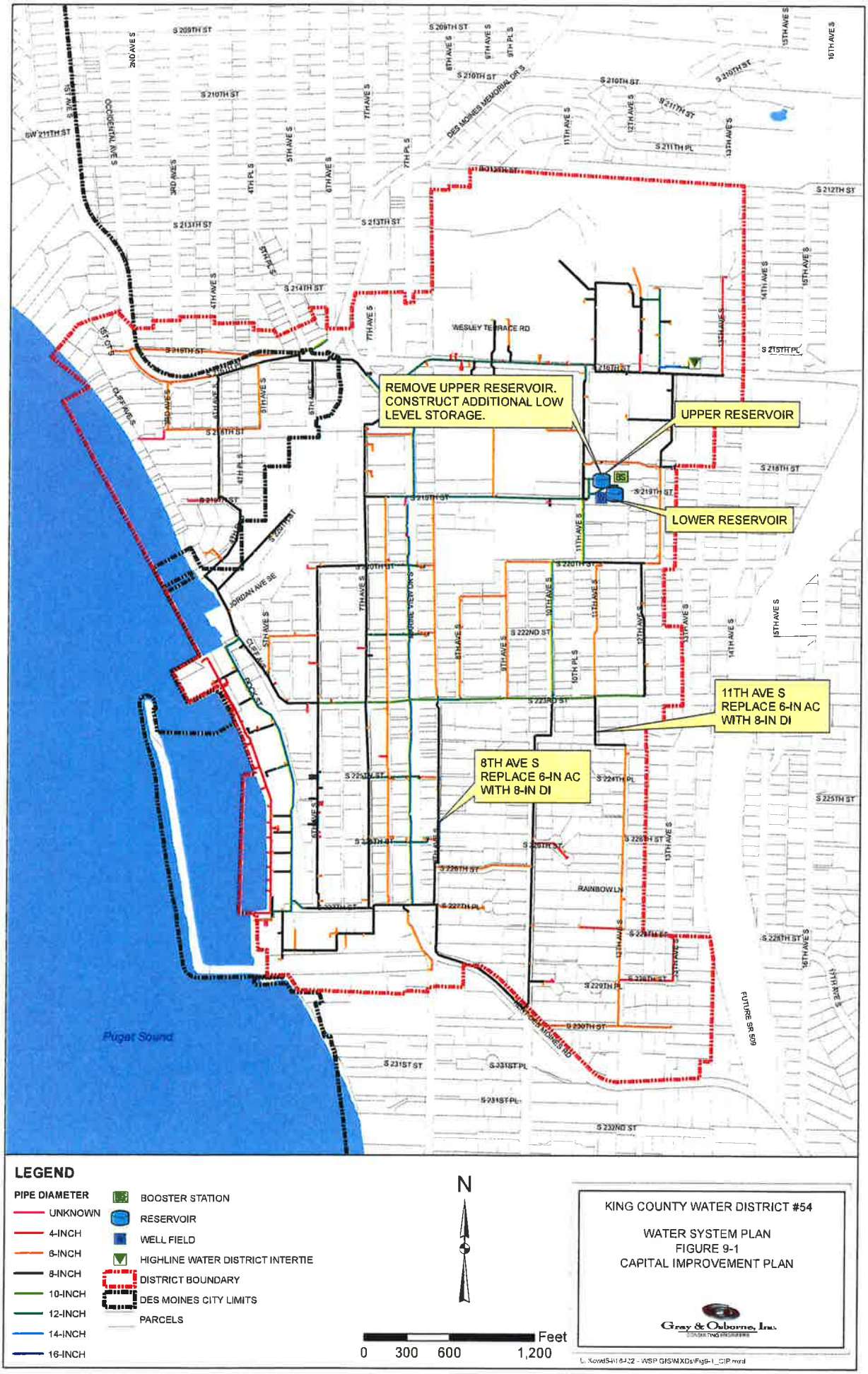
CAPITAL IMPROVEMENTS PLAN SCHEDULE

A summary of the District's capital improvement projects is provided in Table 9-1. The schedule of proposed capital improvement projects may change due to unforeseen circumstances or funding availability.

TABLE 9-1

Capital Improvement Plan Summary

Project Number	Project Title	Year to be Completed	Total Estimated 2018 Project Cost
P-1	8th Avenue South – 223rd to 227th	2019	$831,000
P-2	11th Avenue Southeast	2022	$664,000
P-3	Elevated Reservoir	2026	$1,033,000
P-4	North Hill Pressure Zone	2029	$730,000
Projects Past the 10-Year Planning Horizon			
P-5	New Office Building	2031	$1,000,000
P-6	Marine View Drive Int. Crossing at 7th Place South	TBD	$215,000
P-7	Cliff Avenue South	TBD	$406,000
P-8	Rainbow Lane	TBD	$189,000
P-9	226th Place South	TBD	$205,000
P-10	13th Avenue South	TBD	$314,000
P-11	South 229th Street	TBD	$303,000
P-12	South 216th Street from 1st Court to 6th Avenue South	TBD	$775,000
Total			**$6,665,000**


REMOVE UPPER RESERVOIR. CONSTRUCT ADDITIONAL LOW LEVEL STORAGE.
UPPER RESERVOIR
LOWER RESERVOIR
11TH AVE S REPLACE 6-IN AC WITH 8-IN DI
8TH AVE S REPLACE 6-IN AC WITH 8-IN DI
WESLEY TERRACE RD
DES MOINES MEMORIAL DR S
MARINE VIEW DR S
RAINBOW LN
FUTURE SR 509
Puget Sound
LEGEND
PIPE DIAMETER
UNKNOWN
4-INCH
6-INCH
8-INCH
10-INCH
12-INCH
14-INCH
16-INCH
BOOSTER STATION
RESERVOIR
WELL FIELD
HIGHLINE WATER DISTRICT INTERTIE
DISTRICT BOUNDARY
DES MOINES CITY LIMITS
PARCELS
N
0 300 600 1,200 Feet
KING COUNTY WATER DISTRICT #54
WATER SYSTEM PLAN
FIGURE 9-1
CAPITAL IMPROVEMENT PLAN
Gray & Osborne, Inc.

CHAPTER 10

FINANCIAL ANALYSIS

INTRODUCTION

This chapter presents the financial program for the District. This includes the current water rates, historical revenue and expenses and analysis of the District's ability to meet future operating expenses and fund water improvements outlined in the previous chapters.

FINANCIAL STATUS OF EXISTING WATER UTILITY

CURRENT WATER RATES

The District's water rates are based upon customer class and meter size. The monthly bill includes a base rate and a seasonal consumption rate. The base rates, effective January 1, 2019, are given in Table 10-1. The base rate increased by $1.75 per 5/8" x 3/4" meter over 2018. The Capital Facility Charge did not increase. The seasonal consumption rates are given in Table 10-2.

TABLE 10-1

Monthly Rates

Customer Class	Meter Size	Base Rate 2019	Capital Facility Charge 2019
Residential	5/8" or 3/4"	$13.90	$6.50
	1"	$14.40	$10.50
Multi-Family (Per Unit)	Varies	$13.90	Varies(1)
Non-Residential	5/8" or 3/4"	$37.04	$10.50
	1"	$38.41	$18.00
	1-1/2"	$62.84	$35.00
	2"	$110.75	$56.00
	3"	$199.20	$112.00
	4"	$371.19	$175.00
	6"	$739.74	$350.00
	8"	$1,231.14	

(1) Depends on meter size.

TABLE 10-2

Seasonal Water Rates

Consumption Rate	Dates	Rate per 100 Cubic Feet 2011
Summer Water Rates	5/1 through 10/31	$4.10
Winter Water Rates	11/1 through 4/30	$3.80

Water consumption rates increase by 30¢ per CCF during the summer period.

GENERAL FACILITY CHARGE

New customers are required to pay fees to offset the costs to the utility of extending service to the new customer and to cover a new connection's fair share of existing facilities, as well as future improvements. The District general facility charge is $4,000 per equivalent residential unit (ERU).

FINANCIAL ANALYSIS

This section reviews past revenues and expenses in order to analyze the health of the existing system and to provide estimates of the baseline cash flows for the budget projection.

HISTORICAL OPERATING REVENUES AND EXPENSES

This section presents historical operating revenues and expenses from the year 2014 through 2018. This historical data is shown in Table 10-3. Only historical operating cash flows are considered when evaluating the health of the system because operating revenues and expenses occur annually and are expected to continue. Historical capital revenues and expenses are not indicative of future capital cash flows. Therefore, the health of a utility is primarily judged on the ability of monthly rates to fund annual operation and maintenance (O&M) expenses and debt service.

HISTORICAL REVENUE

The District collects the majority of its revenue from water sales. The revenue provides the base revenue for the operation and maintenance of the system. Water use is billed utilizing both a base rate and volume charge (Tables 10-1 and 10-2). The volume charge increases in the summer relative to the winter.

Water utility operating revenues for the years 2014 through 2018 indicate a gross income of approximately $880,000 per year. Historical revenue and expense varies from year to year, Table 10-3. Revenue generated from the Capital Facility Charge component of

TABLE 10-5

Projected Operations (Cash) Fund

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Assumed Rate Increase (Vol & Base)	10.0%	8.0%	5.0%	5.0%	4.0%	4.0%	4.0%	3.0%	3.0%	3.0%
Start of Year	**$556,932**	**$521,498**	**$469,233**	**$442,287**	**$471,035**	**$518,878**	**$562,009**	**$626,574**	**$674,621**	**$731,421**
Revenue										
Rates	$900,000	$978,300	$1,031,715	$1,087,944	$1,136,248	$1,186,698	$1,239,268	$1,279,793	$1,321,642	$1,364,859
Other	$129,847	$114,980	$117,802	$120,694	$123,657	$126,693	$129,804	$132,992	$136,258	$139,604
Expense										
O&M	($398,000)	($408,725)	($419,741)	($402,597)	($413,509)	($424,719)	($436,235)	($448,066)	($460,221)	($472,709)
Admin	($397,280)	($411,330)	($425,783)	($440,781)	($456,346)	($472,499)	($489,266)	($506,670)	($524,739)	($543,498)
Net Revenue	($234,567)	($273,225)	($303,993)	($365,259)	($390,051)	($416,173)	($443,572)	($458,048)	($472,940)	($488,257)
Transfer to Capital and Bond	($270,000)	($325,490)	($330,939)	($336,511)	($342,208)	($373,042)	($379,008)	($410,001)	($416,139)	($422,427)
Net Revenue, Incl Transfer	($35,433)	($52,265)	($26,947)	$28,748	$47,843	$43,131	$64,564	$48,047	$56,801	$65,831
Year End Cash Balance	**$521,498**	**$469,233**	**$442,287**	**$471,035**	**$518,878**	**$562,009**	**$626,574**	**$674,621**	**$731,421**	**$797,252**

TABLE 10-6

Projected Capital Fund

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Start of Year	**$763,530**	**$279,236**	**$511,267**	**$730,741**	**$221,489**	**$449,699**	**$707,775**	**$970,475**	**$1,255,022**	**$146,400**
Revenue										
Transfer from Operations	$200,000	$205,000	$210,125	$215,378	$220,763	$226,282	$231,939	$237,737	$243,681	$249,773
General Facility Charge	$288,933	$62,296	$40,757	$40,357	$39,957	$39,557	$39,158	$25,029	$24,941	$24,852
Capital Facility Charge on Bills	$70,000	$70,490	$70,814	$71,133	$71,446	$71,760	$72,069	$72,263	$72,459	$72,654
Miscellaneous Income	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500
Expense										
Capital Expense	($810,000)			($732,932)					($1,290,075)	$0
Debt Payment	($235,727)	($158,255)	($154,722)	($155,689)	($156,456)	($157,023)	($157,965)	($152,982)	($146,400)	($146,400)
Net Revenue	($484,294)	$232,031	$219,474	$509,253	$228,210	$258,076	$262,700	$284,547	$992,896	$303,379
End of Year Balance	**$279,236**	**$511,267**	**$730,741**	**$221,489**	**$449,699**	**$707,775**	**$970,475**	**$1,255,022**	**$262,127**	**$565,506**