CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS
Sitting as the Governing Body of Water Environment Services

Policy Session Worksheet

Presentation Date: 01/22/2019 **Approximate Start Time:** 2:30pm
Approximate Length: 1 Hour

Presentation Title: WES Advisory Committee Action Items Report

Department: Water Environment Services

Presenters: Greg Geist, Lynne Chicoine, Doug Waugh, Chris Storey

Other Invitees: Greg Eyerly, Ron Wierenga, Amanda Keller, Shelly Parini

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

This report will provide the Board with an update on three action items addressed by the Water Environment Services ("WES") Advisory Committee, and seek Board direction regarding those recommendations.

BACKGROUND & ISSUES:

1. WES Capital Improvement Plan. WES' Planning and Capital Delivery program has utilized several related planning efforts to assemble a proposed 2018-2023 Sanitary Capital Improvement Plan ("CIP"). The plan includes certain ongoing projects, including the Tri-City Solids Capacity Project and the reinvestment and upgrade work at the Kellogg Plant. Over the next five fiscal years, the CIP anticipates investments totaling approximately $224.1 million and is part of a total 20 year capital investment plan. A few items remain to be developed for the complete 20 year plan but the immediate needs are clear.

Staff presented a draft of the CIP to the WES Advisory Committee in September 2018, and published a draft of the CIP on its' website for public review. After comments and discussion, a slightly revised draft was presented to the WES Advisory Committee in January 2019, for deliberation and recommendation. The Committee voted to recommend adoption of the 5 year CIP.

Staff is now presenting that recommendation and the CIP to the BCC for review and discussion. WES is seeking BCC permission to bring the CIP forward for formal adoption at a business meeting on the consent agenda.

2. WES Sewer Rate Policy. WES' Financial Management program has been reviewing the integration of the underlying service districts into WES and seeking the best path forward from a financial management perspective. The policy guidelines around rate-setting for the WES partnership are key to long term financial management. After noting the variables of rate equity and implementation costs, staff presented four different rate-setting policy approaches to the WES Advisory Committee in September 2018 for their consideration.

The four rate options are:

a. *Uniform Rate (Option 1)*: All WES ratepayers pay the same rate irrespective of the service received or location. This has the lowest implementation cost but is low on

rate equity and poses challenges regarding continued compliance with the commitment that only Rate Zone 2 would be responsible for the legacy debt.

b. *Zone Rate (Option 2)*: All ratepayers within a rate zone pay the same amount. This is still relatively low cost to implement and has a higher degree of rate equity. However, it does not allow for differences in service level receipt (there are retail customers in the Tri-City District, and wholesale customers in Rate Zone 2, despite the majority of the contrary being true for most in those areas) that could be unfair or burdensome.

c. *Service Rate (Option 3)*: The rate charged is dependent on the service received, not on location of the customer. All wholesale customers would pay the same amount for utilization of the system, and all retail customers would pay the same amount as well. This is close to current billing practices and would not be expensive to implement. It is higher on the rate equity scale, and was staff's recommendation.

d. *Consumption Rate (Option 4)*: The rate charged would vary based on water consumption to some degree. Staff estimates our variable costs based on flow to be ~15% of the bill, and would create a flat fee portion similar to option 3, the service rate approach, and then a variable component for the remainder. Implementing this option would require WES to successfully engage the interest of the six water providers in the WES service area (Clackamas River Water, City of Gladstone, City of Milwaukie, Oak Lodge Water Services District, South Fork Water Board, and Sunrise Water Authority) to receive consumption information and build a revised billing program. This approach is highest for rate equity but has significant implementation costs and would take several years to take effect.

The matter was brought back at the January 2019, meeting, where the Committee voted to adopt a recommendation to the BCC for Option 3, the Service Rate approach. Staff is now seeking BCC direction to utilize the WES Advisory Committee recommendation in future rate development and implementation work.

3. Oregon Consensus. In 2015-16, there were conversations between Clackamas County Service District No. 1 (CCSD#1) and Tri-City Service District (TCSD) about joint investment in solids handling at the "Regional Committee", which consisted mainly of elected officials from both districts, plus one unincorporated resident (Eric Hofeld). The Regional Committee's purpose was to discuss joint investments between the then-separate districts. At those meetings, some elected officials, most strongly the Mayor of Oregon City, pushed for a change in governance of the service districts –putting city councils, or representatives from them, in charge of regional wastewater service instead of the Board of County Commissioners.

The Board of County Commissioners responded they were open to having a conversation, and proposed utilizing Oregon Consensus, a facilitation process supported by the Governor's office and housed at Portland State University, to facilitate the discussion.

The formation of WES answered definitively at least part of the governance conversation that was raised in 2015. The BCC concluded that all ratepayers would benefit from a regional approach to such an economies of scale business as wastewater and surface water, and directed the formation of WES and the combination of all three service districts' business dealing with those issues into the single entity of WES.

Since that time, representatives from various cities have continued to advocate for some degree of city control of the regional system. Oregon Consensus was engaged and conducted an initial "survey" phase of work to see if there was sufficient mutuality to support a larger discussion.

Attached is the draft report from Oregon Consensus, based on interviews of WES stakeholders, including County Commissioners, city councilors, and several members of the WES Advisory Committee. Key findings of the report include:

a. *Ratepayer Lens*: There was a high degree of agreement that the proper framework in which to evaluate any discussion around governance is from the perspective of what is in the best interest of the ratepayers.

b. *Operational Satisfaction*: The interviews reflected satisfaction and confidence in the operations of WES and its goals of protecting public health and the environment and promoting economic development – providing the best service possible at the lowest cost possible.

c. *Three Concerns*: The interviews found that several participants had concerns, and that those concerns could be categorized in three areas:

    i. Rate Equity and Input: For some electeds, rate changes were viewed as a political vulnerability for cities. There were also concerns about how the cost of growth or investment in aging systems will be spread across ratepayers, SDC rates, representation of unincorporated ratepayers, and impact on low income residents.

    ii. Transparency: Some interviewees felt they did not have the "big picture" and desired to see long term planning details, and a clear channel of communication to the BCC of input received by WES.

    iii. Meaningful Role/Control: City elected officials felt they did not have a meaningful role around management of the WES wastewater infrastructure, for which they felt responsible for on behalf of city constituents. Unincorporated ratepayers noted that they felt unrepresented except by the BCC at a very high level – with the acknowledgement that the BCC is elected by both incorporated and unincorporated residents and therefore does not represent one group over the other.

d. *Potential Solutions*:

    i. Revision of 190 Partnership: Could revise the 190 structure to grant some degree of authority to city partners. Multiple configurations were discussed, with a particular note of the challenge of assuring representation for unincorporated ratepayers.

    ii. New Special District: Many saw as ideal the idea of converting WES into an ORS 450 independent special district, but were concerned over the potential hurdles to effectuate.

    iii. Revised Input and Reporting Process: Several proposals along the lines of revising and empowering existing groups like the WES Advisory Committee and/or the Elected Officials Forum, better communication regarding rates, financial matters and long term planning and/or steps short of governance change such as having WES do direct billing in cities

to alleviate ratepayers conflating city with WES charges, etc. were all mentioned as possible solutions.

e. *Next Steps*:

i. Process Design: Oregon Consensus recommends the parties agree on a collaborative process and memorialize that pursuant to an agreement regarding cost allocation (born by WES or shared) and operating principles.

ii. Joint Learning: The first step would be an agreed learning process to make sure that there is a common understanding of the facts, issues and interests of the parties and an understanding of what the range of possible solutions might be.

iii. Scope & Goal: Discussion needed to frame the issues, desired outcomes, and any sideboards.

iv. Participants: Oregon Consensus recommends that any community of interest that stands to be affected by that outcome of the process should be included.

After deliberation on the report, the members of the Elected Officials Forum requested a continued conversation about governance and continued engagement with Oregon Consensus. Similarly, after deliberation on the report, the members of the WES Advisory Committee recommend a continued conversation about the matter.

For this item, the BCC first has the threshold question of whether or not to agree to move forward with the Oregon Consensus process as outlined in the draft report.

Second, the BCC needs to state its preferences regarding the process if it is willing to proceed. To date, WES staff has merely facilitated the conversation between interviewees and provided perspective on existing issues. At this point it seems appropriate for staff to offer its recommendation regarding the process. With respect to the next steps portion of the findings, staff recommends:

i. Process Design: Staff supports moving forward with the Oregon Consensus effort. Given that the primary motivation for the conversation is coming from city government and their desire for greater control, staff recommends that those cities be asked to share in the cost of implementing the effort desired.

ii. Joint Learning: Staff supports and endorses the concept of having a joint learning process prior to plunging into a negotiation over solutions, as was suggested at the Elected Officials Forum. Ensuring that all parties' issues and interests are identified, and a common understanding of both problems and solutions exist, seems an important prerequisite for a successful effort.

iii. Scope & Goal: Staff recommends that the scope and goal should be guided by the common agreement of the ratepayer lens. Any proposed change or approach should be tested and viewed through the lens of what is in the best interests of ratepayers, with the goal of arriving at an answer that provides the best

opportunity to provide the best service in protecting public health, the environment, and supporting economic growth for the lowest cost possible.

iv. Participants: Staff recommends that a group consisting of members of the BCC, the cities served by WES, and representatives of unincorporated residential ratepayers, business customers, the development community, and the environmental community be represented. All these perspectives are reflected within the WES Advisory Committee currently, as part of its original design. Therefore staff recommends that the Oregon Consensus participants be the WES Advisory Committee plus additional city participation (beyond Happy Valley and West Linn representatives already on the Committee) to reflect the full scope of interests that stand to be affected by a change that could come out of the Oregon Consensus effort.

Staff requests BCC direction on how it would like to proceed with respect to this matter.

FINANCIAL IMPLICATIONS:

1. The first year of the CIP is part of the currently adopted budget. Adoption of the CIP would direct staff to build the plan into future proposed budgets.

2. There are no immediate financial implications for the rate policy. It would guide future budget development.

3. Depending on the cost and sharing of the same, proceeding with the Oregon Consensus effort will require financial resources from WES to some degree.

Are these items in your current budget? ☒ YES ☐ NO

What is the cost? Budgeted expenditures for capital projects, professional services for governance conversation, staff time.

What is the funding source? FY18-19 WES Budget – ratepayer supported. No general fund dollars will be used for WES efforts.

STRATEGIC PLAN ALIGNMENT

This aligns with several of WES' Strategic Goals:

1. Achieve sewer improvements to support the expected regional 20-year growth horizon.

2. Priorities and policy recommendations will reflect optimum economies of scale.

3. Addressing governance issues can help facilitate needed conversations regarding investment, coordinated action, and regional solutions to watershed issues.

These align with the County's Strategic Goals in that it helps 1) build a strong infrastructure and 2) build trust through good government.

LEGAL/POLICY REQUIREMENTS:

1. CIP adoption would be a formal board action. The CIP, after adoption, will become the basis for calculating SDCs for WES in future fiscal years.
2. No requirements for rate policy direction.
3. Moving forward with Oregon Consensus will require revision of the current IGA with Oregon Consensus to define the scope and scale of the project.

PUBLIC/GOVERNMENTAL PARTICIPATION: Extensive for all the above items.

OPTIONS:

Item 1: Should staff proceed with placing the draft CIP on a Board business meeting agenda for formal adoption?

Option A: Proceed and direct staff to bring the CIP plan forward for adoption.

Option B: Direct staff to revise the CIP in some fashion and then bring it forward for adoption.

Option C: Direct staff to substantially revise the CIP to the extent it should not be brought forward without material revisions and additional public process.

Item 2: Should staff proceed with utilizing the Service Rate approach to rate-making for future budgets?

Option A: Direct staff to proceed with the WES Advisory Committee recommendation (Option 3).

Option B: Direct staff to proceed with a different option.

Item 3: Should WES proceed with engagement of Oregon Consensus to facilitate a conversation around the governance of WES?

Option A: Proceed and authorize staff to negotiate an IGA to be brought back to the BCC regarding the scope and scale of the Oregon Consensus process consistent with BCC direction as discussed arising from recommendations from the WES Advisory Committee, the Elected Officials Forum, and WES staff.

Option B: Do not proceed and decline to move forward with the Oregon Consensus process.

RECOMMENDATION:

Item 1: Should staff proceed with placing the draft CIP on a Board business meeting agenda for formal adoption?

Recommendation: Option A: Proceed and direct staff to bring the CIP plan forward for adoption.

Item 2: Should staff proceed with utilizing the Service Rate approach to rate-making for future budgets?

Recommendation: Option A: Direct staff to proceed with the WES Advisory Committee recommendation (Option 3).

Item 3: Should WES proceed with engagement of Oregon Consensus to facilitate a conversation around the governance of WES?

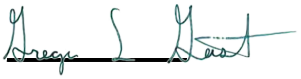
Recommendation: See staff recommendations provided in the Background/Issues discussion of the Issues. Overall, staff recommends:

Option A: Proceed and authorize staff to negotiate an IGA to be brought back to the BCC regarding the scope and scale of the Oregon Consensus process consistent with BCC direction as discussed arising from recommendations from the WES Advisory Committee, the Elected Officials Forum, and WES staff.

ATTACHMENTS:

Draft 2018-2023 Sanitary Capital Improvement Plan
Staff Presentation with respect to CIP Summary
Staff Presentation with respect to Sewer Rate Financial Policies
Oregon Consensus Draft Report

SUBMITTED BY:
Division Director/Head Approval _____

Department Director/Head Approval 

County Administrator Approval _____

For information on this issue or copies of attachments,
please contact Chris Storey at 503-742-4543

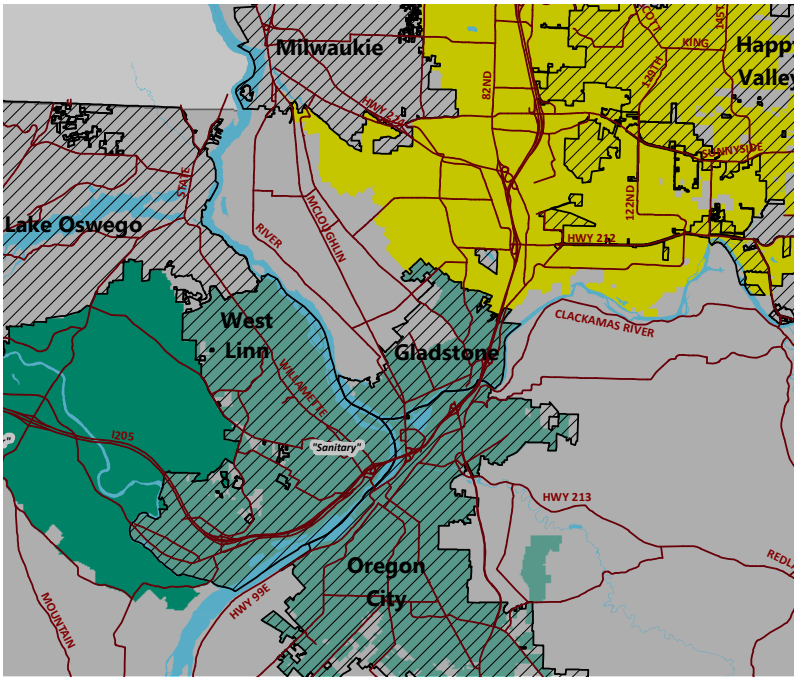
2018 - 2023

CAPITAL IMPROVEMENT PLAN

Water Environment Services

CLACKAMAS COUNTY

WATER ENVIRONMENT SERVICES



Water Environment Services

Of

Clackamas County

Fiscal Years 2018/2019-2022/2023

Capital Improvements Plan

Board of Directors

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WES Leadership Team

Greg Geist, Director

Chris Storey, Assistant Director

Lynne Chicoine, Capital Program

Greg Eyerly, Operations

Amanda Keller, Legal Counsel

Doug Waugh, Financial Services

Ron Wierenga, Environmental Services

WATER ENVIRONMENT SERVICES

Water Environment Services

Mission

The mission of Water Environment Services (WES) is to provide resource recovery and watershed protection services to our community so they can live, work and play in a healthy environment.

Our Lines of Business and their associated programs include the following:

Business Services

- Account Services
- Administrative Services
- Financial Management

Environmental Services

- Environmental Monitoring
- Permit Services
- Watershed Protection

Operations

- Plant Operations and Maintenance
- Resource Recovery
- Sanitary and Surface Water Maintenance

Capital

- Planning and Capital Delivery
- Asset Management

Our Strategic Results support Performance Clackamas which guide our daily activities and long term planning:

Comprehensive Plan – WES will provide the wastewater and stormwater infrastructure necessary to support partner communities and economic development over the next 20 years.

Decisions – Customers will benefit from well-informed and efficiency-minded decision making regarding wastewater infrastructure.

Continuing Operations/Utility Management – WES customers will continue to benefit from a well-managed utility.

Customer Experience – WES customers will understand, feel connected and support WES and the services they receive.

The 2018-2023 Capital Improvement Plan was developed to support WES in meeting our strategic results. The CIP puts forward a prioritized plan that will maintain existing facilities, allow efficient, cost-effective operations and provide new infrastructure to continue to protect human health and Clackamas County's water environment for ratepayers today and into the future.

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CAPITAL IMPROVEMENTS PROGRAM OVERVIEW

INTRODUCTION

The Board of Directors (Board) approves the annual budgets for the Department of Water Environment Services (WES, District). The goal of this document is to provide context and continuity for the budgets and capital needs year over year.

A capital project is any physical asset acquired, constructed, financed, modified or replaced with a total capital cost of $5,000 or more and a useful life of 5 years or more. All capital projects have a definitive beginning and end. All costs needed to acquire, construct, finance or modify a physical asset are included in the estimate of a capital project's total cost, including engineering and project implementation costs. Costs must be directly related to and primarily benefit a single capital project to be considered project costs.

BACKGROUND

Beginning July 1, 2018, WES will be comprised of three service areas: Tri-City Service District (TCSD), the Surface Water Management Agency of Clackamas County (SWMACC) and Clackamas County Service District No. 1 (CCSD1).

On behalf of the ratepayers of Clackamas County, Water Environment Services operates and maintains more than 340 miles of sanitary sewers, interceptors and force mains, 21 wastewater pumping stations and five water resource recovery facilities (WRRFs), and the local collection system in Happy Valley and unincorporated areas within the service area. Each of the treatment facilities hold individual permits, four of which are National Pollution Discharge Elimination System (NPDES) permits that allow discharge to surface waters in the state of Oregon. Altogether, WES treats 6 billion gallons per year of wastewater and is in compliance with all of the terms of its permits.

Water Environment Services is also responsible for surface water management facilities. The District owns a limited amount of surface water infrastructure, but they are the operator of the vast majority of surface water infrastructure constructed with transportation systems and residential subdivisions. This includes hundreds of miles of storm pipe, thousands of inlets, and over 200 water quality treatment facilities, both in public rights of way and on private property. State and federal water quality regulations require that the public surface water system be adequately inspected, maintained, and repaired.

The WES service area is shown in Figure 1. The service areas encompasses 58 square miles.

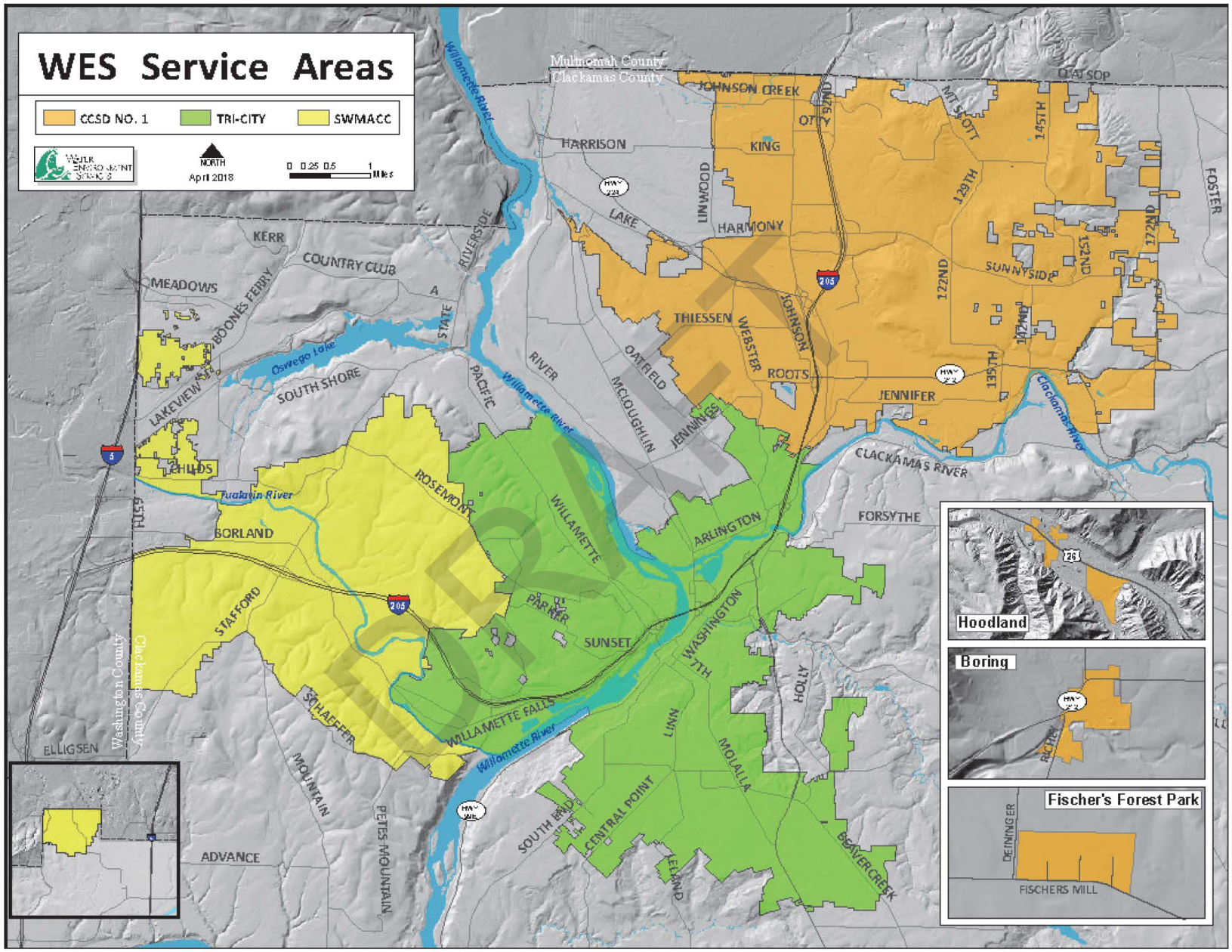


Figure 1. WES Service Districts

Sanitary Sewer and Wastewater Treatment

WES provides retail sanitary sewer services to the cities of Happy Valley and Boring and to unincorporated portions of North Clackamas County, a portion of the former city of Damascus, the communities of the Hoodland corridor, Fischer's Forest Park near Redland. WES provides wholesale wastewater treatment services to the cities of Milwaukie, Johnson City, Oregon City, West Linn, Gladstone and a small retail population outside of the cities. WES services are funded by revenues derived from rates and development fees. The District operates five wastewater treatment facilities: Tri-City WRRF, Kellogg WRRF, Hoodland WRRF, Boring WRRF and Fischer's Forest Park WRRF.

Tri-City Water Resource Recovery Facility (TC WRRF), located in Oregon City, provides treatment for wastewater from the service area and discharges to the Willamette River. The treatment plant was expanded with a state-of-the art membrane bioreactor system in 2012 to treat flow from the former CCSD1 and produces effluent that meets Oregon's highest reclaimed water standards. Digested sludge from Kellogg Creek WRRF is also dewatered at the TC WRRF under a temporary agreement until dewatering facilities are constructed at Kellogg Creek.

Kellogg Creek Water Resource Recovery Facility (KC WRRF) began operation in 1974. Because of its site limitations, WES spent $124 million to expand liquids handling capacity at the TC WRRF, add an additional intertie pipeline, and provide improvements at the KC WRRF between 2008 and 2012. Currently, up to 12.5 million gallons per day (mgd) can be diverted from the Kellogg WRRF to the Tri-City WRRF.

Hoodland WRRF began operation in 1982 and serves the Hoodland/Welches area and the Wemme Recreational Corridor. The service area includes 6 pump stations and 22 miles of pipelines and serves a population of approximately 4000. The treatment facility provides secondary treatment with a capacity of 0.9 mgd. The facility is located in Welches and discharges to the Sandy River.

Boring WRRF serves 60 households and businesses in the city of Boring. The treatment plant consists of lagoons and a sand filter to provide tertiary treatment for up to 20,000 gallons per day.

Fischer's Forest Park WRRF began operation in 1971. It is the smallest of the treatment facilities serving 26 single family homes in the Fischer's Forest Park subdivision in the Redland area. Unlike the other WES treatment facilities, this facility does not discharge to surface water, but has a permitted sub-surface discharge via a gravity drain field.

Surface Water Program

Water Environment Services performs surface and stormwater management for the purpose of providing nonpoint source pollution controls to meet state and federal regulations with respect to surface water and drainage which includes the construction of capital improvements to address surface water quality and quantity, conducting basin analyses and other studies necessary to locate and prioritize necessary capital improvements, and to engage in non-structural solutions including, but not limited to, maintenance of surface water facilities, public education, monitoring programs, and preparation of intergovernmental agreements for a regional approach to surface water quality and quantity matters.

WES administers a Surface Water Program to protect surface water and groundwater resources from polluted storm runoff, and to coordinate compliance with state and federal water pollution laws and cleanup plans. Primary responsibilities of this program include planning and building stormwater control facilities, water quality monitoring of stormwater runoff and streams, public education and outreach, development and enforcement of water quality regulations, coordination with other municipalities, and maintenance of the public stormwater systems within our service area.

As the service area's population continue to increase, WES is committed to responsible stormwater management to keep our waterways clean for people, fish, and wildlife. Unfortunately, many past drainage and stormwater management practices and regulations have proven inadequate to prevent stormwater runoff impacts to streams and groundwater, and thousands of developed acres in Clackamas County currently contribute to problems in streams, lakes, and rivers. Expanding and improving the stormwater management infrastructure are the primary means of controlling runoff from areas of new growth and for fixing problems caused by uncontrolled runoff from existing developed areas.

Impacts of stormwater runoff on surface water are well-documented and widespread. In Clackamas County, runoff contributes to impaired stream health, diminished fish populations, and degraded habitat conditions. These impacts have been observed in the Districts' Watershed Action Plans, in various environmental studies commissioned by the District over the past 10 years, and documented in Oregon's list of impaired water bodies.

Stormwater runoff impacts water bodies in two critical ways: water quality and water quantity. Stormwater runoff from roads, fields, rooftops, parking lots, and yards carries with it a variety of pollutants deposited by everyday activities. Fertilizers, oil, grease, heavy metals, pesticides, chemicals, soil, and animal wastes all can make their way to water bodies in stormwater runoff. These pollutants degrade stream water quality, posing risks to both human health and stream life. Hard surfaces and cleared areas increase the amount and speed of runoff flowing into streams. The result is often streams that have too much flow during storms and too little flow during non-storm periods. Left unchecked, this situation leads to increased erosion during storms, decreased habitat quality, and negative impacts

to groundwater recharge, stream life, and overall water quality. Keeping existing stormwater facilities in good repair, updating old facilities, constructing new projects to remove pollutants or slow down runoff, planting trees, preserving intact forested or streamside habitats, and rehabilitating stream channels are ways the Districts and our performance partners can help limit the impacts of stormwater runoff. These activities and projects all are part of the Districts' Stormwater Capital Program.

INDEX OF CAPITAL FUNDS

Capital expenditures are attributed to one or more capital funds depending on the purpose and location of the asset.

Fund	Fund Title	Description
632	WES Sanitary Sewer System Development Charge Fund	Provides for construction of sanitary sewer projects attributable to growth and therefore eligible for SDC funding.
639	WES Sanitary Sewer Construction Fund	Provides for construction of sanitary sewer projects financed either by bond proceeds, grants, general fund revenues or other resources.
642	WES Surface Water System Development Charge Fund	Provides for construction of surface water projects attributable to growth and therefore eligible for SDC funding.
649	WES Surface Water Construction Fund	Provides for construction of surface water projects financed either by bond proceeds, grants, general fund revenues or other resources

SANITARY SEWER PROJECTS

SANITARY SEWER PROJECT SUMMARY

The District develops a five year Capital Improvements Program (CIP) to project capital needs for the near term. Over the next few years, WES will complete a wastewater comprehensive plan to set forth capital needs for the next 20 years, and consolidate recommendations from several ongoing planning efforts. Future five-year CIPs will reflect the results of those plans. The FY 2018-23 CIP was developed as a result of input from WES leadership, management and operations staff. The wastewater engineering and operations group met several times mid-year to itemize ongoing and anticipated projects, then prioritized the projects according to the following criteria:

- Health and Safety
- Ease of Implementation
- Innovation
- Regulatory Compliance
- Reliability
- Risk Reduction

Projects which received the highest scores when ranked against these criteria were funded and will be carried forward in subsequent years of the CIP until completion.

SANITARY SEWER CIP

For sanitary sewer projects, projects are organized according to their location and/or function. Project types are Treatment (Tri-City, Kellogg Creek, Hoodland, Boring, Fischer Forest Park), Blue Heron, Collection System, Fleet, Asset Management and Pump Stations. Collection System projects include those designed, managed and maintained by WES. Asset Management projects reflect WES's ongoing asset management program which includes itemizing and characterizing the condition of our assets and prioritizing replacement needs.

Categories of projects and their corresponding projected costs for the next five fiscal years are shown in Table 1 and Figure 4. All projects shown are funded in the WES rate model.

Table 1. Sanitary Sewer Capital Budget by Project Type/Location

Project Type	Capital Budget, $ Million				
	18/19	**19/20**	**20/21**	**21/22**	**22/23**
Tri-City WRRF	$ 19.7	$ 18.9	$ 21.3	$ 21.5	$ 30.6
Kellogg Creek WRRF	$ 9.2	$ 11.6	$ 8.5	$ 3.0	$ -
Hoodland WRRF	$ 2.2	$ 0.3	$ -	$ 0.5	$ 2.7
Boring WRRF	$ 0.05	$ 0.05	$ -	$ -	$ -
Collection System	$ 5.0	$ 6.1	$ 13.5	$ 16.1	$ 14.7
Blue Heron	$ -	$ -	$ -	$ -	$ 6.0
Fleet	$ 1.0	$ 1.0	$ 1.0	$ 1.1	$ 1.3
OM Asset Management	$ 0.8	$ 0.8	$ 0.8	$ 0.8	$ 0.8
Pump Stations	$ 0.5	$ 0.45	$ 0.45	$ 0.45	$ 0.45
Water Quality Lab	$ 0.1	$ 0.03	$ 0.18	$ -	$ -
Development Review	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1
Total	**$ 38.6**	**$ 39.4**	**$ 45.8**	**$ 43.6**	**$ 56.7**

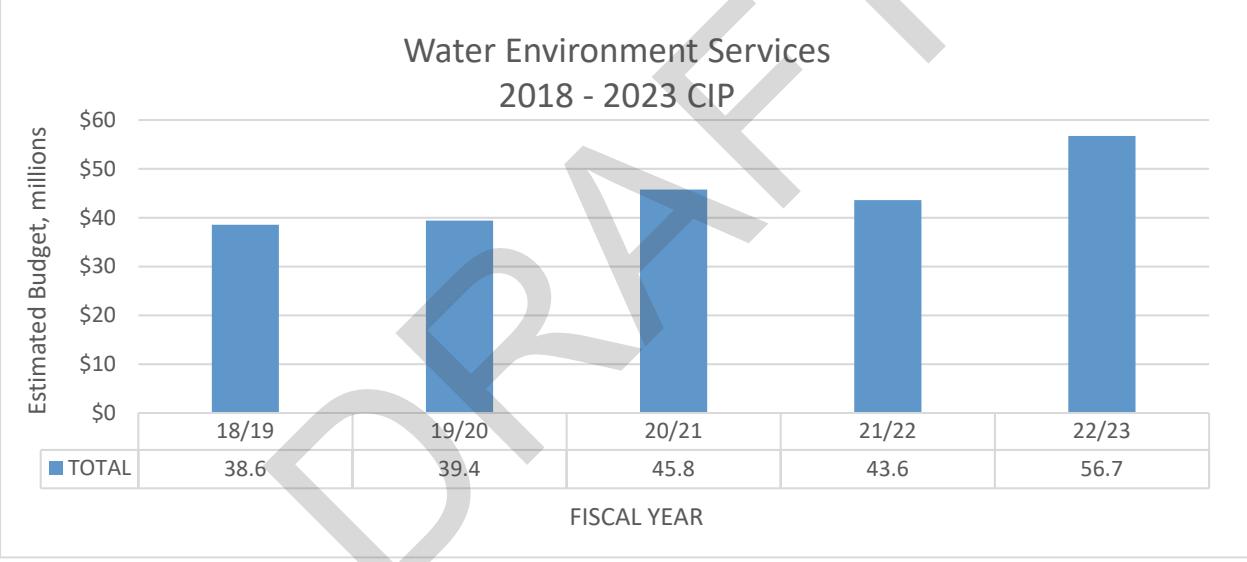


Figure 4. Sanitary Sewer Capital Budget ($ Million)

FISCAL YEAR 2018-19

Of the $38.6 million in the FY 2018-19 capital budget, over $28 million is expected to be spent on the following five major projects:

Tri-City WRRF Solids Handling Project - $14.0 million

WES has identified the need to expand and refurbish the solids handling processes at the Tri-City Water Resource Recovery Facility (TCWRRF). Project costs for FY 2018-19 include construction and engineering services during construction. The expansion and refurbishments to be constructed include new sludge stabilization and dewatering facilities, electrical distribution upgrades, digester feed tank, digested sludge storage, cake storage and loadout facility, centrate storage, biogas utilization and upgrades to existing facilities. Construction is expected to be completed in December 2020.

Kellogg Creek WRRF Improvements Project - $9.0 million

Asset renewal and replacement at the Kellogg WRRF has been deferred over the years while a determination was made regarding the future of the facility. Now that the facility will continue its service with a capped capacity, several areas of the facility require upgrades to provide a fully reliable, functional facility. This project combines several subprojects including blower replacement, polymer system for the thickening process, aeration basin covers for odor control, flow management and improvements to the biofilter, a power distribution system, a retrofit of the return sludge pump station, influent pump station, and associated yard piping. Construction of the improvements began in 2017 and is anticipated to be completed in Summer 2020.

82nd Drive Bridge – North Approach - $3.2 million

This project is part of a larger effort to complete the infrastructure, which diverts wet weather flows from the capacity-limited Kellogg WRRF to the Tri-City WRRF to avoid sanitary sewer overflows during storm events while providing a seismic upgrade to the bridge to allow it to provide passage for emergency vehicles. This project involves the design and construction of a replacement apron to the north end of the 82nd Drive bridge and construction of a 30-inch force main on the side of the bridge.

Tri-City WRRF Sodium Hypochlorite Disinfection - $4.2 million

The gaseous chlorine disinfection at the TC WRRF is original to the facility and for years was industry standard. Current best practice is to use either sodium hypochlorite or ultraviolet light for disinfection to avoid the need for emergency scrubbers to contain an accidental release of chlorine gas. A sodium hypochlorite feed system will be most economical to install in the existing facilities. The project will also include improvements to the plant water system. Construction is expected to begin in Spring 2019.

Hoodland WRRF Modernization - $2.1 million

Construction will begin in Fall 2018 on improvements necessary to maintain the existing level of service at the Hoodland WRRF (HWRRF). This project replaces pumps and adds variable frequency drives at the Arrah Wanna Pump Station (AWPS). The AWPS is the influent pump station to the Hoodland WRRF and improvements will provide redundancy at the facility and better regulate flow into the treatment plant, improving its performance. The project also replaces original electrical equipment (now obsolete), upsizes stand-by power and implements a Systems Control and Data Acquisition (SCADA) system to provide remote monitoring of the HWRRF for improved operational efficiency.

SANITARY SEWER PROJECT LIST BY PROJECT AREA

The following tables summarize funded projects listed in the CIP by project area. Individual project sheets for all projects are included in Appendix A. Actual FY 17-18 figures are unaudited.

TABLE 2. TRI-CITY WRRF PROJECT SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST	2,560,000	1,011,292						
SDC	2,560,000	1,004,191						
WES								
CONST	1,440,000	1,414,781	8,990,000	6,545,000	8,745,000	11,050,000	18,130,000	53,460,000
SDC	1,440,000	555,818	10,700,000	12,425,000	12,575,000	10,500,000	12,500,000	58,700,000
TOTAL	9,060,000	3,986,082	19,690,000	18,970,000	21,320,000	21,550,000	30,630,000	112,160,000

TABLE 3. KELLOGG CREEK WRRF PROJECT SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST	6,250,000	3,895,319						
SDC								
WES								
CONST			9,200,000	11,700,000	8,492,000	3,000,000		32,392,000
SDC								
TOTAL	6,250,000	3,895,319	9,200,000	11,700,000	8,492,000	3,000,000		32,392,000

TABLE 4. HOODLAND WRRF PROJECT SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST	900,000	392,170						
SDC								
WES								
CONST			2,200,000	250,000		250,000	1,375,000	4,075,000
SDC						250,000	1,375,000	1,625,000
TOTAL	900,000	392,170	2,200,000	250,000		500,000	2,750,000	5,700,000

TABLE 5. BORING WRRF PROJECT SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST		4,377						
SDC								
WES								
CONST			50,000	50,000				100,000
SDC								
TOTAL		4,377	50,000	50,000				100,000

TABLE 6. COLLECTION SYSTEM PROJECT SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST	2,100,000	168,842						
SDC	1,408,000	136,962						
WES								
CONST	225,000	91,763	2,666,500	2,571,000	5,439,000	6,075,000	6,075,000	22,826,500
SDC	792,000		2,278,500	3,589,000	8,031,000	10,075,000	8,675,000	32,648,500
TOTAL	4,525,000	397,567	4,945,000	6,160,000	13,470,000	16,150,000	14,750,000	55,475,000

TABLE 7. BLUE HERON SITE PROJECT SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST		194						
SDC								
WES								
CONST		1,002	100,000					100,000
SDC							6,000,000	6,000,000
TOTAL		1,196	100,000				6,000,000	6,100,000

TABLE 8. FLEET SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST	710,000	648,680						
SDC								
WES								
CONST			995,000	990,000	1,041,000	1,152,000	1,285,000	5,463,000
SDC								
TOTAL	710,000	648,680	995,000	990,000	1,041,000	1,152,000	1,285,000	5,463,000

TABLE 9. OM ASSET MANAGEMENT PROJECT SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST	400,000	36,547						
SDC								
WES								
CONST	400,000	123,160	800,000	800,000	800,000	800,000	800,000	4,000,000
SDC								
TOTAL	800,000	159,707	800,000	800,000	800,000	800,000	800,000	4,000,000

TABLE 10. PUMP STATION PROJECT SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST	410,949	105,837						
SDC								
WES								
CONST	39,051	71,754	450,000	450,000	450,000	450,000	450,000	2,250,000
SDC								
TOTAL	450,000	177,591	450,000	450,000	450,000	450,000	450,000	2,250,000

TABLE 11. WATER QUALITY LAB PROJECT SUMMARY

FUNDING SOURCE	FY 17/18 BUDGET $	FY 17/18 ACTUAL $	FY 18/19 PROJECTED $	FY 19/20 PROJECTED $	FY 20/21 PROJECTED $	FY 21/22 PROJECTED $	FY 22/23 PROJECTED $	TOTAL FY 18-23 PROJECTED, $
CCSD1								
CONST								
SDC								
WES								
CONST	52,000	48,098	125,000	27,000	184,000		60,000	396,000
SDC								
TOTAL	52,000	48,098	125,000	27,000	184,000		60,000	396,000

SURFACE WATER PROJECTS

SURFACE WATER PROGRAM SUMMARY

The Policy for the stormwater capital program is to:

- Meet the Phase 1 Municipal Stormwater Permit requirements through stormwater capital planning and capital construction.

District goals for stormwater capital projects include:

- Protect and enhance District streams and wetlands through planning and constructing modifications to the stormwater infrastructure.
- Minimize the degradation of receiving waters from impacts attributable to stormwater runoff in existing developed areas.
- Maximize public benefits of public land by providing multiple uses, including recreation, and by leveraging funding from multiple sources.
- Provide stormwater facilities for future development and redevelopment.

In support of WES's policies and goals, the capital planning process strives to:

- Prioritize projects with the greatest potential to support multiple programs and goals, including local and regional fish recovery, habitat enhancement, and water cleanup goals.
- Ensure a reliable scientific and engineering basis for projects.
- Establish that each project in the plan is needed, feasible, and cost-effective.
- Focus limited resources on the most pressing concerns and the most cost-beneficial solutions.
- Incorporate environmental benefits into needed infrastructure repair projects.
- Maintain a sufficient list of potential projects to enable replacement of any projects that become infeasible, and to take advantage of funding opportunities.

Prioritization

A robust capital planning program identifies more projects than can be implemented in a five-year plan. Prioritization is the process of determining which of the feasible projects of each type best meet program goals and provide the most cost-effective solutions. Within the constraints of regulatory requirements and available funding, the subsequent programming step strives to implement higher-priority projects. Each project type requires slightly different prioritization criteria; in all cases, criteria are intended to be simple yet meaningful. The benefit screen provides an initial prioritization step for all project types by forwarding only those projects that appear to provide significant natural resource benefits. Another key consideration goes beyond the parameters of stormwater management: in all cases, priority is given to projects that also meet other related city and county goals.

Project Types

Surface water capital projects come in many shapes and sizes, which are grouped into six basic types for evaluation and prioritization purposes.

Capital Repairs

Capital repair projects are stormwater facility repair projects that substantially extend the life of the facility. Repairs of this kind are required under the municipal stormwater permit; however, due to the often high costs associated with repair work, the permit does not set a time limit for completing these projects. Typical repair activities include replacing pipes and flow control structures, removing large amounts of accumulated sediment or vegetation, addressing drainage problems, and replacing retaining walls or access roads.

Repairing and maintaining existing infrastructure is a priority. Routine inspection of District owned or operated stormwater facilities identifies repair needs. Given regulatory requirements and funding constraints, the District intends to address as many of the existing list of repair projects as feasible by 2018.

Repair projects are required, and therefore cannot truly be subjected to a screening process; however, screening scores along with watershed assessment information and engineering judgment are used to prioritize those projects where continued malfunction poses the most serious problems, particularly threatening property and safety.

Water Quality Retrofits

A retrofit is like a remodel. Water quality retrofits include a variety of modifications to existing stormwater infrastructure to add or enhance water quality treatment, including installation of cartridge filter systems, conversion of swales to rain gardens or wet ponds, and other improvements to stormwater facilities or conveyance systems where water quality treatment is either inadequate or can be significantly improved.

Water quality retrofits typically qualify for the permit-required retrofit strategy, so a significant annual investment in these projects is expected. Water quality retrofits are located primarily in areas that have been urbanized for many years, as these areas were often developed with little or no water quality treatment and contribute disproportionately to water quality degradation. The focus is on areas with no treatment, followed by those with outdated treatment facilities.

Water quality retrofit projects are prioritized based on the severity of the project need and the results of the cost/benefit analysis.

Hydrology Improvement Facilities

Hydrology improvement facilities address problems from too much runoff. These improvements include new facilities, retrofits focused on providing detention or retention of runoff, and structural low impact development practices aimed at reducing the volume of runoff.

Hydrology improvement facilities are needed to meet obligations under permit conditions and TMDLs. These projects often address significant stormwater runoff impacts. Hydrology improvement facilities are focused on urbanizing areas where streams are still in the process of adjusting to development and increased runoff. In these areas, increased flow control can slow ongoing stream degradation, reduce pollutant loads discharged to waterways, and help promote the eventual recovery of aquatic systems.

Hydrology improvement facilities are prioritized based on the severity of the project need and the results of the cost/benefit analysis.

Underground Injection Control (UIC) Retrofits

UIC Retrofit projects improve stormwater infiltration systems that are a demonstrated threat to groundwater quality. Improvements typically include the addition of upstream treatment devices or the replacement of failing infiltration wells with stormwater retention facilities. Improvements may also include installation of spill-containment structures to mitigate the impact of accidental discharges of pollutants.

Under state regulatory requirements, the District has identified UICs and is currently assessing each one's risk of polluting groundwater. The Districts' obligations to retrofit failing or at-risk facilities is site-specific and situational. Some UIC retrofit projects may also satisfy municipal stormwater permit requirements for the retrofits strategy.

UIC retrofits are prioritized based on cost-benefit and the results of the risk analysis.

Restoration

The District enhances public and private properties with native vegetation, including trees. These projects maximize the ecological and stormwater benefits of the properties, supporting numerous local and regional environmental goals. In-stream Habitat improvement projects typically include channel enhancements or stabilization, floodplain reconnections, or culvert/fish barrier removal.

Tree planting projects provide stormwater benefits that often qualify for permit required controls, so they may be included in stormwater capital plans; however, these projects represent only a subset of the overall restoration program. Habitat improvement projects are usually very cost effective methods to improve stream habitat and function where past impacts have been significant. In-stream habitat improvement projects often rely on the availability of grant funding, or use remaining budget after regulatory requirements have been met.

Tree planting projects typically have a fairly constant per-acre cost across all projects, so a cost/benefit analysis does not provide significant basis for prioritization. Priority is therefore given to projects that directly benefit streams where the Oregon Department of Environmental Quality has established Water Cleanup Plans to address elevated water temperatures. At both levels, projects that support multiple program goals are given priority. In-stream habitat improvements are prioritized based on cost-benefit, applicability to recovery plans, and the degree to which the project complements other planned stormwater projects within a drainage area.

Property Acquisition for Stormwater Benefit

Occasionally, the Districts purchase sites with existing high-quality habitat along streams, in wetlands, or in forested upland areas. Preservation of these areas provides significant long-term watershed benefits, including stormwater control. Property purchases are often costly and are dependent on the availability of willing sellers; however, preventing stormwater problems before they occur is among the most cost-beneficial means of managing stormwater impacts.

Property acquisitions are prioritized and pursued as opportunities are available. When possible, the Districts seek to leverage capital funds with grant funds, and with partnership funds, such as from parks and open space programs. Selection and prioritization of property acquisitions is coordinated through various performance partners including the Districts' sanitary sewer utilities, parks and open space programs, and watershed councils.

SURFACE WATER CIP

Categories of projects and their corresponding projected costs for the next five fiscal years are shown in the following table. Costs shown are for funded projects; unfunded projects are not included.
See project detail sheets in Appendix B for more information.

Table 11. Surface Water Project Budgets by Project Area.

Project Type	**Capital Budget, $ Million**				
	18/19	**19/20**	**20/21**	**21/22**	**22/23**
Carli Creek Water Quality Retrofit	$ 1.2	$ 0.05	$ 0.05	$ 0.05	$ 0.05
Storm System Master Plan for CCSD No.1/Happy Valley	$ 0.3	$ 0.2			
Rock Creek Confluence Site Maintenance	$ 0.01				
Mt. Scott Oak Bluff Restoration	$ 0.52	$ 0.01	$ 0.008	$ 0.005	$ 0.003
Small Projects – ongoing	$ 0.45	$ 0.35	$ 0.35	$ 0.35	$ 0.35
Detention Pond Repair/Rehab	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25
Decant Facility	$ 0.2	$ 0.5	$ -	$ -	$ -
Total	**$ 2.98**	**$ 1.36**	**$ 0.658**	**$ 0.655**	**$ 0.653**

SURFACE WATER PROJECT LIST BY FUNDING SOURCE

TABLE 12. SURFACE WATER PROJECT SUMMARY								
FUNDING SOURCE	**FY 17/18 BUDGET $**	**FY 17/18 ACTUAL $**	**FY 18/19 PROJECTED $**	**FY 19/20 PROJECTED $**	**FY 20/21 PROJECTED $**	**FY 21/22 PROJECTED $**	**FY 22/23 PROJECTED $**	**TOTAL FY 18-23 PROJECTED, $**
CCSD1								
CONST	2,480,000	2,274,905						
SDC	200,000							
WES								
CONST			2,480,000	660,000	658,000	655,000	653,000	5,106,000
SDC			500,000	700,000				1,200,000
TOTAL	2,680,000	2,274,905	2,980,000	1,360,000	658,000	655,000	653,000	6,306,000

APPENDIX A

SUMMARY OF SANITARY SEWER FUNDED PROJECTS

Project Costs:

FUNDING SOURCE	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1						
CONST						$ -
SDC						$ -
WES						
CONST	$ 25,576,500	$ 23,383,000	$ 25,151,000	$ 22,777,000	$ 28,175,000	$ 125,062,500
SDC	$ 12,978,500	$ 16,014,000	$ 20,606,000	$ 20,825,000	$ 28,550,000	$ 98,973,500
TOTAL	$ 38,555,000	$ 39,397,000	$ 45,757,000	$ 43,602,000	$ 56,725,000	$ 224,036,000

PROJECT DETAIL

Project Name: Tri-City WRRF Solids Handling Improvements Project

Project Number: P632162

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 632/639

Project Status: Active

Project Description:

CCSD1 and WES have identified the need to expand and refurbish the solids handling processes at the Tri-Cities Water Resource Recovery Facility (TCWRRF). Project costs for FY 2018-19 include construction and engineering services during construction. The expansion and refurbishments to be considered include new sludge stabilization and dewatering facilities, electrical distribution upgrades, digester feed tank, digested sludge storage, cake storage and loadout facility, centrate storage, biogas utilization and upgrades to existing facilities. Construction is expected to be completed in December 2020.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 2,560,000	$ 867,228						
SDC	$ 2,560,000	$ 867,228						
WES								
CONST	$ 1,440,000	$ 555,668	$ 3,500,000	$ 3,475,000	$ 2,025,000			$ 9,000,000
SDC	$ 1,440,000	$ 555,668	$10,500,000	$10,425,000	$ 6,075,000			$27,000,000
TOTAL	$ 8,000,000	$ 2,845,792	$14,000,000	$13,900,000	$ 8,100,000			$36,000,000

PROJECT DETAIL

Project Name: Liquids Expansion

Project Number: TBD

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 632/639

Project Status: Active

Project Description:
The results of the Collection System Master Plan show that peak wet weather flow to the TC WRRF exceeds its hydraulic capacity. An upcoming facilities planning effort for the TC and KC WRRFs will define facilities that will be required to provide peak wet weather capacity for the near and long term. This project will be the wet weather expansion required to be completed within the next five years.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST				$ 1,000,000	$ 1,500,000	$ 1,500,000	$12,500,000	$16,500,000
SDC				$ 1,000,000	$ 1,500,000	$ 1,500,000	$12,500,000	$16,500,000
TOTAL				$ 2,000,000	$ 3,000,000	$ 3,000,000	$25,000,000	$33,000,000

PROJECT DETAIL

Project Name: Wet Weather Outfall

Project Number: P632241

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 632/639

Project Status: Active

Project Description:

Projected flows to the Tri-City WRRF were developed as part of the Collection System Master Plan (CSMP) and are expected to be approximately 176-MGD under build-out conditions. The capacity of the existing TC WRRF outfall is approximately 75 MGD and is expected to be exceeded as flows increase as projected in the CSMP. This project will proivde a route study to select a preferred route to the Willamette River, acquire the necessary permits, and proceed with design and construction of a new outfall pipe from the WES Tri-City WRRF to the Willamette River.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST		$ 1,866	$ 200,000	$ 1,000,000	$ 4,000,000	$ 4,000,000		$ 9,200,000
SDC			$ 200,000	$ 1,000,000	$ 4,000,000	$ 4,000,000		$ 9,200,000
TOTAL		$ 1,866	$ 400,000	$ 2,000,000	$ 8,000,000	$ 8,000,000		$18,400,000

PROJECT DETAIL

Project Name: Tri-City Administration Building

Project Number: TBD

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:
This project is for the construction of a new administration building for WES staff. The lab, maintenance, and line crew areas are in need of refurbishment or repair. WES Administration is located on the Red Soils Campus where it rents space from the County. The project requires further study and refinement to determine the most efficient solution for WES work space.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST						$ 5,000,000	$ 5,000,000	$10,000,000
SDC								
TOTAL						$ 5,000,000	$ 5,000,000	$10,000,000

PROJECT DETAIL

Project Name: Hypochlorite Disinfection System

Project Number: P632227

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:

The gaseous chlorine disinfection at the TC WRRF is original to the facility and for years was industry standard. Current best practice is to use either sodium hypochlorite or ultraviolet light for disinfection to avoid the need for emergency scrubbers to contain an accidental release of chlorine gas. A sodium hypochlorite feed system was determined to be the most as the preferred disinfection system to install and operate at the TC WRRF. Construction is expected to begin in Spring of 2019.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST		$ 34,590	$ 4,220,000					$ 4,220,000
SDC								
TOTAL		$ 34,590	$ 4,220,000					$ 4,220,000

PROJECT DETAIL

Project Name: Recoat PCs/Primary Clarifier Refurbishment

Project Number: TBD

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:
This project provides a rehabilitation of the mechanical equipment associated with the Primary Clarifiers and the application of a protective coating to the concrete tanks. The concrete surface of the primary clarifiers are exposed to continuous wear from grit and hydrogen sulfide. The coating will help maintain the integrity of the structure and the mechanical rehab will provide an upgrade to equipment that is original to the plant.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST				$ 400,000	$ 400,000	$ 400,000		$ 1,200,000
SDC								
TOTAL				$ 400,000	$ 400,000	$ 400,000		$ 1,200,000

PROJECT DETAIL

Project Name: IPS VFDs

Project Number: TBD

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:
Influent Pump Station VFDs are at the end of their useful life and need to be replaced.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST				$ 500,000	$ 500,000			$ 1,000,000
SDC								
TOTAL				$ 500,000	$ 500,000			$ 1,000,000

PROJECT DETAIL

Project Name: W3 Improvements

Project Number: P632229

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:
At the TC WRRF, there are two sources of non-potable water - from the conventional and MBR trains. Both non-potable pump stations have been identified to have deficiencies. This project (to be constructed with the hypochlorite disinfection project) will address the deficiencies with both stations. At the MBR station, a small jockey pump will be installed to allow the pump station to operate more efficiently, saving energy. The conventional pump station includes the original equipment and which is at the end of its useful life. This proejct will overhaul the station and provide improvements to W3 water quality.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST		$ 10,628						
SDC								
WES								
CONST		$ 10,929	$ 800,000					$ 800,000
SDC								
TOTAL		$ 21,557	$ 800,000					$ 800,000

PROJECT DETAIL

Project Name: MBR Cassette Replacement

Project Number:

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:

The Membrane Bioreactor (MBR) is the centerpiece of the $132 million capacity management program that was completed in 2012. MBR cassettes require periodic replacement. This project will replace a portion of the cassettes in the MBR with cassettes that utilize a new aeration system developed by GE Water Process Technology which reduces air requirements by 25-30%. This reduction will result in energy savings and reduced maintenance requirements.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST							$ 630,000	$ 630,000
SDC								
TOTAL							$ 630,000	$ 630,000

PROJECT DETAIL

Project Name: PLCs 3A (Blower, CI, RAS)

Project Number: TBD

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:
PLCs are control systems for treatment processes and require modernizing on a rotating basis as the hardware becomes obsolete.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 120,000	$ 120,000	$ 120,000			$ 360,000
SDC								
TOTAL			$ 120,000	$ 120,000	$ 120,000			$ 360,000

PROJECT DETAIL

Project Name: Recoat Aeration Basins

Project Number: TBD

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:
This project provides coating of the aeration basins. The concrete surface of the aeration basins are exposed to continuous wear from grit, air scour and gases. Coating will help maintain the integrity of the structures.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST					$ 150,000	$ 150,000		$ 300,000
SDC								
TOTAL					$ 150,000	$ 150,000		$ 300,000

PROJECT DETAIL

Project Name: Security Locks Internal to Plant

Project Number: TBD

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:
Security access to internal buildings will be upgraded in a phased approach for consistency with main plant access. It is intended that access will be updated as facilities are constructed, where applicable.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 50,000	$ 50,000	$ 50,000			$ 150,000
SDC								
TOTAL			$ 50,000	$ 50,000	$ 50,000			$ 150,000

PROJECT DETAIL

Project Name: Process Software (Data Management)

Project Number: TBD

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:

Water resource recovery facilities include complex hydraulic, chemical and biological systems. Current wastewater treatment practice includes use of process control software to collect data to inform operators about the collection system and treatment process performance and allows operators to monitor and control the collection system and treatment processes in the most efficient and reliable manner. This fund will provide software, configuration and implementation services for WES treatment facilities and the laboratory as defined in the IT business plan.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 100,000					$ 100,000
SDC								
TOTAL			$ 100,000					$ 100,000

PROJECT DETAIL

Project Name: Rossman Landfill Mitigation Project

Project Number: TBD

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 632

Project Status: Active

Project Description:
Rossman Landfill was to be mitigated as part of the Phase 1 construction but this portion of the Phase 1 project was not constructed. The cost for this project is a placeholder.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST								
SDC					$ 1,000,000	$ 5,000,000		$ 6,000,000
TOTAL					$ 1,000,000	$ 5,000,000		$ 6,000,000

PROJECT DETAIL

Project Name: Lab

Project Number: Various

Project Subprogram: Capital Delivery/Lab

Fund: 639

Project Status: Active

Project Description:
Lab equipment has been identified as needing replacement due to normal use.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST	$ 52,000	$ 48,098	$ 125,000	$ 27,000	$ 184,000		$ 60,000	$ 396,000
SDC								
TOTAL	$ 52,000	$ 48,098	$ 125,000	$ 27,000	$ 184,000		$ 60,000	$ 396,000

PROJECT DETAIL

Project Name: Kellogg Creek WRRF Improvements Project

Project Number: P632139

Project Subprogram: Capital Delivery/Kellogg Creek WRRF

Fund: 639

Project Status: Active

Project Description:

Asset renewal and replacement at the Kellogg WRRF has been deferred over the years while a determination was made regarding the future of the facility. Now that the facility will continue its service with a capped capacity, several areas of the facility require upgrades to provide a fully reliable, functional facility. This project combines several subprojects including blower replacement, polymer system for the thickening process, aeration basin covers for odor control, flow management and improvements to the biofilter, a power distribution system, a retrofit of the return sludge pump station, influent pump station, and associated yard piping. Construction of the improvements began in 2017 and is anticipated to be completed in Summer 2020.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 21/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 6,000,000	$ 3,606,562						
SDC								
WES								
CONST			$ 9,000,000	$10,000,000	$ 4,000,000			$23,000,000
SDC								
TOTAL	$ 6,000,000	$ 3,606,562	$ 9,000,000	$10,000,000	$ 4,000,000			$23,000,000

PROJECT DETAIL

Project Name: Kellogg Dewatering and Digester Complex Improvements

Project Number:

Project Subprogram: Capital Delivery/Kellogg Creek WRRF

Fund: 639

Project Status: Active

Project Description:

Currently, digested sludge from the Kellogg Facility is hauled to liquid land application sites in the Willamette Valley during the summer and dewatered at the Tri-City facility when fields are too wet for land application during the rainy season. Dewatered biosolids are hauled to eastern Oregon for beneficial reuse. Limited land and seasonal availability is making liquid land application an uncertain option for future and has seasonal restrictions. This project would provide dewatering at the Kellogg Facility with related improvements to the digester complex. The budget for this project was increased to include new thickening equipment, the replacement of which was originally in the Kellogg Improvements project.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 21/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST				$ 1,500,000	$ 3,500,000	$ 3,000,000		$ 8,000,000
SDC								
TOTAL				$ 1,500,000	$ 3,500,000	$ 3,000,000		$ 8,000,000

PROJECT DETAIL

Project Name: Grit Hopper and Collection System

Project Number:

Project Subprogram: Capital Delivery/Kellogg Creek WRRF

Fund: 639

Project Status: Active

Project Description:
This project will replace the drive and sweeps for the grit processing equipment which is at the end of its useful life.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 21/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST				$ 200,000	$ 400,000			$ 600,000
SDC								
TOTAL				$ 200,000	$ 400,000			$ 600,000

PROJECT DETAIL

Project Name: W3 Project

Project Number:

Project Subprogram: Capital Delivery/Kellogg Creek WRRF

Fund: 639

Project Status: Active

Project Description:
This project is the replacement of the W3 sytem at Kellogg. The replacement was originally included in the Kellogg Improvements project but was deferred due to budget constraints.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 21/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST					$ 308,000			$ 308,000
SDC								
TOTAL					$ 308,000			$ 308,000

PROJECT DETAIL

Project Name: Primary Sludge PS

Project Number:

Project Subprogram: Capital Delivery/Kellogg Creek WRRF

Fund: 639

Project Status: Active

Project Description:
This project replaces the existing primary sludge pump station. The project was originally included in the Kellogg Improvements project but was deferred due to project constraints.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 21/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST					$ 284,000			$ 284,000
SDC								
TOTAL					$ 284,000			$ 284,000

PROJECT DETAIL

Project Name: Kellogg Creek Bridge

Project Number:

Project Subprogram: Capital Delivery/Kellogg Creek WRRF

Fund: 639

Project Status: Active

Project Description:
The Kellogg Creek Bridge was damaged in a December 2015 storm. WES has agreed to share costs for repair with the city of Milwaukie through an existing IGA. Terms will be negotiated. The repair is partially funded by FEMA.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 21/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 150,000	-						
SDC								
WES								
CONST			$ 150,000					$ 150,000
SDC								
TOTAL	$ 150,000	-	$ 150,000					$ 150,000

PROJECT DETAIL

Project Name: Admin Lab and Lunch Room

Project Number:

Project Subprogram: Capital Delivery/Kellogg Creek WRRF

Fund: 639

Project Status: Active

Project Description:
This project would refurbish the process lab and lunch room at the Kellogg Facility.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 21/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 50,000					$ 50,000
SDC								
TOTAL			$ 50,000					$ 50,000

PROJECT DETAIL

Project Name: Hoodland Plant Modernization

Project Number: P632208

Project Subprogram: Capital Delivery/Hoodland WRRF

Fund: 639

Project Status: Active

Project Description:

Construction will begin in Fall 2018 on improvements necessary to maintain the existing level of service at the Hoodland WRRF (HWRRF). This project replaces pumps and adds variable frequency drives at the Arrah Wanna Pump Station (AWPS). The AWPS is the influent pump station to the Hoodland WRRF and improvements will provide redundancy at the facility and better regulate flow into the treatment plant, improving its performance. The project also replaces original electrical equipment (now obsolete), upsizes stand-by power and implements a Systems Control and Data Acquisition (SCADA) system to provide remote monitoring of the HWRRF for improved operational efficiency.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 900,000	$ 333,015						
SDC								
WES								
CONST			$ 2,100,000					$ 2,100,000
SDC								
TOTAL	$ 900,000	$ 333,015	$ 2,100,000					$ 2,100,000

PROJECT DETAIL

Project Name: RBC Access

Project Number:

Project Subprogram: Capital Delivery/Hoodland WRRF

Fund: 639

Project Status: Active

Project Description:
This project would provide safer access to the RBC units for operation and maintenance staff.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 100,000	$ 250,000				$ 350,000
SDC								
TOTAL			$ 100,000	$ 250,000				$ 350,000

PROJECT DETAIL

Project Name: Hoodland Secondary Treatment Upgrade

Project Number:

Project Subprogram: Capital Delivery/Hoodland WRRF

Fund: 639

Project Status: Active

Project Description:
Secondary treatment at the Hoodland Facility is provided by rotating biological contactors (RBCs) that are original to the facility. The technology is old and at some point will not be supported. This project will replace the RBCs with state of the art technology selected from an evaluation of alternatives using life cycle cost and non-cost criteria.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST						$ 250,000	$ 1,375,000	$ 1,625,000
SDC						$ 250,000	$ 1,375,000	$ 1,625,000
TOTAL						$ 500,000	$ 2,750,000	$ 3,250,000

PROJECT DETAIL

Project Name: Boring Upgrades

Project Number: P632235

Project Subprogram: Capital Delivery/Boring WRRF

Fund: 639

Project Status: Active

Project Description:
This project will convert the disinfection process at the Boring WWTF to UV and install automation to operate the plant.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 50,000	$ 50,000				
SDC								
TOTAL			$ 50,000	$ 50,000				$ 100,000

PROJECT DETAIL

Project Name: 82nd Drive Bridge - Replace North Approach

Project Number: P632165

Project Subprogram: Capital Delivery/Collection System

Fund: 632/639

Project Status: Active

Project Description:

This project is part of a larger effort to complete the infrastructure which diverts wet weather flows from the capacity-limited Kellogg WRRF to the Tri-City WRRF to avoid sanitary sewer overflows during storm events while providing a seismic upgrade to the bridge to allow it to provide passage for emergency vehicles. This project involves the design and construction of a replacement apron to the north end of the 82nd Drive bridge and construction of a 30-inch force main on the side of the bridge.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC	$ 1,408,000	$ 136,962						
WES								
CONST			$ 1,472,000					$ 1,472,000
SDC	$ 792,000		$ 1,728,000					$ 1,728,000
TOTAL	$ 2,200,000	$ 136,962	$ 3,200,000					$ 3,200,000

PROJECT DETAIL

Project Name: Pipe Rehabilitation and Replacement

Project Number: Various

Project Subprogram: Capital Delivery/Collection System

Fund: 632/639

Project Status: Active

Project Description:
Sanitary sewer pipe is subject to degraded condition through exposure to chemicals, organic growths, and soil movement. This degradation leads to defects in pipe which can result in surface water and groundwater infiltration into the collection system, straining treatment capacities and increasing risk of pipe failure. This project will repair and/or replace damaged and aging pipelines utilizing methods including pipe-lining, pipe bursting and replacement.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 500,000	$ 49,544						
SDC								
WES								
CONST			$ 375,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 2,375,000
SDC			$ 375,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 2,375,000
TOTAL	$ 500,000	$ 49,544	$ 750,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 4,750,000

PROJECT DETAIL

Project Name: I/I Reduction Program

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 632

Project Status: Active

Project Description:

Inflow and Infiltration (I/I) is clean groundwater and/or rainwater that enters the sewer system through direct connections such as roof drains or area drains or defects such as leaking joints or manholes. When the amount of I/I becomes excessive it can cause capacity deficiencies in the sewer system and possible overflows. When the amount of I/I becomes excessive it is more cost effective to remove the I/I than upsize infrastructure or treatment facilities to transport and treat the extraneous clean water. This project will involve activities to identify areas of high I/I and their sources and include design and construction of sewer rehabilitation projects, to abate the I/I.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST								
SDC				$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 4,000,000
TOTAL				$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 4,000,000

PROJECT DETAIL

Project Name: Manhole Rehabilitation

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
This project will rehabilitate aging manholes which have degraded condition through normal exposure to chemical and biological components and soil movement. Rehabilitation efforts to reduce risk will range from cleaning and spray lining to complete manhole replacement depending upon the degree of wear.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST	$ 150,000		$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 375,000
SDC			$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 375,000
TOTAL	$ 150,000		$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 750,000

PROJECT DETAIL

Project Name: Last Road Pipe Rehabiliation

Project Number: P632215

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
This project will relay approximately 1650 lf of 8" sewer to remove sags or bellies in the pipe which cause maintenance issues.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 130,000					$ 130,000
SDC								
TOTAL			$ 130,000					$ 130,000

PROJECT DETAIL

Project Name: Flow Monitoring
SCADA Master Plan Recommendations and Meter Upgrades

Project Number: P632209

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
The recent installation of a fiber optics grid in Clackamas County has provided an opportunity for the Districts to enhance and standardize their Systems Control and Data Acquisition (SCADA) system. This project will upgrade SCADA software and hardware to current technology and create operating efficiencies by providing real-time operating data and enabling continuous equipment monitoring in both districts.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 75,000	$ 113,685						
SDC								
WES								
CONST	$ 75,000	$ 58,391	$ 150,000					$ 150,000
SDC								
TOTAL	$ 150,000	$ 172,076	$ 150,000					$ 150,000

PROJECT DETAIL

Project Name: Lucity Mobile Software

Project Number:

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
This project will provide access to WES's asset management system (Lucity) to our field crews so they can enter data as they work, making their work more efficient and data more reliable.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 15,000					$ 15,000
SDC								
TOTAL			$ 15,000					$ 15,000

PROJECT DETAIL

Project Name: Pump Stations (WSC)

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
Small pump stations in the Hoodland service area need to be rehabbed and updated.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST				$ 200,000				$ 200,000
SDC								
TOTAL				$ 200,000				$ 200,000

PROJECT DETAIL

Project Name: Carver Sewer

Project Number: P632239

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
This project includes the installation of 2 new sewer manholes and approximately 200' of new 8" sewer pipe to serve buisnesses with failing septic systems.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST		$ 5,613						
SDC								
WES								
CONST			$ 49,500					$ 49,500
SDC			$ 100,500					$ 100,500
TOTAL		$ 5,613	$ 150,000					$ 150,000

PROJECT DETAIL

Project Name: Willamette Pump Station Upgrade

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 639

District: WES

Project Status: Active

Project Description:
Over the past several years, the Willamette Pump Station, constructed in 1986, has experienced a variety of electrical, mechanical, hydraulic, and pipeline conveyance issues. These issues have resulted in increased labor costs due to maintenance, sanitary sewer overflows, and concerns over design capacity. This project replaces critical pump station components that are failing or at risk of failure to address capacity issues, reduce maintenance costs, provide reliable service, and meet DEQ regulatory requirements.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST		$ 33,372		$ 250,000				$ 250,000
SDC								
TOTAL		$ 33,372		$ 250,000				$ 250,000

PROJECT DETAIL

Project Name: Willamette Interceptor Capacity Upgrade

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
The Willamette Interceptor receives flows from the Willamette Pump Station and the Willamette force main. This project includes evaluation and rehabilitation of manholes and the interceptor between the West Linn side of the old Oregon City bridge and the downstream end of the Willamette Interceptor near the TC WRRF.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST				$ 1,000,000	$ 2,150,000	$ 2,500,000	$ 2,500,000	$ 8,150,000
SDC				$ 1,000,000	$ 2,150,000	$ 2,500,000	$ 2,500,000	$ 8,150,000
TOTAL				$ 2,000,000	$ 4,300,000	$ 5,000,000	$ 5,000,000	$16,300,000

PROJECT DETAIL

Project Name: Gladstone Pump Station and Force Main Upgrades

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
The Gladstone Pump Station was constructed in 1985 and has significant needs for upgrades ranging from updating obsolete MCCs and controls to pumps that are beyond their useful life. Current planning efforts will provide a condition assessment and recommendations for improvements.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST				$ 360,000	$ 720,000			$ 1,080,000
SDC								
TOTAL				$ 360,000	$ 720,000			$ 1,080,000

PROJECT DETAIL

Project Name: Rock Creek Interceptor Extension

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 632

Project Status: Active

Project Description:
A Preliminary Routing Analysis was completed in 2007 for the extension of the Rock Creek Interceptor. It is anticipated that the interceptor will be extended to the north and east. Work is currently underway to determine the required schedule for implementation, but preliminary indications are that the north extension may be required within the 5 year CIP window The project is included in the CIP as a place holder until the current study is complete. The estimated cost is for the north extension.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST								
SDC				$ 1,000,000	$ 3,000,000	$ 3,000,000		$ 7,000,000
TOTAL				$ 1,000,000	$ 3,000,000	$ 3,000,000		$ 7,000,000

PROJECT DETAIL

Project Name: Emergency Generator for River St

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
This project will provide an emergency generator at the River Street Pump Station in West Linn for reliable operation.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 250,000					$ 250,000
SDC								
TOTAL			$ 250,000					$ 250,000

PROJECT DETAIL

Project Name: Clackamas Interceptor Capacity Improvements

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 632

Project Status: Active

Project Description:
The Clackamas Interceptor has been shown in past studies to be lacking in capacity to serve the current service area. Now that the upstream Rock Creek Interceptor has been constructed and there is growing interest in development in areas contributing to the Rock Creek interceptor, additional capacity will need to be added. Work is underway to assess the condition and current and future capacity needs for the Clackamas Interceptor.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST					$ 1,250,000	$ 3,000,000	$ 3,000,000	$ 7,250,000
SDC					$ 1,250,000	$ 3,000,000	$ 3,000,000	$ 7,250,000
TOTAL					$ 2,500,000	$ 6,000,000	$ 6,000,000	$14,500,000

PROJECT DETAIL

Project Name: Sieben Lane Pump Station Alternatives

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:

In the early 1990s the District planned a collection system project to construct a main line interceptor (Sieben Lane Interceptor) to serve the Sieben creek drainage basin. Due to external circumstances, the interceptor was not constructed. Instead, in 1993 a pump station was constructed to serve development. The District is in the process of updating the collection system master plan and will be conducting a cost analysis to determine the feasibility of constructing the Sieben Lane Interceptor and abandoning the pump station. The feasibility of the project will again depend on external factors. This project is a place holder for replacement of the pump station.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST				$ 186,000	$ 744,000			$ 930,000
SDC				$ 14,000	$ 56,000			$ 70,000
TOTAL				$ 200,000	$ 800,000			$ 1,000,000

PROJECT DETAIL

Project Name: Linwood Pump Station

Project Number: TBD

Project Subprogram: Capital Delivery/Collection System

Fund: 632

Project Status: Active

Project Description:
This pump station will convey some portion of the NCRA flows currently flowing to the city of Portland, back to the WES system, freeing up capacity for flow from Happy Valley to the city of Portland. This approach is less costly than constructing a pump station to pump Happy Valley flows directly to the CCSD1 system. WES already owns the pump station site property.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST								
SDC							$ 1,600,000	$ 1,600,000
TOTAL							$ 1,600,000	$ 1,600,000

PROJECT DETAIL

Project Name: Hoodland Pump Stations

Project Number: P632232

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
The Timberline Rim and Sandy River Lane pump stations were identified in the Hoodland Master Plan as needing to be relocated further away from the Sandy River, which recently changed course. This project provides for new pump stations so to provide a higher level of service. A project is currently underway to secure property to site the new pump stations.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 150,000					$ 150,000
SDC								
TOTAL			$ 150,000					$ 150,000

PROJECT DETAIL

Project Name: Blue Heron Treatment Facilities

Project Number: P631991

Project Subprogram: Capital Delivery/Blue Heron

Fund: 632

Project Status: Active

Project Description:

This project includes the purchase, remediation, and restoration of the former Blue Heron Paper Company West Linn facility. The industrial wastewater treatment lagoon and outfall to the Willamette River provides the Districts with additional capacity for growth and economic development while maintaining the ability to meet regulatory requirements. The cost of the project is jointly shared between the Districts and includes the prior year purchase of the 39 acre site as well as future efforts directed at remediation and restoration of the 14 acre industrial wastewater treatment lagoon.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST		$ 194						
SDC								
WES								
CONST		$ 1,002						
SDC							$ 6,000,000	$ 6,000,000
TOTAL		$ 1,196					$ 6,000,000	$ 6,000,000

PROJECT DETAIL

Project Name: Solar Bees, Security

Project Number:

Project Subprogram: Capital Delivery/Blue Heron

Fund: 639

Project Status: Active

Project Description:
The Blue Heron site has been vandalized and requires additional security measures. Solar Bees are solar operated mixers in the lagoon. Additional units may be required.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST			$ 100,000					
SDC								
TOTAL			$ 100,000					$ 100,000

PROJECT DETAIL

Project Name: Fleet- Heavy Equipment

Project Number: Various

Project Subprogram: Capital Delivery/Fleet

Fund: 639

Project Status: Active

Project Description:
This project pool funds the replacement of aging equipment used in plant operations, pipeline and infrastructure maintenance, and biosolids distribution and application.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 550,000	$ 461,518						
SDC								
WES								
CONST			$ 720,000	$ 525,000	$ 795,000	$ 910,000	$ 1,125,000	$ 4,075,000
SDC								
TOTAL	$ 550,000	$ 461,518	$ 720,000	$ 525,000	$ 795,000	$ 910,000	$ 1,125,000	$ 4,075,000

PROJECT DETAIL

Project Name: Vehicle Replacement

Project Number: Various

Project Subprogram: Capital Delivery/Fleet

Fund: 639

Project Status: Active

Project Description:
This project pool replaces aging fleet including vehicles used for line and facility maintenance, sampling, biosolids, surface water, and district support functions. Specific vehicle purchases will be determined during each fiscal year and are based on an assessment that weighs the costs of maintenance versus the costs of replacement and includes such criteria as miles driven, hours used, age of equipment, and economic life. The goal of this project pool is to systematically replace District vehicles to minimize the impact on rates without adversely impacting service levels.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 160,000	$ 187,162						
SDC								
WES								
CONST			$ 275,000	$ 465,000	$ 246,000	$ 242,000	$ 160,000	$ 1,388,000
SDC								
TOTAL	$ 160,000	$ 187,162	$ 275,000	$ 465,000	$ 246,000	$ 242,000	$ 160,000	$ 1,388,000

PROJECT DETAIL

Project Name: Asset Management - Renewal and Replacement

Project Number: Various

Project Subprogram: Capital Delivery/Tri-City WRRF

Fund: 639

Project Status: Active

Project Description:
These funds are reserved for small projects related to operational assets which are capital in nature, including small pump replacements, minor system and process updates, and small machinery. The intent is to replace or upgrade high risk assets efficiently thereby maintaining effective treatment plant operations. Specific efforts in this fund will include electrical updates, instrumentation upgrades, and process HVAC system improvements.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST								
SDC								
WES								
CONST	$ 400,000	$ 123,160	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 2,000,000
SDC								
TOTAL	$ 400,000	$ 123,160	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 2,000,000

PROJECT DETAIL

Project Name: Asset Management - Renewal and Replacement

Project Number: Various

Project Subprogram: Capital Delivery/Kellogg Creek WRRF

Fund: 639

Project Status: Active

Project Description:
These funds are reserved for small projects related to operational assets which are capital in nature, including small pump replacements, minor system and process updates, and small machinery. The intent is to replace or upgrade high risk assets efficiently thereby maintaining effective treatment plant operations. Specific efforts for this fund include electrical updates, sump pump replacements, and instrumentation upgrades.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 650,000	$ 36,547						
SDC								
WES								
CONST			$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 2,000,000
SDC								
TOTAL	$ 650,000	$ 36,547	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 2,000,000

PROJECT DETAIL

Project Name: Pump Station Improvements

Project Number: Various

Project Subprogram: Capital Delivery/Collection System

Fund: 639

Project Status: Active

Project Description:
These funds are reserved for renewal and replacement of pump station assets to increase reliability. Specific efforts in this project class include electrical updates, pump replacements, and instrumentation upgrades.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1								
CONST	$ 410,949	$ 105,837						
SDC								
WES								
CONST	$ 39,051	$ 71,754	$ 450,000	$ 450,000	$ 450,000	$ 450,000	$ 450,000	$ 2,250,000
SDC								
TOTAL	$ 450,000	$ 177,591	$ 450,000	$ 450,000	$ 450,000	$ 450,000	$ 450,000	$ 2,250,000

APPENDIX B

SUMMARY OF FUNDED SURFACE WATER PROJECTS

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1 SW								
CONST	$ 2,480,000	$ 2,274,905	$ -	$ -	$ -	$ -	$ -	$ -
SDC	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WES								
CONST	$ -	$ -	$ 2,480,000	$ 660,000	$ 658,000	$ 655,000	$ 653,000	$ 5,106,000
SDC	$ -	$ -	$ 500,000	$ 700,000	$ -	$ -	$ -	$ 1,200,000
TOTAL	$ 2,680,000	$ 2,274,905	$ 2,980,000	$ 1,360,000	$ 658,000	$ 655,000	$ 653,000	$ 6,306,000

PROJECT DETAIL

Project Name: Carli Creek Enhancement and Water Quality Project

Project Number: P641962

Project Subprogram: Watershed Protection

Fund: 649

Project Status: Active

Project Description:
CCSD#1 purchased the 15-acre Carli Property in January 2012 in order to construct a regional water quality facility that will remove pollutants in runoff from developed industrial areas. The project will re-route urban runoff through a regional stormwater quality facility that will reduce negative impacts of high storm flows and pollutants in the creek; restore nearly 3,000 feet of critical salmon and steelhead rearing habitat; and provide regional stormwater management for future development in the Carli Creek watershed.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1 SW								
CONST	$ 2,000,000	1,803,008						
SDC								
WES								
CONST			$ 1,250,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 1,450,000
SDC								
TOTAL	$ 2,000,000	1,803,008	$ 1,250,000	$ 50,000	$ 50,000	$ 50,000		$ 1,450,000

PROJECT DETAIL

Project Name: Mt. Scott Creek Oak Bluff Reach Restoration

Project Number: P642207

Project Subprogram: Watershed Protection

Fund: 649

Project Status: Active

Project Description:

Development in the Mt Scott Creek watershed has significantly altered hydrology and sediment inputs, resulting in flashier peak flows, flooding and transport of sediment out of the project reach. Reduction of riparian vegetation and wood from the channel has reduced stream complexity. Steelhead, cutthroat and coho salmon use this reach, but in low numbers. Banks are unstable in portions of the project area. This project will improve habitat and stabilize streambanks by installing large woody debris (LWD), creating an approximately 1.5 acre backwater habitat, removing a small culvert that is a barrier to off-channel habitat, and replacing invasive vegetation with native plants over approximately 12 acres.

Project also includes partnering with watershed council and ODFW, volunteer planting events, new trail and interpretive signs, and monitoring to ensure the project meets objectives.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1 SW								
CONST	$ 30,000	$ 203,393						
SDC								
WES								
CONST			$ 520,000	$ 10,000	$ 8,000	$ 5,000	$ 3,000	$ 546,000
SDC								
TOTAL	$ 30,000	203,393	$ 520,000	$ 10,000	$ 8,000	$ 5,000	$ 3,000	$ 546,000

PROJECT DETAIL

Project Name: Storm System Master Plan

Project Number: TBD

Project Subprogram: Watershed Protection

Fund: 642

Project Status: Active

Project Description:
WES is preparing a Stormwater Master Plan on behalf of Clackamas County Service District No. 1 (CCSD#1) and the City of Happy Valley. The Plan will provide capital improvement projects and priorities, system management and maintenance recommendations, programmatic recommendations, and recommendations for funding needs and strategies. The list of capital improvements will serve as a basis for completing SDC eligible projects, and may be used to update WES's surface water SDC amount.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1 SW								
CONST								
SDC								
WES								
CONST								
SDC			$ 300,000	$ 200,000				$ 500,000
TOTAL		-	$ 300,000	$ 200,000				$ 500,000

PROJECT DETAIL

Project Name: Rock Creek Confluence Site Maintenance

Project Number: TBD

Project Subprogram: Watershed Protection

Fund: 649

Project Status: Active

Project Description:
Site maintenance for FY 2018-19 consists of correcting any issues found with continued monitoring of in-stream elements and plant survival. This may include hiring a contractor for spot control of weeds, re-planting trees and shrubs, correcting in-stream elements, or maintenance that may be needed for the shelter.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1 SW								
CONST		$ 16,255						
SDC								
WES								
CONST			$ 10,000					$ 10,000
SDC								
TOTAL		16,255	$ 10,000					$ 10,000

PROJECT DETAIL

Project Name: Small Projects

Project Number: Various

Project Subprogram: Watershed Protection

Fund: 649

Project Status: Active

Project Description:

Small Projects include vegetation management services, maintenance projects, and small drainage projects within the District. Vegetation management services may include weed control, planting native vegetation, seeding, and monitoring and maintenance for two to three years following initial treatment. Other small projects may include work to improve drainage issues when flooding is caused by District owned stormwater infrastructure, installing small low impact development facilities such as rain gardens, and repairs or regular maintenance of existing stormwater infrastructure.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1 SW								
CONST	$ 200,000	$ 64,071						
SDC								
WES								
CONST			$ 450,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 1,850,000
SDC								
TOTAL	$ 200,000	64,071	$ 450,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 1,850,000

PROJECT DETAIL

Project Name: Detention Pond Repair/Rehab

Project Number: Various

Project Subprogram: Watershed Protection

Fund: 649

Project Status: Active

Project Description:
WES is planning to remove silt and vegetation from 4-6 detention ponds to return the ponds to their original design. Since the original installation, the ponds have become overgrown with vegetation. The pond bottoms are filled with vegetation and silt making them ineffective for stormwater treatment.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1 SW								
CONST	$ 250,000	188,178						
SDC								
WES								
CONST			$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 1,250,000
SDC								
TOTAL	$ 250,000	188,178	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 1,250,000

PROJECT DETAIL

Project Name: Decant Facility

Project Number:

Project Subprogram: Watershed Protection

Fund: 642

Project Status: Active

Project Description:
Project includes design and construction of a regional decant facility that would potentially serve multiple entities including local jurisdictions. The existing decant facility is under-sized and an assessment of potential facility location, partners, regional needs and customer relationships will be performed.

Project Costs:

FUNDING SOURCE	FY 17/18 BUDGET	FY 17/18 REVISED	FY 18/19 PROJECTED	FY 19/20 PROJECTED	FY 20/21 PROJECTED	FY 21/22 PROJECTED	FY 22/23 PROJECTED	TOTAL FY 18-23 PROJECTED
CCSD1 SW								
CONST								
SDC	$ 200,000	-						
WES								
CONST								
SDC			$ 200,000	$ 500,000				$ 700,000
TOTAL	$ 200,000	-	$ 200,000	$ 500,000				$ 700,000


WATER
ENVIRONMENT
SERVICES
CLACKAMAS
COUNTY

January 22, 2019

Overview of Capital Improvement Plan 2018-2023

Lynne Chicoine, PE, BCEE
Capital Program Manager

WATER ENVIRONMENT SERVICES

The Capital Plan (CIP) is a Roadmap for WES's Future

CIP Development

Rate Development

Identify

Prioritize

Adjust

Financial Model

WATER ENVIRONMENT SERVICES

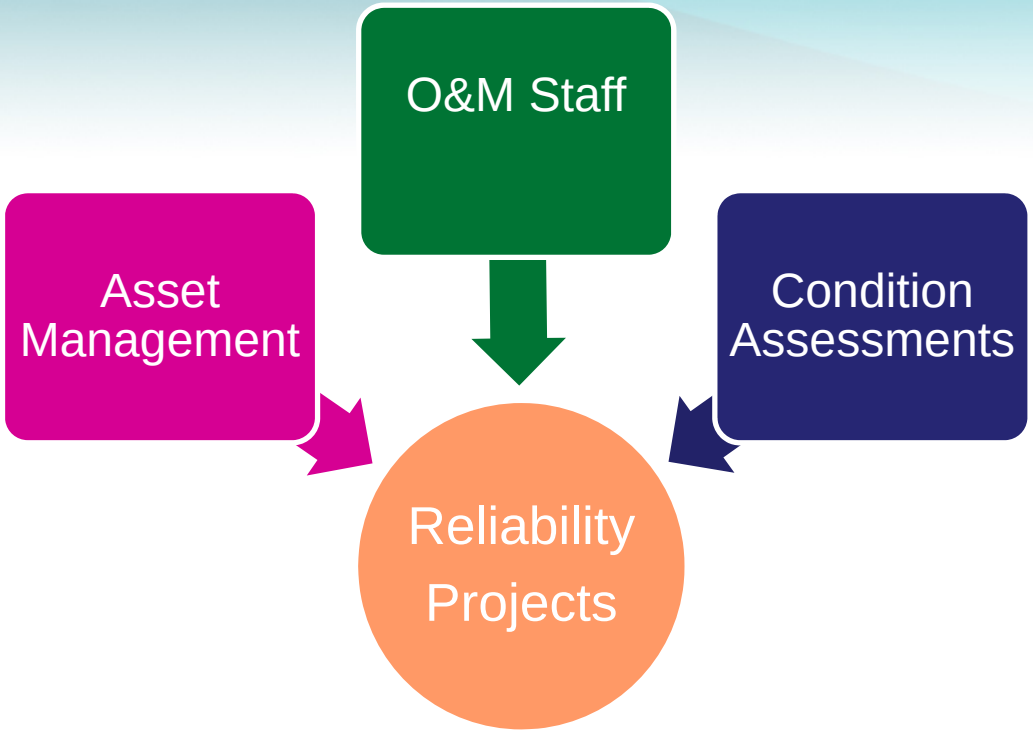
Capital Program Priorities

Capacity

Reliability

*PROVIDE wastewater planning, engineering, and construction services to provide ratepayers with **reliable** wastewater treatment and conveyance infrastructure and support planned **growth.***

Reliability Projects - Our Job is to Help O&M Staff Do Their Job

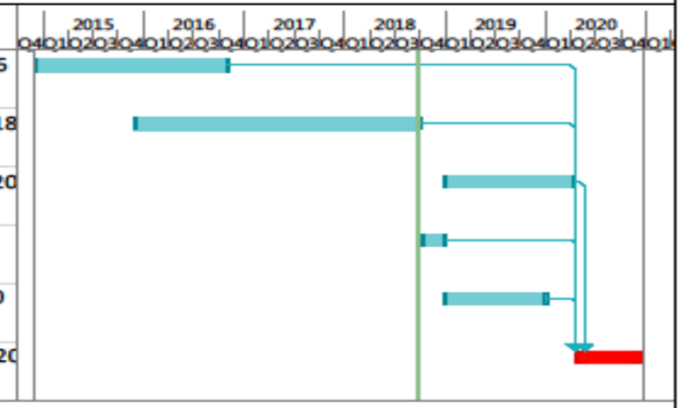


WATER ENVIRONMENT SERVICES

Master Planning Projects Future Capacity Needs

Figure 1. PC Implementation Plan - Comprehensive Plan Flow Chart

ID	Task Mode	Task Name	Duration	Start	Finish
1		Prepare Hoodland Master Plan	502 days	Mon 12/1/14	Tue 11/1/16
2		Prepare Collection System Master Plan	740 days	Tue 12/1/15	Mon 10/1/18
3		Prepare Willamette Master Plan	337 days	Tue 1/1/19	Wed 4/15/20
4		Prepare Boring Facilities Plan	57 days	Mon 10/15/1	Tue 1/1/19
5		Prepare Hoodland Facilities Plan	262 days	Tue 1/1/19	Wed 1/1/20
6		Prepare WES Master Plan	176 days	Thu 4/16/20	Thu 12/17/20

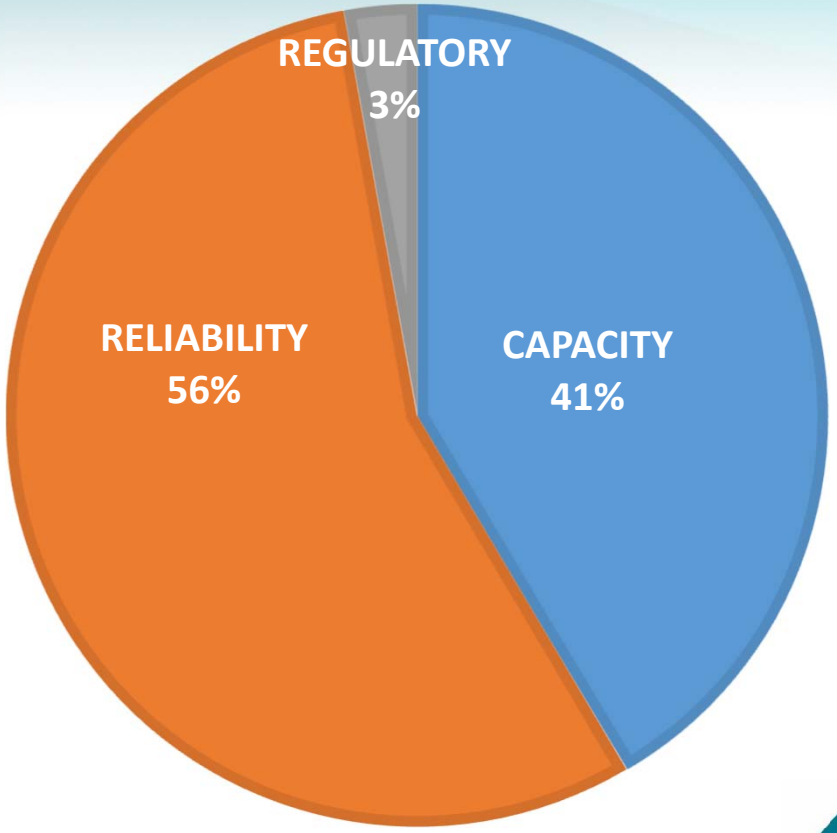


Project: Flowchart_abbreviated
Date: Wed 9/26/18

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

Page 1

2018-2023 CIP
Capacity vs Reliability Projects, $



WATER ENVIRONMENT SERVICES

WES 5-Year Wastewater Treatment and Conveyance CIP Area

Project Type	Capital Budget, $ Million				
	18/19	19/20	20/21	21/22	22/23
Tri-City WRRF	$ 19.7	$ 18.9	$ 21.3	$ 21.5	$ 30.6
Kellogg Creek WRRF	$ 9.2	$ 11.6	$ 8.5	$ 3.0	$ -
Hoodland WRRF	$ 2.2	$ 0.3	$ -	$ 0.5	$ 2.7
Boring WRRF	$ 0.05	$ 0.05	$ -	$ -	$ -
Collection System	$ 5.0	$ 6.1	$ 13.5	$ 16.1	$ 14.7
Blue Heron	$ -	$ -	$ -	$ -	$ 6.0
Fleet	$ 1.0	$ 1.0	$ 1.0	$ 1.1	$ 1.3
OM Asset Management	$ 0.8	$ 0.8	$ 0.8	$ 0.8	$ 0.8
Pump Stations	$ 0.5	$ 0.45	$ 0.45	$ 0.45	$ 0.45
Water Quality Lab	$ 0.1	$ 0.03	$ 0.18	$ -	$ -
Development Review	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1
Total	$ 38.6	$ 39.4	$ 45.8	$ 43.6	$ 56.7

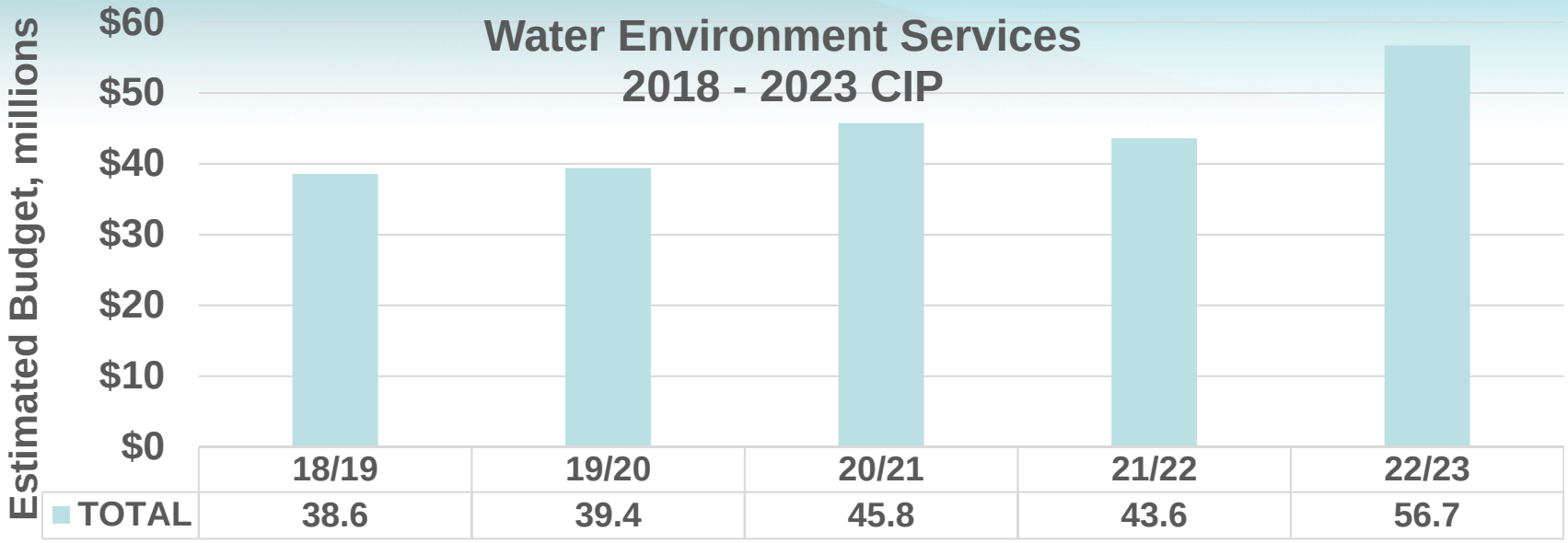
WATER ENVIRONMENT SERVICES

WES 5-Year Wastewater Treatment and Conveyance CIP Area

Project Type	Capital Budget, $ Million				
	18/19	19/20	20/21	21/22	22/23
Tri-City WRRF	$ 19.7	$ 18.9	$ 21.3	$ 21.5	$ 30.6
Kellogg Creek WRRF	$ 9.2	$ 11.6	$ 8.5	$ 3.0	$ -
Hoodland WRRF	$ 2.2	$ 0.3	$ -	$ 0.5	$ 2.7
Boring WRRF	$ 0.05	$ 0.05	$ -	$ -	$ -
Collection System	$ 5.0	$ 6.1	$ 13.5	$ 16.1	$ 14.7
Blue Heron	$ -	$ -	$ -	$ -	$ 6.0
Fleet	$ 1.0	$ 1.0	$ 1.0	$ 1.1	$ 1.3
OM Asset Management	$ 0.8	$ 0.8	$ 0.8	$ 0.8	$ 0.8
Pump Stations	$ 0.5	$ 0.45	$ 0.45	$ 0.45	$ 0.45
Water Quality Lab	$ 0.1	$ 0.03	$ 0.18	$ -	$ -
Development Review	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1
Total	$ 38.6	$ 39.4	$ 45.8	$ 43.6	$ 56.7

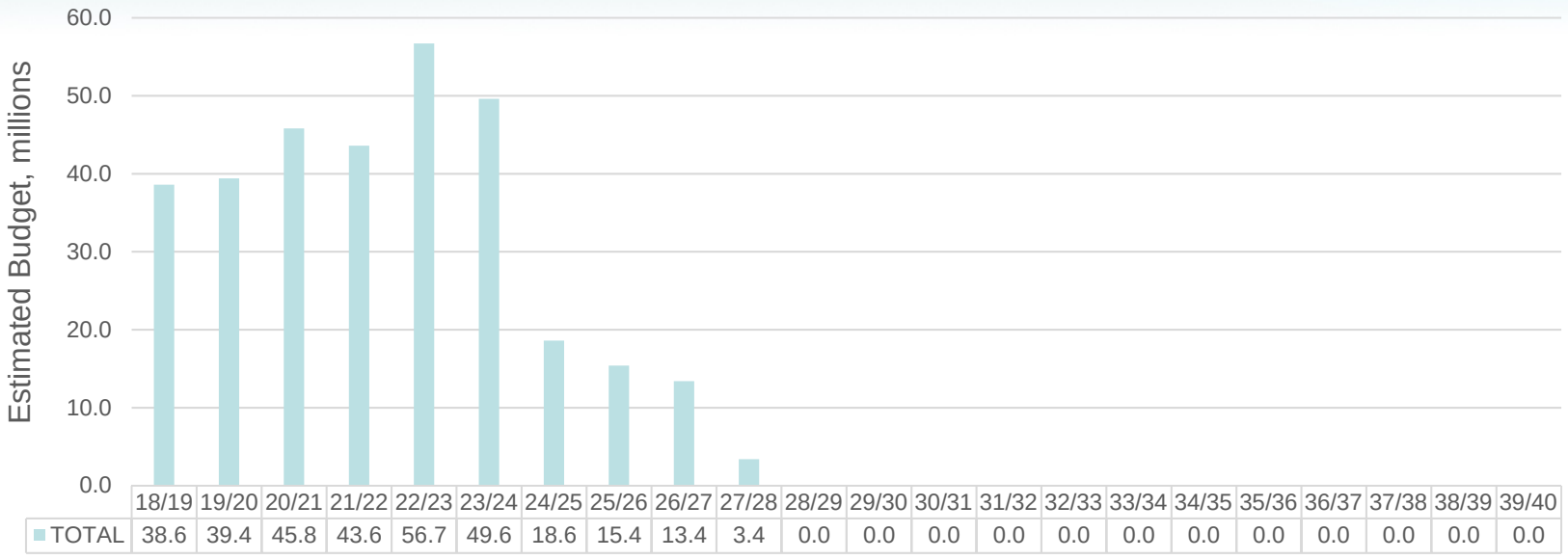
WATER ENVIRONMENT SERVICES

2018-2023 Sanitary Capital Improvement Plan



WATER ENVIRONMENT SERVICES

Building a 20 Year Capital Plan

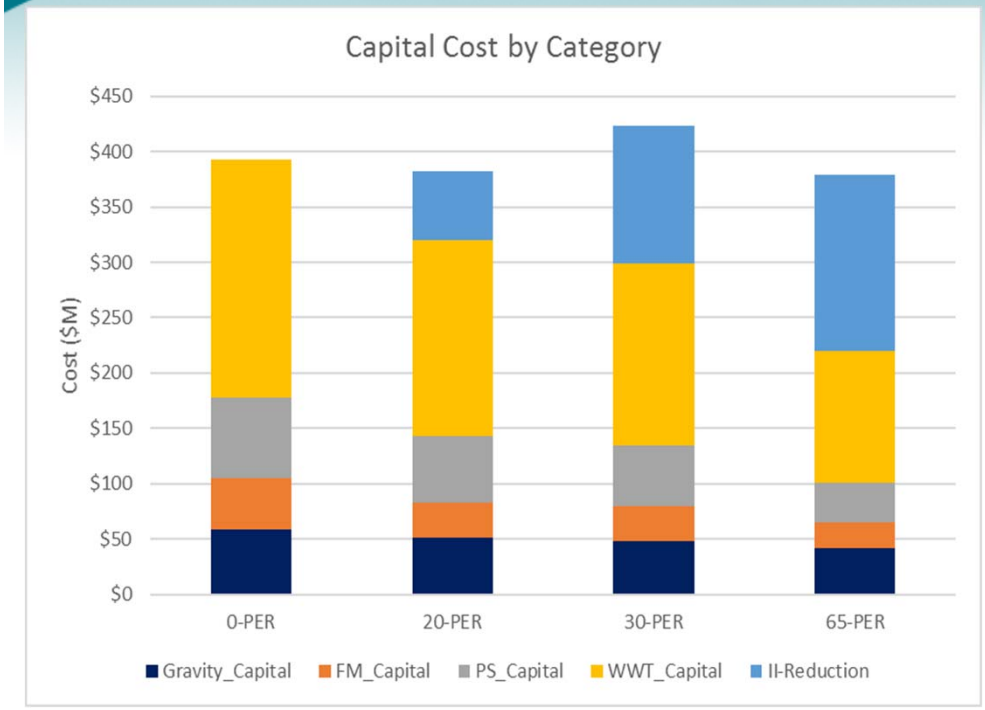


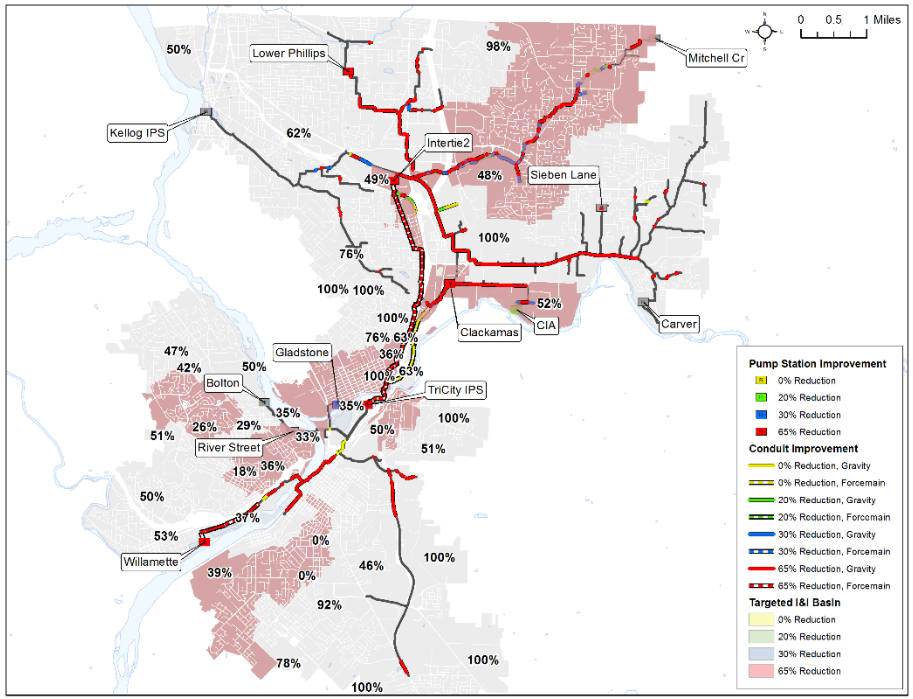
	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40
TOTAL	38.6	39.4	45.8	43.6	56.7	49.6	18.6	15.4	13.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Fiscal Year

WATER ENVIRONMENT SERVICES

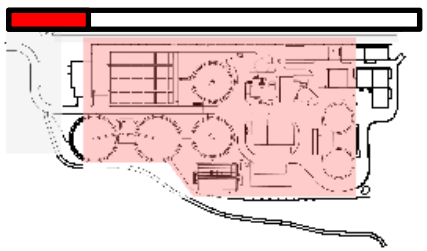
I/I Reduction Program Is Being Initiated to Reduce I/I in 16 Basins by 65%



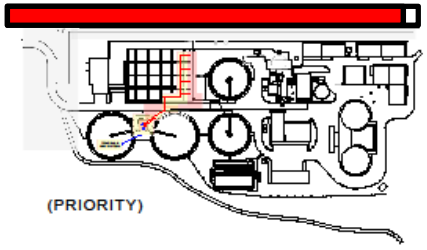


Cost Category	0-PER	20-PER	30-PER	65-PER
COST SAVINGS ($M)	$0	$58	$31	$121
SUBBASIN COUNT	0	16	16	16

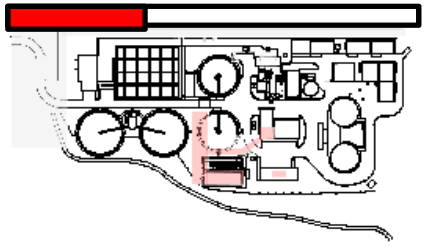
Kellogg WRRF Improvements Project ($18M)



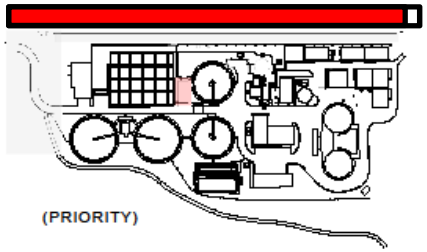
ELEMENT 1 - YARD UTILITIES / PAVING



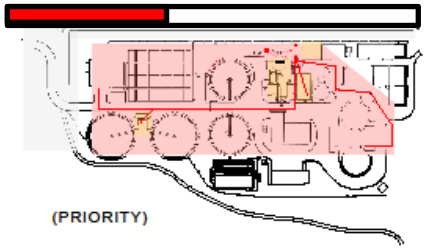
ELEMENT 2 - SECONDARY SLUDGE PS



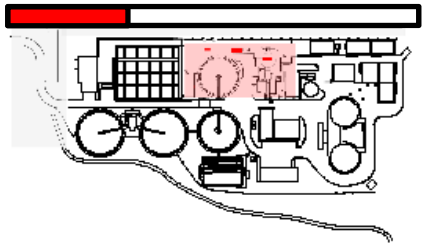
ELEMENT 3 - PEAK HYDRAULIC CAPACITY



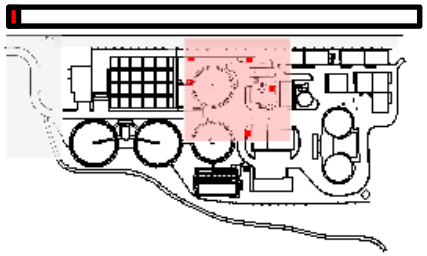
ELEMENT 4 - AERATION BLOWERS



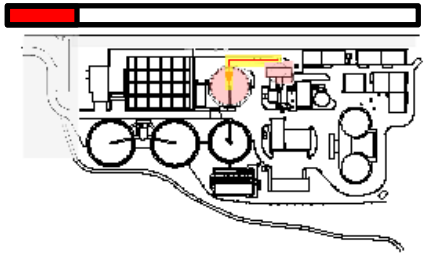
ELEMENT 5 - SITE POWER PHASE 1



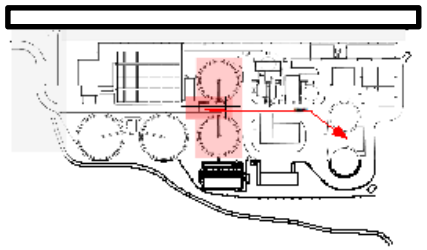
ELEMENT 6A - SITE POWER PHASE 2



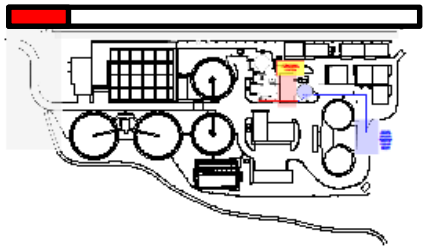
ELEMENT 6B - SITE POWER PHASE 3



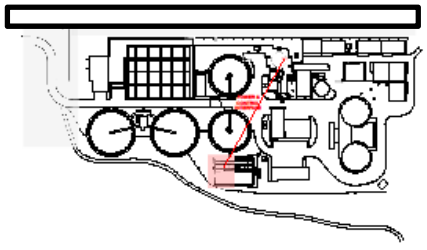
ELEMENT 7 - INFLUENT PS



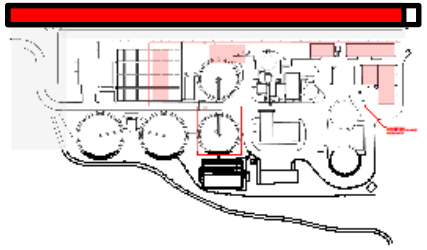
ELEMENT 8 - PRIMARY SLUDGE PS



ELEMENT 9 - WAS THICKENING



ELEMENT 10 - PLANT WATER PS



ELEMENT 11 - AB COVERS / ODOR CONTROL

IMPROVEMENT SITE AREA OVERVIEW

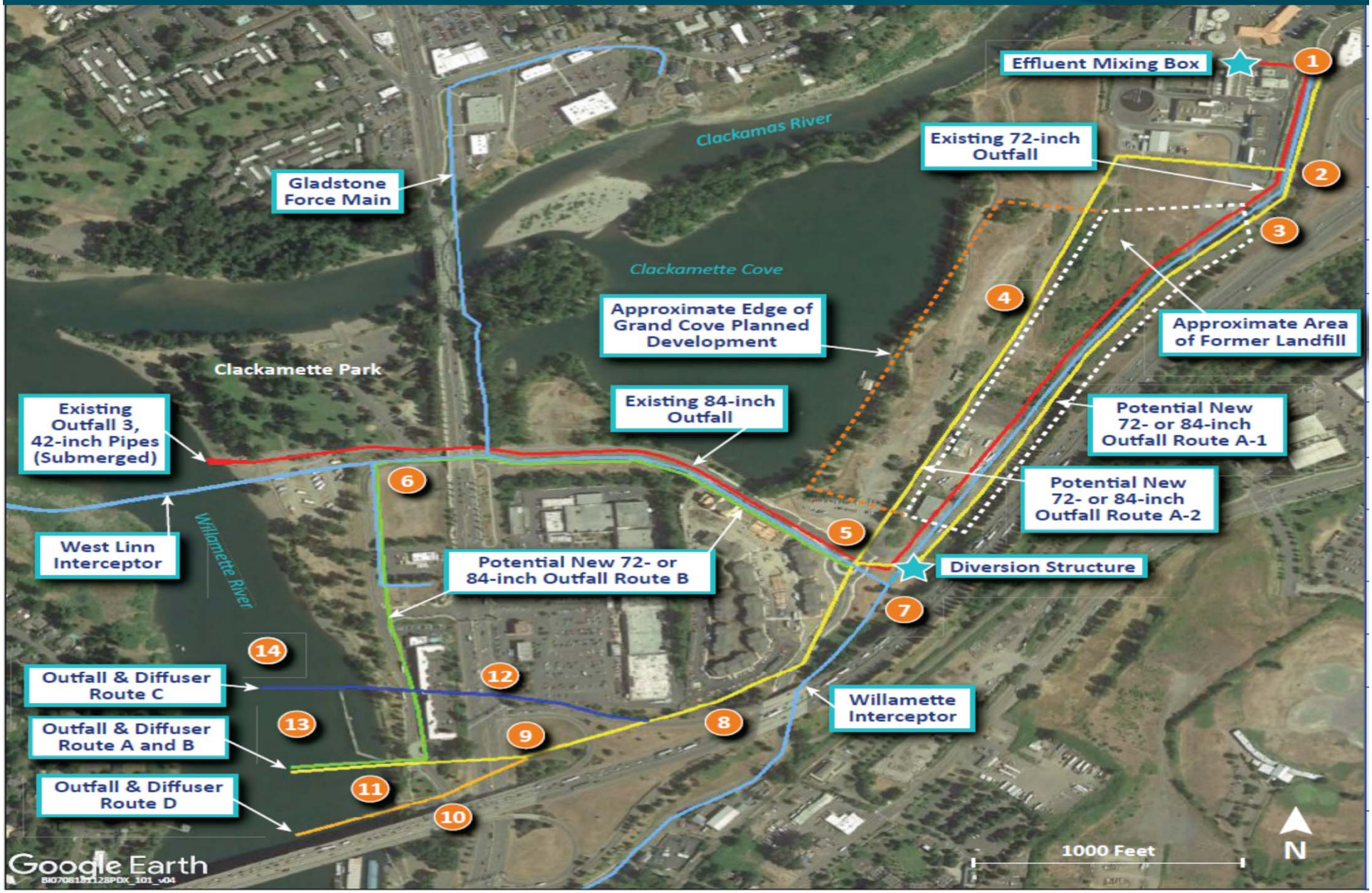
COLOR LEGEND

- ELEMENT AREAS
- MAJOR TEMP. FACILITIES
- FUTURE PROVISIONS

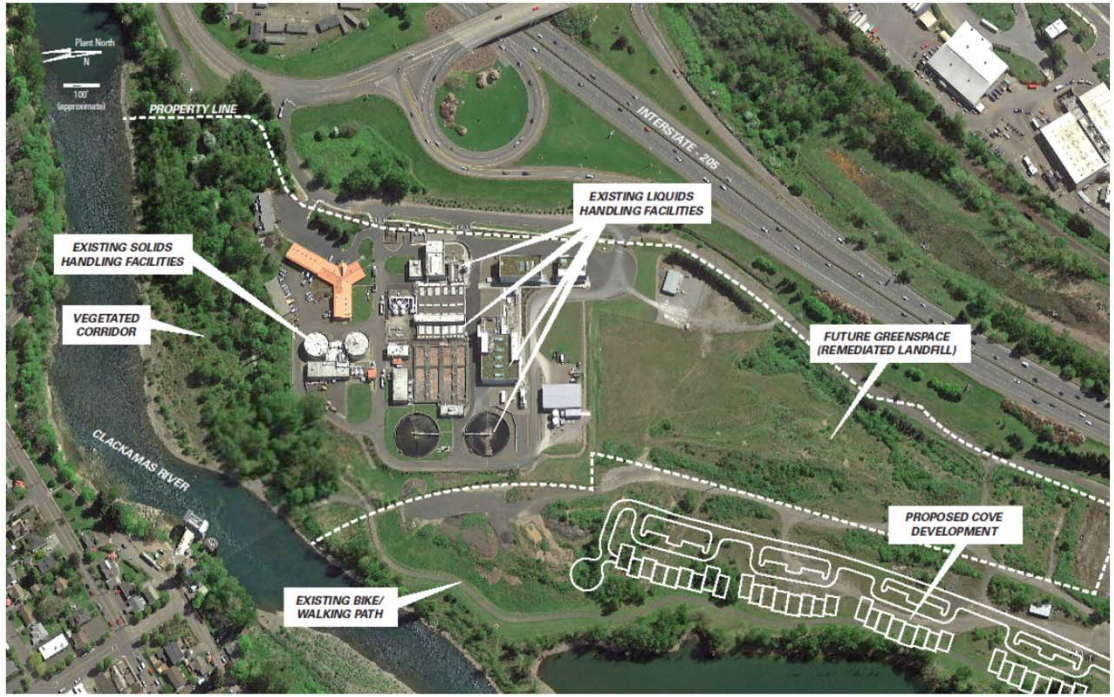
KELLOGG CREEK WPCP IMPROVEMENT PROJECT

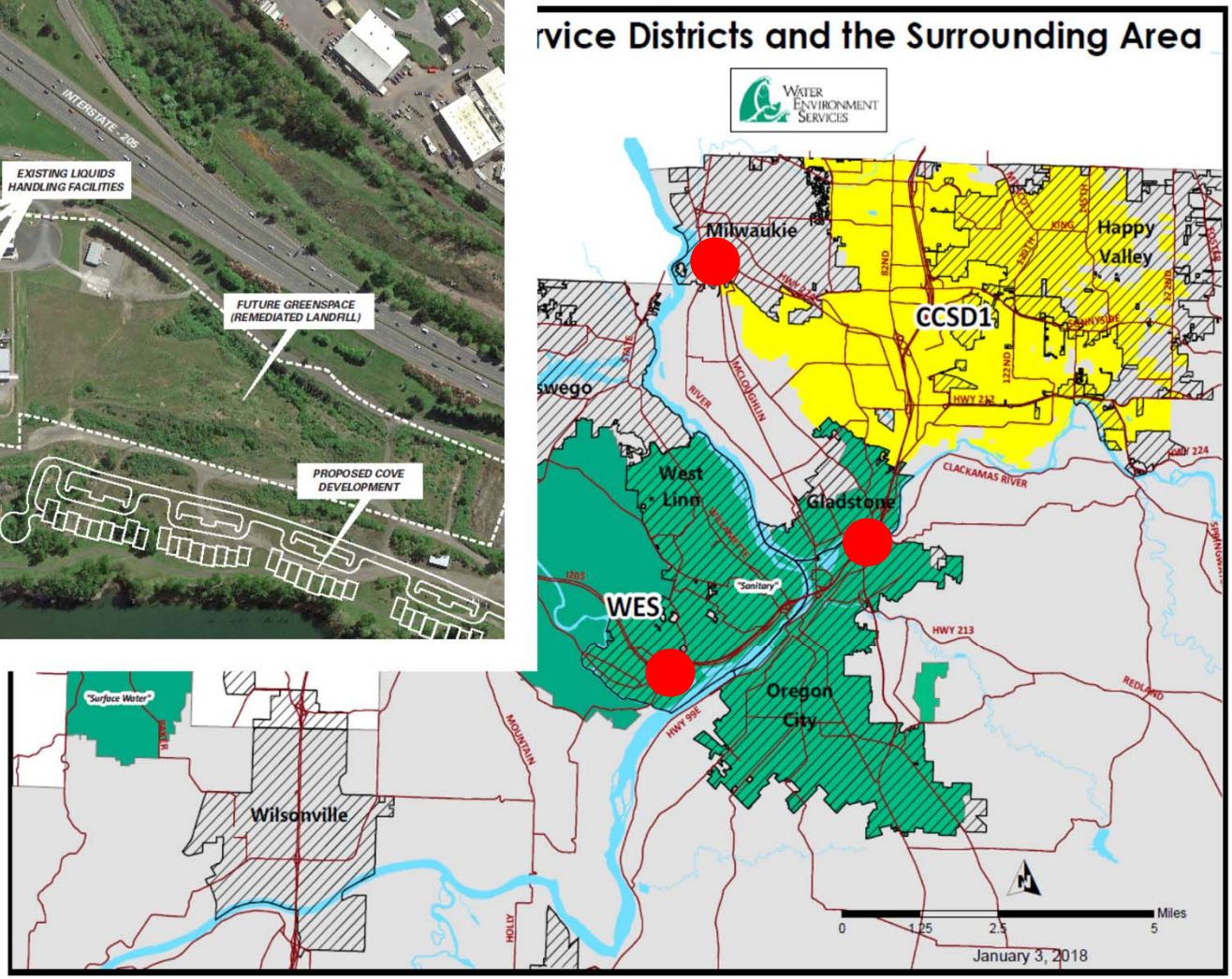
Tri-City WRRF Solids Handling Improvements ($34M)

Tri-City WRRF Outfall Route Study



Willamette Facilities Plan





January 22, 2019

Questions?

Lynne Chicoine, PE, BCEE
Capital Program Manager
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503.742.4559

Water Environment Services

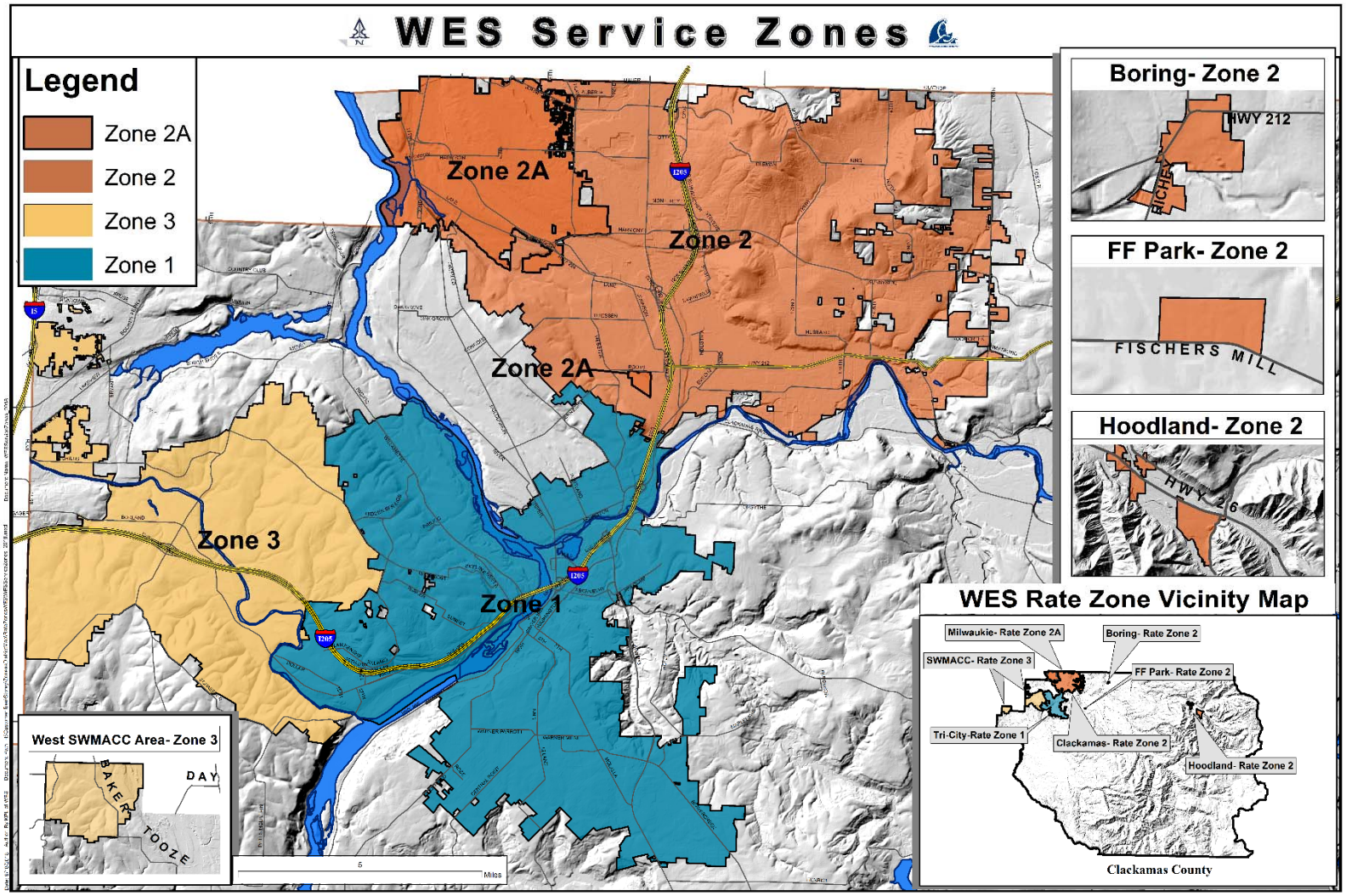
January 22, 2019

WES Sewer Rate Policy Recommendation

Doug Waugh, Finance Manager

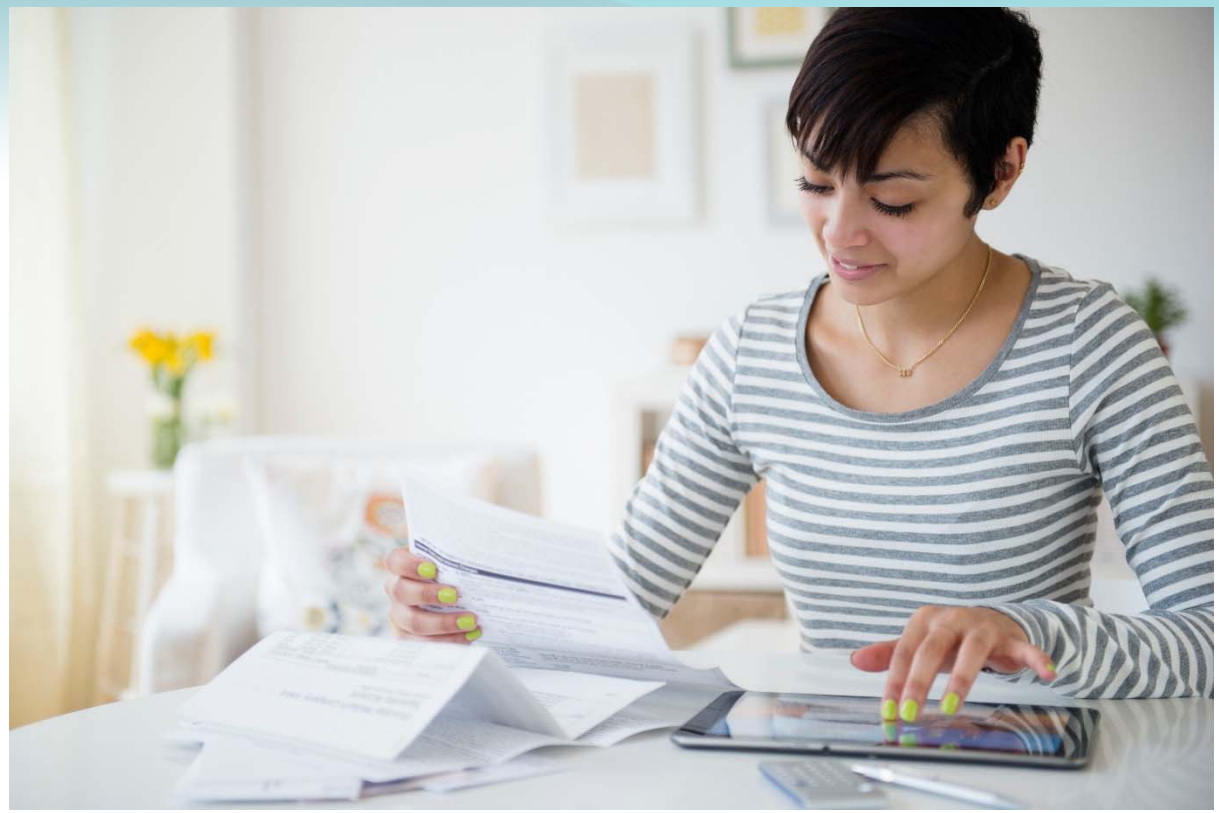
WATER ENVIRONMENT SERVICES

WES – Thinking Regionally



WATER ENVIRONMENT SERVICES

WES Rate Policy on Sewer User Fees



WATER ENVIRONMENT SERVICES

Sewer User Fee Rate Setting – Background & Scope

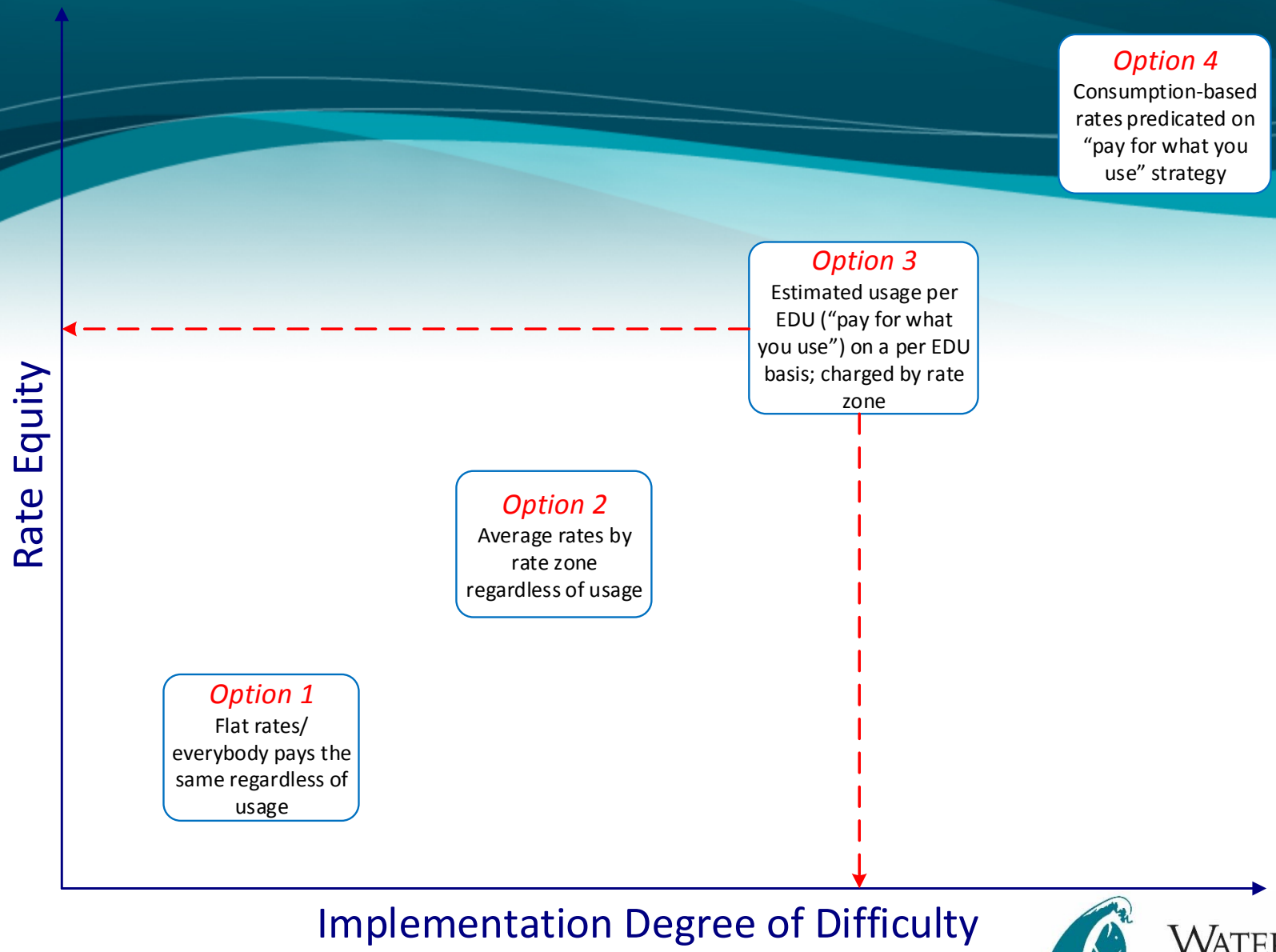
- The WES Advisory Committee established a rate change range with respect to user fees: no less than inflation as reported in the Engineering News Record CCI, no more than 10%.

- WES uses a revenue-requirement approach to ratemaking. We charge the least amount required to meet projected needs.

- User Fee policy will establish not how much but who pays for which services – how the rates are allocated. The regional service model available to WES allows for a greater range of options.

WATER ENVIRONMENT SERVICES

Sewer User Fee Rate Setting Staff Recommendation



WATER ENVIRONMENT SERVICES

WES Advisory Committee Recommendation

» Option 3:

- Common Wholesale Rate: Users will pay the same wholesale rate irrespective of which rate zone they are in.
- Common Retail Rate: Users will pay the same retail rate irrespective of which rate zone they are in.
- Legacy Debt rate component will continue to be the responsibility of Rate Zone 2 (including Milwaukie and Johnson City)

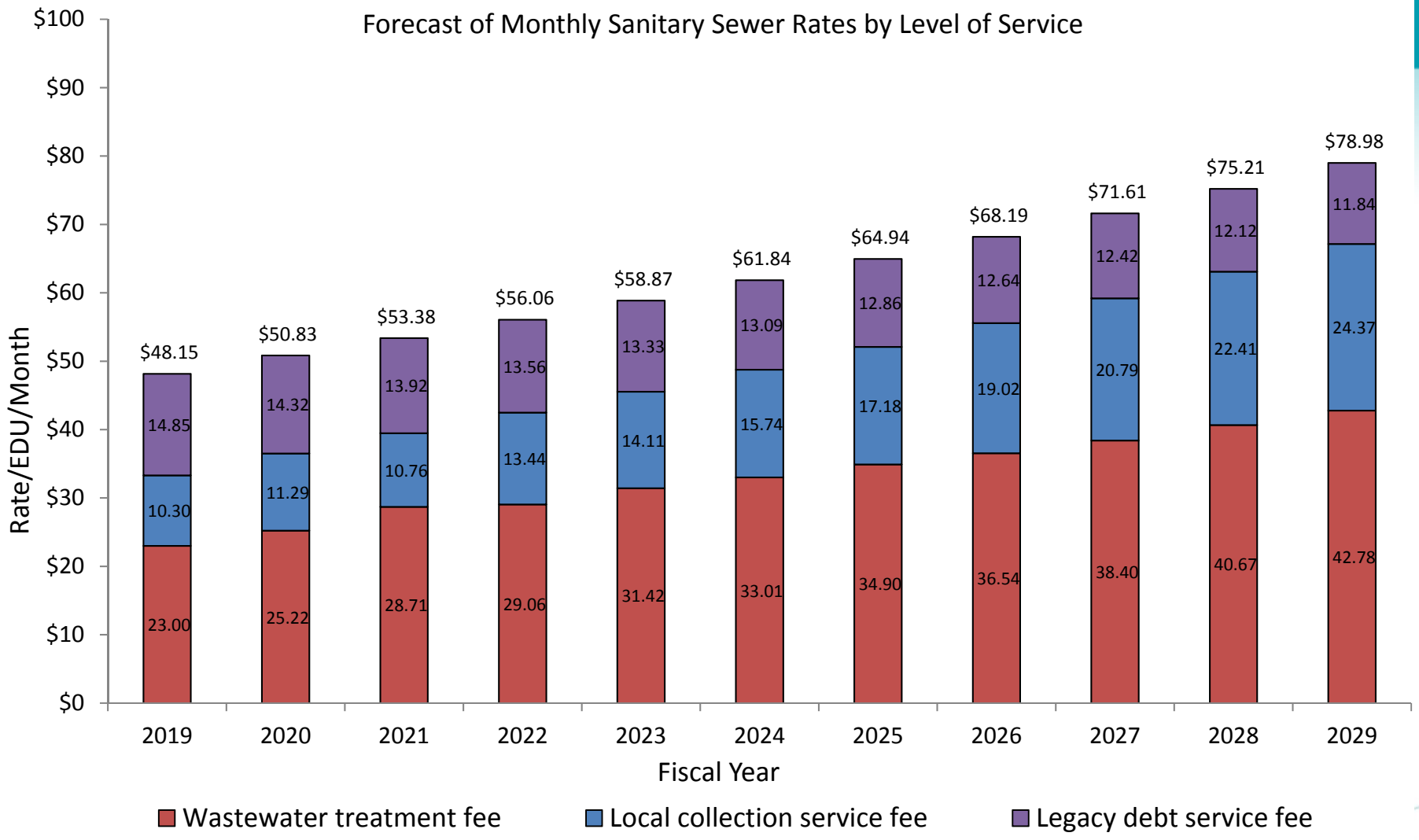
WATER ENVIRONMENT SERVICES

Rate-setting from a Regional Perspective

- The WES Advisory Committee voted to recommend Option 3 because:
  - It allows for customers to pay for the level of service they are receiving without creating more administrative costs.
  - It is implementable at a reasonable cost
  - It comports to the regional business model of looking at costs not from a rate zone perspective but from a service perspective

WATER ENVIRONMENT SERVICES

Sewer Rate Forecast (full CIP funded) Under Option 3



Sewer User Fee Policy - Summary

- Next Steps: The WES Advisory Committee recommends Option 3, the “pay for what you use” approach to establishing sewer user fees. If approved by the BCC, this approach will be used in the 2019-20 budget development process.

- Questions?

WATER ENVIRONMENT SERVICES

Clackamas County Wastewater Governance Situation Assessment

DRAFT – December 13, 2018

Prepared By

Oregon Consensus

(Turner Odell, Senior Project Manager)

Introduction

In response to a request from Water Environment Services (WES) of Clackamas County, Oregon Consensus (OC) conducted an assessment of the potential opportunity for a collaborative agreement-seeking process to address issues related to governance of wastewater and surface water infrastructure in Clackamas County. In particular, OC was asked to explore the issues and opportunities related to wastewater governance and the cities and unincorporated residents served by infrastructure within the Tri-Cities Service District (TCSD) and Clackamas County Service District No. 1 (CCSD#1).

Background

WES is an intergovernmental partnership (an ORS 190 entity) formed by the consolidation of CCSD#1 and TCSD. The partnership was formed in November 2016 after the Clackamas County Board of County Commissioners (BCC), as the governing body of both the districts, voted to formalize the long-running interrelationship between TCSD and CCSD#1. The Board added the Surface Water Management Agency of Clackamas County (SWMACC), to the partnership in May 2017 through an amendment to the original agreement. The partnership was fully implemented in July of 2018 after the final integration of assets, budgets, operations and regulatory requirements. The BCC remains the governing body of WES and the three service districts continue to exist after having contributed their assets and regulatory requirements to the new WES entity.

Representatives of some of the jurisdictions and other stakeholders within CCSD#1 and TCSD, now served by WES, have expressed concerns about how the consolidation of the districts was accomplished and how the new combined entity is and will be governed. WES asked Oregon Consensus to undertake an assessment to see whether a collaborative process could be helpful in addressing those concerns.

The Assessment Process

A collaborative agreement seeking process frequently begins with an assessment to help determine whether conditions are ripe for collaboration and if so, how the process should be designed for the greatest likelihood of success.

An assessment is an opportunity to talk with interested parties to determine *whether* and *how* an issue might be addressed through collaboration. The intent is not to come up with "the answer" to the issue or problem, but rather to (1) learn about the issues and the parties' interests and (2) if possible, determine whether and how to design a process that can help the parties themselves resolve their issues or concerns.

In completing the assessment, OC conducted interviews with representatives of the cities, businesses and other citizens within and served by WES, as well as with members of the Clackamas County Board of Commissioners. The list of interviewees and the interview protocol (questions asked of interviewees) are attached to this report. What follows below is a summary of what we heard in the interviews – comments and concerns about wastewater infrastructure governance, suggestions for changes, and ideas about collaboration and the goals of governance.

What We Heard

During the interviews, OC asked participants to share their perspectives on governance with respect to wastewater infrastructure – whether they observed any problems or challenges with the current governance – and whether they preferred some alternative governance structure (and if so, why they felt that way). Interviewees were also asked what they felt were the primary goals of governance when considering wastewater infrastructure. And finally, they were asked to share their thoughts on whether a collaborative process to address governance might be helpful and their ideas about how that could best be accomplished.

Goals of Wastewater Infrastructure Governance

While interviewees had concerns to share and differed on some issues, there was broad agreement from most on what the goals of wastewater infrastructure governance are or should be. Goals articulated by interviewees can be roughly grouped into three categories: Performance, Protection, and Organizational Functionality.

- Performance. By far the most commonly articulated goal for governance was "to provide the best service at the lowest possible cost to ratepayers". Many stated simply that toilets should flush and rates should be low. Others added that the system should meet capacity needs at the lowest possible rate, or other statements valuing efficiency.
- Protection. Many interviewees also noted that wastewater infrastructure governance should ensure that the environment is protected – that area rivers (where discharge occurs) remain clean and healthy. They noted that part of this goal is ensuring that plants and discharges meet environmental permit requirements.
- Organizational Functionality. A number of interviewees also articulated several goals for governance that could be loosely grouped into this category of functionality. Ideas included the following:
    - Accountability – governance and the governing entity should be accountable for their decisions and actions
    - Transparency – governance should be transparent and provide clear and easy access to information about operations, finances, etc.
    - Equity/fairness – governance should ensure that ratepayers are served and treated equitably and fairly (although as noted below, interpretations of what this means may differ)
    - Decision making – governance should make decisions in a timely and effective way
    - Plan for growth – part of the job of wastewater infrastructure governance is to plan for growth in a timely and effective way
    - Public education – part of the job of governance is keeping the public educated on issues related to watershed health, the role of wastewater treatment, conservation, etc.

Ratepayer Perspective as Lens

It was noteworthy that many of interviewees began by noting that they believed that current system operations were well managed and executed. In addition, few interviewees articulated any specific problems or concerns with the way the system is physically operated – prompting some to question

what problem it was that this assessment effort was seeking to solve. In answering their own question – interviewees frequently noted that an important lens for viewing both "problems" and "solutions" should be the ratepayers' perspective.

That said, there were many interviewees that had specific and well described concerns with other aspects of governance.

Problems/Concerns

Governance concerns expressed by interviewees most frequently revolved around the setting of rates, transparency, and more generally, having a meaningful role or representation in substantive decision making.

Rates

A number of interviewees expressed concerns related to the setting and imposition of rates to system customers. Issues included the following:

- Stated simply, interviewees suggested that rates set by WES are a political vulnerability for the affected cities.
    - E.g., interviewees reported that rate increases are imposed by WES but the cities get blamed because the increased rates show up on the billing provided by the cities.
- Interviewees had a number of concerns related generally to the idea of rate "equity" including the following:
    - Paying increased rates across the service area resulting from the cost of growth in only certain areas is not fair or equitable
        - Others noted that in some situations, growth can in some ways "pay for itself" through the addition of new ratepayers and the imposition of "system development charges" (SDC's) on developers (although that may not always happen)
    - Paying increased rates throughout the service area as a result of costs imposed on the system due to deferred maintenance (e.g., increased capacity needed because of high levels of inflow and infiltration (I&I)) in one (or more) of the cities served by the districts is also not equitable
    - In general, some interviewees noted that rate increases can be more impactful on some ratepayers than on others – although others believed that generally, these rates are so low as to be of little significance to most customers, and some added that the retail portion (what the cities charge for local collection) is a much bigger component than the "wholesale" services component (interceptors and treatment) billed for by WES.
    - Some interviewees also suggested that no one is effectively representing the interests of ratepayers in unincorporated areas of the service district.
- Some interviewees noted that some ratepayers had already effectively invested substantially in (or otherwise borne the costs of) facilities now used by others, and for that they should see a benefit or return.

It should be noted that for most interviewees, rate *equity* did not mean rate *equality*. As noted above, interviewees often articulated that some ratepayers should be treated differently than others (e.g., to reflect differences in growth, deferred maintenance, I&I in the collection systems, etc.).

Transparency

Interviewees also expressed concerns related to transparency, including the following points:

- Some interviewees felt there was a lack of transparency around rate increases
- Interviewees expressed that there was no clear articulation or information available about "the big picture" – about what is really needed from a system-wide perspective – including projections regarding population, growth, and capacity needs – along with visioning for the future design of the system – and this should be a prerequisite before looking at rates
- Interviewees expressed a desire to see a detailed fiscal analysis of the integrated system, including information on the fiscal impacts of growth, SDC's, etc.
- Interviewees also noted a lack of transparency about how (or if) the concerns or issues they raised in forums like the WESAC or the Electeds Forum were ultimately communicated by WES to the BCC

Meaningful Role/Representation/Control

One of the concerns most frequently expressed by some interviewees, particularly by elected officials from the cities served by the district, was that they felt that they had no meaningful role or representation in WES decision making around wastewater infrastructure management (physical or fiscal), rate setting, capacity issues, etc. These interviewees felt that had no control over a significant cost and service being provided to their constituencies – and for which at some level they were responsible in a civic and political sense. It was for some a matter of principle, magnified in some cases by the sense that their constituents had substantially paid for major components of the infrastructure and so should have some say in its operation. This concern over a lack of control was significant, even when the same interviewees might acknowledge that they had no problem with actual system operations (currently).

Interviewees frequently expressed that the current mechanisms for engagement or representation – e.g., the WESAC and the Electeds Forum – were not adequate or effective in providing a meaningful voice in wastewater governance.

- To some, the Electeds Forum was viewed as ad hoc and unstructured, not very productive, and weak in terms of influence on decision making. Some said it was just a "show" by the BCC and WES.
- Some interviewees suggested that while the WESAC was good, it was weak and needed to be further empowered – while others suggested it was large and unwieldy with a "random" membership.
- Other interviewees noted that representation of ratepayers in unincorporated areas is problematic (although there is some representation on the WESAC) and that in some contexts they had no effective representation with respect to wastewater infrastructure – other than the BCC itself (at a high level).

Exacerbating this concern over local control were underlying issues regarding the BCC as the governing entity and historical issues of trust and challenged relationships among the cities and the County. Concerns expressed by interviewees included the following:

- Some interviewees felt that, while technically in charge, the BCC is not deeply engaged or interested in wastewater infrastructure management (some noted that none of the BCC members lived within the Service area of the combined systems).
    - Other interviewees viewed this dynamic positively – suggesting that the BCC is appropriately deferring to the experts (WES) on infrastructure management issues
- Some interviewees observed that the BCC does not do a good job of "switching hats" from being the BCC to being the governing body for an integrated wastewater treatment system
- And without going into detail, it should be noted that some interviewees observed that historically there has been a rocky relationship history among the cities and the County/BCC. While relationships have been marginally better recently (according to some interviewees), some suggested that prior incarnations of the BCC were "heavy handed" in dealing with the cities, and that trust is very low as a consequence. (Interviewees also observed that issues of trust and relationships were not limited to wastewater infrastructure.
    - Some observed that this situation is all part of a political evolution in Clackamas County – historically the County was characterized by numerous small cities and a larger more influential politically County, but over the years, the Cities have grown substantially in size and influence, and in their desire for a stronger role in local governance.

A number of the interviewees who commented on trust as an issue among the cities and the County noted that it would be crucial to address trust issues in any effort to move forward on this issue. It appeared that these issues of trust in turn made the concern over effective representation and control into important matters of principle to those who are representing their own constituencies. Similarly, even though most had no concerns about current operations, the need for control reflected a significant degree of uncertainly about how things might go in the future.

Although as noted above, most interviewees had no complaints about how the system was currently being operated or had confidence in WES's technical ability, and most interviewees focused on relationship issues with the County, there were a few interviewees who also expressed frustration with respect to their relationship with WES – in particular that that WES operated without regard or respect for the cities' interests.

For some who were experiencing these and other issues or concerns with governance, and for whom the lack of representation or control had become a matter of principle, the go-to solution was a restructuring of governance to give effective control to the cities and to dilute the role of the County (as discussed in more detail below).

Potential Solutions – Suggested Alternatives or Modifications to Governance

Interviewees offered a range of potential solutions to address concerns or problems they perceived with governance. Some solutions were aimed at substantially restructuring governance, while others were more focused on adjustments on the existing governance structure.

Restructuring Governance

Those interviewees who considered restructuring governance were for the most part concerned with providing a more "meaningful" role for the cities served by the combined systems – although some also considered the representation of the unincorporated ratepayers as well. Many interviewees noted that they were not opposed to merging the two districts (TCSD and CCSD#1), so long as governance was in the hands of the local communities served. Suggested alternatives included the following:

- Creating a new ORS 190 entity to run the system in which the governing body would include representatives of each of the served cities (among others)
    - Proposals to use this model typically included representation from the BCC
    - Suggested representation for unincorporated ratepayers was either through the BCC or through designated slots on the governing body
    - Various configurations for this ORS 190 model for joint control were suggested with varying numbers of representatives from each jurisdiction
    - Some noted, however, that designing and implementing a new ORS 190 entity could entail thousands of hours of negotiation to complete
- Creating a new special district to operate the system
    - Some saw this as a good or even ideal option, but a heavy lift to accomplish because of the need for voter action
- Privatization was mentioned as an option, but was not viewed as particularly viable even by those who thought it presented some advantages

While there were a number of interviewees who were very interested in exploring shared governance models like the ORS 190 approach that would include elected representatives of jurisdictions within the service area, other interviewees cautioned that moving toward a governance structure characterized by representation from multiple jurisdictions, each prioritizing its own ratepayers over the needs of the system as a whole, could lead to dysfunctional decision making.

Some interviewees also questioned the ability of a new ORS 190 agreement to fundamentally change the control of the combined districts. They suggested that because the original two districts were created by vote of the people, and that vote made the BCC the governing body, it was suggested that the BCC cannot completely surrender that control to a different entity. A clear and mutually shared understanding of what is and what is not possible in terms of restructuring governance would be an important prerequisite to any collaborative discussion of the issue.

Modifications to Existing Governance

Instead of a fundamental reworking of the governance structure, some interviewees suggested adopting modifications to the way in which the existing governance system operated in order to address the concerns or needs expressed by themselves or others. Suggestions for actions that WES and/or the BCC could take to improve the function of existing governance and address some of the issues outlined above included the following:

- Improve Transparency. A number of interviewees thought that improved transparency proactively providing more information about rates, financial and fiscal matters, long term projections and planning, and about WES's interactions with the BCC (as described above)

could help address the concerns of WES's constituencies, including the cities. A commitment to increased transparency could lead to improved levels of trust among the parties in addition to information sharing.

- Re-tool and Empower Existing Groups. Some interviewees suggested that the role of the Electeds Forum could be formalized and strengthened so as to provide a meaningful voice for the cities in governance. (This falls short of giving cities the legal role in decision making that would be provided by an actual restructuring of governance, but it could include documenting a meaningful voice for cities through written policy or process that is more robust than the perceived ad hoc nature of the current Forum.) Similarly, some interviewees thought that the role of the WESAC group could be clarified and additionally empowered.

- Create Guidance/Policy on Rates and Rate Fairness. Some interviewees noted various ways to address the issues related to rates, including the following:
    - Let WES do its own billing (so that the cities do not have to do that and shoulder the political repercussions of rate increases).
    - Creating a rate review board.
    - Create a policy or guidance that governs rate setting and rate increases – perhaps tied to some sort of index. Issues related to rate equity (considering growth, deferred maintenance, ability to pay, etc.) could also be considered and articulated in developing such policy or guidance, along with many other variables such as SDC's.

- Revenue Sharing. Some interviewees noted the many benefits of revenue sharing approaches (including good neighbor or rainy day funds) to help build relationships and address specific problems.

The challenge with all of these approaches is that they are only as good as the commitment to implement them by WES and the BCC. As the ultimate governing body (absent a restructuring), the BCC can change course at will, and as some observed, mere verbal or ad hoc written "assurances" are not likely to be relied on by many interviewees in this context. Some noted that the parties (cities, WES, BCC) could enter into an intergovernmental agreement that more formally documents changes such as these as a way to improve the level of commitment to and confidence in the changes.

Several interviewees cited Clean Water Services (CWS) (in Washington County) as an example of a similar and functionally effective entity – where the Washington County Board of Commissioners acts as the governing body of a service district serving numerous cities. It was suggested that studying the CWS model could be helpful, although some also noted that there were different political dynamics in play there – now, and when CWS was created.

Input on Collaboration

When asked about their thoughts on whether a collaborative process could help address issues related to wastewater governance, most interviewees reacted positively – supportive of the idea that collaboration could be a productive way to deal with the perceived problems. But many interviewees were also cautious. They wanted to be sure that all participants would commit to engage constructively, while still taking the issues head-on. Interviewees expressed a number of

additional ideas about how a process should be designed and implemented – making the following suggestions:

- Structure. Interviewees suggested that a process would need to be clearly structured, organized and facilitated:
    - The scope and goals of the process should be clear – with the focus being what is good for the districts and the ratepayers
    - The process must be clear about any sideboards (legal and/or policy), but it is also crucial that the process not feel "directed" toward certain outcomes
    - There should be third party facilitation
- Joint Learning. Interviewees suggested that, at the outset, there is a need to get everyone clear regarding facts and information – and it should be joint learning, so that everyone is comfortably on the same page.
    - There should also time for developing a collective or shared understanding of grievances and concerns, and an understanding of the implementability of potential solutions
        - Specifically, what are the viable options (legally or otherwise), and what would each require to implement
- Trust and Relationships. Interviewees noted that the process needs to engage the right people around the table – i.e., people who represent their constituents (ratepayers) interests and who will participate constructively with the intent to build relationships.

Conclusions and Recommendations

There is common ground among the parties engaged in this issue of wastewater governance – and that can be seen in the responses to questions about the goals of waste water governance. Specifically, interviewees were virtually unanimous in saying that the *primary* goals of governance in this context are, first, to provide the best service at the lowest possible cost – along with protecting the environment and functioning effectively as a service organization. And while there is plenty to disagree about with respect to what that cost is or should be (what is fair or equitable) and how the entity should function, the largely agreed-upon perspective from which the answers must come remains the same – i.e., the ratepayers' perspective. With that commonality in mind, it is possible to conceive of a collaborative process to address sincere concerns or grievances with wastewater governance using a lens that focuses on what is best for the ratepayer.

<u>Collaborative Problem Solving</u>

It was not the purpose of this assessment to determine what the "right" solution is to address the concerns raised by interviewees, nor to decide whether there should be a restructuring of governance or otherwise what a new approach should look like. Rather it was to determine if there was sufficient common ground among the interested parties to even have the discussion. Ultimately it must be up to the parties themselves to find their own solution – the one that best meets the needs or interests of all the parties. The right solution is then the one that everyone can conclude is acceptable.

In this situation, a spectrum of potential solutions have been identified, ranging from ones that involve significant restructuring of governance to ones that describe a more incremental approach to

address concerns. A collaborative approach here might explore these solutions in a step-wise manner – exploring what can be accomplished with incremental changes, with the understanding that more significant restructuring can be considered if the incremental approaches are not successful in addressing the issues.

Process

Initiating a collaborative effort to move forward with problem solving around wastewater governance will entail a significant commitment from each of the participants to work together through several crucial steps and phases of collaborative problem solving. Agreement at the outset on certain steps and conditions for moving forward will ensure that valuable time is not wasted by embarking on a collaborative effort that cannot succeed.

- Process Design. As noted in more detail in the bullets below, all the parties (as described below) will need to agree roughly on a design for a collaborative process. The group can memorialize their commitment to move forward through the process by agreeing at the outset to a set of operating principles.

- Scope and Goal. While there is significant commonality on what are the primary goals of wastewater governance (as noted above), which provide a helpful lens for designing a collaborative process, the participants must also agree more particularly on a framing of the issues, desired outcomes, and any sideboards for the process.

- Participants. The group must agree on what interests and constituencies should be at the table and who should represent those interests. As noted above, there was considerable feedback about the need for participants who will embrace a constructive and collaborative approach. At a minimum, any community of interest that stands to be affected by the outcome of the process should be included – not only WES, the BCC and the cities, but also, for example, unincorporated ratepayers, and perhaps businesses or other identifiable user groups.

- Joint Learning. At the outset of a collaborative process, it will be important to take steps to ensure all participants have a common basis of knowledge and understanding – of the facts, the issues and interests of the other parties (and their own), and including a common understanding of what the range of possible solutions might be.

- Problem Solving. In order to find a solution that works for everyone, it is important to approach the question by examining (1) the problems to be solved and (2) the interests of all the participants, *before* considering what solutions might be appropriate. It is usually not helpful to skip straight to a discussion of solutions before the problems to be addressed and the interests to be met are fully explored and understood by all.

- Collaboration, Consensus and Trust. To achieve a consensus-based outcome in a collaborative process, each party has two essential responsibilities: (1) to speak up about their own interests, and (2) to actively work to meet the needs and interests of the other parties at the table. This commitment to reciprocity is a crucial foundation for building trust among the parties. For an outcome or decision to be effective and lasting, it will need to meet the

interests of all the parties, and those parties will have to be confident (trust) that the other parties are honoring their reciprocal commitments.

Good Faith Participation

Collaboration is not always the answer. An important caveat is that collaboration only works when there is good faith participation by all necessary participants. That means not just a desire (even a sincere desire) to be "collaborative", rather, it must derive from a genuine belief by each participant that they will achieve an outcome that is *at least* as good – or better – than if they sought to get what they wanted by some other approach. If some other approach (e.g., litigation, legislation, etc.), upon careful consideration of the risks, costs (monetary, political, etc.) and benefits, appears more likely to achieve the desired outcome, then they will never fully engage in the effort to collaborate as described above – because when the going gets tough, they have an out. In such situations, parties can and probably should pursue their alternative approach.

If all the essential parties to this issue are willing to engage constructively, and if they see this collaborative effort as the best alternative to achieve a lasting and implementable resolution to the issues and concerns that have been raised, then there is a meaningful opportunity to move forward.