



## WES Technical Advisory Team AGENDA

**Date:** October 23, 2025 **Time:** 11:30 AM – 1:00 PM

Format: Zoom

Link to Zoom: https://clackamascounty.zoom.us/j/85496557766

Facilitators: Jessica Rinner, Civil Engineering Supervisor | Greg Karnes, WES Administrative Specialist

Time	Topic	Action
11:30 am	Welcome/Introductions	Roll Call
5 minutes	Jessica Rinner, WES – Civil Engineering Supervisor	
11:35 am	Review/Approve minutes from 06/26/2025 meeting	Annroyal
5 minutes		Approval
5 minutes	Greg Karnes, WES – Administrative Specialist	
11:40 am	Review IGA Amendment Comments	Discuss
20 minutes	Ron Wierenga, WES – Assistant Director	
12:00 am	WES Draft CIP 26-30	Discuss
20 minutes	Jeff Stallard, WES – Capital Program Manager	
12:20 pm	City of Gladstone CIPP Project	Vote
10 minutes	Jessica Rinner WES – Civil Engineering Supervisor	
	Justin Poyser – City of Gladstone – Public Works Utility Manager	
12:30 pm	Oregon City 2026 Manhole Project	Vote
10 minutes	Kenneth Cannady-Schltz – Project Engineer	
12:40 pm	Member Community Invoicing Second ½ FY24/25	Discuss
5 minutes	Jessica Rinner WES – Civil Engineering Supervisor	
12:45 pm	Member Community Annual I/I Reports	Discuss
5 minutes	Jessica Rinner WES – Civil Engineering Supervisor	
12:50 pm	Round Table Discussion	Discussion
15 minutes	Adianas	
	Adjourn	





# WES Technical Advisory Team MINUTES

**Date:** June 26, 2025

**Time:** 11:30 AM – 1:00 PM

Facilitators: Jessica Rinner, Civil Engineering Supervisor | Greg Karnes, WES Administrative Specialist

Time	Topic	Action
11:30 am 5 minutes	Welcome/Introductions  Jessica Rinner, WES – Civil  Engineering Supervisor	Action
11:35 am 5 minutes	Review/Approve minutes from 02/20/2025 meeting Greg Karnes, WES – Administrative Specialist	<ul> <li>Approved by Kenny and Jeff</li> <li>Jessica suggests sharing TAT website in invite and reminder email</li> </ul>
11:40 am 10 minutes	City of Milwaukie Waverly Heights I&I Reduction Construction Proposal  Jessica Rinner WES – Civil Engineering Supervisor Jeff Tolentino – City of Milwaukie – Assistant City Engineer	<ul> <li>Jeff Tolentino discusses 60 year old collection system in Waverly Heights and its I&amp;I issues.</li> <li>CCTV videos issues with various pipe issues</li> <li>Design completed with goal of construction in September</li> <li>1.2 Million Estimate</li> <li>Mostly pipe realigning and not manholes</li> <li>Kenny thinks this is a good approach</li> <li>No opposing votes – All in favor of approving</li> <li>Jessica says she will send more information once the bid documents are ready</li> </ul>
11:50 am 10 minutes	Member Community Invoicing Second ½ FY24/25 Jessica Rinner WES – Civil Engineering Supervisor	<ul> <li>Finance team is requesting grant reimbursement invoices by August 15<sup>th</sup>. If they can't submit them by then they should let Jessica know when she can expect them.</li> <li>Kenny will send renewed amendment for work</li> <li>Linn phase 2 not completed</li> <li>2025 manhole project has been terminated</li> <li>Rivercrest and Molalla reimbursement requests are incoming</li> </ul>

<b>12:00 pm</b> <i>10 minutes</i>	Member Community Annual	<ul> <li>Gladstone I&amp;I work is completed. Jessica requests I&amp;I reimbursements from Gladstone</li> <li>Milwaukie will submit additional design invoices for Waverly Heights.</li> <li>Needing Gladstone and Milwaukie reports</li> <li>Jessica will use Oregon City's annual report</li> </ul>
	Jessica Rinner WES – Civil Engineering Supervisor	as an example
12:10 pm 10 minutes	Member Community Flow Data Jessica Rinner WES – Civil Engineering Supervisor	<ul> <li>WES requests hydraulic flow modeling data         <ul> <li>just raw data</li> </ul> </li> <li>WES can share interceptor flow data if requested by partner cities</li> </ul>
<b>12:20 pm</b> <i>15 minutes</i>	Round Table Discussion	<ul> <li>Erich/West Linn – Finished station update and is hoping to have I&amp;I project in the fall or early next year</li> <li>Jessica discusses update of Gladstone pump station. Open house on July 9<sup>th</sup>. Zach and Jessica will lead tours and operators will be there to answer questions.</li> <li>Kenny – Presentation at NASTT conference in February and giving the presentation at Short School</li> <li>Greg – Mentions the next TAT meeting on October 23<sup>rd</sup>.</li> </ul>
	Adjourn	•

**Roll Call:** 

Jessica Rinner

**Greg Karnes** 

Jeff Tolentino

**Kenneth Cannady-Shultz** 

**Josh Miner** 

Mike Rice

**Erich Lais** 

**Justin Poyser** 

**Chris Randall** 

**Silas Richardson** 

**Zach Koellermeier** 

# WATER ENVIRONMENT SERVICES TECHNICAL ADVISORY TEAM BYLAWS Updated July 2025

The Water Environment Services ("WES") Technical Advisory Team ("TAT") is a group of technical experts from WES and its member communities. WES member communities consist of the cities of Gladstone, Happy Valley, Johnson City, Milwaukie, Oregon City, and West Linn (each a "City" and collectively the "Cities"). The TAT is comprised of WES engineers, City public works directors, and City engineers and technical staff who meet quarterly to share knowledge and collaborate on sanitary sewer infrastructure issues.

## 1. PURPOSE

The purpose of the WES TAT is to:

- A. Provide a forum for technical staff to collaborate and share knowledge on sanitary sewer related issues;
- B. Provide a forum for coordinating, learning, understanding and gathering input on wastewater plans, and projects; and
- C. Review City proposals for funding under the Regional Inflow and Infiltration Reduction IGA ("Regional I/I IGA").

## 2. MISSION

The WES TAT is intended to strengthen WES' relationships with City technical staff for the purpose of maintaining a strong and cohesive wastewater collection system.

#### 3. DUTIES

- A. TAT members shall review and discuss topics related to the wastewater collection system; and
- B. TAT IGA voting members (defined below) shall review and determine if City proposals for I/I reduction projects qualify for funding under the Regional I/I IGA, and provide a recommendation for WES Director approval.

### 4. MEMBERSHIP

- A. TAT shall be composed of 7 voting members and unlimited non-voting members.
- B. Membership to include:
  - Voting members:
    - o 1 City technical staff member appointed from each City.
    - o 1 WES Capital Program member appointed by WES.
  - IGA Voting members:
    - o Members whose City is a party to the Regional I/I IGA, who may vote on distribution of WES funding under the IGA.
  - Non-voting members:
    - o Any City technical staff or designated WES technical staff with interest in

wastewater collection and treatment systems, appointed by the City or WES, respectively.

C. If a voting member is unable to perform the duties of a TAT member, the appointing authority may appoint a replacement by giving notice to the TAT Chair and WES Director in writing.

#### 5. ORGANIZATION AND PROCEDURE

- A. WES' voting member or their designee will be the TAT Chair, whose duties will be to prepare an agenda and lead the meetings. All members are invited to propose agenda items for the meetings.
- B. Regular TAT meetings are to be held 3 times a year. Additional meetings may be scheduled as appropriate.
- C. Meetings shall be noticed and conducted in accordance with Oregon Public Meeting Laws.
- D. Unless otherwise covered by these bylaws, all TAT meetings shall be conducted in accordance with Robert's Rules of Order.
- E. For general business, a majority of voting members present at a meeting constitutes a quorum to conduct business. A majority of a quorum is necessary to take formal action.
- F. For the purposes of reviewing City proposals for I/I reduction project funding, a majority of IGA voting members must be present to conduct business. A majority of the IGA voting members present is necessary to take formal action. Only IGA voting members are eligible to participate in a vote regarding I/I reduction project funding.
- G. All meetings are open to the public. WES staff and the TAT determine the means of participation of public observers.
- H. Unless otherwise agreed by the TAT, all TAT meetings will be held in-person at Clackamas County Facilities, virtually, or a combination of the two. The specific location of upcoming meetings will be published with the agenda.
- I. WES or its designee shall maintain records for the TAT.
- J. The TAT shall make its agendas, minutes, reports, findings and recommendations to WES and the Cities through designated team members and WES staff.

#### 6. RECORDS

TAT records are subject to Oregon Public Records Law (ORS Chapter 192). All TAT records are subject to disclosure, except as exempted by the Oregon Public Records Law.

#### 7. AMENDMENTS

These bylaws may be amended. Proposed amendments shall be reviewed by the TAT and submitted to County Counsel for approval. Upon approval of County Counsel, the proposed amendments shall be approved by the members of the TAT.

# INTERGOVERNMENTAL AGREEMENT BETWEEN WATER ENVIRONMENT SERVICES AND PARTNER CITIES FOR REGIONAL INFLOW AND INFILTRATION REDUCTION

THIS REGIONAL INFLOW AND INFILTRATION REDUCTION AGREEMENT (this "Agreement") is entered into between Water Environment Services ("District"), an intergovernmental entity formed pursuant to ORS Chapter 190, and those Cities (defined below) that execute this Agreement (collectively, the "Partners" or individually "Partner"). The District and the Partners are collectively referred to as the "Parties" and each a "Party."

#### **RECITALS**

Oregon Revised Statutes Chapter 190.010 confers authority upon local governments to enter into agreements for the performance of any and all functions and activities that a party to the agreement, its officers or agencies have authority to perform.

The District provides sanitary sewer treatment to over 190,000 people in Clackamas County. This service area includes the City of Gladstone, the City of Happy Valley, the City of Johnson City, the City of Milwaukie, the City of Oregon City, and the City of West Linn, all Oregon municipal corporations (collectively the "Cities" and each a "City"). There are thousands of miles of underground pipes that convey sewage from homes and businesses in Partner jurisdictions to the District's regional wastewater treatment facilities. Some of those pipes allow clean groundwater to enter the system during the winter, through a process called "infiltration." In other cases, there are accidental or illicit connections such as downspouts or street drains that allow rain water to enter the sanitary sewer system, through a process called "inflow." Together, this additional water is called infiltration and inflow, or by its' industry shorthand "I/I."

Analysis shows that the amount of VI entering into District's system is higher than industry norms. This surge of water during wet weather events is approaching the maximum peak flow capacities of the District's Tri-City and Kellogg Creek water resource reclamation facilities and that of portions of the regional collection system. Excessive VI can result in higher-than-needed costs to the District's and Partner's ratepayers, given that under the Clean Water Act, a treatment provider must convey and treat every drop of water that arrives at a treatment facility as wastewater. This additional treatment capacity and effort for cleaning what is essentially rainwater or groundwater is inefficient and expensive. It can also require upsizing of buried infrastructure at significant cost.

To most effectively reduce excessive I/I, a regional I/I program is needed to manage peak flows in the wastewater collection and treatment systems in the most cost-effective manner. The program is the implementation of the recommended capital improvement program outlined in the Sanitary Sewer Master Plan for Water Environment Services ("SSMP") (Jacobs, 2019). The SSMP identified reduction targets throughout the regional system, not just that portion of the collection system directly managed by the District. All Partner systems were included in the review, except for the City of Johnson City's collection system; however, leadership for the city has been engaged on this topic.

The SSMP identified 19 sub-basins as priority investment areas ("Target Areas"), further described in Exhibit A ("Technical Memos"), due to the high rate of I/I present, the cost of conveying the peak flow downstream, and ultimately the cost of treating it. These

Target Areas are located throughout the regional wastewater network, in both District-owned and Partner-owned collection systems.

The SSMP found the most cost-effective alternative for all parties was a sixty-five percent (65%) I/I reduction in the Target Areas by 2040. Removal of 65% in Target Areas over the time period study of 2020-2040 is considered ambitious within the industry and will take a significant amount of investment to reach. However, this yields to lowest cost for ratepayers, resulting in a net savings for the regional system of approximately \$120 million in avoided capital and operational expenditures during the next 20 years, with the cost savings growing larger in the outer years. In order to achieve the lowest cost solution for District ratepayers, a collective effort from all Partners is required to implement this regional I/I reduction.

In 2019, this recommendation was presented to the Technical Advisory Team ("TAT"), made up of District engineers, Partner public works directors, and Partner engineers, which broadly agreed that a focus on 65% level of l removal in Target Areas, balanced with other necessary improvements in the collection and plant treatment systems, is the most cost-effective regional solution to managing peak flows. The Water Environment Services Advisory Committee ("District Advisory Committee") agreed that these targets should be the baseline for the regional discussion in 2019.

In an effort to implement the program recommended in the SSMP and by the advisory committee, the District and the Partners desire to establish a pilot program to determine the long-term feasibility of the District providing funding to Partners in support of projects that will help achieve the collective goal of reducing I/I by 65% in the Target Areas ("Regional I/I Reimbursement Program" or the "Program"). Beyond just this Program, it is the District's desire that this be the first step towards establishing a more collaborative relationship with the Partners moving forward to address I/I and other regional issues using common studies, common approaches and common solutions.

In consideration of the mutual promises set forth below and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

#### TERMS

- 1. **Term.** The Agreement shall be effective between the District and any individual Partner upon execution by the District and Partner ("**Effective Date**"). After District execution, a City may sign on to the Agreement at a later date by executing the signature page below. A lack of execution by one City shall not impact the validity of the Agreement as to any other Partner. The Agreement shall expire on June 30, 2026. It is the intent of the Parties to evaluate the effectiveness of the Program and, if significant progress is being made towards the goal of 65% I/I reduction in Target Areas, continue this approach. The term of this Agreement may be extended by the Parties in five (5) year increments upon a writing signed by all Parties.
- 2. **Cost Sharing.** The District agrees to reimburse thirty-three percent (33%) of the actual costs incurred by a Partner in the completion of work arising out of a Qualified Proposal that has received an Approval Letter (both defined below) ("**Reimbursement Contribution**") from revenues received through the collective wholesale sewer rate. The amount the District is contributing reflects the mutual savings to ratepayers with respect to wholesale sewer expenditures through regional collective action. Note that

these contributions are intended to supplement, not replace, collection system service charges already being charged by District or Partners.

## 3. Program Proposal Process.

- A. Qualified Proposals. Partners will identify qualified proposal projects to submit for review. A "Qualified Proposal" means a project proposal that meets the base threshold of being designed for I/I reduction purposes and occurring within the Target Areas. A Qualified Proposal should include a project description, project area/boundary, flow-metering data if available (I/I rates), rehabilitation method (if applicable), project statistics (i.e. number of manholes, linear feet of pipe or number of laterals to be rehabilitated), construction schedule, and anticipated I/I flow reduction. Potential eligible projects may include, but are not limited to, flow-metering studies, consulting services to analyze flow-metering results, I/I source identification, rehabilitation design or construction, post-construction flow monitoring, etc.
- B. <u>Approval of Qualified Proposals</u>. Each Partner will bring forward their proposed projects for approval by the TAT. The TAT will review the proposal and determine if it satisfies the elements of a Qualified Proposal identified in Section A above. If the TAT members approve, by majority vote of those present, a proposal as being an eligible Qualified Proposal, the Partner will be provided with a letter of approval in a form substantially similar to <u>Exhibit B</u> ("Approval Letter").
- C. Annual Notification of Proposals. Each Partner agrees to submit an annual list summarizing the potential Qualified Proposals planned for the following year, including their estimated cost, to the District no later than February 1<sup>st</sup> of each year, in order to provide the District with sufficient time to budget appropriately for the upcoming fiscal year. Failure to provide the notice will not automatically prevent funding of a Qualified Proposal, but such funding may be delayed by a fiscal year. Notwithstanding the above, upon execution of the Agreement by a Partner, the Partner may immediately submit Qualified Proposals for the current fiscal year.
- D. <u>Annual Reports</u>. Each Partner receiving funding pursuant to this Agreement will provide an annual report out to the District Advisory Committee, indicating the projects completed with the funding provided and their anticipated or actual reduction of I/I in the impacted Target Area. The Partners may elect to provide the report at the end of each fiscal year or calendar year.
- E. <u>TAT Membership</u>. The Parties acknowledge that thus far the TAT has been an informal advisory group of technical experts meeting to share knowledge and collaborate on infrastructure strategy, and that a more formalized procedure will be needed to allow the TAT to effectuate the purposes of this Agreement. Therefore, bylaws will be drafted creating, amongst other provisions, a voting procedure with each of the District and Partners having a single vote for the purposes of approving a Qualified Proposal.
- 4. **Reimbursement.** In order to receive the Reimbursement Contribution, the Partners agree to submit a single invoice after the completion of the work performed related to their Qualified Proposal, with a copy of their Approval Letter from the TAT included. Invoices shall describe the work performed with particularity, by whom it was performed, and shall itemize and explain the expenses for which reimbursement is

claimed, noting the elements of the project correlated with *VI* reduction. Reimbursement Contribution payments shall be made by the District to the Partner within forty-five (45) days of receipt of an invoice that complies with the requirements of this section. The District is not obligated to pay any amount in excess of the Reimbursement Contribution amount identified above.

## 5. Representations and Warranties.

A. <u>Party Representations and Warranties</u>. Each Party represents and warrants to the other Parties that it has the power and authority to enter into and perform this Agreement, and this Agreement, when executed and delivered, shall be a valid and binding obligation of the Party enforceable in accordance with its terms.

## 6. Withdrawal; Termination.

- A. Any Partner may withdraw from this Agreement at any point and for any reason upon thirty (30) days' written notice to the District. If one Party withdraws from this Agreement, such withdrawal shall not affect the Agreement with the remaining Partners.
- B. The District may terminate the Agreement with any individual Partner at any point and for any reason upon thirty (30) days' written notice. Any termination of the Agreement with an individual Partner shall not affect the Agreement as to the remaining Partners.
- C. Either the District or the Partners may terminate this Agreement in the event of a material breach of the Agreement by the other. Prior to such termination however, the Party seeking the termination shall give the other Party written notice of the breach and of the Party's intent to terminate. If the breaching Party has not entirely cured the breach within fifteen (15) days of deemed or actual receipt of the notice, then the Party giving notice may terminate the Agreement at any time thereafter by giving written notice of termination stating the effective date of the termination. If the default is of such a nature that it cannot be completely remedied within such fifteen (15) day period, this provision shall be complied with if the breaching Party begins correction of the default within the fifteen (15) day period and thereafter proceeds with reasonable diligence and in good faith to effect the remedy as soon as practicable. The Party giving notice shall not be required to give more than one (1) notice for a similar default in any twelve (12) month period.
- D. The District or the Partners shall not be deemed to have waived any breach of this Agreement by any other Party except by an express waiver in writing. An express written waiver as to one breach shall not be deemed a waiver of any other breach not expressly identified, even though the other breach is of the same nature as that waived.
- E. The District may terminate this entire Agreement with all Parties upon fifteen (15) days' written notice in the event the District fails to receive expenditure authority sufficient to allow the District, in the exercise of its reasonable administrative discretion, to continue to perform under this Agreement, or if federal or state laws, regulations or guidelines are modified or interpreted in such a way that either the work under this Agreement is prohibited or the District is prohibited from paying for such work from the planned funding source. The District agrees to provide a Reimbursement Contribution for all Qualified Proposals that receive an Approval

- Letter prior to the date of termination identified in the notice provided pursuant to this subsection.
- F. Any termination of this Agreement shall not prejudice any rights or obligations accrued to the Parties prior to termination.

#### 7. Indemnification.

A. Subject to the limits of the Oregon Constitution and the Oregon Tort Claims Act or successor statute, the District agrees to indemnify, save harmless and defend the Partners, and their officers, elected officials, agents and employees from and against all costs, losses, damages, claims or actions and all expenses incidental to the investigation and defense thereof arising out of or based upon damages or injuries to persons or property caused by the negligent or willful acts or omissions of the District or its officers, elected officials, owners, employees, agents, or its subcontractors or anyone over which the District has a right to control.

Subject to the limits of the Oregon Constitution and the Oregon Tort Claims Act or successor statute, each Partner agrees to indemnify, save harmless and defend the District, Clackamas County and any other Partner, as well as each of their officers, elected officials, agents and employees from and against all costs, losses, damages, claims or actions and all expenses incidental to the investigation and defense thereof arising out of or based upon damages or injuries to persons or property caused by the negligent or willful acts or omissions of the Partner or its officers, elected officials, owners, employees, agents, or its subcontractors or anyone over which the Partner has a right to control.

- 8. **Dispute Resolution**. In the event of a dispute arising out of this Agreement, the Parties involved in the dispute agree to meet with one another in a good faith attempt to resolve the dispute prior to taking any other action against another Party. In these discussions, city managers will represent the affected Partners and the District will be represented by its Director. If a dispute cannot be resolved through these discussions, then the Parties may seek relief from any available method.
- 9. **Insurance.** The Parties agree to maintain levels of insurance, or self-insurance, sufficient to satisfy their obligations under this Agreement and all requirements under applicable law.
- 10. **Notices**; **Contacts.** Legal notice provided under this Agreement shall be delivered personally, by email or by certified mail to the business address for the party thereof as published. Any communication or notice so addressed and mailed shall be deemed to be given upon receipt. Any communication or notice sent by electronic mail to an address indicated herein is deemed to be received 2 hours after the time sent (as recorded on the device from which the sender sent the email), unless the sender receives an automated message or other indication that the email has not been delivered. Any communication or notice by personal delivery shall be deemed to be given when actually delivered. Each Party shall provide a separate written designation for notices relating to this Agreement, and any Party may change such Party's contact information, or the invoice or payment addresses by giving prior written notice thereof to the other Party at its then current notice address.

#### 11 General Provisions.

- A. Oregon Law and Forum. This Agreement, and all rights, obligations, and disputes arising out of it will be governed by and construed in accordance with the laws of the State of Oregon without giving effect to the conflict of law provisions thereof. Any claim between District and Partners that arises from or relates to this Agreement shall be brought and conducted solely and exclusively within the Circuit Court of Clackamas County for the State of Oregon; provided, however, if a claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by any Party of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. Each Party, by execution of this Agreement, hereby consents to the in personam jurisdiction of the courts referenced in this section.
- B. Compliance with Applicable Law. All Parties shall comply with all applicable local, state and federal ordinances, statutes, laws and regulations. All provisions of law required to be a part of this Agreement, whether listed or otherwise, are hereby integrated and adopted herein. Failure to comply with such obligations is a material breach of this Agreement.
- C. Non-Exclusive Rights and Remedies. Except as otherwise expressly provided herein, the rights and remedies expressly afforded under the provisions of this Agreement shall not be deemed exclusive, and shall be in addition to and cumulative with any and all rights and remedies otherwise available at law or in equity. The exercise by any Party of any one or more of such remedies shall not preclude the exercise by it, at the same or different times, of any other remedies for the same default or breach, or for any other default or breach, by any other Party.
- D. Access to Records. Each Party shall retain, maintain, and keep accessible all records relevant to this Agreement ("Records") for a minimum of six (6) years, following Agreement termination or any longer period as may be required by applicable law, or until the conclusion of an audit, controversy or litigation arising out of or related to this Agreement, whichever is later. Each Party shall maintain all financial records in accordance with generally accepted accounting principles. All other Records shall be maintained to the extent necessary to clearly reflect actions taken. During this record retention period, the Party's shall permit the District's or another Party's authorized representatives' access to the Records at reasonable times and places for purposes of examining and copying.
- F. Work Product. Reserved.
- F. Hazard Communication. Reserved.

- G. **Debt Limitation.** This Agreement is expressly subject to the limitations of the Oregon Constitution and Oregon Tort Claims Act, and is contingent upon appropriation of funds. Any provisions herein that conflict with the above referenced laws are deemed inoperative to that extent.
- H. **Severability.** If any provision of this Agreement is found to be unconstitutional, illegal or unenforceable, this Agreement nevertheless shall remain in full force and effect and the offending provision shall be stricken. The Court or other authorized body finding such provision unconstitutional, illegal or unenforceable shall construe this Agreement without such provision to give effect to the maximum extent possible the intentions of the Parties.
- I. Integration, Amendment and Waiver. Except as otherwise set forth herein, this Agreement constitutes the entire agreement between the Parties on the matter of the Project. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement. No waiver, consent, modification or change of terms of this Agreement shall bind any Party unless in writing and signed by all Parties and all necessary approvals have been obtained. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of any Party to enforce any provision of this Agreement shall not constitute a waiver by such Party of that or any other provision.
- J. **Interpretation**. The titles of the sections of this Agreement are inserted for convenience of reference only and shall be disregarded in construing or interpreting any of its provisions.
- K. Independent Contractor. Each of the Parties hereto shall be deemed an independent contractor for purposes of this Agreement. No representative, agent, employee or contractor of one Party shall be deemed to be a representative, agent, employee or contractor of the other Party for any purpose, except to the extent specifically provided herein. Nothing herein is intended, nor shall it be construed, to create between the Parties any relationship of principal and agent, partnership, joint venture or any similar relationship, and each Party hereby specifically disclaims any such relationship.
- L. No Third-Party Beneficiary. The Partners and the District are the only parties to this Agreement and are the only parties entitled to enforce its terms. Nothing in this Agreement gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Agreement. No contractors or agents of the Partners performing work on Qualifying Projects are considered intended beneficiaries for the purposes of this Agreement.
- M. **Assignment**. No Partner shall assign or transfer any of its interest in this Agreement by bankruptcy, operation of law or otherwise, without obtaining prior

- written approval from the District, which shall be granted or denied in the District's sole discretion.
- N. Counterparts. This Agreement may be executed in several counterparts (electronic or otherwise), each of which shall be an original, all of which shall constitute the same instrument.
- O. **Survival.** All provisions in Sections 5, 7, 8 and 10 (A), (C), (D), (G), (H), (I), (L), (Q), and (T) shall survive the termination of this Agreement, together with all other rights and obligations herein which by their context are intended to survive.
- P. **Necessary Acts.** Each Party shall execute and deliver to the others all such further instruments and documents as may be reasonably necessary to carry out this Agreement.
- Q. **Time is of the Essence**. With the ambitious goal of reducing 1/1 by 65% in Target Areas, the Parties are encouraged to act expeditiously in submitting and completing Qualified Proposal work.
- R. **Successors in Interest.** The provisions of this Agreement shall be binding upon and shall inure to the benefit of the parties hereto, and their respective authorized successors and assigns.
- S. Force Majeure. Neither the Partners nor District shall be held responsible for delay or default caused by events outside of the Partners' or District's reasonable control including, but not limited to, fire, terrorism, epidemic, riot, acts of God, or war.
- T. **No Attorney Fees.** In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Agreement, each party shall be responsible for its own attorneys' fees and expenses.

Signature Page Follows

Water Environment Services	City of Milwaukie
Jatu Smil	
Chair	Authorized Signatory
3/17/22	
Date	Title
City of Gladstone	Date
Authorized Signatory	City of Oregon City
Title	
	Authorized Signatory
Date	-
	Title
City of Happy Valley	
•	Date
Authorized Signatory	=
	City of West Linn
Title	•
Date	Authorized Signatory
City of Johnson City	Title
	Date
Authorized Signatory	-
Title	-
Date	=

Water Environment Services	City of Milwaukie
Chair	Authorized Signatory
Date	Title
City of Gladstone	Date
Authorized Signatory  MATOL  Title	City of Oregon City
Title 3/3/2022  Date	Authorized Signatory
City of Happy Valley	Title  Date
Authorized Signatory Title	City of West Linn
Date	Authorized Signatory
City of Johnson City	Title
	Date
Authorized Signatory	
Title	
Date	•

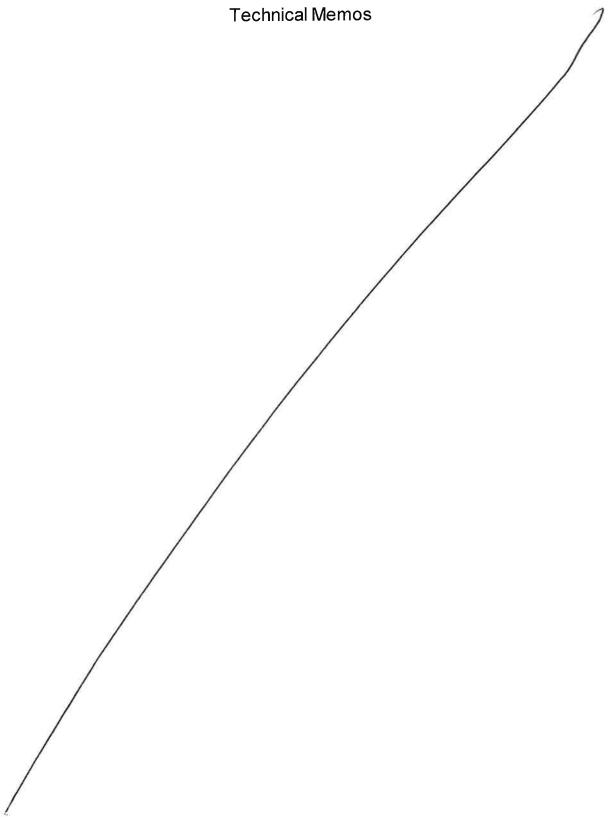
Water Environment Services	
	City of Milwaukie
Chair	
	Authorized Signatory
Date	
	Title
City of Gladstone	Date
Authorized Signatory	
Title	City of Oregon City
Date	Authorized Signatory
City of Happy Valley	Title
Just Tule	Date
Authorized Signatory	
City Manager	
Title 3/14/2020	City of West Linn
Date	
City of Johnson City	Authorized Signatory
	Title
Authorized Signatory	Date
Title	
Date	

Water Environment Services	City of Milwaukie
Chair	Authorized Signatory
Date	Title
City of Gladstone	Date
Authorized Signatory	City of Oregon City
Title	Authorized Signatory
Date	Title
City of Happy Valley	Date
Authorized Signatory	City of West Linn
Title	
Date	Authorized Signatory
City of Johnson City	Title
June Owhilead & Authorized Signatory	Date
Mayor	
Title	
1-18-2022 Date	

Water Environment Services	City of Milwaukie
Chair	Authorized Signatory
Date	Title
City of Gladstone	Date
Authorized Signatory	City of Oregon City
Title	Anothony & KU III
Date	Authorized Signatory  City Manager  Title
City of Happy Valley	3-16-22 Date
Authorized Signatory	
Title	City of West Linn
Date	Authorized Signatory
City of Johnson City	Title
	Date
Authorized Signatory	
Title	
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City of Oregon City
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City of West Linn
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CITY MANAGER Title
1100
OCTOBER 11, 2022 Date

# **Exhibit A**





# Technical Memorandum

Prepared for: Jessica Rinner, PE

Water Environment Services, Clackamas County, Oregon

Project:

Infiltration and Inflow Program Support

Author:

Yarrow Murphy, PE

Leeway Engineering Solutions

Reviewer:

Rob Lee, PE, PMP

Leeway Engineering Solutions

Date:

November 9, 2020

Subject:

Infiltration and Inflow (I/I) Program Development

City of West Linn Member Community Program and Summary

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## Introduction

Clackamas Water Environment Services (WES) is developing and implementing a regional infiltration and inflow (I/I) program to cost-effectively manage peak flows in the regional wastewater collection system and treatment facilities. This program supports the implementation of the capital improvement program outlined in the *Sanitary Sewer Master Plan* ([SSMP] completed by Jacobs in 2019). As a member city located within WES's Regional Service Area, the City of West Linn (City) is implementing I/I abatement as described in this technical memorandum (TM).



This TM describes the City's program and details the specific requested contributions identified by the City for WES-provided assistance to the City.

## SSMP Recommendations

The SSMP found hydraulic capacity deficiencies through the WES service area resulting from high I/I during the 5-year frequency design storm. These capacity deficiencies will increase over time due to several factors, including system expansion and pipe aging and degradation.

The SSMP evaluated alternatives for providing capacity to convey and/or treat peak 2040 flows. The total investment for each alternative included the present worth value of capital costs to reduce I/I, increase capacity to transport remaining flows, and expand treatment capacity and operation and maintenance costs over a 60-year life. The plan recommended the most cost-effective alternative, which included 65-percent I/I reduction in 19 subbasins throughout WES's service area by 2040.

## West Linn I/I Reduction Efforts and Recommendations

## I/I Reduction Target Subbasins

Nine of the target 19 subbasins (Highway 43, WL\_2, Willamette 9C-3, Mill Street, 2A-19, Holly, River Street, WL\_1\_2B-1-0 and Bolton 3A-8) are located in West Linn and are shown in Figure 1. West Linn's Sanitary Sewer Master Plan (Carollo, 2019) had similar recommendations regarding I/I within many of these basins. These subbasins and their characteristics are summarized in Table 1.

Table 1. Characteristics of I/I Reduction Target Subbasins in West Linn Jurisdiction

Subbasin	RDII Reduction Completion	Area (acres)	Length of sewer main (LF [mi])	Number of laterals	RDII Rate <sup>1</sup> (gallons per acre-day)
WL_2	2025	148	42,240 (8)	1,410	25,000
Highway 43	2025	354	107,000 (20.2)	1,570	21,500
Willamette 9C-3	2030 <sup>2</sup>	113	54,000 (10.2)	670	16,300
Mill Street	2030²	287	104,000 (19.7)	990	15,400
2A-19	2030	106	19,000 (3.6)	290	23,200
Holly	2030	94	18,000 (3.4)	540	20,200
River Street	2030	64	11,000 (2.1)	490	18,900
WL_2B-1-0	2030	89	17,000 (3.2)	260	17,100
Bolton 3A-8	2035	284	111,500 (21.1)	1,450	15,800

<sup>&</sup>lt;sup>1</sup> I/I rate projected for conditions at the reduction timeframe during the design storm with 5-year frequency.

<sup>&</sup>lt;sup>2</sup> Early start recommended due to impacts to downstream improvements.



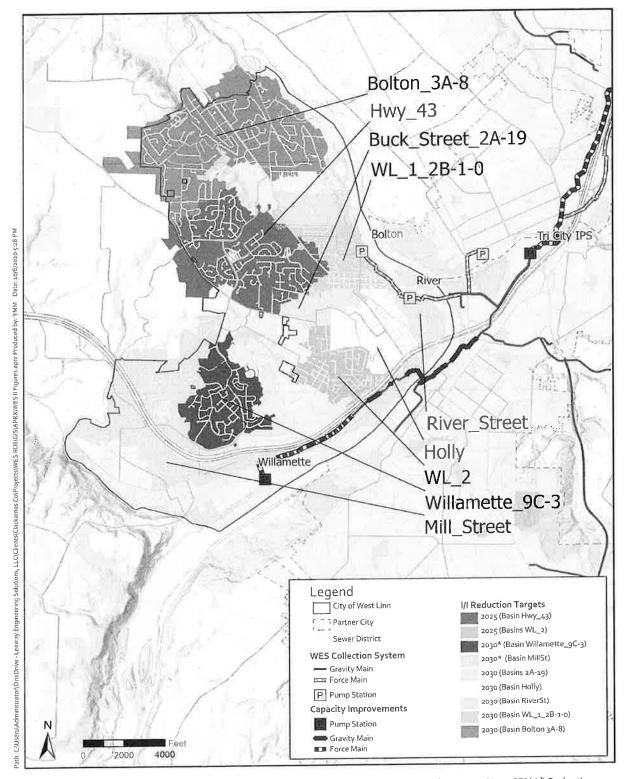


Figure 1. Target Subbasins for West Linn and Capacity Improvements Required for WES's System Given 65% I/I Reduction



## I/I Project Sequencing

Due to the impacts of the peak wet weather flows on the downstream infrastructure, the City's I/I reduction efforts will be implemented incrementally over the next 15 years, according to the schedule in Table 2. The first phase will include I/I reductions in the WL\_2 and Hwy\_43 subbasins.

As noted in Table 1 and shown in Table 2, early action I/I reduction is recommended for four of West Linn's subbasins. The need for additional City I/I reduction will depend on the actual amount of I/I reduction from rehabilitation within these first four subbasins.

Table 2. West Linn I/I Reduction Components and Schedule by Targeted Completion Year

Project Name	2025	2030	2035	2040
West Linn I/I Program (2 subbasins: WL_2, Hwy_43)				
West Linn I/I Program (2 basins: Willamette_9C-3, MillSt)				
West Linn I/I Program (4 basins: 2A-19, Holly, RiverSt, WL_2B-1-0)				
West Linn I/I Program (1 basins: Bolton_3A-8)				

West Linn I/I Reduction Program Meeting Summary

Recognizing that a successful WES-wide I/I reduction program will require collaboration between WES and its member cities, representatives of WES and the City met on April 23, 2020 for a discussion of what might comprise such a program

The City has requested the following support from WES for their I/I reduction effort:

- Coordination on flow monitoring
- Review of differences between West Linn and the WES's Master Plans modeling

#### References

Jacobs. 2019. Sanitary Sewer System Master plan for Water Environment Services.

Carollo. 2019. City of West Linn Sanitary Sewer System Master Plan.



# Technical Memorandum

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Clackamas Water Environment Services, Clackamas County, Oregon

Project:

Infiltration and Inflow Program Support

Author:

Yarrow Murphy, PE

Leeway Engineering Solutions

Reviewer:

Rob Lee, PE, PMP

Leeway Engineering Solutions

Date:

November 9, 2020

Subject:

District Infiltration and Inflow (I/I) Reduction Program Summary

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## Introduction

Clackamas Water Environment Services (WES) is developing and implementing a regional infiltration and inflow (I/I) program to cost-effectively manage peak flows in the regional wastewater collection system and treatment facilities. This program supports the implementation of the capital improvement program outlined in the *Sanitary Sewer Master Plan* ([SSMP] completed by Jacobs in 2019). WES is responsible for implementing I/I abatement as described in this technical memorandum (TM).



## SSMP Recommendations

The SSMP found hydraulic capacity deficiencies through the WES service area resulting from high I/I during the 5-year frequency design storm. These capacity deficiencies will increase over time due to several factors, including system expansion and pipe aging and degradation.

The SSMP evaluated alternatives for providing capacity to convey and/or treat peak 2040 flows. The total investment for each alternative included the present worth value of capital costs to reduce I/I, increase capacity to transport remaining flows, and expand treatment capacity and operation and maintenance costs over a 60-year life. The plan recommended the most cost-effective alternative, which included 65-percent I/I reduction in 19 subbasins throughout WES's service area by 2040.

## WES I/I Reduction Efforts and Recommendations

## I/I Reduction Target Subbasins

Two of the 19 subbasins (Mt. Talbert and Clackamas) recommended for I/I reduction are located in WES service area and are shown in Figure 1. These subbasins and their characteristics are summarized in Table 1.

Table 1. I/I Reduction Target Basin Characteristics

Characteristic	Mh Talbert	Clackamas	
I/I Reduction Timeframe	2025	2040	
Area (acres)	1,603	466	
Length of sewer main (linear feet, LF)	495,000	68,000	
Number of laterals	6,800	2,130	
I/I Rate <sup>1</sup> (gpad)	12,400	15,000	
Jurisdiction	WES	WES	

<sup>&</sup>lt;sup>1</sup> I/I rate projected for conditions at the reduction timeframe during design storm with 5-year frequency.



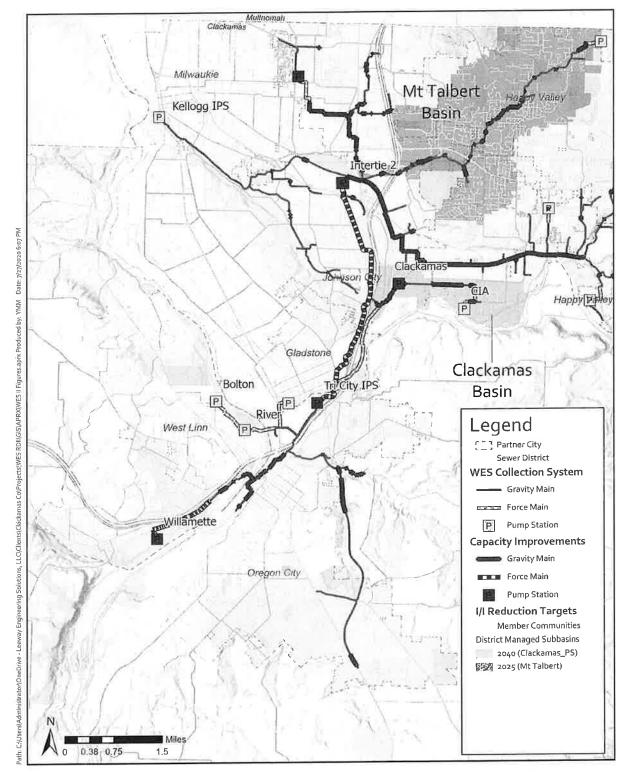


Figure 1. Target Subbasins for the District and Member Cities and Capacity Improvements Given 65% I/I reduction



## I/I Project Sequencing

Due to the impacts of the peak wet-weather flows on the downstream infrastructure, WES's I/I reduction efforts are planned to be implemented according to the schedule shown in Table 2. WES has already begun work in the Mount Talbert basin. Work already initiated includes smoke-testing, stream walks, and CCTV inspections.

WES is also expanding its permanent flow monitoring program which will be used for further refinement of I/I reduction measures. The final phase of the District's I/I reduction will apply to the Clackamas Basin.

Table 2. Program Components and Schedule by Targeted Completion Year

Project Name	Owner	2025	2030	2035	2040
WES I/I Program (1 subbasin: Mount Talbert)	District				
Permanent Flow Monitoring	District				
WES I/I Program (1 basin: Clackamas)	District				

## References

Jacobs. 2019. Sanitary Sewer System Master Plan for Water Environment Services.



# Technical Memorandum

Prepared for:

Jessica Rinner, PE

Clackamas Water Environment Services, Clackamas County, Oregon

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Infiltration and Inflow Program Support

Author:

Yarrow Murphy, PE

Leeway Engineering Solutions

Reviewer:

Rob Lee, PE, PMP

Leeway Engineering Solutions

Date:

November 9, 2020

Subject:

Infiltration and Inflow (I/I) Program Development

City of Oregon City Member Community Program and Summary

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## Introduction

Clackamas Water Environment Services (WES) is developing and implementing a regional infiltration and inflow (I/I) program to cost-effectively manage peak flows in the regional wastewater collection system and treatment facilities. This program supports the implementation of the capital improvement program outlined in the *Sanitary Sewer Master Plan* ([SSMP] completed by Jacobs in 2019). As a member city located within WES's Regional Service Area, the City of Oregon City (City) is implementing I/I abatement as described in this technical memorandum (TM).



This TM describes the City's program and details the specific requested contributions identified by the City for WES-provided assistance to the City.

## SSMP Recommendations

The SSMP found hydraulic capacity deficiencies through the WES service area resulting from high I/I during the 5-year frequency design storm. These capacity deficiencies will increase over time due to several factors, including system expansion and pipe aging and degradation.

The SSMP evaluated alternatives for providing capacity to convey and/or treat peak 2040 flows. The total investment for each alternative included the present worth value of capital costs to reduce I/I, increase capacity to transport remaining flows, and expand treatment capacity and operation and maintenance costs over a 60-year life. The plan recommended the most cost-effective alternative, which included 65-percent I/I reduction in 19 subbasins throughout WES's service area by 2040.

## Oregon City I/I Reduction Efforts and Recommendations

## I/I Reduction Target Subbasins

Four of the target 19 subbasins (M05, M08, M10 and M12) are located in Oregon City and are shown in Figure 1. Oregon City's Sanitary Sewer Master Plan (Brown and Caldwell, 2014) also recommended these basins for rehabilitation. These subbasins and their characteristics are summarized in Table 1.

Table 1. I/I Reduction Target Subbasin Characteristics

Jurisdiction	Oregon City	Oregon City	Oregon City	Oregon City
I/I Rate¹ (gpad)	15,000	48,000	41,100	20,200
Number of laterals	2,180	300	210	1,920
Length of sewer main (linear feet, LF)	118,000	52,000	22,000	113,000
Area (acres)	509	107	70	522
I/I Reduction Timeframe	2030	2025	2025	2030
Characteristic	IVI05	80IVI	M10	M12

 $<sup>^{1}</sup>$  I/I rate projected for conditions at the reduction time frame during design storm with 5-year frequency.



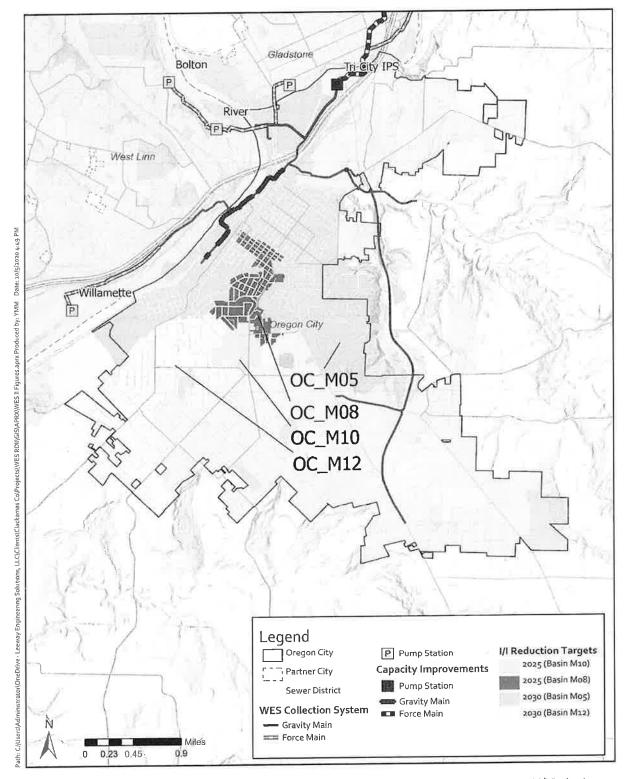


Figure 1. Target Subbasins for Oregon City and Capacity Improvements Required for WES's System Given 65% I/I Reduction



## I/I Project Sequencing

Due to the impacts of the peak wet weather flows on the downstream infrastructure, the City's I/I reduction efforts are planned to be implemented incrementally over the next 10 years, according to the schedule in Table 2. The City has already begun to implement the first phase, which will include I/I reductions in the M08 and M10 subbasins. Work already initiated includes smoke-testing, dye-testing, disconnection of cross-connected inflow sources, and development of a private source I/I policy.

The need for additional I/I reduction within the Oregon City I/I reduction target subbasins will depend on the success of early rehabilitation measures offset by flow increases over time due to system degradation and expansion.

Table 2. Oregon City I/I Reduction Components and Schedule by Targeted Completion Year

Project Name	Owner	2025	2030	2035	2040
Oregon City I/I Program (2 subbasins: M08 and M10)	Oregon City				
Oregon City I/I Program (2 basins: M05 and M12)	Oregon City				

## Oregon City I/I Reduction Program Meeting Summary

Recognizing that a successful WES-wide I/I reduction program will require collaboration between WES and its member cities, representatives of WES and the City met on April 21, 2020 for a discussion of what might comprise such a program.

The City has requested the following support from WES for their I/I reduction effort.

- A template for pipe bursting and CIPP lining standard specifications.
- Access to permanent flow metering data.
- Provide/contract flow metering consultant services to do pre- and post-I/I reduction project metering within member community sewer systems.
- Provide/contract flow meter data analysis to identify I/I severity and I/I reduction success.
- Funding to support private lateral rehabilitation. The program is structured to have cost sharing between the private owner and Oregon City. The City requests WES contribute to the individual lateral rehabilitation, in addition cost sharing with the City for its share.
- Provide cost sharing for the private lateral owners with a reduction in their utility bill during the payback period, if the owner is participating in Oregon City's private lateral rehabilitation program. The payback period is to be determined.

## References

Jacobs. 2019. Sanitary Sewer System Master plan for Water Environment Services.

Brown and Caldwell. 2014. City of Oregon City Sanitary Sewer Master Plan.



# Technical Memorandum

Prepared for:

Jessica Rinner, PE

Clackamas Water Environment Services, Clackamas County, Oregon

Project:

Infiltration and Inflow Program Support

Author:

Yarrow Murphy, PE

Leeway Engineering Solutions

Reviewer:

Rob Lee, PE, PMP

Leeway Engineering Solutions

Date:

November 9, 2020

Subject:

Infiltration and Inflow (I/I) Program Development

City of Milwaukie Member Community Program and Summary

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## Introduction

Clackamas Water Environment Services (WES) is developing and implementing a regional infiltration and inflow (I/I) program to cost-effectively manage peak flows in the regional wastewater collection system and treatment facilities. This program supports the implementation of the capital improvement program outlined in the *Sanitary Sewer Master Plan* ([SSMP] completed by Jacobs in 2019). As a member city located within WES's Regional Service Area, the City of Milwaukie (City) is implementing I/I abatement as described in this technical memorandum (TM).



This TM describes the City's program and details the specific requested contributions (if any) identified by the City for WES-provided assistance to the City.

## SSMP Recommendations

The SSMP found hydraulic capacity deficiencies through the WES service area resulting from high I/I during the 5-year frequency design storm. These capacity deficiencies will increase over time due to several factors, including system expansion and pipe aging and degradation.

The SSMP evaluated alternatives for providing capacity to convey and/or treat peak 2040 flows. The total investment for each alternative included the present worth value of capital costs to reduce I/I, increase capacity to transport remaining flows, and expand treatment capacity and operation and maintenance costs over a 60-year life. The plan recommended the most cost-effective alternative, which included 65-percent I/I reduction in 19 subbasins throughout WES's service area by 2040.

## Milwaukie I/I Reduction Efforts and Recommendations

I/I Reduction Target Subbasins

One of the target 19 subbasins (Milwaukie Basin) is located in Milwaukie and is shown in Figure 1. The Milwaukie subbasin's characteristics are summarized in Table 1.

Table 1. I/I Reduction Target Subbasin Characteristics

Characteristic	Milwaukie Subbasin
I/I Reduction Timeframe	2040¹
Area (acres)	1,087
Length of sewer main (linear feet, LF)	221,000
Number of laterals	5,850
I/I Rate² (gpad)	17,100
Jurisdiction	Milwaukie

 $<sup>^{1}</sup>$  I/I reduction efforts should begin no later than approximately 2025.

<sup>&</sup>lt;sup>2</sup> The I/I rate projected for conditions at the reduction timeframe during design storm with 5-year frequency.



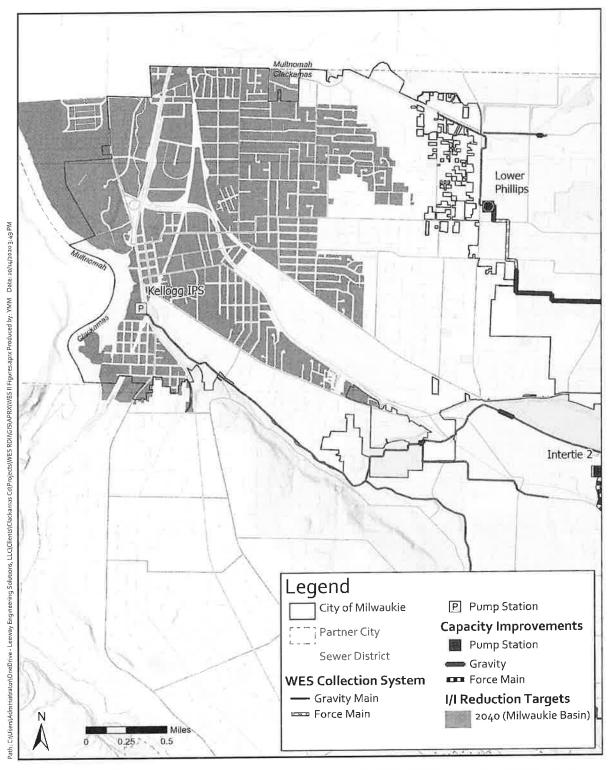


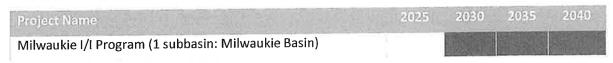
Figure 1. Target Subbasins for Milwaukie and Capacity Improvements Required for WES's System Given 65% I/I Reduction



## I/I Project Sequencing

Because of the large size of the Milwuakie Basin and the effects of the peak wet weather flow on the downstream infrastructure, the City's I/I reduction efforts should begin no later than 2025 and will continue until 2040, as indicated in Table 2. The need for additional I/I reduction within the Milwaukie Subbasin will depend on the success of early rehabilitation measures offset by flow increases over time due to system degradation and expansion.

Table 2. Milwaukie I/I Reduction Program Components and Schedule by Targeted Completion Year



## City of Milwaukie I/I Reduction Program Meeting Summary

Recognizing that a successful WES-wide I/I reduction program will require collaboration between WES and its member cities, representatives of WES and the City met on April 22, 2020 for a discussion of what might comprise such a program.

City staff did not make any specific requests for support from WES.

## References

Jacobs. 2019. Sanitary Sewer System Master plan for Water Environment Services.



## Technical Memorandum

Prepared for:

Jessica Rinner, PE

Clackamas Water Environment Services, Clackamas County, Oregon

Project:

Infiltration and Inflow Program Support

Author:

Yarrow Murphy, PE

Leeway Engineering Solutions

Reviewer:

Rob Lee, PE, PMP

Leeway Engineering Solutions

Date:

November 9, 2020

Subject:

Infiltration and Inflow (I/I) Program Development

City of Gladstone Member Community Program and Summary

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## Introduction

Clackamas Water Environment Services (WES) is developing and implementing a regional infiltration and inflow (I/I) program to manage peak flows cost-effectively in the regional wastewater collection system and treatment facilities. This program supports the implementation of the capital improvement program outlined in the *Sanitary Sewer Master Plan* ([SSMP] completed by Jacobs in 2019). As a member city located within WES's Regional Service Area, the City of Gladstone (City) is implementing I/I abatement as described in this technical memorandum (TM).



This TM describes the City's program and details the specific requested contributions identified by the City for WES-provided assistance to the City.

## SSMP Recommendations

The SSMP found hydraulic capacity deficiencies through the WES service area resulting from high I/I during the 5-year frequency design storm. These capacity deficiencies will increase over time due to several factors, including system expansion and pipe aging and degradation.

The SSMP evaluated alternatives for providing capacity to covey and/or treat peak 2040 flows. The total investment for each alternative included the present worth value of capital costs to reduce I/I, increase capacity to transport remaining flows, and expand treatment capacity and operation and maintenance costs over a 60-year life. The plan recommended the most cost-effective alternative, which included 65-percent I/I reduction in 19 subbasins throughout WES's service area by 2040.

## Gladstone I/I Reduction Efforts and Recommendations

## I/I Reduction Target Subbasins

WES.I-I\_TM.Gladstone\_Final

Three of the target 19 subbasins (1\_1010, 2\_20400, and US\_1\_10100 & DS\_2\_20400) are located in Gladstone and are shown in Figure 1. The recommendations in WES's SSMP were consistent with the *City of Gladstone Sanitary Sewer Master Plan*, completed in 2017 by Murray, Smith and Associates. These subbasins and their characteristics are summarized in Table 1.

Table 1. I/I Reduction Target Subbasin Characteristics

Characteristic	1_10100	2_20400	US_1_10100 & DS 2 20400
I/I Reduction Timeframe	2025	2025	2030
Area (acres)	191	201	0.2
Length of sewer main (linear feet, LF)	28,000	38,500	1,584
Number of laterals	709	915	10
I/I Rate¹ (gpad)	18,900	17,100	23,700
Jurisdiction	Gladstone	Gladstone	Gladstone

<sup>&</sup>lt;sup>1</sup> I/I rate projected for conditions at the reduction timeframe during design storm with 5-year frequency.



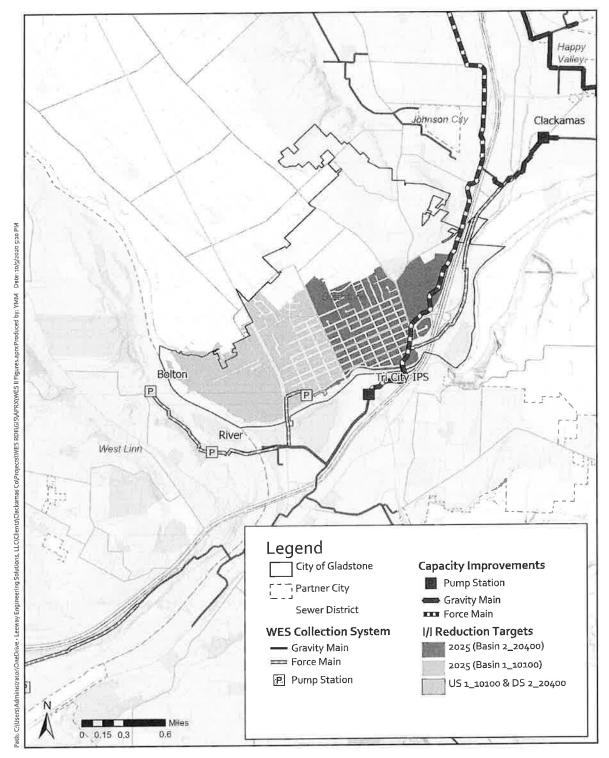


Figure 1. Target Subbasins for Gladstone and WES Capacity Improvements Required Given 65% I/I Reduction



## I/I Project Sequencing

Due to the impacts of the peak wet-weather flows on the downstream infrastructure, the City's I/I reduction efforts are planned to be implemented by 2025 for basins 1\_10100 and 2\_20400, as indicated in Table 2. The SSMP recommended that the second phase of I/I reduction will include subbasin US 1\_10100 & DS 2\_20400 with targeted completion date of 2030. However, due to size and efficiencies gained while implementing the I/I reduction efforts in the other two highest priority basins and regulatory requirements from the Oregon Department of Environment Quality, the City is moving forward with accelerating their I/I reductions in all three basins. Work already initiated in the target basins includes smoke testing, CCTV inspection, disconnection of cross connections and development of an I/I abatement plan.

Table 2. Gladstone I/I Reduction Components and Schedule by Targeted Completion Year

Project Name	2025	2030	2035	2040
I/I Program Phase 1 (2020 to 2025)				
2 subbasins: 1_10100, 2_20400				
1 subbasin: US 1 10100 & DS 2 20400 (moved up for efficiency)				

## Gladstone I/I Reduction Program Meeting Summary

Recognizing that a successful WES-wide I/I reduction program will require collaboration between WES and its member cities, representatives of WES and the City met on April 23, 2020 for a discussion of what might comprise such a program.

On May 14, the City has requested the following support from WES for their I/I reduction effort:

- Combine field efforts
- RFP templates
- Outreach templates
- Private source I&I code revision template or sample language
- Share Barton PS flow data
- Assist in analyzing master plan data compared to current data to determine improvements
- Post construction analysis

## References

Jacobs. 2019. Sanitary Sewer System Master plan for Water Environment Services.

Murray, Smith and Associates. 2017. City of Gladstone Sanitary Sewer Master Plan.

## **Exhibit B**

## Form Letter

[Insert Date]
[Insert Name] [Insert Address]
RE: Regional I/I Reimbursement Program – [Insert Qualified Proposal Title or Description]
Dear,
Thank you for the submittal and presentation of your Qualified Proposal to the Technical Advisory Team ("TAT").
This letter serves as notification that the TAT has approved your project for reimbursement as a part of the Regional I/I Reimbursement Program, in accordance with the terms of the IGA for Regional Inflow and Infiltration Coordination ("IGA"). The total amount of fund reimbursed will be determined in accordance with Section 2 of the IGA.
Please retain a copy of this letter in your records, as you will be required to provide it along with documentation of your expenses when you seek reimbursement from Water Environment Services once your project is complete.
On behalf of WES and all the cities participating in this I/I reduction effort, we appreciate your commitment to addressing this regional issue. Thank you!
Sincerely,
Chair, Technical Advisory Team

TAT comments pertaining to the Program Manual

Kenneth - Eligible Expenses: the definition of a "Qualified Proposal" is being significantly altered with this amendment. I specifically flagged the elimination of the phrase "Potentially eligible projects may include, but are not limited to, flow-metering studies... post-construction flow monitoring, etc." as concerning to us, since our Wallis I&I PM contract includes a lot of these activities. The new second paragraph in the manual that defines an "Eligible Project" as a direct capital expense that creates or rehabilitates a capital asset, which significantly narrows the types of costs that are covered, though this same section does also state that "Design, planning, and engineering costs directly attributable to an I/I reduction capital project" are covered, which is actually much broader than what the paragraph implies. Oregon City already uses GAAP methods to assign all of our program activities to individual capital projects and assets.

a. I believe we have a question and a request: the question is, are you intending to disallow all investigative (CCTV, smoke testing, etc.) and monitoring (metering, modeling, etc.) costs with this updated definition? I can read the same paragraph multiple times and get different interpretations out of it depending upon what statements I emphasize/prioritize, so we'd appreciate clarity on the intention of this modification. The request is that the types of qualified expenses remain functionally unchanged with this amendment: broad-based investigations are essential to properly scoping and prioritizing projects to deliver, even though not all investigations will directly lead to capital projects, and ongoing monitoring and modelling are required to provide those anticipated I&I flow reduction values that are still required as part of a "Qualified Proposal" as well as prioritizing project delivery. We have developed a method to assign these more amorphous program-level efforts to individual capital projects (and assets) that we believe complies with GAAP, so we request that the definition of an "Eligible Project" be streamlined to simply state that only those expenses that can be directly attributed to a capital project resulting in the rehabilitation or creation of a capital asset that directly contributes to I&I reduction (an "Eligible Project") may be reimbursed. Partners must ensure that all expenses claimed for reimbursement may be attributed to an Eligible Project using methods that align with GAAP and their own internal capital policies. We also request that costs related to monitoring the ongoing efficacy and impact of I&I reduction efforts be explicitly permitted, since the only way that partner agencies will be able to provide meaningful estimates of I&I removal for proposed projects is to refer back to the efficacy of their own and other Partner Agency efforts.

Dayna - 1.A. needs a period at the end of the first paragraph.

Dayna - Does this mean that smoke testing or CCTV done to determine if a project is needed, or flow monitoring after projects, would not be reimbursable? Or is saying if you procure these as materials and services not paid out of a Capital Expense that they are not reimbursable?

#### Kenneth -

Role of the TAT and Meaning of a "Project Approval": this also raised significant concerns for both of us, since the combination of the addition to Section 2 of the Agreement and the amendment evaluation and approval process make the TAT's approval of the proposal essentially meaningless. As currently written, the IGA states that "[WES] agrees to reimburse thirty-three percent (33%) of actual costs incurred... [completing] work arising out of a Qualified Proposal that has received an Approval Letter...", or more concisely, the TAT's approval of a proposal guarantees reimbursement. The addition of the maximum annual reimbursement allotment calls the status of and certainty of reimbursement for all existing but incomplete approved projects into question (if active contracts or adopted CIP's commit Partner Agency's to spending money in year(s) where WES doesn't have reimbursement funds available, will they still receive reimbursement for this work eventually or have the reimbursement request denied) and the proposal amendment process puts the final power to approve or deny amendments in the hands of the WES director, not the TAT. I don't need to beat a dead horse here, but these modifications will play extremely poorly with Oregon City leadership and will be very difficult to get their signoff on. Making a finer point, the net effect of the actual amendment and the Program Manual is to shift a lot of decision-making power away from the TAT, which is the representative body allowing each Partner Agency to directly voice their opinions and control how the IGA is implemented, to the WES director, who is not answerable to any of the Partner Agencies.

- a. I believe the goal of ensuring the annual WES reimbursements do not exceed a certain amount can still be met without diluting the role and power of the TAT. I have two primary recommendations here:
  - i. Note in section 4 that once the total amount that the District has made available for reimbursements in any fiscal year is exhausted, payment of any subsequent reimbursement requests submitted for reimbursement of qualified expenses will be delayed until the following fiscal year, or future year(s) as necessary to comply with the District's annual budget(s). Deferred reimbursement requests will be given priority over reimbursement requests submitted in the current fiscal year, with highest priority being given to the oldest reimbursement requests. This will allow WES to adhere to its own budget without invalidating the TAT's approval of a project proposal.
  - ii. If the total amount of proposals and/or amendments for any fiscal year exceeds the amount WES has budgeted for reimbursement, leave it to the TAT to determine which proposals will be approved for funding in the current fiscal year and which will be deferred to future years. Again, this seems in line with the role of the TAT as the

"technical experts" and "advisors" who make sure that WES reimbursement funds are being spent wisely and in the best interest of all signatories. This doesn't conflict with my first recommendation, as deferred proposals won't even be eligible to submit reimbursement requests until a specified future date and so won't enter the "deferred reimbursement request" queue. When considering a proposal amendment, the availability of funds in the current year and merits of the additional work relative to the other proposals already approved for the year will be among the factors the TAT considers when deciding whether or not to approve, deny, or defer reimbursement for the request.

Dayna - Can you confirm where the reimbursement contribution is formalized for a project? Is that applying the 33% to the \$ proposed during TAT Review? Or is this based on the \$ determined in 1.C. under Annual Notification of Proposals, where we send our anticipated costs?

Dayna - 3. B. says the TAT will review the proposal, if the only change is to the \$ and this says that the director has discretion, is TAT only reviewing the scope changes, or also the \$ only changes?

Dayna - 3. C. says that if approved by the district director, they will provide the partner with an updated Approval letter, showing the revised contribution amount. The current letter states that the funding contributions will be calculated based on the value of the executed contracts.

Dayna -

We get an approval based on a scoping \$.

We award contract to a consultant – this shouldn't be an issue unless we did a really bad job at scoping and Engineering costs more than we expected the entire project to cost.

Than if we open bids and the Construction \$ + Consultant \$ is larger than proposal/contribution amount approved, we would need to do an amendment? Does the amendment have to be approved prior to the expense occurring, like the original approval? We've switched to 3 meetings a year, will this create issues for Invoices/reimbursements that need to be for work done January – June, and July – December if the approval doesn't happen in time to keep the \$ in the correct invoicing period and/or fiscal year?

Jeff T. The watermark on the Sample Approval Letter completely obscures the letter.

TAT comments received pertaining to Amendment #1

Dayna - Opening paragraph states "shall become part of the contract documents entered into between the parties" – should this use the term Agreement? That is the how it is referred to in the opening paragraph of the Program Manual.

#### Kenneth -

- 1. Revisions to Program Manual: it's unclear from the amendment exactly what types of edits to the program manual WES can make without consulting the TAT. I'm aware that "substantive revision" has a distinct meaning as legal jargon, but it's not one I can easily define offhand, and I'm sure none of the partners could either without consulting their own counsel. At a minimum, we'd appreciate having some examples of substantive and non-substantive revisions written into the amendment, and honestly, I believe we'd rather this provision be removed entirely. If you want to reserve the right to make changes "that do not change the substance or meaning of any provisions of the Program Manual" (i.e., make grammatical or clarifying edits) without checking with the TAT, that's probably fine, but we believe WES really needs to check with the TAT (and through them the partner agencies) before making any. meaningful changes.
  - a. As an alternative, I think a reasonable revision to this clause would be that the Program Manual can be revised through a majority (or unanimous, to stand in for concurrence from all signatories) vote of the TAT without requiring any modification to the Agreement (i.e., IGA).

Dayna - Item 3 – states "Exhibit A to the Contract", should this say Agreement? Also, this looks like it is removing all the Leeway memos from the IGA, and replacing it with the Program Manual? The current IGA in the last paragraph on page 1 states "The SSMP identified 19 sub-basins as priority investment areas (Target Areas), further described in Exhibit A (Technical Memos). Removing this means that there is no listing or visual attached that quickly identifies the sub-basins eligible in the program, we would have to go to the SSMP on your webpage to look up the eligible basins. If you don't want the full memos attached, could an exhibit list out the eligible basins?

Jeff T. - Bullet 3 replaces Exhibit A to the Contract (Technical Memos), with Exhibit A to this Amendment #1 (WES Regional Inflow and Infiltration Reduction IGA Program Manual). Do you want to retain the Technical Memos?

Dayna - Section 4 – Reimbursement. The last sentence states "The District is not obligated to pay any amount in excess of the Reimbursement Contribution amount identified above." Can you expand on what that means? I don't see any \$ referenced above in the

amendment. It does look like the amendment notes, although the is the note about cost sharing above. The approval letter doesn't have a \$ for the project but does attach the City proposal that went to TAT which has a \$.

## Kenneth -

- 2. Reimbursement Amounts and Policy: we're not clear what budgetary amount actually controls how much reimbursement a project is eligible for and how we are supposed to actually administer real construction projects under the constraints that are apparently being put upon us. When we read this proposed amendment, we identified two separate ways we provide estimated costs to WES: as part of the initial proposal (submitted ahead of any design being completed) and annually with our budgetary updates. The TAT only formally reviews one of these (the proposal), which means that the only time we all get a chance to review and approve a cost is before any work is done. Is the intention here to force Partner Agencies to provide regular proposal updates when the expected budget changes (or at least any time the amount increases) or does this only apply if the project's annual expenditure will exceed the amount we report to WES for the upcoming Fiscal Year (which the TAT does not directly review, approve, or have any input on). There is also the practical issue of the timing of routine things like change requests and addenda versus the meeting schedule of the TAT. This group only meets quarterly – a longer project may be under construction for several quarters, but many shorter projects are completely constructed in the time between two meetings. Even for longer projects, adding a potential 3-month delay to being able to approve any change order is something that most contractors would consider unacceptable (since it remains the case, even after this amendment is approved, that all expenses must be approved prior to any costs being incurred). Our view is that none of these mechanisms favorable to partner agencies, so we'd again request either that this process be heavily modified or this proposed language be eliminated entirely.
  - a. We believe the best way to address this issue is to have the TAT explicitly ratify the annual proposed budget (and encourage or require all partner agencies to include some percentage of a contingency in their submitted budgetary numbers for the fiscal year) and roster of projects being delivered for the fiscal year. To be clear, WES would still determine the amount they make available for reimbursements through the normal budgetary process; my proposal is that the TAT reviews and ratifies how the available funds will be divvyed out annually. Ideally, a modest "slush fund" (probably formally called a "contingency" fund) to allow for unplanned projects or cost overruns

in planned projects that exceed the contingency amount should also be included in this annual budget the TAT approves, and unused funds should roll forward to future fiscal year(s). Alternately, the requirement that proposal amendments be approved prior to any work or funds occurring on the extra work should be stricken. In this case, the TAT probably no longer needs to explicitly ratify the annual reimbursement budget, but it should be made aware of the total amount of money approved in WES's budget and the total value of reimbursements Partner Agencies will be requesting that same year, and a "contingency" as I previously described should be added to WES's annual budget request.

b. Personally, I believe the focus of the proposal amendment process on budget amounts is improper and would prefer a process that is focused on making sure the TAT is informed when an approved project's scope or delivery schedule is significantly altered. This seems more in line with the TAT's role in this IGA of ensuring that projects are using effective methods to remove I&I and fully focused in the reimbursement basins.

# AMENDMENT #1 TO THE INTERGOVERNMENTAL AGREEMENT BETWEEN WATER ENVIRONMENT SERVICES AND PARTNER CITIES FOR REGIONAL INFLOW AND INFILTRATION REDUCTION

This Amendment #1 is entered into between **Water Environment Services** ("District") and the **City of Gladstone**, **City of Happy Valley**, **City of Johnson City**, **City of Milwaukie**, **City of Oregon City**, **and the City of West Linn** (collectively, the "Partners" or individually "Partner") and shall become part of the Agreement documents entered into between the parties on March 17, 2022 ("Agreement").

The Purpose of this Amendment #1 is to make the following changes to the Agreement:

1. **Section 2 – Cost Sharing**. The following sentence is hereby added after the last sentence:

"The amount of District funding available for each fiscal year shall be the amount specified in the budget as adopted by the District Board."

**Section 3 - Program Proposal Process.** Section 3 is hereby deleted in its entirety and replaced with the following:

"Section 3 – Program Proposal Process. The proposal process shall be governed by the WES Regional Inflow and Infiltration Reduction IGA Program Manual, attached hereto and incorporated herein as Exhibit A ("Program Manual"). The definitions of Qualified Proposal and Approval Letter are as specified in the Program Manual. The Program Manual may be updated and revised by WES at any time in its sole discretion without need for an amendment to this Agreement. Upon making a substantive revision to the Program Manual, WES will provide Partners with reasonable notice of the changes made."

- 3. **Exhibit B** to the Agreement is hereby replaced in its entirety with **Exhibit A to this Amendment #1** attached hereto and incorporated herein.
- **4. Section 4 Reimbursement** is hereby deleted in its entirety and replaced with the following:

"Reimbursement. In order to receive the Reimbursement Contribution, the Partners agree to submit invoices for work performed related to the Qualified Proposal in accordance with the dates and requirements of the Program Manual. The District is not obligated to pay any amount in excess of the Reimbursement Contribution amount identified above."

Except as expressly amended above, all other terms and conditions of the Agreement shall remain in full force and effect.

Signature Page Follows

By signature below, the parties agree to this Amendment #1, effective upon the date of the last signature below.

Water Environment Services	City of Milwaukie					
Chair	Authorized Signatory					
Date	Title					
City of Gladstone	Date					
Authorized Signatory	City of Oregon City					
Title	Authorized Signatory					
Date	Title					
City of Happy Valley	Date					
	City of West Linn					
Authorized Signatory						
Title	Authorized Signatory					
Date	Title					
City of Johnson City	Date					
Authorized Signatory	_					
Title	_					
Date	_					

## **EXHIBIT A**

## WES Regional Inflow and Infiltration Reduction IGA Program Manual

## WES Regional Inflow and Infiltration Reduction IGA Program Manual

This manual governs the implementation of certain aspects of administration of the inflow and infiltration ("I/I") reimbursement program established under the Intergovernmental Agreement Between Water Environment Services and Partner Cities for Regional Inflow and Infiltration Reduction ("Agreement") entered into between Water Environment Services ("District") and the City of Gladstone, City of Happy Valley, City of Johnson City, City of Milwaukie, City of Oregon City, and the City of West Linn (collectively, the "Partners" or individually a "Partner") on March 17, 2022.

## 1. Program Proposal Process.

A. <u>Qualified Proposals</u>. Partners will identify qualified proposal projects to submit for review. A "Qualified Proposal" means a project proposal that meets the base threshold of being designed for I/I reduction purposes and occurring within the Target Areas. A Qualified Proposal should include a project description, project area/boundary, flow-metering data, if available (I/I rates), rehabilitation method (if applicable), project statistics (i.e. number of manholes, linear feet of pipe or number of laterals to be rehabilitated), construction schedule, and anticipated I/I flow reduction.

Eligible projects must result in the creation or improvement of a capital asset that directly contributes to I/I reduction. District will only reimburse costs of the project that are exclusively used for capital expenditures. Capital expenditures means expenditures that are considered capital under generally accepted accounting principles ("GAAP"). Each Partner must ensure that all expenditures classified as capital align with GAAP and their own internal capital policies. Project costs eligible for reimbursement may include, but are not limited to:

- i. Design, planning, and engineering costs directly attributable to an I/I reduction capital project.
- ii. Construction and rehabilitation costs.
- B. <u>Approval of Qualified Proposals</u>. Each Partner will bring forward their proposed projects for approval by the Technical Advisory Team ("TAT"). The TAT will review the proposal and determine if it satisfies the elements of a Qualified Proposal identified in Section A above. If the TAT members approve by majority vote of those present finding a proposal as being an eligible Qualified Proposal, the Partner will be provided with a letter of approval in a form substantially similar to <u>Attachment A</u> ("**Approval Letter**").
- C. <u>Annual Notification of Proposals</u>. Each Partner agrees to submit an annual list summarizing the potential Qualified Proposals planned for the following year, including their estimated cost, to the District no later than February 1<sup>st</sup> of each

year, in order to provide the District with sufficient time to budget appropriately for the upcoming fiscal year. Failure to provide the notice will not automatically prevent funding of a Qualified Proposal, but such funding may be delayed by a fiscal year. Notwithstanding the above, upon execution of the Agreement by a Partner, the Partner may immediately submit Qualified Proposals for the current fiscal year.

- D. <u>Annual Reports</u>. Each Partner receiving funding pursuant to this Agreement will provide an annual report out to District, indicating the projects completed with the funding provided and their anticipated or actual reduction of I/I in the impacted Target Area. The Partners may elect to provide the report at the end of each fiscal year or calendar year.
- E. <u>TAT Membership</u>. The Parties acknowledge that thus far the TAT has been an informal advisory group of technical experts meeting to share knowledge and collaborate on infrastructure strategy, and that a more formalized procedure will be needed to allow the TAT to effectuate the purposes of this Agreement. Therefore bylaws will be drafted creating, amongst other provisions, a voting procedure with each of the District and Partners having a single vote for the purposes of approving a Qualified Proposal.

## 2. Payment Terms.

A. <a href="Invoices">Invoices</a>. The Partners agree to submit invoices for work performed related to the Qualified Proposal a minimum of twice annually. Invoices may be submitted more frequently if desired. The required invoice submissions are: 1) one by February 15 for all work performed between July 1 and December 31, and 2) a second by August 15 for all work performed between January 1 and June 30. Invoices shall describe the work performed with particularity, by whom it was performed, and shall itemize and explain the expenses for which reimbursement is claimed, noting the elements of the project correlated with I/I reduction. Reimbursement Contribution payments shall be made by the District to the Partner within forty-five (45) days of receipt of an invoice that complies with the requirements of this section.

## 3. Amendments to Existing Approvals.

- A. Request. A Partner may submit a request for an amendment to the Reimbursement Contribution if the actual costs of the work performed related to a Qualified Proposal are greater than originally anticipated ("Amendment Request"). The Partner will submit the Amendment Request to the TAT.
- B. <u>Evaluation of Amendment Request</u>. The TAT will review the Amendment Request and make a recommendation to the District Director, who will determine, in their sole discretion, whether the District as adequate funding to authorize the Amendment Request.
- C. <u>Approval of Amendment Request</u>. If an Amendment Request is approved by the District Director, then the District will provide the Partner with an updated Approval Letter showing the revised Reimbursement Contribution amount ("Updated Approval Letter").

al n 2

# ATTACHMENT A SAMPLE APPROVAL LETTER

## GREGORY L. GEIST | DIRECTOR



Water Quality Protection Surface Water Management Wastewater Collection & Treatment

Date

Name Address 1 Address 2

## Sent Via Email

Re: Insert Proposal Name Here

Dear Name,

Thank you for the submittal of your Proposal to the Technical Advisory Team ("TAT").

This letter serves as notification that the TAT has approved your project for reimbursement as a part of the Regional I/I Reimbursement Program, in accordance with the terms of the IGA for Regional Inflow and Infiltration Coordination.

When you have entered into a contract to do the work included in your proposal, please forward us a copy of the executed contract(s). Exact funding contribution will be calculated based on the value of the executed contract(s).

Please retain a copy of this letter in your records, as you will be required to provide it along with documentation of your expenses when you seek reimbursement from Water Environment Services.

On behalf of WES and all the cities participating in this I/I reduction effort, we appreciate your commitment to addressing this regional issue. Thank you!

Sincerely,

Greg Geist Director, Clackamas Water Environment Services 150 Beavercreek Road #430 Oregon City, OR 97045

Enclosures: Insert proposal name here

Fiscal Years 2026/27 - 2030/31

CAPITAL IMPROVEMENT PLAN

DRAFT

## Water Environment Services













#### **Clackamas Water Environment Services**

Fiscal Years 2026/27 - 2030/31

## **Capital Improvement Plan**

## **Board of Directors**

Craig Roberts, Chair

Diana Helm, Commissioner

Paul Savas, Commissioner

Martha Schrader, Commissioner

Ben West, Commissioner

Gary Schmidt, District Administrator

## **Clackamas Water Environment Services Leadership Team**

Greg Geist, Director

Ron Wierenga, Deputy Director

Jeff Stallard, Capital

Erin Blue, Financial Services

Matt House, Operations

Terrance Romaine, Environmental Services

Lauren Haney, Administration

Amanda Keller, Legal Counsel



#### **Clackamas Water Environment Services**

Clackamas Water Environment Services (WES) produces clean water, protects water quality and recovers renewable resources. We do this by providing wastewater services, stormwater management, and environmental education. It is our job to protect public health and support the vitality of our communities, natural environment and economy.

WES lines of business and associated programs include the following:

#### **Business Services**

- Account Services
- Administrative Services
- Financial Management

#### **Environmental Services**

- Environmental Monitoring
- Permit Services
- Watershed Protection
- Resource Recovery

## Operations

- Plant Operations and Maintenance
- Field Operations and Maintenance
- Asset Management

## Capital

Planning and Capital Delivery

## **Clackamas County Performance Clackamas**

Performance Clackamas, the county strategic business plan focuses on five strategic priorities:

- Safe, Secure and Livable Communities
- Vibrant Economy
- Strong Infrastructure
- Healthy People
- Public Trust in Good Government

WES has developed strategic results specific to our business that align with the countywide strategic priorities. The Fiscal Year 2026/27 - 2030/31 (FY 26/27 - 30/31) Capital Improvement Plan (CIP) was developed to support WES in meeting our strategic results. The CIP puts forward a prioritized plan to maintain existing facilities, allow efficient, cost-effective operations and provide new infrastructure to protect human health and clean water, today and into the future.

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## Appendix A

Sanitary Sewer Project Detail Sheets

## Appendix B

Surface Water Project Detail Sheets

## CAPITAL IMPROVEMENT PROGRAM OVERVIEW

#### **INTRODUCTION**

The Water Environment Services (WES) Board of Directors adopts the annual budget for WES. The goal of the Capital Improvement Plan (CIP) is to provide context and continuity for the budget and capital needs for the next five years.

A capital project is any physical asset acquired, constructed, financed, modified or replaced with a total capital cost of \$10,000 or more and a useful life of 1 year 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. Expenses must be directly related to and primarily benefit a single capital project to be considered project costs.

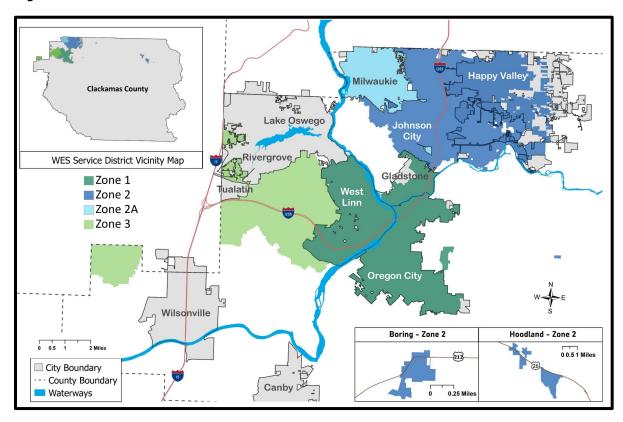
#### **BACKGROUND**

On behalf of our customers, WES operates and maintains more than 360 miles of sanitary sewer pipelines, interceptors and force mains, 23 wastewater pumping stations, 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 Pollutant Discharge Elimination System (NPDES) permits that allow wastewater that is treated and cleaned to be discharged to rivers in the state of Oregon. WES treats more than 7 billion gallons of wastewater per year and complies with all of the terms of its permits.

WES is also responsible for surface water management facilities. Although WES constructs a limited amount of surface water infrastructure, it operates the vast majority of public surface water infrastructure constructed with transportation systems and residential subdivisions. This includes hundreds of miles of storm pipelines, thousands of inlets, and over 300 water quality treatment facilities, in public right-of-way and on private property. State and federal water quality regulations require that the public surface water system be adequately inspected, maintained, expanded and repaired.

The WES service area is shown in Figure 1. The service area encompasses 65 square miles.

Figure 1. WES Service Area



## **RATE ZONE 1**

Rate Zone 1 includes the Cities of Gladstone, Oregon City, West Linn and a small number of retail customers.

## **RATE ZONE 2 / 2A**

Rate Zone 2 includes four separate, noncontiguous sewer service areas including the unincorporated areas of Clackamas County, the City of Happy Valley, the western edges of Damascus, the communities of Hoodland, Boring, and Fischer's Forest Park, as well as a surface water management service area within the City of Happy Valley and in unincorporated Clackamas County. Rate Zone 2A includes the Cities of Milwaukie and Johnson City as wholesale customers.

## **RATE ZONE 3**

Rate Zone 3 includes the City of Rivergrove and portions of unincorporated Clackamas County draining into the Tualatin River.

## **Sanitary Sewer and Wastewater Treatment**

WES provides retail sanitary sewer services (administration, operation, and maintenance of the collection and conveyance systems including pipes and pump stations), to the cities of Happy Valley and Boring, to unincorporated portions of North Clackamas County, a portion of the former city of Damascus, the communities of the Highway 26 Hoodland Recreational Corridor including Wemme and Welches, Fischer's Forest Park near Redland and a small retail population outside of Oregon City. WES provides wholesale services (operation and maintenance of the regional collection system and WRRFs that treat and clean wastewater and return it to the rivers and streams) to the cities of Milwaukie, Johnson City, Oregon City, West Linn and Gladstone. Revenues derived from customer rates and development fees fund WES services. WES operates five wastewater treatment facilities: Tri-City WRRF, Kellogg Creek WRRF, Hoodland WRRF, Boring Treatment Facility and Fischer's Forest Park Treatment Facility.

**Tri-City WRRF**, located in Oregon City in operation since 1986, provides treatment for wastewater from the Zone 1 service area and for wastewater flow diverted from the Zone 2 service area, and then discharges effluent into the Willamette River. The liquid capacity of the treatment facility was expanded with a state-of-the-art membrane bioreactor system in 2011 to treat some wastewater diverted from the Zone 2 service area and is capable of producing effluent that meets Oregon's highest reclaimed water standards. The solids processing capacity of the facility was expanded in 2020. Digested sludge from the Kellogg Creek WRRF is also dewatered at the Tri-City WRRF until dewatering facilities are constructed at the Kellogg Creek WRRF.

**Kellogg Creek WRRF**, located in Milwaukie, began operation in 1974. Due to site constraints, the facility cannot expand as its Zone 2 and Zone 2A service areas grow. Between 2008 and 2012, WES spent \$124 million to construct an intertie pump station and pipeline to convey new wastewater flow to the Tri-City WRRF and expanded liquids handling capacity at the Tri-City WRRF. Currently, up to 12.5 million gallons per day (MGD) can be diverted from the Kellogg Creek WRRF Zone 2 service area to the Tri-City WRRF with the Intertie 2 Force Main and Pump Station Expansion Project underway to increase that diversion capacity to 30 MGD.

**Hoodland WRRF,** located in Welches, began operation in 1982 and serves the Highway 26 Hoodland Recreational Corridor including Wemme and Welches. The service area includes six pump stations, 22 miles of pipeline and serves a population of approximately 4,000. The facility provides secondary treatment with a capacity of 0.9 MGD and discharges effluent to the Sandy River.

**Boring Treatment Facility,** serves 60 households and businesses within the Community of Boring began operation in 1986. The facility consists of lagoons and a sand filter to provide tertiary treatment for up to 20,000 gallons per day.

**Fischer's Forest Park Treatment Facility,** began operation in 1971. It is the smallest of the treatment facilities serving 26 single-family homes in a subdivision in the Redland area. Unlike the other WES treatment facilities, this facility does not discharge to a river, but has a permitted sub-surface discharge via a drip distribution system.

## **Surface Water**

WES performs surface and stormwater management for the purpose of providing nonpoint source pollution controls to meet state and federal regulations. This includes the construction of capital improvements to address surface water quality and quantity, conducting basin analyses and other studies 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, water quality 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 regulations and remediation 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 on watershed health, development and enforcement of water quality regulations, coordination with other municipalities and maintenance of the public stormwater systems within the WES service area.

As the service area's population continues to increase, WES is committed to provide responsible stormwater management to keep waterways clean for people, fish, and wildlife. Many past drainage and stormwater management practices and regulations have proven inadequate to prevent runoff impacts to streams and groundwater and need rehabilitation or enhancements. 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 improving 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 WES Watershed Action Plans, in various environmental studies 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 a variety of pollutants deposited by everyday activities. Fertilizers, oil, grease, heavy metals, pesticides, chemicals, soil, and animal waste can make their way to water bodies via 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 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 WES and our performance partners can help reduce the impacts of stormwater runoff. These activities and projects are the WES 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 (SDC) 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, operating fund revenues (e.g. monthly service rate revenue) 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, operating fund revenues (e.g. monthly service rate revenue) or other resources.

Funding for capital projects that benefit both WES's Sanitary Sewer/Wastewater Treatment and Surface Water programs is proportionately split between the Sanitary Sewer and Surface Water Construction and/or SDC funds based on the relative benefit to each program. Projects with shared Sanitary Sewer and Surface Water funding include improvements to, or rehabilitation of, shared facilities (e.g., Tri-City Administration Building and Water Quality Lab), as well as shared equipment.

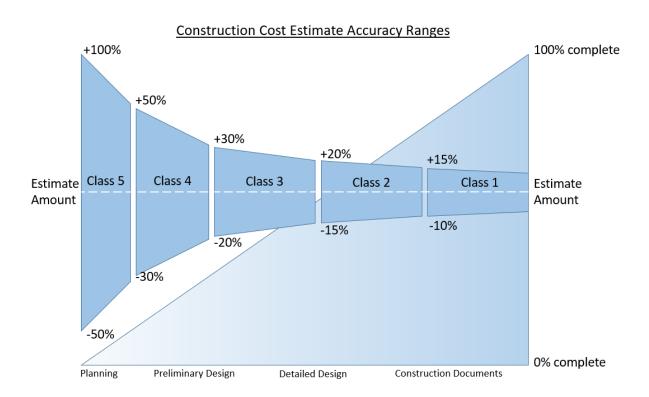
WES utilizes a cost-pool model for fleet management in which the capital expenditures for vehicles are initially attributed to the Sanitary Sewer Construction Fund and the full annual costs for those vehicles, including asset replacement costs, are charged to the Sanitary Sewer or Surface Water programs based on each program's use of the vehicles.

## **Project Cost Updates**

Project cost estimates change over time due to inflation and as the design phase of projects evolve and the details of the project are refined. The costs presented in this CIP plan are total project costs that have been escalated to the Engineering News Record (ENR) Construction Cost Index of July 2025.

In addition to escalating the project costs to the construction index, this capital plan is utilizing the most recent costs estimates for each project. WES uses a structured approach to estimating costs for capital improvements and infrastructure investments, utilizing different estimate classes to align with the various stages of project development.

In the initial phases of a project 5-year capital plan, a Class 5 estimate might be employed to outline broad budgetary needs. This early-stage estimate helps WES identify potential financial requirements and prioritize projects but comes with a broader range of uncertainty. As projects move through delivery and become more defined, more detailed estimates are calculated with more certainty. The below figure identifies estimate classifications, range of uncertainty, and associated project phase. The Project Detail sheets for each project identify the Class of the most recent estimate WES has developed for that project.



## SANITARY SEWER PROJECTS

#### SANITARY SEWER PROJECT SUMMARY

WES has a wastewater comprehensive plan to set forth capital needs for the next 20 years, consolidating recommendations from the following planning efforts: Storm System Master Plan (2023), Willamette Facilities Plan (2021), Boring Facility Plan (2020), Sanitary Sewer Master Plan (2019) and the Hoodland Master Plan (2017). Future five-year CIPs will reflect the results of those plans. The FY 26/27 - 30/31 CIP was developed and projects prioritized as a result of coordination between the capital planning team and operations and maintenance staff.

## **SANITARY SEWER CIP**

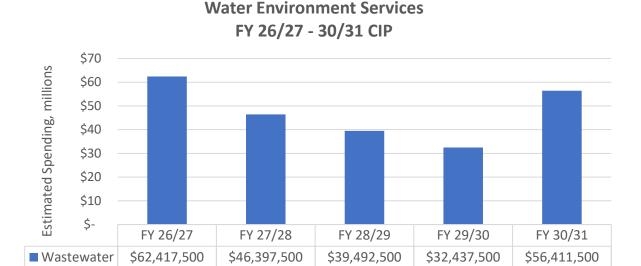
Sanitary sewer projects are organized according to their location and/or function. Project types are Treatment (Tri-City, Kellogg Creek, Hoodland, Boring, Fischer's Forest Park), Collection System, Fleet, Water Quality Lab (WQL), Asset Management and Pump Stations. Collection System projects include those for facilities designed, owned and maintained by WES. Asset Management projects include 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 2.

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

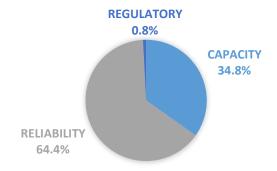
		Capital Spending, \$ Million							
Project Type		26/27	27/28	28/29	29/30	30/31	5-Year Total		
Tri	i-City WRRF	\$ 11.25	\$ 13.63	\$ 16.39	\$ 18.32	\$ 17.80	\$ 77.39		
W	ater Quality Lab	0.50	1.71	-	-	-	2.21		
Ke	ellogg Creek WRRF	3.80	1.85	1.50	3.00	12.10	22.25		
Нс	oodland WRRF	-	-	-	0.50	2.00	2.50		
Вс	oring Treatment Facility	0.50	-	-	-	8.00	8.50		
Fischer Forest Park Treatment Facility		-	-	-	-	-	-		
Collection System		43.56	26.25	18.60	7.80	13.50	109.71		
	Flow Metering Program	-	0.05	-	-	0.05	0.10		
	Pipe/Manhole R&R	1.00	1.00	1.00	1.00	1.00	5.00		
ects	Pump Stations	0.10	0.10	0.10	0.10	0.10	0.50		
Proj	Development Review	0.10	0.10	0.10	0.10	0.10	0.50		
rring	Fleet	0.47	0.61	0.66	0.52	0.62	2.88		
Recurring Projects	WQL Equipment	0.04	-	- 0.04		0.04	0.12		
	WRRF: Small Projects	0.80	0.80	0.80	0.80	0.80	4.00		
	WRRF: SCADA	0.30	0.30	0.30	0.30	0.30	1.50		
Total		\$ 62.42	\$ 46.40	\$ 39.49	\$ 32.44	\$ 56.41	\$ 237.16		

Figure 2. Sanitary Sewer Capital Spending (\$ Million)



Some CIP projects will provide capacity for growth and are eligible to be funded, in whole or part, by system development charges (SDCs). Some projects are required to maintain the reliability and operability of WES's infrastructure, and are not funded by SDC dollars. Figure 3 shows the breakdown of the CIP by project driver. SDC-eligible project expenses may initially be funded with debt proceeds from the construction fund and the principal and interest on the debt subsequently paid from the SDC fund.

Figure 3. Sanitary Sewer Capital Spending Breakdown by Project Driver



## **FISCAL YEAR 2026-27 MAJOR PROJECTS**

Of the \$62.4 million in FY 26/27 planned capital spending, \$32.9 million is expected to be spent on the following projects:

## Intertie 2 Pump Station and 30-inch Force Main Project - \$6.7 million

The Intertie 2 Pump Station diverts flow from the Kellogg Creek WRRF drainage basin to the Tri-City WRRF. The pump station was constructed in 2012 and is now at capacity. The station was constructed with plans to add a pump to increase capacity. The 30-inch force main from the pump station to Tri-City WRRF was partially constructed during the original construction of the pump station and force main. The purpose of this project is to construct the remaining segments of the 30-inch force main to increase the pumping capacity of the Intertie 2 Pump station to accommodate future peak flows as identified in the SSMP. The force main and pump station upgrades will be completed in 2027, with one more expansion of this pump station planned for 2035.

## Willamette Pump Station and Force Main Project - \$11.0 million

The Willamette Pump Station and Force Main were constructed in 1986 and convey sanitary sewer flows from areas west of the Willamette River, including portions of southwest West Linn, to the Tri-City WRRF. The pump station and force main were analyzed as part of the SSMP, and it was determined that, in addition to targeted Inflow/Infiltration (I/I) reduction upstream of the pump station, a new pump station and force main are necessary to increase capacity to meet future wet-weather flows. The portion of the force main crossing the Willamette River is being constructed as part of the Oregon Department of Transportation (ODOT) Abernethy Bridge project. Design of the remaining force main and a new pump station is at 60% design and we anticipate building the force main first and then the pump station in two separate bid packages. The entire system will be brought online by 2030.

## Middle Clackamas Interceptor Improvements Project - \$11.25 million

The SSMP identified the Clackamas Area Interceptor system upstream of the Intertie 2 Pump Station, which serves Clackamas County and portions of the City of Happy Valley, is nearing its peak wet weather capacity and needing to be upsized. A conceptual design has been completed for the entire alignment. The previous CIP included the entire Clackamas Area Interceptor Improvements as one project, it is now being separated into separate phases as we advance to developing construction packages. The Middle Clackamas phase includes the portion of the interceptor that is most capacity driven and therefore will be constructed first.

## Regional Infiltration/Inflow (I/I) Control Cost Share - \$3.98 million

The WES sanitary sewer capital plan is based on a 65% reduction of I/I in 19 key sewer basins. To help achieve this reduction, WES has Intergovernmental Agreements (IGAs) with five partner cities to provide 33% funding for approved I/I reduction projects. At this time, projects within the following member cities have been approved for funding through the IGAs: Oregon City, Gladstone, and Milwaukie.

## **ACTIVE PROJECT PROGRESS**

WES staff is continuously looking at future needs. The WES capital team is also concurrently managing the design and construction of numerous projects. Below are several highlights of our work:

## Multi Pump Station Improvements Project - Estimated Spent to Date \$9.6 million

During SSMP efforts, a condition assessment of the 23 pump stations that WES owns and operates was

conducted. The outcome of this assessment was a recommendation to rehabilitate a large number of pump stations. The rehabilitation of each station is unique, so this work is delivered using multiple bid packages. The work generally includes condition assessment related to pumps, wet well concrete and coatings, Variable Frequency Drive (VFD), controls and emergency power. This work will be completed in 2027 and is addressing condition issues at 11 different pump stations.



## Tri City Influent Pump Station Improvements - Estimated Spent to Date \$1.0 million



The Influent Pump Station (IPS) pumps flow that arrives from the sanitary sewer collection system by gravity to the influent screening channel for subsequent treatment through the facility. The pumps are original to the 1985 construction and have a firm (largest pump out of service) hydraulic capacity of 50 MGD. The pumps and VFDs have reached the end of their service life and are due for replacement. The firm capacity has been exceeded during wet weather events in recent years, necessitating the immediate need for expansion. The project will include new pumps and drives sized for projected 2040 influent flows. Pump station mechanical, electrical, and control systems will be replaced as needed to operate the new pumps and extend the life of the facility.

## Rock Creek Interceptor Extension - Estimated Spent to Date \$0.6 million



The SSMP completed in 2019 built upon a preliminary routing analysis that was completed in 2007 for the extension of the Rock Creek Interceptor. Based on this planning work, the interceptor will be extended to the north and east. The project is currently under design and in the process of property acquisition to facilitate construction.

## SANITARY SEWER PROJECT LIST BY PROJECT AREA

The following table summarizes funded projects listed in the CIP by project area. Individual project detail sheets for all projects are included in Appendix A. As a part of WES's annual budget and CIP development process, project planning estimates are updated to reflect the most current information and market conditions. Total Project Costs include estimated project expenditures through the end of FY 25/26 and projected spending beyond the next five years, which may be subject to change. Subtotals by project area include spending only for projects included in the FY 26/27 - 30/31 CIP, and do not include projects with spending anticipated to commence in FY 30/31 or later.

				PROJ	ECTED					
PROJECT DESCRIPTION		FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	5-Year CIP Total	Total Project Cost*	SDC Eligibility	5-Year SDC Eligible Cost
Tri-City Water Resource Recovery Facility										
Wet Weather Expansion		\$ 500,000	\$ 2,500,000	\$13,000,000	\$16,000,000	\$13,500,000	\$ 45,500,000	\$ 59,500,000	13%	5,915,000
Influent Pump Station (IPS) Expansion		6,500,000	6,500,000	. , ,			13,000,000	18,380,000	50%	6,500,000
Rossman Landfill Mitigation Project		3,500,000	3,500,000				7,000,000	7,500,000	100%	7,000,000
Aeration Basin Improvements		750,000	750,000	750,000	750,000		3,000,000	3,700,000		
Administration Building Remodel			212,500	1,700,000	1,572,500		3,485,000	3,485,000		
(15% split with SW)			212,000	1,700,000	1,072,000					
Headworks Rehabilitation						2,300,000	2,300,000	3,340,000		
Rehabilitate Chlorine Contact Basins and Replace Gates						1,000,000	1,000,000	1,180,000		
Maintenance Building Relocation			470.000	025 000			4 405 000	4 445 000		
(15% split with SW)			170,000	935,000			1,105,000	1,115,000		
MBR Cassette Replacement	_					1,000,000	1,000,000	1,000,000		
	TOTAL	11,250,000	13,632,500	16,385,000	18,322,500	17,800,000	77,390,000	99,200,000		
Water Quality Laboratory										
Lab Remodel (15% Split with SW)		500,000	1,710,000				2,210,000	3,485,000		
	TOTAL	500,000	1,710,000	-	-	-	2,210,000	3,485,000	1	
Kellogg Creek Water Resource Recovery Fa	cility									
Digester Improvements and Dewatering	oy			1,000,000	3,000,000	12,000,000	16,000,000	28,500,000		
Administration Building Remodel		2,000,000		1,000,000	5,000,000	12,000,000	2,000,000	4,640,000		
UV Replacement		1,250,000					1,250,000	2,240,000		
Headworks and Grit Loading Improvements		250,000	1,350,000				1,600,000	1,600,000		
Primary Clarifier Rehabilitation		300,000	500,000	500,000			1,300,000	1,300,000		
Primary Basin and Primary Pump Station		000,000	333,333	000,000		100,000	100,000	1,100,000		
ary East andary . amp etation	TOTAL	3,800,000	1,850,000	1,500,000	3,000,000	12,100,000	22,250,000	39,380,000		
Headland Water Bearing Bearing Facility		.,,	,,	,,	.,,	,,	,,	,,		
Hoodland Water Resource Recovery Facility					500,000	2 000 000	0.500.000	40 500 000	F00/	4 050 000
Secondary Treatment Upgrade	TOTAL				500,000	2,000,000	2,500,000	10,500,000	50%	1,250,000
	IUIAL	-	-	-	500,000	2,000,000	2,500,000	10,500,000		
Boring Treatment Facility										
Upgrades	_	500,000				8,000,000	8,500,000	8,800,000		
	TOTAL	500,000	-	-	-	8,000,000	8,500,000	8,800,000		
Collection System										
Clackamas Area Interceptor Improvements		11,250,000	12,150,000	4,000,000	500,000	5,000,000	32,900,000	40,180,000	47%	15,470,000
Willamette Pump Station and Force Main Cap	pacity	11,000,000	3,000,000	8,000,000	4,000,000		26,000,000	33,090,000	48%	12,480,000
Rock Creek Interceptor Extension		6,000,000	6,000,000				12,000,000	13,620,000	100%	12,000,000
Inflow & Infiltration (I&I) Reduction Program		3,975,000	2,000,000	2,000,000	2,000,000	2,000,000	11,975,000	N/A	100%	11,975,000
Intertie 2 Pump Station Expansion and 30-inc	h	6,700,000					6,700,000	24,560,000	50%	3,350,000
Force Main	ont		2 600 000	2 600 000						
Bolton Force Main Evaluation and Replaceme Lower Willamette Interceptor Rehabilitation	51 IL	1,180,000	2,600,000	2,600,000		5,000,000	6,380,000 5,000,000	7,660,000 14,500,000	50%	2,500,000
Timberline Rim and Sandy River Lane Pump						3,000,000			30 /0	2,300,000
Station with Force Main			500,000	2,000,000			2,500,000	2,500,000		
Multiple Pump Station Upgrades		2,000,000	-				2,000,000	12,920,000		
Oregon City Interceptor Rehabilitation					300,000	1,500,000	1,800,000	1,800,000	50%	900,000
Clackamas Force Main 10-inch Upsize		1,250,000					1,250,000	1,520,000	50%	625,000
Decant Facility		200,000			1,000,000		1,200,000	1,200,000		
	TOTAL	43,555,000	26,250,000	18,600,000	7,800,000	13,500,000	109,705,000	153,550,000		
Recurring / Programmatic Capital Project Co	osts									
Collection System: Pipe and Manhole Rehabi and Replacement	ilitation	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000		50%	2,500,000
Water Resource Recovery Facilities: Small P	rojects	800,000	800,000	800,000	800,000	800,000	4,000,000			
Fleet: Vehicle Replacement	,	260,000	605,000	165,000	515,000	619,000	2,164,000			
Water Resource Recovery Facilities: SCADA										
Improvements		300,000	300,000	300,000	300,000	300,000	1,500,000			
Fleet: Heavy Equipment		210,000		500,000			710,000	N/A		
Collection System: Developer-Installed Asset		100,000	100,000	100,000	100,000	100,000	500,000			
Collection System: Pump Station Improveme		100,000	100,000	100,000	100,000	100,000	500,000			
Water Quality Lab: Equipment (15% split with	,	42,500		42,500		42,500	127,500			
Collection System: Permanent Flow Metering Program			50,000			50,000	100,000			
. rogram	TOTAL	2,812,500	2,955,000	3,007,500	2,815,000	3,011,500	14,601,500			
TOTAL ALL CEMED DD	-							¢ 244 045 000		\$02 ACE 000
TOTAL - ALL SEWER PR	OJECIO	ψ 02,417,500	ψ 40,387,300	\$39,492,500	\$32,437,500	\$56,411,500	\$ 237,156,500	\$ 314,915,000	j	\$82,465,000

<sup>\*</sup>Total Project Costs are rounded to the nearest \$10,000, and include projected spending after FY 2030-31 and estimated spent-to-date through the end of FY 2025-26.

## SURFACE WATER PROJECTS

#### **SURFACE WATER 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.

WES's goals for stormwater capital projects include:

- Protect and enhance 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 benefits of public land where appropriate 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 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 efficient 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**

WES recently completed the Storm System Master Plan (SSMP). The SSMP provides a flexible framework for storm system infrastructure operations, maintenance, and expansion to improve the quality of surface water and maintain infrastructure function in the WES service area. The SSMP provides short-and medium-term recommendations for capital improvements and programmatic system improvements. The recommended projects and programs have been prioritized and initial cost estimates have been developed. The resulting priorities and costs were used to create a 10-year construction plan to sequence implementation and to equalize annual expenditures.

The plan includes a prioritization methodology and stormwater toolkit. These items allow WES to adapt the implementation plan to changing circumstances, identify and evaluate future storm system needs, and develop project concepts to address future needs. The SSMP recommendations were compared against each other, WES's goals, and anticipated available funding to determine relative priority.

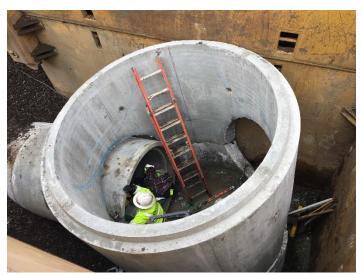
Surface water capital projects come in many shapes and sizes, which are grouped into six basic types for evaluation and prioritization purposes:

- Capital Repairs
- Small Drainage
- Stormwater Pond Repair/Rehabilitation
- Water Quality Retrofits
- Underground Injection Control (UIC) Decommissioning/Retrofits
- Restoration and Property Acquisition

#### **PROJECT TYPES**

## **Capital Repairs**

Capital repair projects are stormwater facility repairs 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 completion. 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 WES owned or operated stormwater facilities identifies repair needs. Given regulatory requirements and funding constraints, WES intends to address as many of the existing list of repair projects as feasible.

The SSMP identified and prioritized 10 capital repair projects. The actual implementation sequence will depend on factors such as financial constraints and partnership opportunities.

## **Small Drainage**

Nuisance issues in the stormwater system are common and expected. They include blockages of small pipes by roots, degradation of small pipes, and minor flooding due to clogged or degraded inlets or missing small pipes. Minor repairs and upgrades to the storm system exceed routine maintenance requirements and are an important part of proper asset management. Projects correcting nuisance issues and estimated to cost less than \$100,000 each are grouped together into the Small Drainage Program. The projects will improve drainage issues when flooding is caused by WES's stormwater infrastructure and would support WES's goal of proactively addressing performance deficiencies or enhancements and decreasing the number of customer service requests.

The Small Drainage Program is intended to provide steady annual funding so that WES can both reactively and proactively address small flooding and drainage issues in a timely manner. Without this program, damage to roadways or public and private property could result, and public complaints could rise.

Project types within this program include new birdcage inlets and manholes, root removal/pipe lining, and small pipe conveyance.

#### **Stormwater Pond Repair and Rehabilitation**

WES owns or operates 620 vegetated stormwater ponds that provide the critical function of reducing pollutants in stormwater runoff and/or controlling flows prior to discharge to a natural drainage, wetland, stream, or river. The Stormwater Pond Repair and Rehabilitation Program will provide a clear budget line for required repair of these assets. Rehabilitation of a stormwater pond typically includes removal of sediment and invasive species, regrading edges, cleaning orifices and pipes and other related activities. Stormwater pond repair can include several activities or types of work. In some cases, hard features such as weirs, orifices, inlets, pipes, or other parts of the system may need to be replaced. Also, maintenance access to the ponds may need repair to allow proper equipment near the site or allow field staff to work near the site safely.

## **Water Quality Retrofits**

The Water Quality Retrofit Program will add water quality treatment capacity in existing developed areas. Water quality retrofits generally include new facilities in unserved areas or enhancements which add or increase water quality treatment within existing storm infrastructure. The focus is on areas with no treatment, followed by those with outdated treatment facilities. Enhancements of existing facilities could include 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 retrofit projects are prioritized based on the severity of the project need and the value they provide. Retrofit projects help meet WES's NPDES permit requirements, support water quality goals, and support WES's goals to be good stewards of the environment.

# **Underground Injection Control (UIC) Decommissioning and Retrofits**

UICs are systems that place stormwater below the ground, the most common being drywells. UICs for stormwater are most commonly used where connections to the storm system infrastructure are not available. Decommissioning or retrofitting UICs is necessary where the system is a known threat to groundwater quality. Under state regulatory requirements, WES has identified 10 UICs with risk of polluting groundwater. Decommissioning a UIC entails filling the vault with concrete and removing the manhole cover. Retrofitting a UIC entails filling it with one to two feet of concrete so that the total depth is a greater distance from seasonal high groundwater levels. It could also entail installing low impact development (LID) practices upstream of the UIC inlet to treat the runoff before it enters the UIC.

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 value and the results of a risk analysis.

#### **Restoration and Property Acquisition**



WES enhances public and private properties with native vegetation and trees. These projects maximize the ecological and stormwater benefits of the properties, supporting numerous local and regional environmental goals. Within this program, restoration-type projects are organized into four main categories: in-stream restoration, property acquisition, riparian vegetation, and culvert replacement or repair.

In-stream habitat improvement projects typically include channel enhancements or stabilization, floodplain reconnections or culvert/fish barrier removal. It also includes tree planting in areas where it supports regulatory compliance.

Occasionally, WES purchases 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 acquisitions are prioritized and pursued as opportunities are available. Selection and prioritization of property acquisitions is coordinated through various performance partners including the WES sanitary sewer utilities, parks and open space programs, and watershed councils.

Revegetation of streamside properties improves habitat by increasing stream shading and reducing water temperatures. These projects maximize the ecological and stormwater benefits of the properties, supporting numerous local and regional environmental goals, including regulatory compliance in some areas. 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.

Culvert replacement or repair can re-introduce fish habitat that had been previously cut off due to culverts that prevented passage. The program evaluates and prioritizes culvert replacements or repair where there is a clear nexus with the stormwater program and opportunity for stream restoration.

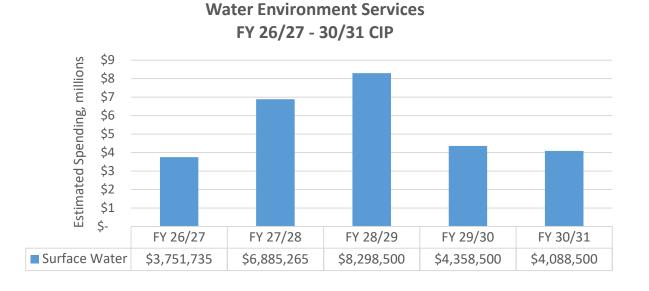
## **SURFACE WATER CIP**

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 3. Surface Water Capital Spending by Project Type/Location

		Capital Spending, \$ Million						
Pr	oject Type	26/27	27/28	28/29	29/30	30/31	5-Year Total	
SV	V Capital Projects	\$ 2.04	\$ 4.72	\$ 5.26	\$ 2.29	\$ 2.29	\$ 16.60	
Tri	i-City WRRF	-	0.07	1.24	0.28	-	1.59	
W	ater Quality Lab (WQL)	0.09	0.30	-	-	-	0.39	
	Restoration And Property Acquisition	0.65	0.82	0.83	0.82	0.82	3.94	
.0	Stormwater Pond Repair and Rehabilitation Program	0.41	0.41	0.41	0.41	0.41	2.05	
Projects	Water Quality Retrofit Program	0.15	0.15	0.15	0.15	0.15	0.75	
Recurring	Small Drainage Project Program	0.10	0.10	0.10	0.10	0.10	0.50	
Rec	Emergency Repairs	0.25	0.25	0.25	0.25	0.25	1.25	
	UIC Decommissioning / Retrofit Program	0.05	0.06	0.05	0.06	0.06	0.28	
	WQL – Equipment	0.01	-	0.01	-	0.01	0.03	
	Total	\$ 3.75	\$ 6.88	\$ 8.30	\$ 4.36	\$ 4.09	\$ 27.38	

Figure 4. Surface Water Capital Spending (\$ Million)



## **SURFACE WATER PROJECT LIST**

The following table summarizes funded Stormwater projects listed in the CIP. Individual project detail sheets for all projects are included in Appendix B. As a part of WES's annual budget and CIP development process, project planning estimates are updated to reflect the most current information and market conditions. Total Project Costs include estimated project expenditures through the end of FY 25/26 and projected spending beyond the next five years, which may be subject to change. Subtotals in the tables below include spending only for projects included in the FY 26/27 – 30/31 CIP, and do not include projects with spending anticipated to commence in FY 30/31 or later.

		PROJECTED								
PROJECT DESCRIPTION		FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	5-Year CIP Total	Total Project Cost*	SDC Eligibility	5-Year SDC Eligible Cost
Stormwater Capital Projects										
3-Creeks Water Quality Project		\$ 40,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 120,000	\$ 5,800,000		\$ -
NCRA Stormwater Plan			150,000	150,000	450,000	450,000	1,200,000	5,300,000	50%	600,000
Valley View (Storm Costs Only)			250,000	750,000	750,000	1,000,000	2,750,000	3,680,000		
Regional Stormwater Pond - Happy Valley			\$ 1,750,000	\$1,750,000			3,500,000	3,500,000	100%	3,500,000
Rose Creek New Detention Pond and										
Instream Restoration		350,000	1,525,000	1,525,000			3,400,000	3,400,000		
Aldercrest Culvert Replacement &		000 000					200 200	0.000.000		
Kellogg Creek Restoration		800,000					800,000	2,320,000		
SE Clackamas Rd Drainage Infrastructure SE Wildlife Estates Dr Ditch Inlet		100,000					100,000	2,000,000		
and Upstream Detention			1,030,000	400,000			1,430,000	1,740,000		
Idleman Conveyance			1,000,000	400,000	820,000	820,000	1,640,000	1,640,000		
Sedona Drive Detention Repair		750,000			020,000	020,000	750,000	750,000		
Sunnyside Place Culvert Replacement		750,000					750,000	7 30,000		
& Stream Restoration				670,000		_	670,000	670,000		
SE 172nd Ditch Conveyance Improvement					250,000		250,000	250,000		
	TOTAL	2,040,000	4,725,000	5,265,000	2,290,000	2,290,000	16,610,000	31,050,000		
Tri-City Water Resource Recovery Facility Maintenance Building Relocation (85% split with SS) Administration Building Remodel (85% split with SS)			30,000 37,500	935,000	277,500		965,000 615,000	965,000 615,000		
	TOTAL	-	67,500	1,235,000	277,500	-	1,580,000	1,580,000		
Water Quality Laboratory Lab Remodel (85% split with SS)		88,235	301,765				390.000	615.000		
	TOTAL	88,235	301,765	-	-	-	390,000	615,000		
Recurring / Programmatic Capital Project Co	sts									
Restoration and Property Acquisition Stormwater Pond Repair		650,000	825,000	825,000	825,000	825,000	3,950,000			
and Rehabilitation Program		411,000	411,000	411,000	411,000	411,000	2,055,000			
Small Storm System Emergency Repairs		250,000	250,000	250,000	250,000	250,000	1,250,000			
Water Quality Retrofit Program		150,000	150,000	150,000	150,000	150,000	750,000	N/A		
Small Drainage Projects Program		100,000	100,000	100,000	100,000	100,000	500,000	N/A	4%	20.000
UIC Decommissioning/Retrofit Program		55,000	55,000	55,000	55,000	55,000	275,000		-770	20,000
Water Quality Lab: Equipment (85% split wit	h SS)	7,500	33,000	7,500	35,000	7,500	22,500			
Zaam, Laz. Lyapmam (50% opin Wi	TOTAL	1,623,500	1,791,000	1,798,500	1,791,000	1,798,500	8,802,500			
		1,020,000	1,101,000	1,700,000	1,701,000	1,700,000	5,552,566			
TOTAL - ALL STORMWATER P	ROJECTS	\$ 3,751,735	\$ 6,885,265	\$ 8.298.500	\$ 4.358.500	\$4.088.500	\$ 27.382.500	\$ 33.245.000	1	\$ 4.120.000
TOTAL ALLOTONIMATERY		\$ 0,7 0 1,7 00	\$ 5,000,£00	\$ 5,200,000	ψ 1,000,000	Ç 1,000,000	Ţ 11,001,000	T 00,2-10,000	l	+ -, 120,000

<sup>\*</sup>Total Project Costs are rounded to the nearest \$10,000, and include projected spending after FY 2030-31 and estimated spent-to-date through the end of FY 2025-26.

# Appendix A

Sanitary Sewer Project Detail Sheets

Project Name: Tri-City WRRF Wet Weather Expansion

Project Subprogram: Tri-City WRRF Current Project Phase: Planning

Project Fund: 632/639 Project Completion: 2031

# **Project Description:**

The results of the Collection System Master Plan show that peak wet weather flow to the Tri City WRRF currently exceeds its hydraulic capacity. The current hydraulic capacity of the facility is 70 MGD. Projected 2040 peak flow is 105 MGD assuming I/I reduction goals (65% in 19 basins) are met. The Willamette Facilities Plan recommends an expansion of the wet-weather treatment capacity to include new headworks, high-rate clarification and disinfection.

#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/24
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$58,000,000	\$59,500,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: The cost increase is related to inflation and assumes that the Oregon Department of Environmental Quality allows the recommended alternative to proceed.

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	D	D/C	С	С	С

Total Project Cost <sup>3</sup>	\$ 59,500,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 29,750,000
Sewer SDC Fund 632	\$ 29,750,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Tri-City WRRF Influent Pump Station Expansion

Project Subprogram: Tri-City WRRF Current Project Phase: Design

Project Fund: 632/639 Project Completion: 2027

## **Project Description:**

The Influent Pump Station (IPS) pumps flow that arrives from the sanitary sewer collection system by gravity to the influent screening channel for subsequent treatment through the facility. The pumps are

original to the 1985 construction and have a firm (largest pump out of service) hydraulic capacity of 50 MGD. The pumps and variable frequency drives have reached the end of their service life and are due for replacement. The firm capacity has been exceeded during wet weather events in recent years, necessitating the immediate need for expansion. The project will include new pumps and drives sized for projected 2040 influent flows. Pump station mechanical, electrical, and control systems will be replaced as needed to operate the new pumps and extend the life of the facility.



## **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/23	08/24
CLASS <sup>2</sup>	Class 5	Class 4
ESTIMATE	7,303,000	\$18,380,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Preliminary design efforts identified a substantial amount of existing electrical infrastructure at the WRRF needs to be upgraded as part of the project, which led to broader project scope and higher associated costs than envisioned in planning efforts.

P = Planning D = Des	sign D/C = 0	Design and Co	C = Constr	Recurring		
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	D/C	С	С	-	-	-

Total Project Cost <sup>3</sup>	\$ 18,380,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 9,190,000
Sewer SDC Fund 632	\$ 9,190,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Tri-City WRRF Rossman Landfill Mitigation Project

Project Subprogram: Tri-City WRRF Current Project Phase: Planning

Project Fund: 632 Project Completion: 2028

# **Project Description:**

Rossman Landfill was to be mitigated as part of the Membrane Bio-Reactor (MBR) Phase 1 construction project but the work was not performed due to the location of the MBR being outside of the landfill footprint. Thus, this project, like the MBR project is 100% SDC eligible. The cost for this project will need to be refined as the mitigation requirements are further studied and a plan is developed with DEQ. This project is scheduled to be complete prior to the Tri City Wet Weather Expansion to reduce risk/uncertainty from that project.

# **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/23	08/24
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$7,500,000	\$7,500,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: N/A

P = Planning	D = Des	gn D/C = Design and Construction			C = Construction R = Recurring		
Fiscal Year (F	Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	<u>;</u>	D	С	С	-	-	-

Total Project Cost <sup>3</sup>	\$ 7,500,000
Funding Source(s)	
Sewer SDC Fund 632	\$ 7,500,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** Tri-City WRRF Aeration Basin Improvements

Project Subprogram: Tri-City WRRF Current Project Phase: Design

Project Fund: 639 Project Completion: 2029

# **Project Description:**

The four conventional aeration basins are original to the facility. The aeration system consists of valves and instruments that control the flow of oxygen to the biological treatment process. The aeration system at Tri-City's aeration basins, along with its programming and controls, are antiquated and need to be replaced. This renewal will improve process performance and increase efficiency, significantly conserving electricity used to power air blowers. In addition to control and process improvements, this project will also address deficiencies of the basins' structural concrete and other ancillary systems.



## **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/23	08/24
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$3,650,000	\$3,700,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project soft costs were recalculated

P = Planning	D = Des	ign D/C = [	D/C = Design and Construction		C = Construction		t = Recurring	
Fiscal Year (F	Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	

Project Phase	D	D	D/C	С	С	-
Total Project Cost <sup>3</sup>		\$ 3.70	00.000			

Total Project Cost <sup>3</sup>	\$ 3,700,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 3,700,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Tri-City Administration Building Remodel

Project Subprogram: Tri-City WRRF Current Project Phase: Planning

Project Fund: 639/649 Project Completion: 2029

# **Project Description:**

The Tri-City Administration Building is in need of a remodel to address generally outdated and deteriorated spaces and create workspaces for current and future staff. A conceptual design was completed and recommended repurposing the existing large vehicle garage into finished space. Since the concept design requires the relocation of the garage, delivery of these projects will be coordinated and sequenced to minimize impacts to staff.



# **Project Cost Estimate:**

	Previous <sup>1</sup>	Current	
DATE	08/24	08/25	
CLASS <sup>2</sup>	Class 5	Class 5	
ESTIMATE	\$4,000,000	\$4,100,000	

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project soft costs were recalculated.

P = Planning D = Des	sign D/C = Design and Construction			C = Constr	uction R =	Recurring
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	D/C	С	С	-

Total Project Cost <sup>3</sup>	\$ 4,100,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 3,485,000
Surface Water Construction Fund 649	\$ 615,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Tri-City WRRF Headworks Rehabilitation

Project Subprogram: Tri-City WRRF Current Project Phase: Planning

Project Fund: 639 Project Completion: 2031

# **Project Description:**

The Willamette Facilities Plan identifies the need to refurbish the headworks at Tri-City. The specific refurbishments identified in the plan are to be further refined during design. Improvements include replacing existing mechanical bar screens, rehabilitating piping and gates, repairing channel concrete, and rehabilitating the main screening room to bring it up to current code.



## **Project Cost Estimate:**

	Previous <sup>1</sup>	Current	
DATE	08/24	08/25	
CLASS <sup>2</sup>	Class 5	Class 5	
ESTIMATE	\$3,200,000	\$3,300,000	

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project soft costs were re-calculated

# **Project Budget and Schedule:**

		200.8.1 0.10.0		0 00		
	1				I	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
D : DI		-	-	-	-	
Project Phase	ט	-	-	-	-	C

P = Planning D = Design D/C = Design and Construction C = Construction R = Recurring

Total Project Cost <sup>3</sup>	\$ 3,300,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 3,300,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Tri-City WRRF Rehabilitate Chlorine Contact Basins and Replace Gates

Project Subprogram: Tri-City WRRF Current Project Phase: Design

Project Fund: 639 Project Completion: 2030

# **Project Description:**

The Willamette Facilities Plan (WFP) Condition Assessment identified two items related to the Tri-City facility chlorine contact basins (CCB) requiring rehabilitation. The first is the concrete inside the chlorine contact basins is showing signs of deterioration and requires surface repair. The second item is the replacement of the influent gates. This project will be addressed in two phases, starting with the influent gate and actuator replacement in FY 24/25. The concrete surface repair work will be further evaluated to develop a final plan for addressing this condition item identified by the WFP and to extend the life of the basins.

## **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$1,080,000	\$1,180,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project soft costs were recalculated.

P = Planning D = Des	gn D/C = Design and Construction		C = Construction F		Recurring	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	-	-	-	С

Total Project Cost <sup>3</sup>	\$ 1,180,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 1,180,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Tri-City WRRF Maintenance Building Relocation

Project Subprogram: Tri-City WRRF Current Project Phase: Planning

Project Fund: 639/649 Project Completion: 2028

# **Project Description:**

The Tri-City Administration Building is in need of a remodel to address generally outdated and deteriorated spaces and create workspaces for current and future workforce. Currently, the building

houses a garage for several large trucks that require overnight freeze protection. During the concept design phase, it was identified that relocating the garage would be a lower cost than constructing new administration space and will allow the existing garage to be converted into finished space. Construction of this new building to protect large vehicles will need to be coordinated with the planned improvements for the Tri-City Administration Building. Cost shown does not include property acquisition, if needed.



#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/23	08/24
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$1,300,000	\$1,300,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: N/A

P = Planning D = Des	Planning D = Design D/C = Design and Construction		C = Construction R		Recurring	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	D	С	-	-

Total Project Cost <sup>3</sup>	\$ 1,300,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 1,105,000
Surface Water Construction Fund 649	\$ 195,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Tri-City WRRF MBR Cassette Replacement

Project Subprogram: Tri-City WRRF Current Project Phase: Planning

Project Fund: 639 Project Completion: 2031

# **Project Description:**

The Tri-City Water Resource Recovery Facility utilizes a membrane bioreactor (MBR) system for advanced wastewater treatment. The submerged membrane cassettes are critical to maintaining treatment performance and permit compliance. The existing cassettes are approaching the end of their useful service life. This project will replace the aging MBR cassettes with new manufacturer-supplied units to ensure reliable operation, maintain treatment capacity, and extend the long-term viability of the facility's MBR system. Work will include procurement of new cassettes, installation within the existing membrane tanks, necessary piping and hardware adjustments, and system startup and testing.

#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	08/24
CLASS <sup>2</sup>	N/A	Class 5
ESTIMATE	N/A	\$1,000,000

<sup>&</sup>lt;sup>1</sup>This estimate was not identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: N/A

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	-	-	-	D/C

Total Project Cost <sup>3</sup>	\$ 1,000,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 1,000,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Lab

Project Subprogram: Lab Current Project Phase: Design

Project Fund: 639/649 Project Completion: 2028

# **Project Description:**

A conceptual design was performed for a remodel of the WES Lab Building located on the Tri-City campus. The project includes a new roof, a new HVAC system and reconfiguration of office space. Due to the immediate need for the roof system, that part of the remodel was completed during FY22/23. The HVAC Improvements and full lab remodel are in design and will be constructed prior to the Tri City Admin Remodel Project.

## **Project Cost Estimate:**

	Previous <sup>1</sup>	Current				
DATE	01/24	08/25				
CLASS <sup>2</sup>	Class 5	Class 5				
ESTIMATE	\$4,000,000	\$4,100,000				



<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

P = Planning	D = Des	sign $D/C = 0$	gn D/C = Design and Construction			uction R =	Recurring
Fiscal Year (F	-Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phas	e	D	D/C	С	-	-	-

Total Project Cost <sup>3</sup>	\$ 4,100,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 3,485,000
Surface Water Construction Fund 649	\$ 615,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Kellogg Creek WRRF Digester Improvements and Dewatering

Project Subprogram: Kellogg WRRF Current Project Phase: Planning

Project Fund: 639 Project Completion: 2032

# **Project Description:**

Currently, digested sludge from the Kellogg Facility is hauled to, and dewatered at, the Tri-City WRRF.

Dewatered biosolids are hauled from Tri-City WRRF to eastern Oregon for beneficial reuse. This project would provide dewatering capabilities at the Kellogg WRRF with additional improvements to the digester complex, including updating the biogas utilization system. The budget for this project was previously increased to include new thickening equipment, the replacement of which was originally in the Kellogg Improvements project but was delayed to be included in this project.



#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$27,800,000	\$28,500,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project soft costs were recalculated

# **Project Budget and Schedule:**

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	-	D	D/C	С

P = Planning D = Design D/C = Design and Construction C = Construction R = Recurring

Total Project Cost <sup>3</sup>	\$ 28,500,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 28,500,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Kellogg Creek WRRF Administration Building Remodel

Project Subprogram: Kellogg WRRF Current Project Phase: Design

Project Fund: 639 Project Completion: 2026

# **Project Description:**

This project remodels the Administration Building at the Kellogg Facility to update the lab, provide locker rooms, a kitchen/lunchroom and offices for staff. This project will also include a dual purpose conference room that will be available for community use. A conceptual design has been completed. This project needs to be completed prior to construction of the Digestion and Dewatering Project at the Kellogg Creek WRRF as that project includes demolishing the current staff locker rooms and kitchen/lunchroom.



# **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	09/24
CLASS <sup>2</sup>	Class 4	Class 3
ESTIMATE	\$4,200,000	\$4,500,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: The previous estimate underestimated inflation to midpoint of construction. This updated value is from the 60% estimate developed in design.

P = Planning	D = Des	ign D/C = [	D/C = Design and Construction			uction R =	Recurring
Fiscal Year (F	-Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	D/C	С	-	-	-	1

Total Project Cost <sup>3</sup>	\$ 4,500,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 4,500,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Kellogg Creek WRRF UV Replacement

Project Subprogram: Kellogg WRRF Current Project Phase: Design

Project Fund: 639 Project Completion: 2027

# **Project Description:**

Wastewater treated at the Kellogg Creek WRRF is primarily disinfected with ultraviolet (UV) light, while a chlorination system provides backup. The Willamette Facilities Plan identifies a need to renew this disinfection system to ease maintenance and improve reliability. The UV equipment is at the end of its useful life. This project will evaluate and select the best disinfection system, and then design and construct the recommended improvements.



## **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/23	08/24
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$3,160,000	\$2,250,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project soft costs were recalculated.

# **Project Budget and Schedule:**

- C	,	0				
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	D/C	С	-	-	-	-

P = Planning D = Design D/C = Design and Construction C = Construction R = Recurring

Total Project Cost <sup>3</sup>	\$ 2,250,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 2,250,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** Kellogg Creek WRRF Headworks/Grit Loading Improvements

Project Subprogram: Kellogg WRRF Current Project Phase: Planning

Project Fund: 639 Project Completion: 2028

# **Project Description:**

The headworks and grit loading systems at Kellogg are original to the 1970s construction of the facility and are in need of an update to provide reliable treatment. Planned improvements include replacing two existing mechanical bar screens and accessories, rehabilitating the grit removal system, and updating the electrical, instrumentation, and control systems.



# **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$1,500,000	\$1,600,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project soft costs were recalculated.

P = Planning	D = Des	ign D/C = Design and Construction		C = Construction		Recurring	
Fiscal Year (F	·Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	е	-	D	С	-	-	-

Total Project Cost <sup>3</sup>	\$ 1,600,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 1,600,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** Kellogg Creek WRRF Primary Clarifier Rehabilitation

Project Subprogram: Kellogg WRRF Current Project Phase: Planning

Project Fund: 639 Project Completion: 2029

# **Project Description:**

This project was identified as a condition assessment project to rehabilitate Primary Basin 1 and 2. The facility plan identified that rehabilitation will include addressing the corrosion of the concrete within the basins and full replacement of the bottom basin grout. During the design phase of this project, further evaluation of the basins will be conducted to refine the full scope of this project. At this time, replacement of the mechanical equipment is not included as part of this project.



## **Project Cost Estimate:**

	Previous <sup>1</sup> Curre	
DATE	08/23	08/24
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$1,800,000	\$1,300,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project soft costs were recalculated

P = Planning D = De	= Design D/C = Design and Construction		C = Construction R		Recurring	
Fiscal Year (FY)						EV 20/21
riscal feat (Ff)	F1 23/20	F1 20/2/	F1 2//20	F1 20/29	F1 29/30	F1 30/31
Project Phase	-	D	С	С	-	-

Total Project Cost <sup>3</sup>	\$ 1,300,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 1,300,000

<sup>&</sup>lt;sup>3</sup>Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Kellogg Creek WRRF Primary and Primary Pump Station

Project Subprogram: Kellogg WRRF Current Project Phase: Planning

Project Fund: 639 Project Completion: 2032

## **Project Description:**

The Kellogg Creek Facility Plan identifies the Kellogg Creek WRRF Primary and Primary Pump Station improvements necessary due to condition assessment. The primary basins includes two 100' diameter aluminum covered clarifiers located central to the facility, as well as the pump station located north of Primary Basin 2. This Primary Clarifier Rehab project is scheduled to be completed in 2029 and findings from this project will impact the scope of the Primary and Primary Pump Station project, scheduled to start after the conclusion of the former project. The facility plan identified possible future rehabilitation of the primaries, primary pump station piping, primary scum pump, primary sludge pumps, and primary sludge grinder control panel.



Picture 8.
Primary Basin 2



Picture 9. Primary Basin 1



Primary Basin 2



Primary Pump Station Piping General

# **Project Cost Estimate:**

	Previous <sup>1</sup> Curren	
DATE	N/A	08/25
CLASS <sup>2</sup>	N/A	Class 5
ESTIMATE	N/A	\$1,100,000

<sup>&</sup>lt;sup>1</sup>This estimate was not identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project soft costs were recalculated

P = Planning	D = Des	ign D/C = [	gn D/C = Design and Construction			uction R =	Recurring
Fiscal Year (FY)						FY 30/31	
Project Phas	e	-	-	-	-	-	D

Total Project Cost <sup>3</sup>	\$ 1,100,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 1,100,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

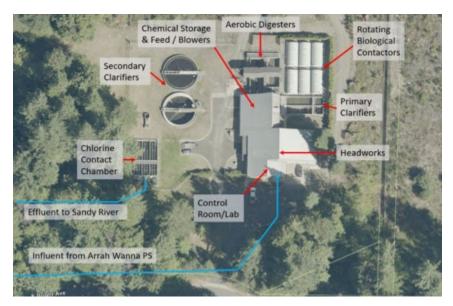
Project Name: Hoodland WRRF Secondary Treatment Upgrade

Project Subprogram: Hoodland WRRF Current Project Phase: Planning

Project Fund: 632/639 Project Completion: 2033

# **Project Description:**

The Hoodland Water
Resource Recovery Facility
(WRRF) was originally
constructed in 1982 and
provides treatment of
wastewater from the
Hoodland service area prior to
discharge into the Sandy
River. The Hoodland Facility
Plan (HFP) will make
recommendations for
necessary improvements to
the facility. This project is a
placeholder in anticipation of



a project recommendation from the HFP. This project definition and costs will be updated at the completion of the HFP.

## **Project Cost Estimate:**

	Previous <sup>1</sup> Current		
DATE	N/A	08/24	
CLASS <sup>2</sup>	N/A	Class 5	
ESTIMATE	N/A	\$10,500,000	

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Estimate escalated for inflation.

P = Planning D = Design D/C = Design an		Design and C	onstruction	C = Constr	uction R =	Recurring	
Fiscal Year (F	Υ)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	9	-	-	-	-	D	С

Total Project Cost <sup>3</sup>	\$ 10,500,000			
Funding Source(s)				
Sewer Construction Fund 639	\$ 5,250,000			
Sewer SDC Fund 632	\$ 5,250,000			

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** Boring Upgrades **Project** 

Subprogram: Boring Treatment Facility Current Project Phase: Planning

Project Fund: 639 Project Completion: 2031

# **Project Description:**

The Boring Treatment Facility periodically is not able to meet effluent water quality requirements defined in the NPDES permit. During winter months, wastewater must occasionally be hauled to a different WES WRRF when the facility is unable to adequately reduce ammonia concentrations. During the summer months, onsite irrigation of treated effluent is essential to limit temperature impacts to the discharge stream. In 2020, a Facilities Plan was prepared that recommended the facility be permanently converted to a pump station to convey flow to another facility for treatment.



Design of the proposed pump station and force main was initiated, but detailed cost estimates prepared during the initial phases of design exceeded the planning level estimates and the project to convert the facility to a pump station was placed on hold until a more feasible discharge location can be realized. An updated alternatives analysis is being performed to identify a cost-feasible approach to continue operation of the existing facility until the recommended long-term solution can be implemented.

## **Project Cost Estimate:**

	Previous <sup>1</sup> Current		
DATE	08/24	08/25	
CLASS <sup>2</sup>	Class 5	Class 5	
ESTIMATE	\$10,230,000	\$8,800,000	

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: New estimate is based on utilizing underground discharge.

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring
_	_			_

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	Р	D	D	-	-	С

Total Project Cost <sup>3</sup>	\$ 8,800,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 8,800,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

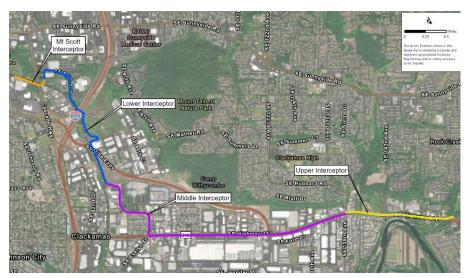
Project Name: Clackamas Area Interceptor Improvements – Middle Clackamas

Project Subprogram: Collection System Current Project Phase: Design

Project Fund: 632/639 Project Completion: 2027

## **Project Description:**

The Clackamas Interceptor has been shown in past studies and in the SSMP to lack capacity to serve the current and future service areas. Parts of the interceptor require rehabilitation. A conceptual design has been completed. Improvements along the length of the interceptor will be designed as one system to assure cohesiveness, then construction will be phased over several years and multiple projects to best meet capacity needs and funding resources. The previous CIP included



the entire Clackamas Area Interceptor Improvements as one project, it is now being separated into separate phases. The Middle Clackamas phase includes the portion of the interceptor that is most capacity driven and therefore will be constructed first. It is identified in purple above.

#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	11/24
CLASS <sup>2</sup>	N/A	Class 3
ESTIMATE	N/A	\$28,700,000

<sup>&</sup>lt;sup>1</sup>This estimate was not identified in the previous CIP for this specific project. The total Clackamas Interceptor project estimate is \$60.4M, a decrease from \$63.7M in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Estimate is for the Middle Clackamas portion only

P = Planning	P = Planning D = Design D/C = Design and Construction		onstruction	C = Constr	uction R =	Recurring	
Fiscal Year (F	Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	9	D	D/C	С	-	-	-

Total Project Cost <sup>3</sup>	\$ 28,700,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 14,350,000
Sewer SDC Fund 632	\$ 14,350,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** Clackamas Area Interceptor Improvements – Mount Scott

Project Subprogram: Collection System Current Project Phase: Design

Project Fund: 632/639 Project Completion: 2027

## **Project Description:**

The Clackamas Interceptor has been shown in past studies and in the SSMP to lack capacity to serve the current and future service areas. Parts of the interceptor require rehabilitation. A conceptual design has been completed. Improvements along the length of the interceptor will be designed as one system to assure cohesiveness, then construction will be phased over several years and multiple projects to best meet capacity needs and funding resources. The previous CIP included



the entire Clackamas Area Interceptor Improvements as one project, it is now being separated into separate phases. The Mt. Scott phase will be constructed in a similar timeframe to the Middle Clackamas Interceptor. It is identified in orange above.

#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	11/24
CLASS <sup>2</sup>	N/A	Class 3
ESTIMATE	N/A	\$4,900,000

<sup>&</sup>lt;sup>1</sup>This estimate was not identified in the previous CIP for this specific project. The total Clackamas Interceptor project estimate is \$60.4M, a decrease from \$63.7M in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Estimate is for the Middle Clackamas portion only

P = Planning D =	Design	D/C = [	Design and Co	onstruction	C = Constr	uction R =	Recurring	
								<b>.</b>
Fiscal Year (FY)	FY	′ 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	
Project Phase		D	D/C	С	-	-	-	

Total Project Cost <sup>3</sup>	\$ 4,900,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 2,450,000
Sewer SDC Fund 632	\$ 2,450,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** Clackamas Area Interceptor Improvements – Upper Clackamas

Project Subprogram: Collection System Current Project Phase: Design

Project Fund: 632/639 Project Completion: 2032

# **Project Description:**

The Clackamas Interceptor has been shown in past studies and in the SSMP to lack capacity to serve the current and future service areas. Parts of the interceptor require rehabilitation. A conceptual design has been completed. Improvements along the length of the interceptor will be designed as one system to assure cohesiveness, then construction will be phased over several years and multiple projects to best meet capacity needs and funding resources. The previous CIP included



the entire Clackamas Area Interceptor Improvements as one project, it is now being separated into separate phases. The Upper Clackamas phase will be constructed after the Middle and Mt. Scott phases. However, the hydraulic model is currently being updated with new flow data and the construction schedule may change based on modeled capacity needs. It is identified in yellow above.

## **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	11/24
CLASS <sup>2</sup>	N/A	Class 3
ESTIMATE	N/A	\$6,600,000

<sup>&</sup>lt;sup>1</sup>This estimate was not identified in the previous CIP for this specific project. The total Clackamas Interceptor project estimate is \$60.4M, a decrease from \$63.7M in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Estimate is for the Middle Clackamas portion only

P = Planning D =	Design D/C = D	esign and Construction	C = Construction	R = Recurring
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Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	-	-	D	С

Total Project Cost <sup>3</sup>	\$ 6,600,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 3,300,000
Sewer SDC Fund 632	\$ 3,300,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

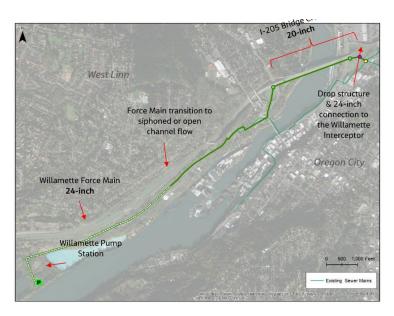
Project Name: Willamette Pump Station and Force Main Capacity

Project Subprogram: Collection System Current Project Phase: Design

Project Fund: 632/639 Project Completion: 2030

## **Project Description:**

The Willamette Pump Station collects flow from the Willamette area of West Linn and conveys it to the Willamette Interceptor. The SSMP and a subsequent detailed evaluation showed the pump station and force main are at capacity and in need of expansion. Condition issues also need to be addressed. WES took advantage of the Abernethy Bridge Expansion Project and contracted with ODOT to suspend a portion of the force main from the bridge at a cost savings to rate payers. The remainder of the project includes replacement of the Willamette Pump Station and an upsized force main from the pump station to the Abernethy Bridge to accommodate planned future flows.



#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 4	Class 4
ESTIMATE	\$38,090,000	\$33,090,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project costs decreased due to new data from site geotechnical conditions, cost savings related to pump station design, and cost of pipe material.

P = Planning D = Design D/C = Design and Construction			C = Constr	uction R =	Recurring	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	D	D/C	С	С	С	С

Total Project Cost <sup>3</sup>	\$ 33,090,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 16,545,000
Sewer SDC Fund 632	\$ 16,545,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Rock Creek Interceptor Extension

Project Subprogram: Collection System Current Project Phase: Design

Project Fund: 632 Project Completion: 2028

# **Project Description:**

The Sanitary Sewer Master Plan completed in 2019 built upon a preliminary routing analysis that was completed in 2007 for the extension of the Rock Creek Interceptor. Based on this planning work, the interceptor will be extended to the north and east. The schedule for implementation will need to be balanced against available downstream conveyance and treatment capacity. The project is currently in the preliminary design phase.



#### **Project Cost Estimate:**

	Previous <sup>1</sup> Cur						
DATE	08/24	06/25					
CLASS <sup>2</sup>	Class 5	Class 4					
ESTIMATE	\$12,190,000	\$13,620,000					

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Intergovernmental Agreements were not accounted for in the previous estimate and have been included in this estimate

P = Planning D = Des	esign D/C = Design and Construction		C = Construction R		Recurring	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	D	D/C	С	С	-	-

Total Project Cost <sup>3</sup>	\$ 13,620,000
Funding Source(s)	
Sewer SDC Fund 632	\$ 13.620.000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** I/I Reduction Program

Project Subprogram: Collection System Current Project Phase: Recurring

Project Fund: 632 Project Completion: Ongoing

## **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. The Sanitary Sewer System Master Plan (2019)



recommended removal of excessive I/I in 19 basins in WES and member city systems. All future WES planning assumes removal of the I/I. WES initiated a five year program to assist member cities with the cost of removal of I/I in basins identified in their systems. This project includes those costs and assumes ongoing costs through the planning period.

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	R	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 11,975,000 <sup>2</sup>
Funding Source(s)	
Sewer SDC Fund 632	\$ 11,975,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 2 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring cost with a range of future projects with varying scope, additional future spending beyond the next five years is not included in this figure

**Project Name:** IT2 Pump Station Expansion and 30-inch Force Main

Project Subprogram: Collection System Current Project Phase: Construction

Project Fund: 632/639 Project Completion: 2027

# **Project Description:**

The Intertie Pump Station diverts flow in excess of Kellogg WRRF capacity to the Tri-City WRRF. The pump station is at capacity and was constructed so that pump(s) can be added to increase capacity. The 30-inch force main from the pump station to Tri-City WRRF was partially constructed in past years. This project will complete construction of the force main. The pump station is scheduled for a second expansion beyond 2030.



# **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	07/24	08/25
CLASS <sup>2</sup>	Class 1	Class 1
ESTIMATE	\$23,060,000	\$24,560,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Total project increased due to the bidding of the project coming in higher than anticipated.

P = Planning	D = Design D/C = Design and Construction			C = Constr	uction R =	Recurring	
Fiscal Year (F	Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	е	С			-	-	-

Total Project Cost <sup>3</sup>	\$ 24,560,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 12,280,000
Sewer SDC Fund 632	\$ 12,280,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Bolton Force Main Evaluation and Replacement

Project Subprogram: Collection System Current Project Phase: Planning

Project Fund: 639 Project Completion: 2029

# **Project Description:**

The Bolton and River Street pump stations are served by 16" and 12" force mains respectively. The force mains were installed in the 1980s', and recently the Bolton force main has had breaks in the pipe. This project will determine, based on hydraulic needs and condition, if the existing force mains can be rehabilitated or if a new force main will need to be installed to provide a reliable and resilient way to transport sewage from the north side of West Linn across the Willamette River for treatment at the Tri-City WRRF.



## **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	6,500,000	7,660,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: The estimate was developed based on technical experience and updated to include escalation due to inflation. Total project costs include pigging and analysis work as well as work to address proposed solution.

P = Planning D = Design D/C = Design and Construction	C = Construction	R = Recurring
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Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase		D	D/C	С	-	-

Total Project Cost <sup>3</sup>	\$ 7,660,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 7,660,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

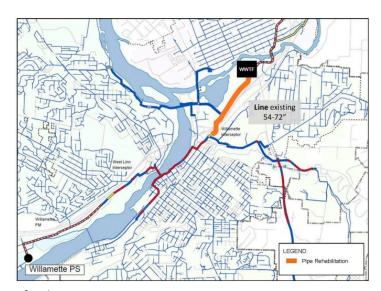
Project Name: Lower Willamette Interceptor

Project Subprogram: Collection System Current Project Phase: Planning

Project Fund: 632/639 Project Completion: 2033

# **Project Description:**

The Lower Willamette Interceptor improvements address the intermediate to mid-stage microbial induced corrosion issues found during the condition assessment. The project involves lining the existing lower Willamette Interceptor, which ranges from 54 inches to 72 inches in diameter. The interceptor was identified in the Collection SSMP with a moderate risk score, and is therefore scheduled further out than other assets identified in the SSMP, with design beginning in 2030. The Lower Willamette Interceptor project addresses the condition issues in the Willamette Interceptor. This



project is eligible to be funded 50% through SDC funding.

# **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	08/25
CLASS <sup>2</sup>	N/A	Class 5
ESTIMATE	N/A	\$14,500,000

<sup>&</sup>lt;sup>1</sup>This project was not identified in previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: N/A

P = Planning D = Des	D/C = Design and Construction			C = Construction R =		Recurring
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	-	-	-	D/C

Total Project Cost <sup>3</sup>	\$ 14,500,000
Funding Source(s)	
Sewer SDC Fund 632	\$ 7,250,000
Sewer Construction Fund 639	\$ 7,250,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Sandy River Lane Pump Station

Project Subprogram: Collection System Current Project Phase: Planning

Project Fund: 639 Project Completion: 2029

# **Project Description:**

The Timberline Rim and Sandy River Lane Pump Stations were included as a single project in the previous CIP. The Sandy River Lane Pump Station will be constructed first and has thus been separated into its own project. The pump station and associated force main are located in the Mt. Hood Village area, adjacent to the Sandy River. The pump station was constructed in 2002 and operates upstream of the Hoodland WRRF. The pump station and force main are at risk of erosion due to movement of the Sandy



River, posing significant risk of failure. Also, in periods of wet weather when the system experiences peak flow, capacity in the system is not adequate with risk of overflow. This project will relocate the Sandy River Lane Pump Station to a location outside of the channel migration zone and evaluate an increase to the system capacity and ensure system resiliency.

#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	08/25
CLASS <sup>2</sup>	N/A	Class 5
ESTIMATE	N/A	\$2,500,000

<sup>&</sup>lt;sup>1</sup>This project was not identified in previous CIP (previously it was included as part of a larger project but is now a standalone project). <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: N/A

P = Planning D = D	esign D/C =	gn D/C = Design and Construction			uction R =	Recurring
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	D	С	-	-

Total Project Cost <sup>3</sup>	\$ 2,500,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 2,500,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** Multiple Pump Station Upgrades

Project Subprogram: Collection System Current Project Phase: Construction

Project Fund: 639 Project Completion: 2027

# **Project Description:**

Several pump stations are in need of rehabilitation. The type of upgrades include, but are not limited to, pumps and electrical, HVAC and structural components. By designing the project once and constructing in phases, WES is providing consistency across our facilities and being efficient with design costs. The pump stations include Sieben Lane, South Welches, Golf Course Terrace, Gladstone, Clackamas, 82nd Drive, Bolton, River Street, Timberline Rim, and Willamette.





## **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 3/1	Class 3/1
ESTIMATE	\$12,010,000	\$12,920,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: This project includes multiple pump station upgrades at various levels of design and so the classification identified here does not represent the entire project. Scope has fluctuated with project need across the pump stations throughout the system.

P = Planning	= Planning $D = Design D/C = Design and Construction$			C = Constr	uction R =	Recurring	
Fiscal Year (F	Υ)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	2	D/C	С	_	_	_	_

Total Project Cost <sup>3</sup>	\$ 12,920,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 12,920,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Oregon City Interceptor Rehabilitation

Project Subprogram: Collection System Current Project Phase: Planning

Project Fund: 632/639 Project Completion: 2031

# **Project Description:**

The Oregon City interceptor consists of 30"- 42" sewers located adjacent to Clackamette Park and

McLoughlin Boulevard in Oregon City and was constructed in 1984. The interceptor was identified in the Collection SSMP with a moderate risk score, and is therefore scheduled further out than other assets identified in the SSMP, with design beginning in 2030. The Oregon City Interceptor project addresses the condition issues in the Oregon City Interceptor. The improvements involve lining the existing interceptor and hydraulic modifications to the Gladstone Pump Station discharge to address flow backups by reducing losses through the flow structure. This project is eligible to be funded 50% through SDC funding.



# **Project Cost Estimate:**

	Previous <sup>1</sup>	Current	
DATE	N/A	08/24	
CLASS <sup>2</sup>	N/A	Class 5	
ESTIMATE	N/A	\$1,800,000	

<sup>&</sup>lt;sup>1</sup>This project was not identified in previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: N/A

P = Planning D = De	sign $D/C = I$	n D/C = Design and Construction			C = Construction R	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	-	-	D	С

Total Project Cost <sup>3</sup>	\$ 1,800,000			
Funding Source(s)				
Sewer SDC Fund 632	\$ 900,000			
Sewer Construction Fund 639	\$ 900,000			

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** Clackamas Force Main 10-inch Upsize

Project Subprogram: Collection System Current Project Phase: Planning

Project Fund: 632/639 Project Completion: 2027

# **Project Description:**

The existing force main from the Clackamas Pump Station has an approximately 2,000 linear foot section where the pipe reduces size from 12-inch to 10-inch diameter and causes pressure issues with the air relief valves. The reduction in diameter limits operations ability to clean the force main as part of regular force main maintenance. This project includes the design and construction of the replacement of the 10-inch diameter segment and upsizes it for additional capacity.



### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$1,250,000	\$1,350,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project estimate increased estimate due to additional investigation work and inflation.

P = Planning D = Des	ign D/C = [	Design and Co	onstruction	C = Constr	uction R =	Recurring
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	D	С	-	-	-	-

Total Project Cost <sup>3</sup>	\$ 1,350,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 675,000
Sewer SDC Fund 632	\$ 675,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

**Project Name:** Decant Facility Upgrades

Project Subprogram: Collection System Current Project Phase: Planning

Project Fund: 632/639 Project Completion: 2030

# **Project Description:**

WES operates a decant facility adjacent to the Clackamas Pump Station located at the corner of SE Jennifer St. and SE Evelyn St. in the Clackamas industrial area. A decant facility is a structure used to

separate liquids from solids in waste material via gravity, allowing flows to be drained into the collection system off of a sloped concrete pad through screening, and material to be hauled away more efficiently with higher percent solids. This decant facility is utilized by multiple municipalities and presently experiences operating issues that impact the Clackamas Pump Station. This project will evaluate the existing facility, identify upgrades, develop standard operating procedures for facility use, and construct the designed upgrades.



#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	08/25
CLASS <sup>2</sup>	N/A	Class 5
ESTIMATE	N/A	\$1,200,000

<sup>&</sup>lt;sup>1</sup>This project was not identified in previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: N/A

P = Planning D = Design D/C = D		Design and Co	onstruction	C = Constr	uction R =	Recurring
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase		Р	D	D	С	-

Total Project Cost <sup>3</sup>	\$ 1,200,000
Funding Source(s)	
Sewer Construction Fund 639	\$ 1,200,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 2 for a more detailed annual project cost breakdown

Project Name: Pipe and Manhole Rehabilitation and Replacement

Project Subprogram: Collection System Current Project Phase: Recurring

Project Fund: 632/639 Project Completion: Ongoing

### **Project Description:**

Sanitary sewer pipe and manholes are 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. WES tracks manhole and pipe condition through our asset management program. Projects are prioritized and each year, some work is planned to be done where budget allows. This project will repair and/or replace damaged and aging pipelines utilizing methods including pipe-lining, pipe bursting



and replacement. This project will also 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.

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	R	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 5,000,000 <sup>2</sup>
Funding Source(s)	
Sewer Construction Fund 639	\$ 2,500,000 <sup>2</sup>
Sewer SDC Fund 632	\$ 2,500,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 2 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

Project Name: Water Resource Recovery Facilities: Small Projects

Project Subprogram: Asset Maintenance Current Project Phase: Recurring

Project Fund: 639 Project Completion: Ongoing

# **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 may include electrical updates, instrumentation upgrades, and process HVAC system improvements. This project was formerly known as 'Asset Management - Renewal and Replacement.'

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	R	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 4,000,000 <sup>2</sup>
Funding Source(s)	
Sewer Construction Fund 639	\$ 4,000,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 2 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

Project Name: Fleet: Light Duty

Project Subprogram: Fleet Current Project Phase: Recurring

Project Fund: 639 Project Completion: Ongoing

# **Project Description:**

This project pool funds the replacement of aging fleet including vehicles used for pipeline and facility maintenance, stormwater operations, construction management and district support functions. We are

also working to improve fuel economy and reduce carbon emissions. Specific vehicle purchases are prioritized during each fiscal year and are based on an assessment that weighs the costs of maintenance versus the costs of replacement. The assessment includes such screening 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.



P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	R	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 2,164,000 <sup>2</sup>
Funding Source(s)	
Sewer Construction Fund 639	\$ 2,164,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Refer to Table 2 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

Project Name: SCADA System Modernization and Renewal Program

Project Subprogram: Asset Maintenance Current Project Phase: Recurring

Project Fund: 639 Project Completion: Ongoing

# **Project Description:**

WES treatment facilities utilize Supervisory Control and Data Acquisition (SCADA) systems that allow personnel to monitor and control treatment processes in real time. Data from sensors and devices like motors, pumps, and valves are relayed to operators, who interpret data to efficiently and effectively control plant processes. As SCADA systems are vital for plant operations, this project includes a recurring budget to evaluate and repair or replace the existing SCADA systems, some of which utilize computer components from the 1990s.



P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring
1 - 1 1011111115	D Design	D/C - Design and construction	C Construction	it - itecarring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 1,500,000 <sup>2</sup>
Funding Source(s)	
Sewer Construction Fund 639	\$ 1,500,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 2 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

Project Name: Fleet: Heavy Equipment

Project Subprogram: Fleet Current Project Phase: Recurring

**Project Fund:** 639 **Project Completion:** Ongoing

# **Project Description:**

This project pool funds the replacement of aging heavy fleet and equipment used in plant operations, pipeline and infrastructure maintenance, and liquid biosolids transport.



P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	R	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 710,000 <sup>2</sup>
Funding Source(s)	
Sewer Construction Fund 639	\$ 710,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 2 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

**Project Name:** Pump Station Improvements

Project Subprogram: Collection System Current Project Phase: Recurring

Project Fund: 639 Project Completion: Ongoing

# **Project Description:**

These funds are reserved for renewal and replacement of high risk pump station assets to increase reliability. Specific efforts in this project class include pump rebuilds or replacements.



P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	R	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 500,000 <sup>2</sup>
Funding Source(s)	
Sewer Construction Fund 639	\$ 500,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 2 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

Project Name: Lab Equipment

Project Subprogram: Lab Current Project Phase: Recurring

Project Fund: 639/649 Project Completion: Ongoing

# **Project Description:**

These funds are reserved for small projects related to new or replaced lab equipment which are capital in nature, including analytical instruments, balances, ovens and incubators, etc. This is an ongoing cost.

P = Planning	D = Des	ign D/C = [	D/C = Design and Construction		C = Construction R		Recurring
Fiscal Year (F	-Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	R	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 150,000 <sup>2</sup>
Funding Source(s)	
Sewer Construction Fund 639	\$ 127,500 <sup>2</sup>
Surface Water Construction Fund 649	\$ 22,500 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 2 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

# Appendix B

Surface Water Project Detail Sheets

**Project Name:** 3-Creeks Water Quality Project

Project Subprogram: Watershed Protection Current Project Phase: Construction

Project Fund: 649 Project Completion: 2026

### **Project Description:**

WES owns the 3-Creeks Natural Area where Mt. Scott, Phillips and Deer (Dean) Creeks come together on 89 acres in Northern Clackamas County. WES completed final plans and bid this project in summer 2025 to enhance floodplain processes and the incised stream, to increase flood storage, improve fish and wildlife habitat, and restore natural floodplain function. The project will improve the creek's water quality by allowing sediments in high water to settle onto the floodplain, and by restoring floodplain processes such as filtration and infiltration. After construction is complete, the CIP includes budget to maintain the area.

#### **Project Cost Estimate:**

-,			
	Previous <sup>1</sup>	Current	
DATE	08/24 08/24		
CLASS <sup>2</sup>	Class 1	Class 1	
ESTIMATE	\$5,626,000	\$5,800,000	

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project cost increases are reflective of the project completing bidding and contracting, as well as including maintenance in out years.

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	С	R	R	R	R	R

Total Project Cost <sup>3</sup>	\$ 5,800,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 5,800,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

**Project Name:** NCRA Stormwater Plan

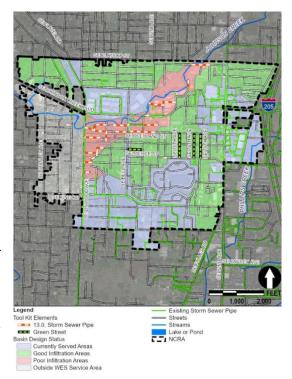
Project Subprogram: Watershed Protection Current Project Phase: Planning

Project Fund: 642/649 Project Completion: 2033

### **Project Description:**

The North Clackamas Revitalization Area (NCRA) consists of approximately 1,008 acres of unincorporated Clackamas County between Milwaukie and I-205. In 2006, Clackamas County adopted the North Clackamas Urban Renewal Plan (plan) to improve infrastructure in the area. The County identified frequent flooding from Johnson Creek and inadequate street storm infrastructure as some of the conditions limiting redevelopment in NCRA. The plan is administered by the Clackamas County Development Agency.

About 10% of the area, including 199 tax lots, is within the 100-year floodplain of Johnson Creek, which floods frequently. Many streets in the area are not built to County standards and lack adequate storm water service, including curb and gutter for proper drainage. Among other goals, the plan authorized the Development Agency to fund improvements to storm facilities in the area to improve street drainage and assist in mitigating flood impacts. The purpose of this project is to develop a master plan for extending and improving stormwater infrastructure in the NCRA.



#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current	
DATE	08/23 08/25		
CLASS <sup>2</sup>	Class 5	Class 5	
ESTIMATE	\$5,145,000		

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions.

### **Project Budget and Schedule:**

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Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	Р	Р	D	D

P = Planning D = Design D/C = Design and Construction C = Construction

Total Project Cost <sup>3</sup>	\$ 5,295,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 2,647,500
Surface Water SDC Fund 642	\$ 2,647,500

<sup>&</sup>lt;sup>3</sup>Refer to Table 4 for a more detailed annual project cost breakdown. Project Extends beyond 5-year CIP.

**Project Name:** Valley View (Storm Costs Only)

Project Subprogram: Watershed Protection Current Project Phase: Planning

Project Fund: 649 Project Completion: 2033

### **Project Description:**

The Valley View Terrace storm system (age of construction range 1970s – 2005) is within the Mt. Scott Creek area, bounded in the north by SE Charview Ct and SE Valley View Terrace, and extends roughly 2,700 feet to the south, terminating at the intersection of SE Sunnyside Rd with SE Valley View Terrace. This section of storm drainage piping is in extremely poor condition, with known failures and issues, such as blockages, cracking/holes, failed seals, collapsed pipe segments, and sink holes. WES completed a Stormwater System Capacity & System Analysis of SE Valley View Terrace in February 2022 in which existing conditions were analyzed and conceptual system improvements were provided for the storm network. This project would build upon that study to develop and construct a new storm system. This project would require coordination with DTD for road replacement. WES will coordinate with DTD to address the drainage issues in the lower section of Valley View, between Spruce View and Sunnyside, in 2025/2026.

#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24 08/24	
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$3,668,000	\$3,683,000

 $<sup>^{1}</sup>$ This estimate was identified in the previous CIP.  $^{2}$  Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project cost increases were related to inflation/soft costs.

P = Planning D = Des	sign D/C = [	gn D/C = Design and Cons		C = Constr	uction R =	R = Recurring	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	
Project Phase	Р	-	D	С	С	С	

Total Project Cost <sup>3</sup>	\$3,683,000
Funding Source(s)	
Surface Water Construction Fund 649	\$3,683,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

**Project Name:** Regional Stormwater Pond – Happy Valley

Project Subprogram: Watershed Protection Current Project Phase: Planning

Project Fund: 642 Project Completion: 2029

### **Project Description:**

Clackamas Water Environment Services (WES), in coordination with the City of Happy Valley developed a Stormwater Infrastructure Plan for the Pleasant Valley/North Carver area. As part of the Infrastructure Plan development and the Community Plan, potential locations for regional stormwater ponds were identified to provide treatment and detention, reducing the need for developers to provide onsite stormwater management and reducing the number of facilities that the City will need to maintain in the future.



The City of Happy Valley recently acquired property for the development of a Community Center. The Community Center is located on a property that was identified as suitable for a regional stormwater pond. The purpose of this project is to coordinate with the City of Happy Valley to design and construct a regional stormwater pond as part of the Community Center development.

#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	08/24
CLASS <sup>2</sup>	N/A	Class 5
ESTIMATE	N/A	\$3,500,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	D/C	С	-	-

Total Project Cost <sup>3</sup>	\$ 3,500,000
Funding Source(s)	
Surface Water SDC Fund 642	\$ 3,500,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

Project Name: Rose Creek New Detention Pond and Instream Restoration

Project Subprogram: Watershed Protection Current Project Phase: Planning

Project Fund: 649 Project Completion: 2028

### **Project Description:**

The purpose of the project is to stabilize the stream, prevent future erosion, and improve habitat. The project will construct a stormwater detention pond and flow control structure upstream of the headcut to treat and detain runoff from the upstream residential neighborhood. This will reduce peak flow rates entering the stream system and reduce erosion in the stream. The proposed detention pond receives runoff from a drainage basin of approximately 30 acres. Rock grade control structures and stable streambed material will be placed in the stream to raise the level of the streambed and stabilize the headcut. protecting the pedestrian bridge, road, and habitat upstream. The project will also restore habitat within the riparian corridor of the site. Invasive vegetation will be removed, and native species will be planted. Vegetation restoration will include the establishment of habitat features such as brush piles, snags, and large woody debris. The large woody debris will also slow the flow of water and dissipate energy during high flow events. Wetland areas will be constructed adjacent to the main channel by excavation and planting with native wetland plants.



R = Recurring

### **Project Cost Estimate:**

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	Previous <sup>1</sup>	Current				
DATE	08/24	08/25				
CLASS <sup>2</sup>	Class 5	Class 5				
ESTIMATE	\$3,393,000	\$3,400,000				

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

# **Project Budget and Schedule:**

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	D	С	С	-	-

P = Planning D = Design D/C = Design and Construction C = Construction

Total Project Cost <sup>3</sup>	\$ 3,400,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 3,400,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

Project Name: Aldercrest Culvert Replacement & Kellogg Creek

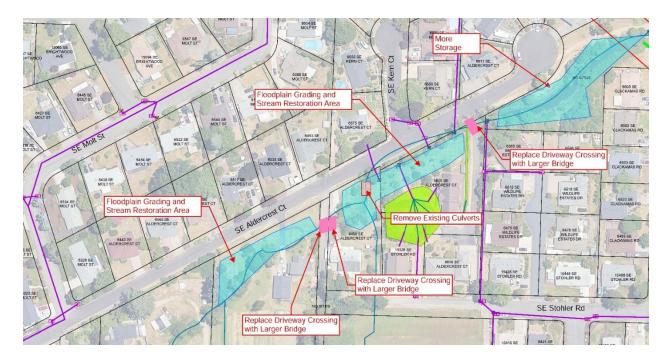
Project Subprogram: Watershed Protection Current Project Phase: Construction

Project Fund: 649 Project Completion: 2026

# **Project Description:**

The purpose of this project is to reduce flooding and improve habitat along Kellogg Creek between SE Clackamas Road and SE Thiessen Road by removing or replacing culverts and stream crossings and restoring the stream channel. Replacement stream crossings will be designed to be fish passable. The project proposes several discrete interventions in this section of Kellogg Creek that could be undertaken as separate projects depending on property owner cooperation and funding availability. At the southern end of the creek section, this project will remove one pair of parallel culverts that appear to serve no purpose, replace a small culvert with a concrete slab driveway bridge, and restore native vegetation along a length of the stream. Two driveway crossings will be replaced with concrete slab bridges to accommodate the natural stream form and provide fish passage. The proposed improvements take place entirely on private property and will require the cooperation of multiple property owners along the project reach.

This project will be funded with resources from Clackamas County's American Rescue Plan Act (ARPA) grant award, as approved by the Board of County Commissioners in October 2022.



# **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 3	Class 1
ESTIMATE	\$1,875,000	\$2,320,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: This project is funded by ARPA. Any costs over allocated funds will be paid for from SW Construction fund. Project costs reflect bidding and beginning construction.

P = Planning D =	P = Planning D = Design D/C = Design and Construction		C = Construction R =		Recurring	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	D/C	С	-	-	-	-

Total Project Cost <sup>3</sup>	\$ 2,320,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 2,320,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

Project Name: SE Clackamas Rd Drainage Infrastructure

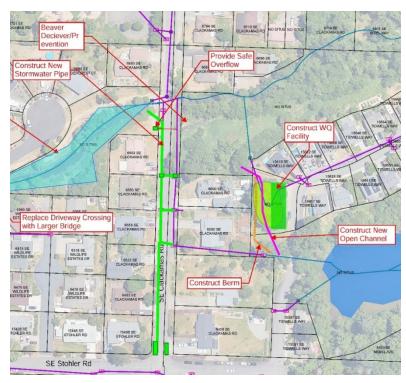
Project Subprogram: Watershed Protection Current Project Phase: Construction

Project Fund: 649 Project Completion: 2026

# **Project Description:**

The purpose of this project is to reduce flooding of properties near the SE Clackamas Road-Kellogg Creek crossing without replacing the culvert or disrupting the wetland upstream of the crossing. This will be achieved by replacing the undersized ditch inlet that collects a tributary stream and routing new storm pipes on SE Clackamas Road to a new outfall on the downstream side of the Kellogg Creek crossing instead of into the wetland upstream of the crossing.

This project will be funded with resources from Clackamas County's American Rescue Plan Act (ARPA) grant award, as approved by the Board of County Commissioners in October 2022.



### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 3	Class 1
ESTIMATE	\$1,743,000	\$1,996,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project cost increases were related to inflation. This project is funded by ARPA. Any costs over allocated funds will be paid for from SW Construction fund.

# **Project Budget and Schedule:**

1 - Hailing D - Des	C = Consti	uction it -	Recuiring			
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	С	С	-	-	-	-

P = Planning D = Design D/C = Design and Construction C = Construction R = Recurring

Total Project Cost <sup>3</sup>	\$ 1,996,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 1,996,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

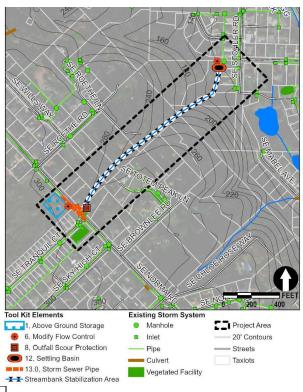
Project Name: SE Wildlife Estates Dr Ditch Inlet & Upstream Detention

Project Subprogram: Watershed Protection Current Project Phase: Planning

Project Fund: 649 Project Completion: 2027

# **Project Description:**

The purpose of this project is to prevent flooding and reduce maintenance requirements by decreasing the volume of sediment eroded and deposited at the ditch inlet. The project will involve improvements at the top of the bluff, along the stream, and at the inlet location where debris is deposited. The project will reduce erosion by detaining stormwater runoff from the neighborhood in a pond at the top of the hill and stabilizing the creek through enhancement actions at the bottom of the hill, a settling basin will remove sediment before it reaches the ditch inlet. The inlet will also be improved to reduce the potential for clogging.



### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/23	08/24
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$1,976,400	\$1,741,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes: Project costs decreased as the conceptual design was further evaluated

P = Planning D = Des	ign $D/C = 0$	n D/C = Design and Construction		C = Construction R =		Recurring
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	D	-	С	С	-	-

Total Project Cost <sup>3</sup>	\$ 1,741,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 1,741,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

**Project Name:** Idleman Conveyance

Project Subprogram: Watershed Protection Current Project Phase: Planning

Project Fund: 649 Project Completion: 2031

### **Project Description:**

The problem area is located on SE Idleman Road from SE 92nd Avenue east to SE Nicole Lane. SE Idleman Road slopes steeply at grades of 13% to 15% from east to west and has inconsistent use of curb and gutter. Areas without curbs have a raised asphalt lip which is insufficient to direct water into catch basins during heavy runoff, and the existing catch basins often clog and overflow. Water floods the roadway and neighboring properties. Flooding of private property is a frequent problem. Some driveways slope from the street, providing a direct path for runoff towards homes.

The purpose of this project is to improve conveyance and collection infrastructure along SE Idleman Road. The improvements will direct runoff into the storm system and prevent flooding of the roadway and the yards of homes along the road. The project will construct curbs, gutters, and catch basins along SE Idleman Road between SE 92nd Avenue and SE 99th Court. Curbs already exist on SE Idleman at both ends of the project, and the improvements will require widening the road five feet on the south side to connect to these existing curbs. All catch basins along the project length will be replaced in order to align with the curb and gutter, and new storm pipe will be constructed along the south side of SE Idleman. These improvements may all be completed within existing right-of-way.

The project will also replace an existing inlet at SE Idleman and SE Nicole Lane that captures flow from a drainage ditch. The existing inlet will be replaced with a larger structure to prevent clogging. The project will require coordination with the Clackamas County Department of Transportation and Development.

#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	08/24
CLASS <sup>2</sup>	N/A	Class 5
ESTIMATE	N/A	\$1,640,000

<sup>&</sup>lt;sup>1</sup>This project was not identified in previous CIP. <sup>2</sup> Refer to 'Project Cost Updates' Section for classification definitions

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	-	-	D/C	С

Total Project Cost <sup>3</sup>	\$ 1,640,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 1,640,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

**Project Name:** Sedona Drive Retention Repair

Project Subprogram: Watershed Protection Current Project Phase: Planning

Project Fund: 649 Project Completion: 2027

### **Project Description:**

WES owns a buried detention pipe behind two residential properties on SE Sedona Drive. During a period of heavy rain in spring 2025, a portion of the soil cover around a leaking part of the pipe failed and slid downhill, which exposed the side of the pipe. The facility is located along the back yard property lines at the top of a slope that is approximately 20 feet high. The 72-inch-diameter corrugated steel detention pipe is approximately 216 feet long. Visible soil erosion has occurred around the outfall pipe, and scattered pieces of concrete debris downhill of the outfall pipe suggest that concrete debris was previously placed around the outfall pipe as riprap to reduce erosion.

Following the initial failure, WES field operations cleaned and modified the detention pipe to reduce leakage, but concerns remain about the risk of future failure. This project will develop a preliminary plan to mitigate the risk of further failures. The project includes eotechnical Engineering, Natural Resources Assessment, Survey, Alternatives Analysis, and Preliminary Design to stabilize the detention pipe and slope.

#### **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	N/A	08/25
CLASS <sup>2</sup>	N/A	Class 5
ESTIMATE	N/A	\$750,000

<sup>&</sup>lt;sup>1</sup>This estimate was not identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

P = Planning D = Des	sign D/C = Design and Construction		C = Construction R =		Recurring	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	D/C	-	-	-	-

Total Project Cost <sup>3</sup>	\$ 750,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 750,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

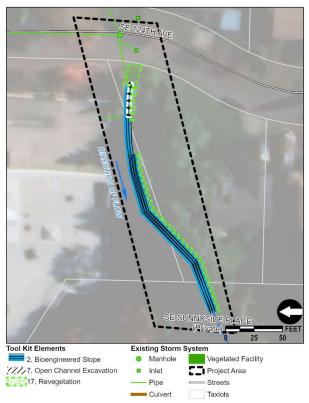
**Project Name:** Sunnyside Place Culvert Replacement & Stream Restoration

Project Subprogram: Watershed Protection Current Project Phase: Planning

Project Fund: 649 Project Completion: 2029

# **Project Description:**

The purpose of this project is to reduce flooding of SE 124th Avenue and protect the stream channel between SE 124th Avenue and SE Sunnyside Place. The project will stabilize the stream channel and uncover the buried outfall. Sediment at the SE 124th Avenue culvert outfall will be excavated to expose the downstream end of the pipe, and the stream banks will be stabilized and revegetated. These improvements will improve drainage out of the culvert and through the creek, reducing flooding at SE 124th Avenue.



# **Project Cost Estimate:**

	Previous <sup>1</sup>	Current
DATE	08/23	08/24
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$670,000	\$670,000

<sup>&</sup>lt;sup>1</sup>This estimate was identified in the previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

Notes related to project cost estimate changes:

P = Planning D = D	esign D/C = Design and Const		onstruction	C = Construction		Recurring
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	-	D/C	-	-

Total Project Cost <sup>3</sup>	\$ 670,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 670,000

<sup>&</sup>lt;sup>3</sup>Refer to Section Table 4 for a more detailed annual project cost breakdown

**Project Name:** SE 172<sup>nd</sup> Ditch Conveyance Improvement

Project Subprogram: Watershed Protection Current Project Phase: Planning

Project Fund: 649 Project Completion: 2030

### **Project Description:**

A drainage ditch flows along the west side of SE 172<sup>nd</sup> Avenue to a local low point at SE Wooded Heights Drive. There the ditch crosses SE 172nd Avenue through two culverts to a natural drainage through private property which connects to Rock Creek to the east. The ditch backs up at the culverts under SE 172nd Ave causing flooding over the roadway and into homeowners' yards. Based on visual observations, the culverts appear to be 18"-24" in diameter. The culverts and drainage downstream appear to have sufficient capacity. Vegetation growing at the inlets and outlets appears to be blocking the culverts causing the backup. As a result, the ditch overflows and floods the roadway and yards annually.

The purpose of this project is to reduce flooding and increase the conveyance capacity of the existing ditch along SE 172nd Avenue. The project will replace the culvert inlets with beehive grate manholes. These larger inlet structures will be less prone to clogging from vegetation, sediment, and debris. At the outlets, rip rap scour protection or concrete splash pads will be added to keep vegetation from restricting flows and to prevent erosion.

#### **Project Cost Estimate:**

	Previous <sup>1</sup> Currer	
DATE	08/24	08/25
CLASS <sup>2</sup>	Class 5	Class 5
ESTIMATE	\$100,000	\$250,000

<sup>&</sup>lt;sup>1</sup>This project was identified in previous CIP. <sup>2</sup>Refer to 'Project Cost Updates' Section for classification definitions

#### **Project Budget and Schedule:**

_ 0	0 , , -					0
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	-	-	-	-	D/C	-

R = Recurring

P = Planning D = Design D/C = Design and Construction C = Construction

Total Project Cost <sup>3</sup>	\$ 250,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 250,000

<sup>&</sup>lt;sup>3</sup> Refer to Table 4 for a more detailed annual project cost breakdown

**Project Name:** Restoration & Property Acquisition (Baseline Funding)

Project Subprogram: Watershed Protection Current Project Phase: Recurring

Project Fund: 649 Project Completion: Ongoing

# **Project Description:**

WES puts a high value on stream restoration, habitat improvement, and floodplain management and sees these actions as part of its mission to protect and improve water quality. These projects maximize the ecological and stormwater benefits of properties and support numerous local and regional environmental goals. For the purposes of this program summary, restoration and property acquisition can include instream restoration, riparian revegetation, culvert replacement or repair for fish passage, and property acquisition.



The main challenges for these waterbodies include poor fish passage, changes to aquatic habitat conditions, flooding risks, lack of riparian vegetation, in-stream erosion and down cutting, and water quality concerns. The SSMP identified 13 locations where restoration and property acquisition projects would address these challenges. The Restoration and Property Acquisition budget is an annual baseline funding allocation to put toward restoration, revegetation, and culvert replacement efforts, as well as an allocation of funding for property acquisition that would support restoration efforts.

The restoration and property acquisition program would fund the following types of activities: In-stream habitat improvement such as channel enhancements or stabilization, or floodplain reconnections; Streamside property acquisition to protect existing valuable habitat from alteration; Culvert replacement or repair to re-introduce habitat to fish that had been previously cut off due to culverts that prevented passage; Revegetation of streamside properties to improve habitat for fish and aquatic invertebrates; and Streamside property acquisition to protect existing valuable habitat from alteration.

P = Planning D = D	esign D/C =	gn D/C = Design and Construction		C = Construction F		R = Recurring	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	
Project Phase	R	R	R	R	R	R	

Total Project Cost <sup>1</sup>	\$ 3,950,000 <sup>2</sup>
•	, ,,
Funding Source(s)	
Surface Water Construction Fund 649	\$ 3,950,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Refer to Section Table 4 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

**Project Name:** Stormwater Pond Repair and Rehabilitation Program

Project Subprogram: Watershed Protection Current Project Phase: Recurring

Project Fund: 649 Project Completion: Ongoing

# **Project Description:**

WES owns or operates 621 stormwater facilities that reduce pollutants in stormwater runoff and/or control flows prior to discharge to a natural wetland, stream, or river. These facilities also help reduce erosive runoff, or drainage hydromodification, in stream channels. Of those facilities, 58 are currently in need of repair or rehabilitation. These facilities need routine inspection and maintenance, as well as eventual rehabilitation, to ensure functionality and maximize their useful life.



The Stormwater Pond Repair and Rehabilitation Program provides a clear budget line for these assets that are critical to meeting water quality goals and to protecting conveyance infrastructure downstream. Associated costs include project management, mobilization, traffic control, erosion controls, and surface restoration. To keep up with maintenance needs, WES is planning to fund the repair and rehabilitation of 10% of all facilities every five years.

P = Planning D = Des	ign D/C = [	D/C = Design and Construction		C = Construction R =		Recurring	
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	
Project Phase	R	R	R	R	R	R	

Total Project Cost <sup>1</sup>	\$ 2,055,000 <sup>2</sup>
Funding Source(s)	
Surface Water Construction Fund 649	\$ 2,055,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 4 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

**Project Name:** Small Storm System Emergency Repairs

Project Subprogram: Watershed Protection Current Project Phase: Recurring

Project Fund: 649 Project Completion: Ongoing

# **Project Description:**

This project includes repair of storm infrastructure such as pipes, manholes or catch basins that break and need immediate repair.

P = Planning	D = Design	D/C = Design and Construction	C = Construction	R = Recurring

Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	R	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 1,250,000 <sup>2</sup>
Funding Source(s)	
Surface Water Construction	\$ 1,250,000 <sup>2</sup>
Fund 649	

<sup>&</sup>lt;sup>1</sup>Refer to Table 4 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

**Project Name:** Water Quality Retrofit Program

Project Subprogram: Watershed Protection Current Project Phase: Recurring

Project Fund: 649 Project Completion: Ongoing

### **Project Description:**

Within the WES surface water service area, water quality has been significantly degraded from predevelopment conditions in some areas due to land use changes, hydromodification, and untreated runoff from impervious surfaces. Water quality retrofits generally include new facilities in unserved areas or enhancements which add or increase water quality treatment within existing stormwater infrastructure. New facilities serving existing impervious surfaces may be placed in the right-of-way or on public property. Enhancements of existing facilities could include 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.

The National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit requirements may change in the future and require additional water quality monitoring and retrofits to the existing storm system to improve water quality.

P = Planning	D = Des	ign D/C = [	D/C = Design and Construction			uction R =	= Recurring	
Fiscal Year (F	Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	
Project Phase		R	R	R	R	R	R	

Total Project Cost <sup>1</sup>	\$ 750,000 <sup>2</sup>
Funding Source(s)	
Surface Water Construction Fund 649	\$ 750,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 4 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

Project Name: Small Drainage Projects Program

Project Subprogram: Watershed Protection Current Project Phase: Recurring

Project Fund: 632/649 Project Completion: Ongoing

### **Project Description:**

Providing regular maintenance to existing stormwater infrastructure is important to proper asset management. The Storm System Master Plan (SSMP) grouped similar drainage issues together. Projects within the Small Drainage Program correct nuisance drainage issues and include small pipe conveyance, upgrading manholes and inlets, and small pipe lining and root removal.

The Small Drainage Projects Program improves drainage issues when flooding is caused by WES-



owned stormwater infrastructure. These projects support WES's goal of proactively addressing performance deficiencies or enhancements and decrease the number of customer service requests. The SSMP identified 32 instances where a new inlet or manhole is needed, three instances of root removal in small pipe, and identified 3,000 linear feet of 18" (or smaller) pipe that could be installed to address some flooding and ponding issues through a given year. The Small Drainage Project Program is intended to provide steady annual funding so that WES can both reactively and proactively address small flooding and drainage issues in a timely manner.

P = Planning D = Des	sign D/C = [	Design and C	onstruction	C = Constr	uction R =	Recurring
Fiscal Year (FY)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31
Project Phase	R	R	R	R	R	R

Total Project Cost <sup>1</sup>	\$ 500,000 <sup>2</sup>
Funding Source(s)	
Sewer SDC Fund 632	\$ 100,000 <sup>2</sup>
Surface Water Construction Fund 649	\$ 400,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Refer to Section Table 4 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure

**Project Name:** UIC Decommissioning/Retrofit Program

Project Subprogram: Watershed Protection Current Project Phase: Recurring

Project Fund: 649 Project Completion: Ongoing

# **Project Description:**

Underground Injection Controls (UICs) are systems that place fluids below the ground. The most common UICs in Oregon are stormwater drywells, which are usually found on large parking lot surfaces, according to the Department of Environmental Quality (DEQ). UICs for stormwater are most commonly used where connections to storm system infrastructure are not available.

Decommissioning or retrofitting UICs is necessary where the system is a known threat to groundwater quality. Under state regulatory requirements, WES has identified UICs with risk of polluting groundwater. The SSMP identified 10 drywells that intersect groundwater and are the focus of this Program.

P = Planning	D = Des	ign D/C = [	D/C = Design and Construction		C = Construction		R = Recurring	
Fiscal Year (F	-Y)	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	
Project Phase		_	R	R	R	R	R	

Total Project Cost1	\$ 275,000 <sup>2</sup>
Total Project Cost <sup>1</sup>	\$ 275,000
Funding Source(s)	
Surface Water Construction Fund 649	\$ 275,000 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Refer to Table 4 for a more detailed annual project cost breakdown

<sup>&</sup>lt;sup>2</sup> The total project cost represents projected spending over the next five years. Since this is a recurring programmatic cost, additional future spending beyond the next five years is not included in this figure





**Member Community:** City of Gladstone

**Project Name:** Sanitary Sewer I/I Reduction CIPP Project

**Date:** July 17, 2025

Basin: Gladstone East Basin 20400

In December 2024, the City of Gladstone completed Clackamas County Technical Advisory Team (TAT) approved **Project 1: Inflow Disconnection** and **Project 2: Storm Sewer Extensions** identified within the Gladstone I/I Investigation and Reduction Plan prepared by Leeway Engineering Solutions in November 2021. In order to continue I/I reduction efforts per the Leeway I/I Investigation and Reduction Plan, the City of Gladstone has developed a sanitary sewer CIPP repair project to be constructed as a series of repairs performed annually beginning in 2025 through 2027.

The project consists of constructing CIPP repairs within the East Basin 20400 identified as one of the 19 critical basins within the 2019 Clackamas County WES Sanitary Sewer System Master Plan and within **Project 4: Rehabilitation of East Basin (20400) Sewers** of the Leeway I/I Reduction Plan. The City has prioritized project 4 over **Project 3: Rehabilitation of West Basin (10100) Sewers** as east basin repairs will directly reduce I/I flows to the sanitary sewer manhole located at the intersection of Portland Ave and W. Clackamas Blvd that has historically produced SSOs to the Clackamas River during heavy rain events. The SSOs triggered a recent MAO with DEQ.

16 prioritized pipe segments are proposed to be CIPP lined over the 3 years of the project. The selected pipe segments were prioritized based on I/I reduction efficiency, logistical efficiency, SSO reduction efficiency, and severity of defects. Please see the cost estimates table located on the following pages for a breakdown of proposed annual efforts. The City will be developing separate construction contracts each year over the 3-year course of the project.

The engineers estimate for total project construction costs is \$1,114,506. This does not include any of the design work that has already been completed. Please see the cost estimates table located on the following pages for annual efforts and cost estimates.

Final Plans: June 2025

**Bidding & Awarding:** Anticipated October/November 2025

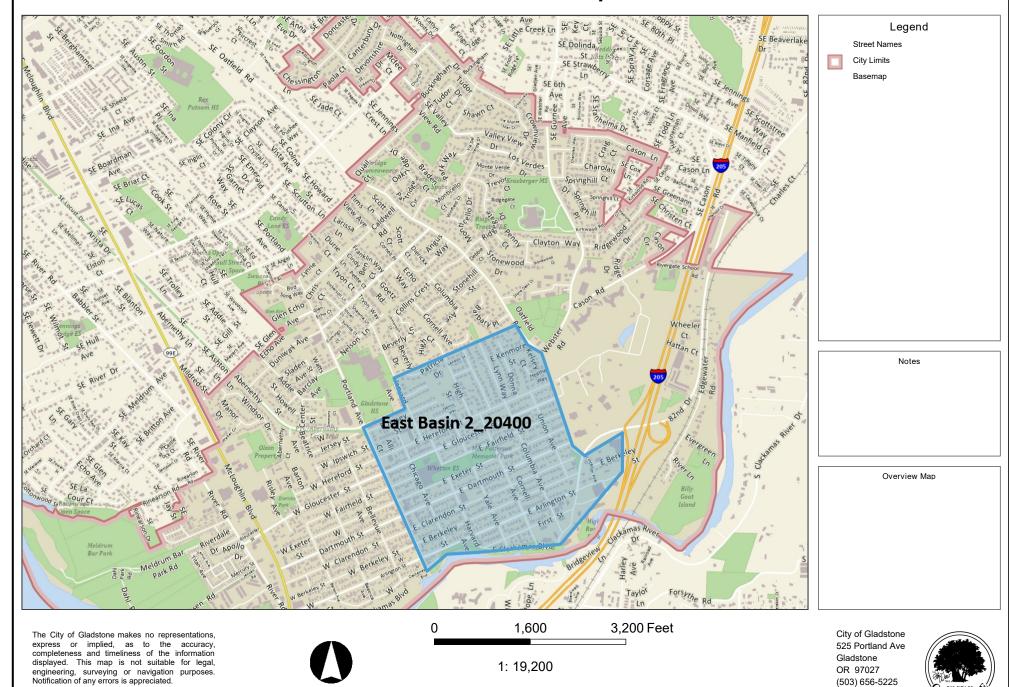
**Construction:** Anticipated to begin December 2025

EAST BASIN COST ESTIMATES 5/30/2025

							EA	ST BASIN COST E	ESTIMATES					5/30/20
No.									Service /	rvice / Tee Liner Manholes		holes		
Pile   Chemina   Pile   Chemina   Pile   Pile   Chemina   Pile   Chemina   Pile   Chemina   Pile   Pile   Chemina   Pile   Pil				# of	# of								General	
Pilot   Effective   208   6	No.	Street	(LF)	Services	Manholes								Items	Total Cost
Part						\$85	\$90	\$100	\$250	\$2,250	\$6,000	\$8,000	10%	
Part														
Page   Clarendon   African   Afric	P118	E Hereford	205	6				205	6	6				
Post   Exert   400   60								\$20,500	\$1,500	\$13,500			\$3,550	\$39,050
Post   Exert   400   60														
PS	P44	E Gloucester	450	14			450		14	14				
Property   Factor   April							\$40,500		\$3,500	\$31,500			\$7,550	\$83,050
Property   Factor   April														
Page   Electric   460   13	P58	E Exeter	460	6		460			6	6				
Property						\$39,100			\$1,500	\$13,500			\$5,410	\$59,510
Property														
Post	P59	E Exeter	460	13		460			13	13				
Second   S						\$39,100			\$3,250	\$29,250			\$7,160	\$78,760
Second   S														
P68   EClarendon   S10   10   S10   S43,380   S2,500   S4,835   S4,836   S4,836   S4,836   S2,500   S4,836	P60	E Exeter	460	14		460			14	14				
P88   EClarendon   S10						\$39,100			\$3,500	\$31,500			\$7,410	\$81,510
P68   EClurendon   S10   10   S10   S43,350   S43,350   S22,500   S22,500   S22,500   S43,500													Subtotal	\$341,880
P68   EClurendon   S10   10   S10   S43,350   S43,350   S22,500   S22,500   S22,500   S43,500														
P68   E Clarendon   510   10   510   510   510   543,350   543,350   542,500   522,500   522,500   543,350   5475,185   543,350   543,													-	
P60   EClarendon   610   15														
P60   EClarendon   610   15	P68	E Clarendon	510	10		510			10	10				
P69   EClarendon   610   15													\$6,835	\$75,185
P70   EClarendon										, , , -				
P70   EClarendon	P69	E Clarendon	610	15		610			15	15				
P70   E Clarendon   445   16													\$8.935	\$98.285
Form						, , , , , ,			72,122	, , , , , , , , , , , , , , , , , , ,			+ = , = = =	<b>,</b> ,
Form	P70	F Clarendon	445	16		450			16	16				
P71   EClarendon   415   10													\$7 825	\$86 075
Subtotal =   \$325,848   \$38,000   \$22,500   \$66,000   \$60,028   \$66,000   \$38,000   \$38,000   \$38,000   \$33,600   \$33,600   \$33,600   \$33,600   \$33,600   \$33,600   \$33,600   \$33,600   \$33,000   \$30,000   \$33,000						ψου,2ου			ψ1,000	ψου,σου			ψ,,020	φου,στο
Subtotal =   \$325,848   \$38,000   \$22,500   \$66,000   \$60,028   \$66,000   \$38,000   \$38,000   \$38,000   \$33,600   \$33,600   \$33,600   \$33,600   \$33,600   \$33,600   \$33,600   \$33,600   \$33,000   \$30,000   \$33,000	P71	F Clarendon	415	10		415			10	10				
Post   Fairfield   Associate   September   Associate   September	.,_	2 otal chaon	710	10									\$6,028	\$66,303
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P74   E Berkeley   460   12	P312	F Berkelev	90	2		90			2	2				
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\$14,500 \$1,000 \$9,000 \$2,450 \$26,950  Subtotal = Subtotal = \$316,415 3% inflation 3% inflation \$19,270  Subtotal = Subtotal = \$335,685 10% General 10% General \$33,568	D400	- Fllamatana	4.45					4.45		4				
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3% inflation   \$19,270				1				\$14,500	\$1,000	\$9,000	<del> </del>	0.4.1.1		
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10% General 10% General \$33,568														
		1									1	2027 Cost =	2027 Cost =	\$369,253

Grand Total \$1,114,506

# Gladstone GIS Map



www.ci.gladstone.or.us

Map created 7/17/2025

# Regional I/I Reduction Program Proposal

Member Community: City of Oregon City

**Project Name:** 2026 Manhole Sealing Project (Cl 25-007)

Date: October 7, 2025

WES SubBasin/Basin: OC M05/Agnes Main, OC M08/WI-40, OC M10/WI-40, &

OC M12/WI-40 (Precise scope TBD)

Table ES-3. Basin Details Identified for I/I Reduction by 2040

Priority	Subbasin	Basin	Jurisdiction	RDI/I Rate at Timeframe of Reduction Target	Estimated CIPP Rehab Length (miles)	Estimated Lateral Services	Category 1, Percentage (R&R Program) <sup>a</sup>	Category 2, Percentage (RDI/I Rehab Program) <sup>b</sup>
1	OC_M08	WI-40	Oregon City	54,600	9.7	300	100%	0%
2	OC_M10	WI-40	Oregon City	47,600	4.2	210	100%	0%
9	OC_M12	WI-40	Oregon City	24,500	30.9	1,920	71%	29%
15	OC_M05	Agnes_ Main	Oregon City	19,300	42.7	2,180	59%	41%

The 2026 Manhole Sealing Project's precise scope is to be determined, but all candidate manholes are located within the Falls, Linn, McLoughlin, Rivercrest, South End, and Warner Parrott Basins, which are located within the WES subbasins OC\_M05 (McLoughlin and Falls), OC\_M08 (Linn), OC\_M10 (Rivercrest) and OC\_M12 (South End and Warner Parrott). The identification of the manholes being rehabilitated and design of the project will be performed as part of the I&I Program Management Contract, which was approved by the TAT in March 2022.

The specific rehabilitation scope has not yet been set, but is likely to focus in these general areas:

- Manholes in the Rivercrest Basin (final step of the Rivercrest Basin rehab).
- Manholes in the McLoughlin, South End, and Warner Parrott Basins (no nearterm plans for mainline rehabilitation)

This project includes repairing ~175 manholes via grout sealing. The project is being advertised and will follow this approximate schedule:

- Final Plans, Bidding, & Award: December 2025
- Construction: January 2026

The estimated cost of this project is \$536,000, including \$426,000 in construction costs and \$110,000 in design and construction services expenses. The design and construction services expenses are not included as part of this request (part of the I&I PM Contract).