

To request translation or disability-related accommodations, please contact us at **bcc@clackamas.us | 503-655-8581**.

Si quiere solicitar servicios de traducción o adaptaciones para la discapacidad, contáctenos en/al **bcc@clackamas.us | 503-655-8581**.

Чтобы запросить перевод или приспособления, связанные с инвалидностью, пожалуйста, свяжитесь с нами по: **bcc@clackamas.us | 503-655-8581**.

Щоб попросити переклад або спеціальні послуги для осіб з особливими потребами, зверніться до нас, скориставшись такими контактними даними: **bcc@clackamas.us | 503-655-8581**.

如需翻译服务或残障相关的协助，请与我们联系：**bcc@clackamas.us | 503-655-8581**。

Để yêu cầu dịch vụ dịch thuật hoặc điều chỉnh liên quan đến tình trạng khuyết tật, vui lòng liên hệ với chúng tôi qua **bcc@clackamas.us | 503-655-8581**.



Clackamas County
www.clackamas.us

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

Policy Session Worksheet

Presentation Date: July 28, 2026

Approx. Start Time: 1:30 PM

Approx. Length: 30 minutes

Presentation Title: Inflow and Infiltration Intergovernmental Agreement Renewal

Department: Water Environment Services (WES)

Presenters: Ron Wierenga, Assistant Director & Jeff Stallard, Capital Program Manager

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Board approval to renew an agreement with partner cities for continued implementation of a regional program to reduce inflow and infiltration.

EXECUTIVE SUMMARY:

Inflow and infiltration (I/I) is unwanted water that enters the sanitary sewer system through cracks, defects or improper connections. Excessive I/I can result in higher-than-needed costs to ratepayers, as the Clean Water Act stipulates a treatment provider must 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.

WES partners with its member cities through an intergovernmental agreement (IGA) to reduce inflow and infiltration entering the regional wastewater collection and treatment system. The program provides cost-sharing incentives for rehabilitation projects that reduce I/I entering sanitary sewers in 19 specific basins identified in the Sanitary Sewer Master Plan.

Since program implementation, WES and its member communities have invested millions of dollars in rehabilitation projects throughout the service area, resulting in measurable reductions in I/I while improving aging public infrastructure.

The current I/I IGA created a pilot program that expired in June of 2026. This agreement would renew the pilot for an additional 5 years. At the end of the 5 years, WES would return to the Board to create a longer-term program.

FINANCIAL IMPLICATIONS (current year and ongoing):

Is this item in your current budget? ☒ YES ☐ NO

What is the cost? \$11.9M over next 5 years

What is the funding source? WES Sanitary Sewer Construction Funds

STRATEGIC PLAN ALIGNMENT:

- How does this item align with your Department's Strategic Business Plan goals?
This aligns with our goal to strategically plan and upgrade WES' infrastructure to ensure the sustainable delivery of reliable, high-quality, and climate-resilient clean water services that support the growth and vitality of our communities, natural environment, and economy.
- How does this item align with the County's Performance Clackamas goals?
This aligns with the County's goal for safe, secure, and livable communities by promoting affordability of wastewater and surface water services.

LEGAL/POLICY REQUIREMENTS:

County Counsel has reviewed the IGA.

PUBLIC/GOVERNMENTAL PARTICIPATION:

The WES Advisory Committee is in full support of the I/I Program and IGA with our partner cities.

OPTIONS:

1. Direct staff to submit a 5-year renewal of the I/I IGA to a Business Meeting for final approval.
2. Direct staff to revise specific portions of the I/I IGA.
3. Do not approve a 5-year renewal of the I/I IGA with WES' partner cities.

RECOMMENDATION:

Staff recommends Option #1:

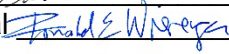
1. Direct staff to submit a 5-year renewal of the I/I IGA to a Business Meeting for final approval.

ATTACHMENTS:

A: Presentation Slides

B: WES I/I IGA with partner cities

SUBMITTED BY:

Division Director/Head Approval 
Department Director/Head Approval 
County Administrator Approval _____

For information on this issue or copies of attachments, please contact ____Chris Koontz____@ 503-__679-4034____

July 28, 2026 | Policy Session



WES Inflow and Infiltration (I/I) IGA

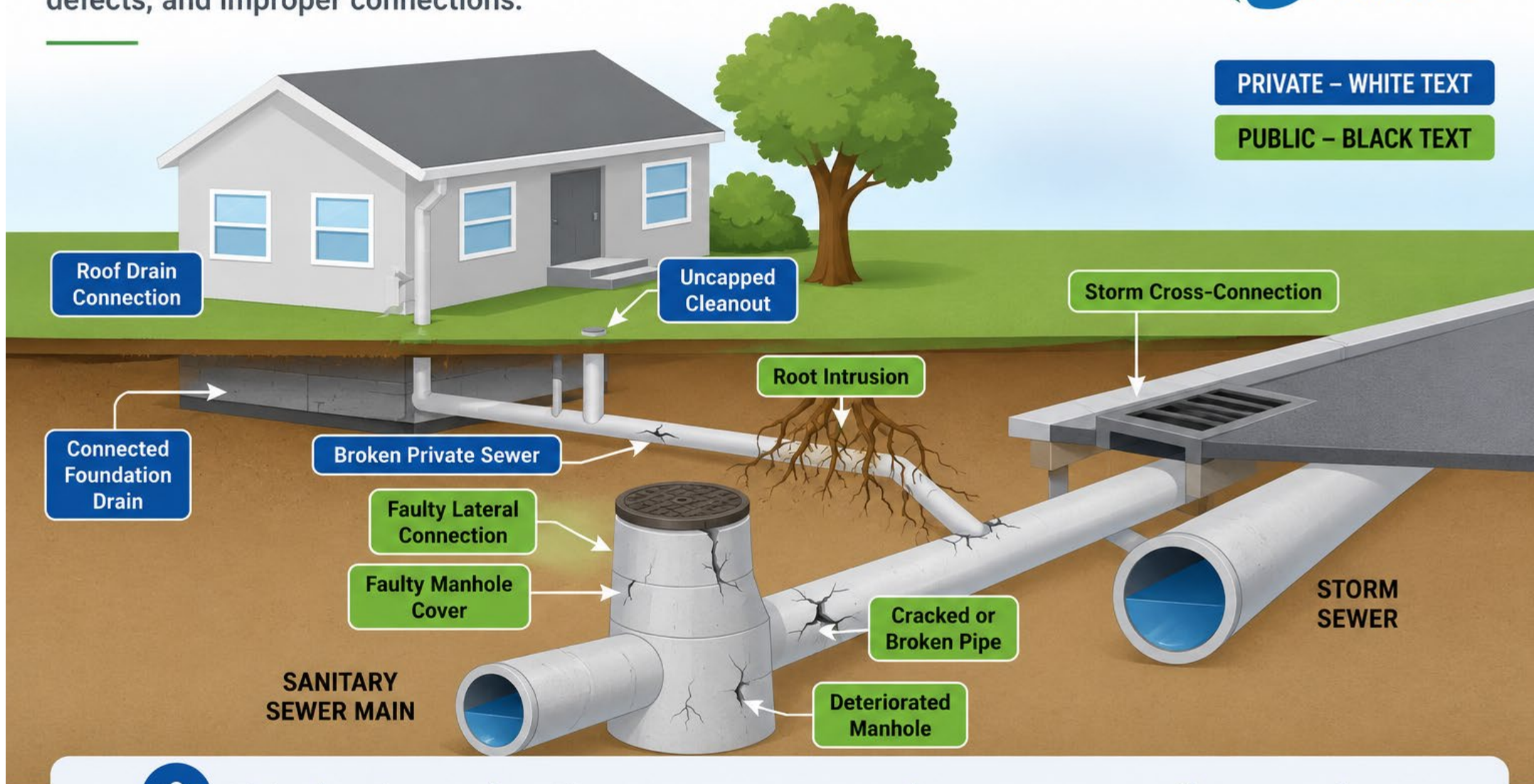
Common Sources of Inflow & Infiltration (I/I)

Unwanted water enters the sanitary sewer system through cracks, defects, and improper connections.



PRIVATE – WHITE TEXT

PUBLIC – BLACK TEXT



Fixing these issues reduces I/I, protects our waterways, and supports a strong, resilient community.



I/I REDUCTION APPROACHES & EXPECTED RESULTS

Different levels of investment target different parts of the collection system and achieve different levels of I/I reduction.

APPROACH	SCOPE	TYPICAL I/I REDUCTION
 1. REHABILITATION OR REPLACEMENT OF MAINLINES ONLY	Focus on rehabilitation or replacement of mainlines (pipes and manholes) only.	20% Reduction
 2. REHABILITATION OR REPLACEMENT OF MAINLINES AND THE SERVICE LATERALS LOCATED IN THE PUBLIC ROW	Focus on rehabilitation or replacement of mainlines (pipes and manholes) and the service laterals located in the public right-of-way.	30% Reduction
 3. REHABILITATION OR REPLACEMENT OF MAINLINES, AND THE SERVICE LATERALS LOCATED IN BOTH THE PUBLIC ROW AND ON PRIVATE PROPERTY	Focus on rehabilitation or replacement of mainlines (pipes and manholes) and the service laterals located in both the public right-of-way and on private property.	65% Reduction



WHERE WE CAN MAKE THE BIGGEST IMPACT

RDII reduction potential across our service area by 2040



ALL PRIORITY AREAS BY RDII RATE AT 2040 (Gal/Acre/Day)						
PRIORITY	MAP ID	SUBBASIN	BASIN	JURISDICTION	ACRES	RDII RATE AT 2040 (Gal/Acre/Day)
1	25	OC_M08	WI-40	Oregon City	107	54,600
2	26	OC_M10	WI-40	Oregon City	70	47,600
3	37	WL_2	Mill_Street	West Linn	148	31,500
4	32	Hwy_43	Holly	West Linn	354	28,000
5	18	US_1_10100&DS_2_20400	Gladstone_PS	Gladstone	0.2	28,000
6	40	Buck_Street_2A-19	Holly	West Linn	106	27,600
7	8	1_10100	Gladstone_PS	Gladstone	191	25,400
8	41	Holly	Holly	West Linn	94	24,500
9	27	OC_M12	WI-40	Oregon City	522	24,500
10	9	2_20400	Gladstone_PS	Gladstone	201	23,700
11	34	River_Street	River_Str_PS	West Linn	64	23,200
12	43	WL_1_2B-1-0	Bolton_PS	West Linn	89	21,500
13	36	Willamette_9C-3	Willamette_PS	West Linn	113	20,600
14	42	Mill_Street	Willamette_PS	West Linn	287	19,700
15	24	OC_M05	Agnes_Main	Oregon City	509	19,300
16	5	Mount_Talbert	Mount_Talbert	Clackamas Co	1603	18,900
17	39	Bolton_3A-8	Bolton_PS	West Linn	284	18,000
18	19	Milwaukie	Milwaukie	Milwaukie	1087	17,100
19	2	Clackamas_PS	Clackamas_PS	Clackamas Co	466	15,000

KEY TAKEAWAYS



No sewer system is without RDII. Typical Oregon planning assumption for new sewer construction is an RDII rate of **2,500** Gal/Acre/Day.



In Oregon, RDII rates exceeding **10,000** Gal/Acre/Day are considered **high**.

HIGHEST PROJECTED RATE BY 2040



54,600
Gal/Acre/Day

Subbasin: OC_M08 (Map ID 25)
Basin: WI-40 | Jurisdiction: Oregon City



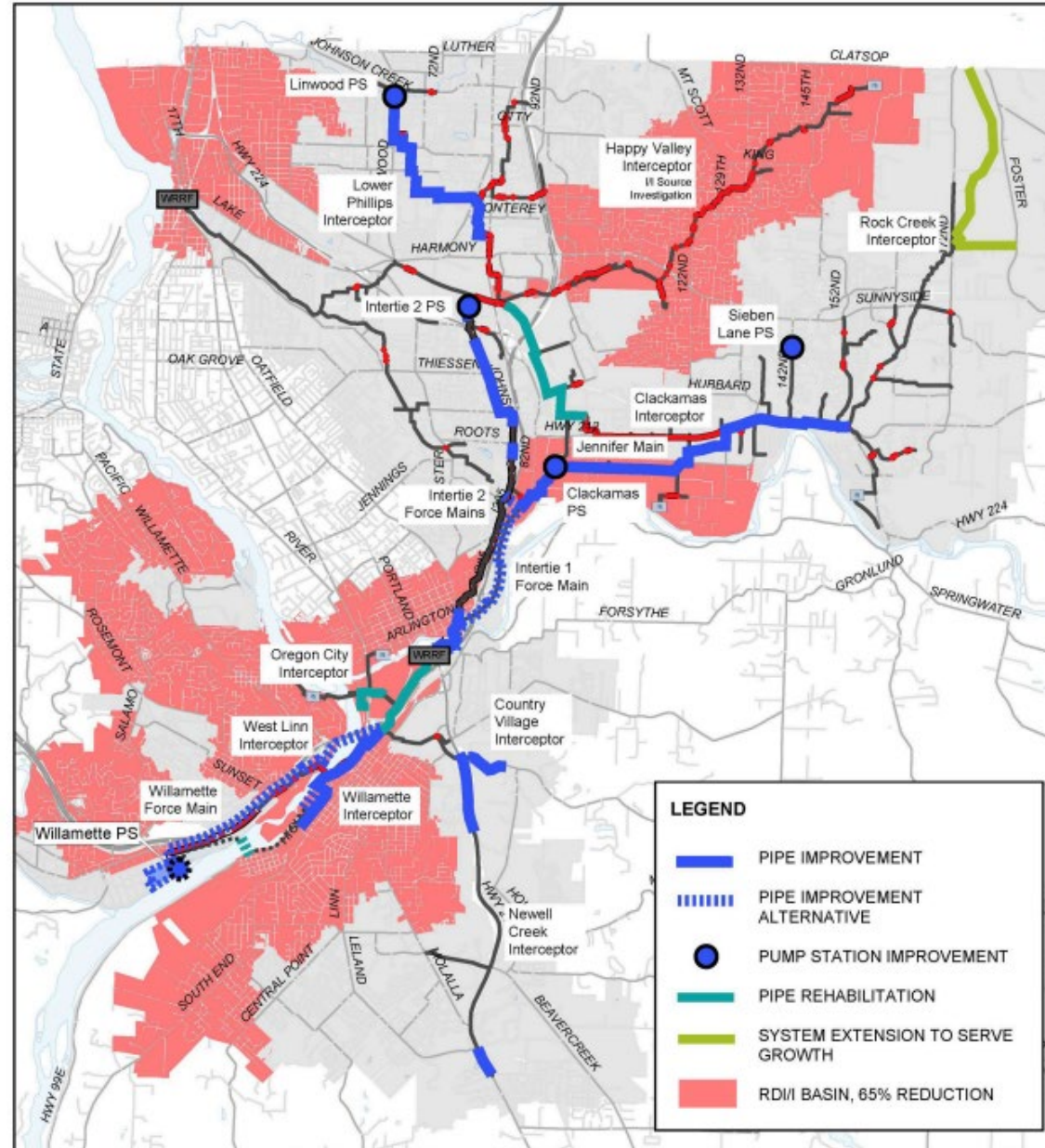
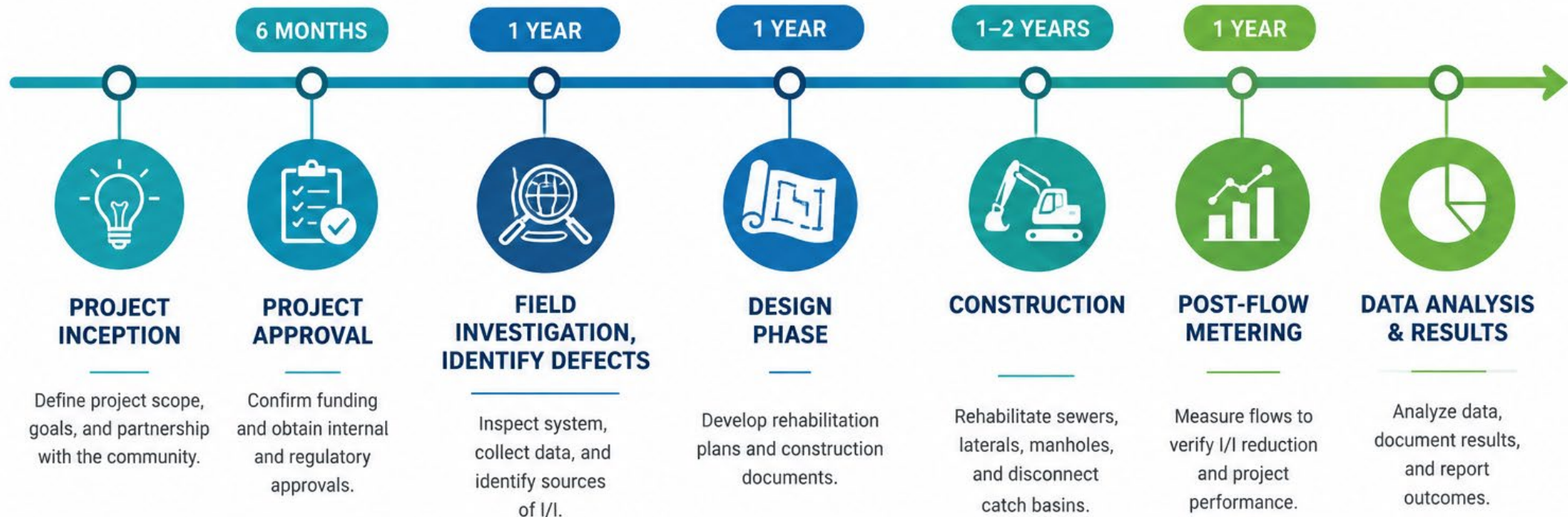


Figure ES-2. Recommended 2040 Capital Improvement Projects Map



TYPICAL I/I REDUCTION PROJECT TIMELINE

A collaborative, data-driven process that delivers long-term inflow and infiltration reduction.



IGA Approved: March 7, 2022
TAT meeting: March 31, 2022 (2 projects)

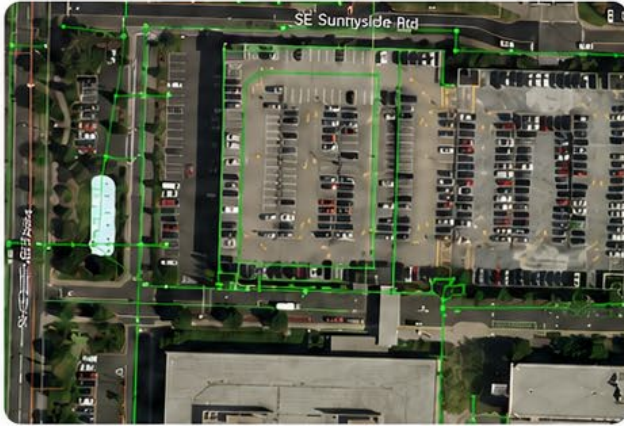


**PROJECTED DURATION:
4-5 YEARS MINIMUM**



MT. TALBERT BASIN – I&I REDUCTION PROJECT

Using data to target repairs and reduce inflow & infiltration

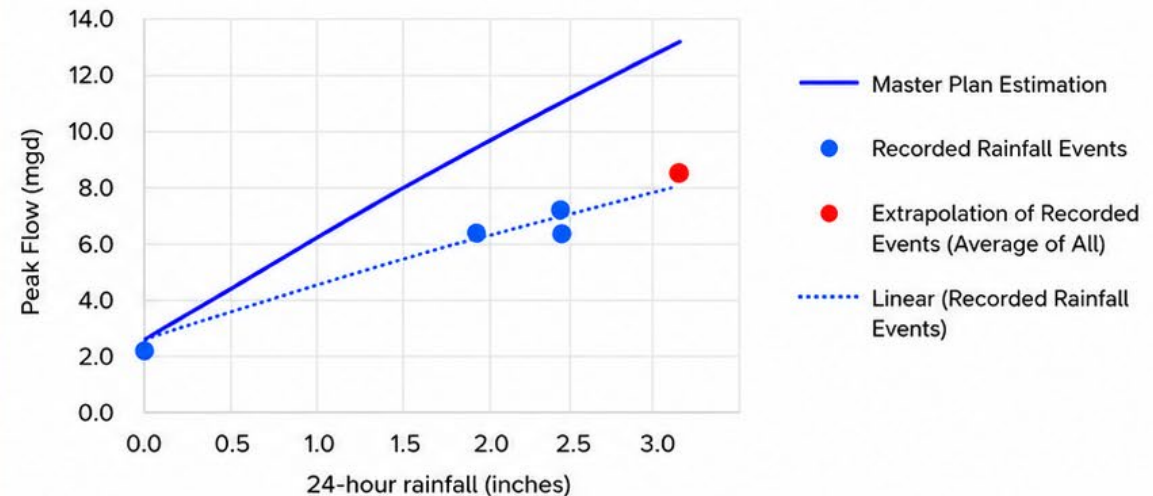


Project Area
Mt. Talbert Basin
in Clackamas
County



Source Identified
Storm ponding
from a lateral
connection issue
allowing storm
water into the
interceptor.

MOUNT TALBERT FLOW TRACKING



PROJECT TIMELINE

2019
WES kicked off
the project

2023/2024
First data collected
during the 23/24
wet season

RESULT
Streamlined repair
– no design or
bidding required



DATA. TARGETED ACTION. MEASURABLE RESULTS.

Using flow monitoring and rainfall data helps us identify I/I sources, prioritize repairs, and meet future flow targets efficiently and cost-effectively.



INVESTMENTS & RESULTS

Working together to reduce inflow and infiltration and protect our regional sewer system



CLACKAMAS
WATER
ENVIRONMENT
SERVICES

PROJECTS COMPLETED THROUGH FY 24/25



MAINLINE SEWER
REHABILITATED

20,200
LF



LATERALS
REHABILITATED

648
LF



MANHOLES
REHABILITATED

98
MANHOLES



CATCH BASINS
DISCONNECTED

38
CATCH BASINS



TOTAL WES
INVESTMENT

\$5.37M
MILLION

TOTAL MEMBER
COMMUNITY
INVESTMENT

\$10.93M
MILLION

REDUCING INFLOW & INFILTRATION THROUGH PARTNERSHIP



Restores collection
system capacity



Reduces wet-weather
treatment flows



Lowers risk
of SSOs



Defers future
capital expansion costs



MAINLINE REHAB



LATERAL REHAB



MANHOLE REHAB



CATCH BASIN DISCONNECTION

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 **I/I** 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 **I/I** 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 I/I 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. Approval of Qualified Proposals. 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 Exhibit B ("**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 1st 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. Annual Reports. 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. TAT Membership. 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. Party Representations and Warranties. 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.
- E. **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), (J), (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 I/I 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

IN WITNESS HEREOF, the Parties have executed this Agreement by the date set forth opposite their names below.

Water Environment Services



Chair

3/17/22

Date

City of Gladstone

Authorized Signatory

Title

Date

City of Happy Valley

Authorized Signatory

Title

Date

City of Johnson City

Authorized Signatory

Title

Date

City of Milwaukie

Authorized Signatory

Title

Date

City of Oregon City

Authorized Signatory

Title

Date

City of West Linn

Authorized Signatory

Title

Date

IN WITNESS HEREOF, the Parties have executed this Agreement by the date set forth opposite their names below.

Water Environment Services

Chair

Date

City of Gladstone



Authorized Signatory

MAYOR

Title

3/3/2022

Date

City of Happy Valley

Authorized Signatory

Title

Date

City of Johnson City

Authorized Signatory

Title

Date

City of Milwaukie

Authorized Signatory

Title

Date

City of Oregon City

Authorized Signatory

Title

Date

City of West Linn

Authorized Signatory

Title

Date

IN WITNESS HEREOF, the Parties have executed this Agreement by the date set forth opposite their names below.

Water Environment Services

Chair

Date

City of Gladstone

Authorized Signatory

Title

Date

City of Happy Valley

Authorized Signatory

Title

Date

City of Johnson City

Vince O Whitehead
Authorized Signatory

Mayor

Title

1-18-2022
Date

City of Milwaukie

Authorized Signatory

Title

Date

City of Oregon City

Authorized Signatory

Title

Date

City of West Linn

Authorized Signatory

Title

Date

City of Milwaukie



Authorized Signatory

City Manager

Title

March 1, 2022

Date

City of Oregon City

Authorized Signatory

Title

Date

City of West Linn

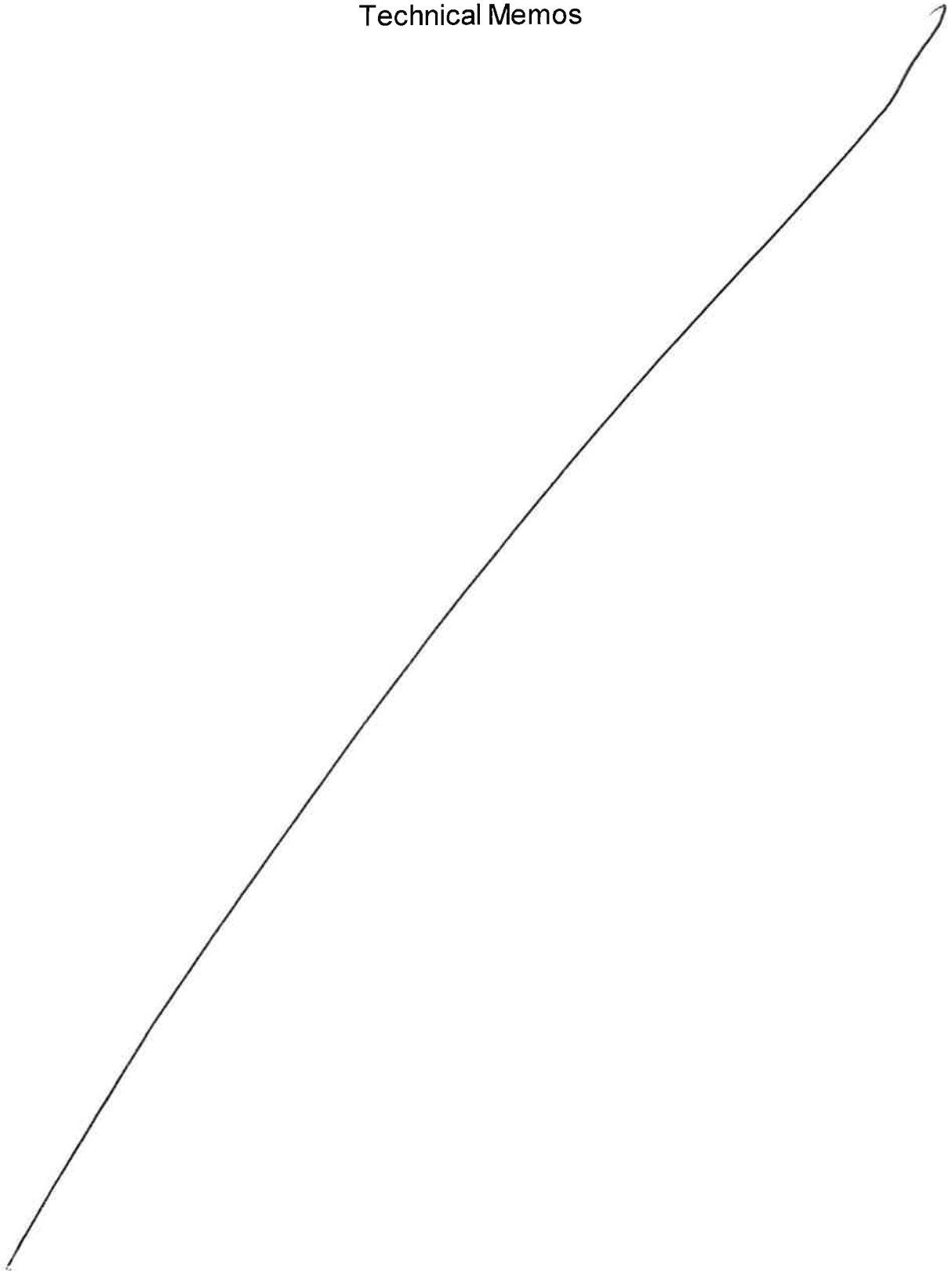
Authorized Signatory

Title

Date

Exhibit A

Technical Memos



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

Table of Contents

Introduction.....	1
SSMP Recommendations.....	2
West Linn I/I Reduction Efforts and Recommendations	2
I/I Reduction Target Subbasins	2
I/I Project Sequencing.....	4
Summary of Meeting	4
References	4

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 ¹ (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 ²	113	54,000 (10.2)	670	16,300
Mill Street	2030 ²	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

¹ I/I rate projected for conditions at the reduction timeframe during the design storm with 5-year frequency.

² Early start recommended due to impacts to downstream improvements.

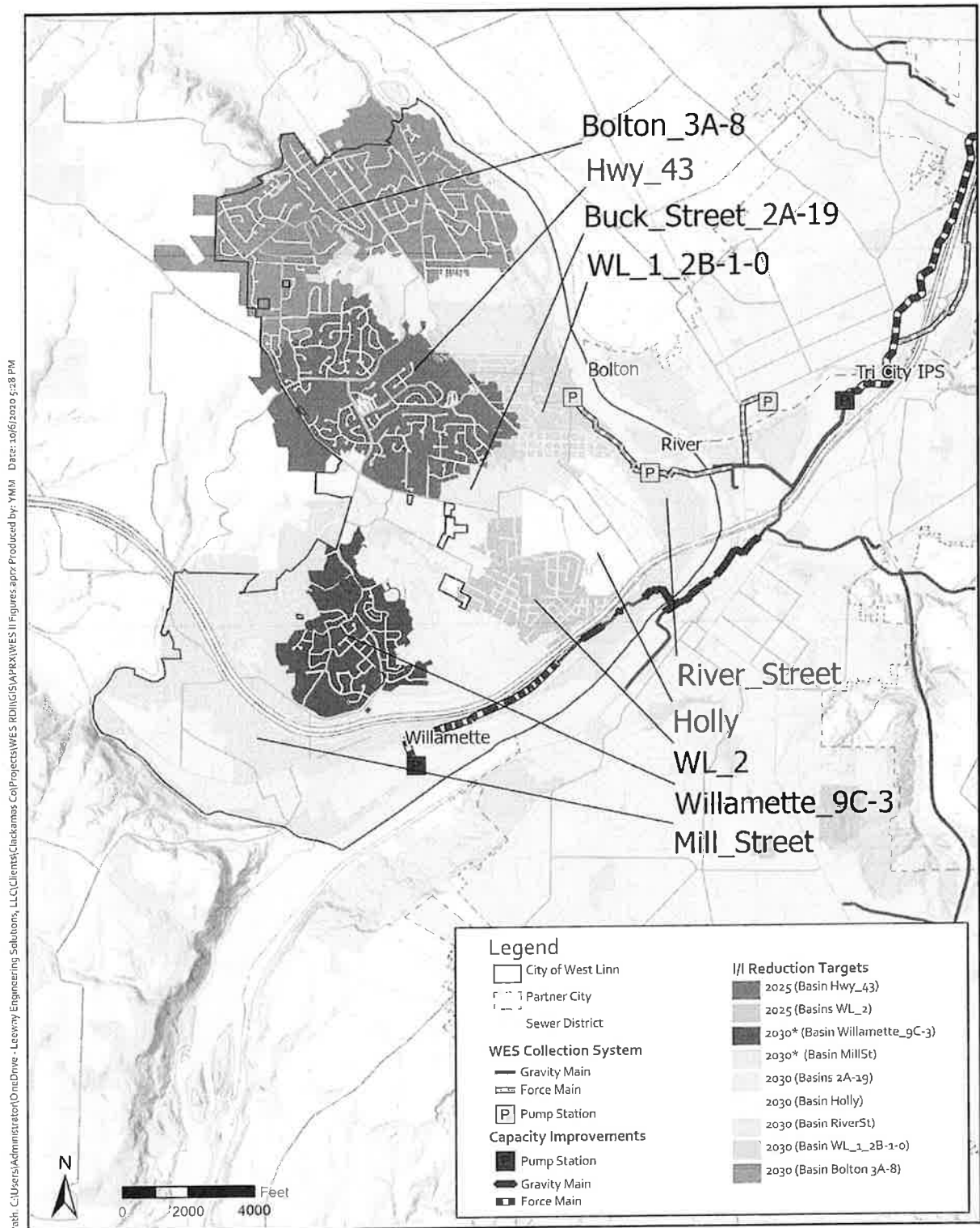


Figure 1. Target Subbasins for West Linn and Capacity Improvements Required for WES's System Given 65% I/I Reduction

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

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

Table of Contents

Introduction.....	1
SSMP Recommendations	2
Flow Triggers and Limits	2
District I/I Reduction Program	Error! Bookmark not defined.
SSMP/SWMP Recommendations and Current Efforts	Error! Bookmark not defined.
I/I Project Sequencing.....	4
Recommended Next Steps.....	Error! Bookmark not defined.
References	4

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	Mt 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 ¹ (gpad)	12,400	15,000
Jurisdiction	WES	WES

¹ I/I rate projected for conditions at the reduction timeframe during design storm with 5-year frequency.

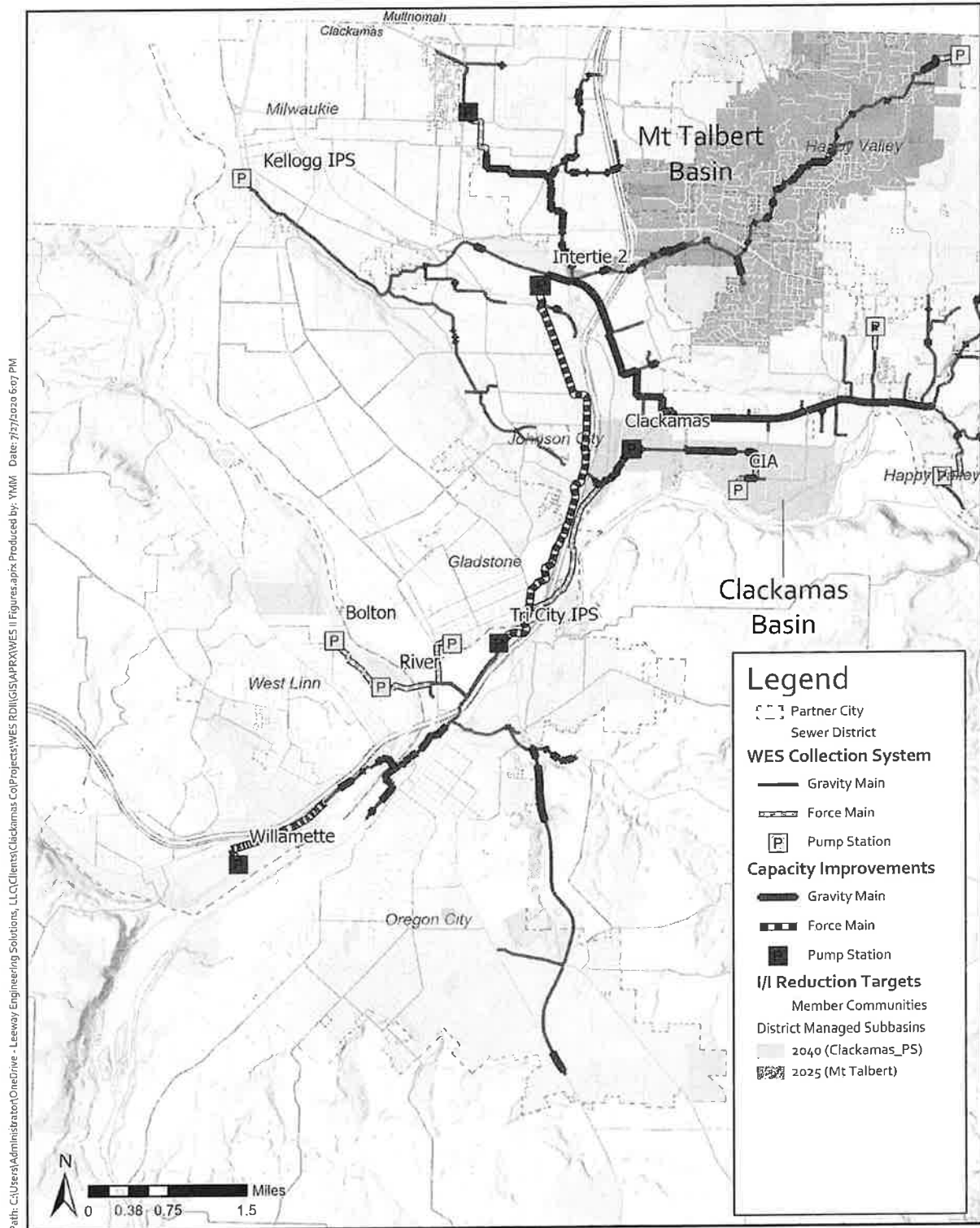


Figure 1. Target Subbasins for the District and Member Cities and Capacity Improvements Given 65% I/I reduction

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

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 Oregon City Member Community Program and Summary

Table of Contents

Introduction	1
SSMP Recommendations	2
Oregon City I/I Reduction Efforts and Recommendations	2
I/I Reduction Target Subbasins	2
I/I Project Sequencing	4
Summary of Meeting	4
References	4

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

Characteristic	M05	M08	M10	M12
I/I Reduction Timeframe	2030	2025	2025	2030
Area (acres)	509	107	70	522
Length of sewer main (linear feet, LF)	118,000	52,000	22,000	113,000
Number of laterals	2,180	300	210	1,920
I/I Rate ¹ (gpad)	15,000	48,000	41,100	20,200
Jurisdiction	Oregon City	Oregon City	Oregon City	Oregon City

¹ I/I rate projected for conditions at the reduction time frame during design storm with 5-year frequency.

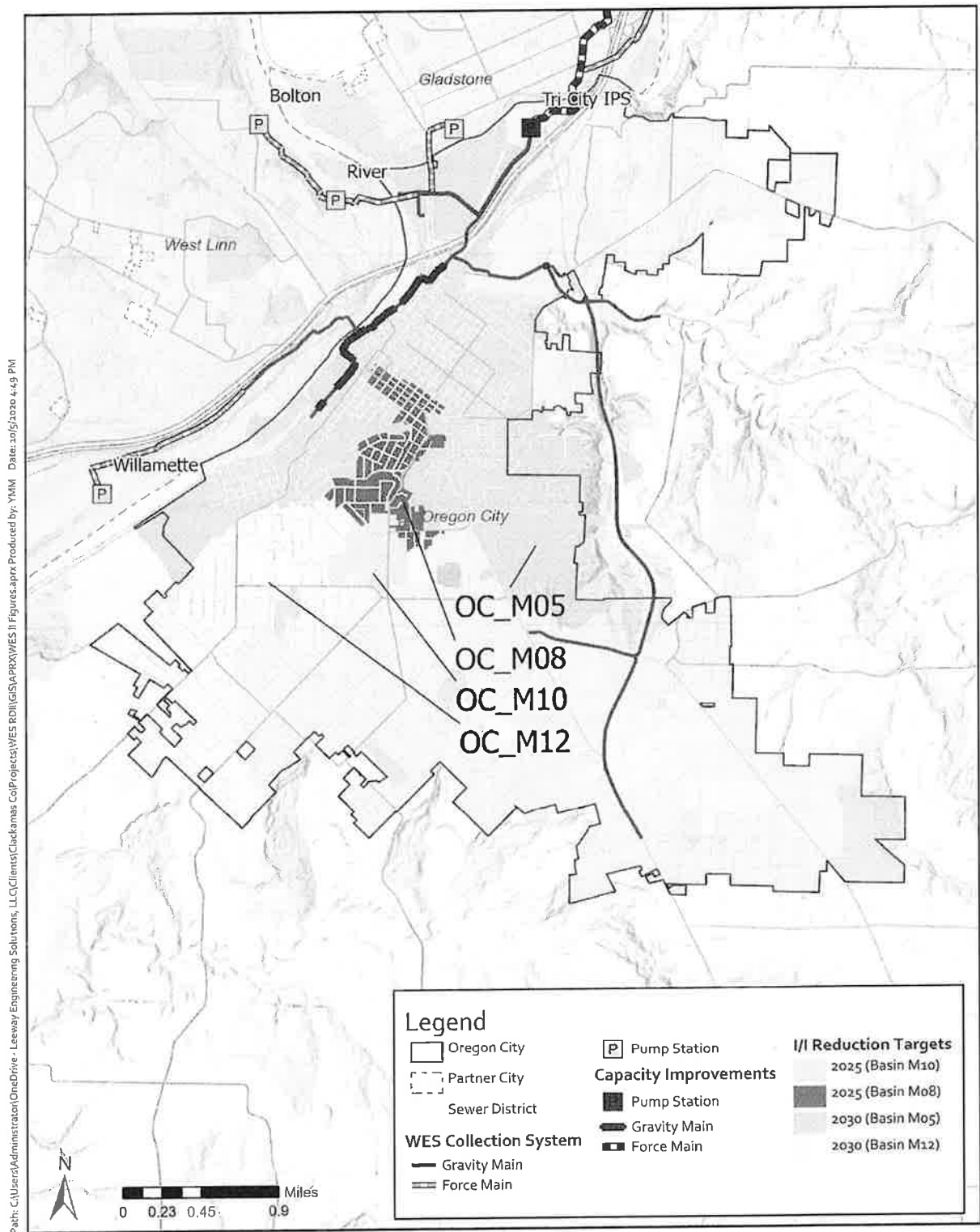


Figure 1. Target Subbasins for Oregon City and Capacity Improvements Required for WES's System Given 65% I/I Reduction

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

Table of Contents

Introduction	1
SSMP Recommendations	2
Milwaukie I/I Reduction Efforts and Recommendations.....	2
I/I Reduction Target Subbasins	2
I/I Project Sequencing.....	4
Summary of Meeting	4
References	4

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	2040 ¹
Area (acres)	1,087
Length of sewer main (linear feet, LF)	221,000
Number of laterals	5,850
I/I Rate ² (gpad)	17,100
Jurisdiction	Milwaukie

¹ I/I reduction efforts should begin no later than approximately 2025.

² The I/I rate projected for conditions at the reduction timeframe during design storm with 5-year frequency.

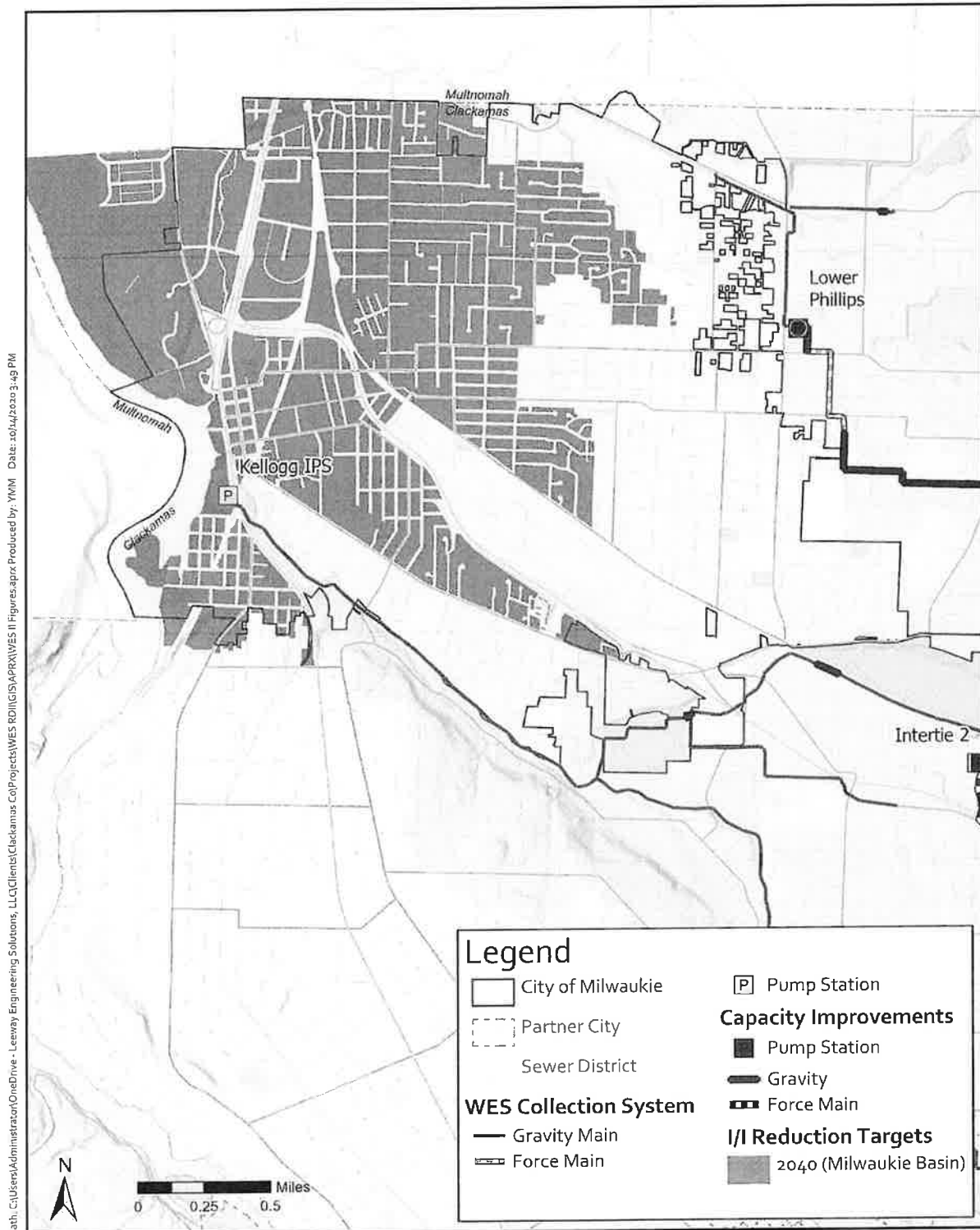


Figure 1. Target Subbasins for Milwaukie and Capacity Improvements Required for WES's System Given 65% I/I Reduction

I/I Project Sequencing

Because of the large size of the Milwaukee 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 Milwaukee Subbasin will depend on the success of early rehabilitation measures offset by flow increases over time due to system degradation and expansion.

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

Project Name	2025	2030	2035	2040
Milwaukee I/I Program (1 subbasin: Milwaukee Basin)				

City of Milwaukee 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

Table of Contents

Introduction.....	1
SSMP Recommendations	2
Gladstone I/I Reduction Efforts and Recommendations.....	2
I/I Reduction Target Subbasins	2
I/I Project Sequencing.....	4
Summary of Meeting	4
References	4

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 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.

Gladstone I/I Reduction Efforts and Recommendations

I/I Reduction Target Subbasins

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 Rate ¹ (gpad)	18,900	17,100	23,700
Jurisdiction	Gladstone	Gladstone	Gladstone

¹ I/I rate projected for conditions at the reduction timeframe during design storm with 5-year frequency.

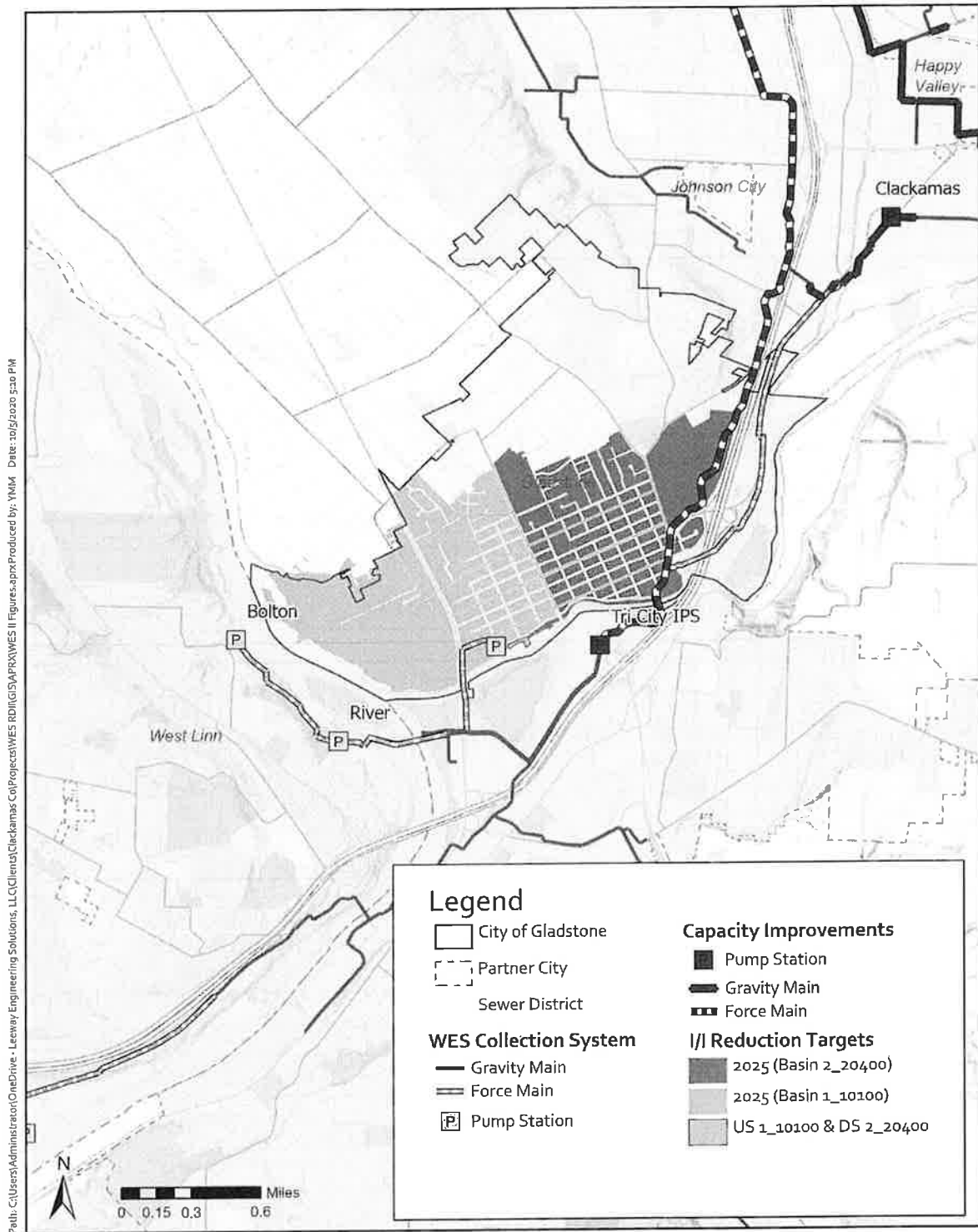


Figure 1. Target Subbasins for Gladstone and WES Capacity Improvements Required Given 65% I/I Reduction

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

**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."

2. **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


Chair
03/05/2026

Date

City of Gladstone

Authorized Signatory

Title

Date

City of Happy Valley

Authorized Signatory

Title

Date

City of Johnson City

Authorized Signatory

Title

Date

City of Milwaukie

Authorized Signatory

Title

Date

City of Oregon City

Authorized Signatory

Title

Date

City of West Linn

Authorized Signatory

Title

Date

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

Water Environment Services

Chair

Date

City of Milwaukie



Authorized Signatory

City Manager

Title

12/15/2025

Date

City of Gladstone

Authorized Signatory

Title

Date

City of Oregon City

Authorized Signatory

Title

Date

City of Happy Valley

Authorized Signatory

Title

Date

City of West Linn

Authorized Signatory

Title

Date

City of Johnson City

Authorized Signatory

Title

Date

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

Water Environment Services

Chair

Date

City of Gladstone



Authorized Signatory
City Administrator

Title

12-10-25

Date

City of Happy Valley

Authorized Signatory

Title

Date

City of Johnson City

Authorized Signatory

Title

Date

City of Milwaukie

Authorized Signatory

Title

Date

City of Oregon City

Authorized Signatory

Title

Date

City of West Linn

Authorized Signatory

Title

Date

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

Water Environment Services

Chair

Date

City of Gladstone

Authorized Signatory

Title

Date

City of Happy Valley

Authorized Signatory

Title

Date

City of Johnson City

Authorized Signatory

Title

Date

City of Milwaukie

Authorized Signatory

Title

Date

City of Oregon City

Anthony J. Konkol, III
Anthony J. Konkol, III (Dec 18, 2025 11:46:49 PST)

Authorized Signatory

City Manager

Title

Dec 18, 2025

Date

City of West Linn

Authorized Signatory

Title

Date

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

Water Environment Services

Chair

Date

City of Gladstone

Authorized Signatory

Title

Date

City of Happy Valley



Authorized Signatory

City Manager

Title

12/01/25

Date

City of Johnson City

Authorized Signatory

Title

Date

City of Milwaukie

Authorized Signatory

Title

Date

City of Oregon City

Authorized Signatory

Title

Date

City of West Linn

Authorized Signatory

Title

Date

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

Water Environment Services

Chair

Date

City of Gladstone

Authorized Signatory

Title

Date

City of Happy Valley

Authorized Signatory

Title

Date

City of Johnson City

Authorized Signatory

Title

Date

City of Milwaukie

Authorized Signatory

Title

Date

City of Oregon City

Authorized Signatory

Title

Date

City of West Linn



Authorized Signatory

Deputy City Manager, AIC

Title

12/29/2025

Date

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

Water Environment Services

Chair

Date

City of Gladstone

Authorized Signatory

Title

Date

City of Happy Valley

Authorized Signatory

Title

Date

City of Johnson City

Vincent O. Whitehead
Authorized Signatory

MAYOR
Title

12-15-2025
Date

City of Milwaukie

Authorized Signatory

Title

Date

City of Oregon City

Authorized Signatory

Title

Date

City of West Linn

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. 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.

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. Approval of Qualified Proposals. 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 Attachment A (**“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 1st 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. Annual Reports. 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. TAT Membership. 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. Invoices. 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. Evaluation of Amendment Request. 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 has adequate funding to authorize the Amendment Request.
- C. Approval of Amendment Request. 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").

D. Payment of Amended Amounts. After a Partner receives the Updated Approval Letter, the Partner will submit invoices in accordance with the terms in Section 2 above.

ATTACHMENT A
SAMPLE APPROVAL LETTER



CLACKAMAS

**WATER
ENVIRONMENT
SERVICES**

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 Beaver Creek Road #430
Oregon City, OR 97045

Enclosures: Insert proposal name here