INFLOW & INFILTRATION PROGRAM MANAGEMENT ANNUAL REPORT FY 2024-2025

June 2025 | WE #OC23-II

Prepared by:

wallis engineering

Acknowledgements

The FY 24-25 Annual Report is the product of collaboration of numerous people across several disciplines, as summarized on the Organizational Chart. But there are many others outside of the I&I Reduction Program that support this Program that we would like to acknowledge here. Without their support, the I&I Reduction Program would not have been able to be as successful as it has been.

A sincere thank you to:

Mayor Denyse McGriff

The Oregon City Commissioners

Oregon City Public Works Department

Clackamas Water Environment Services

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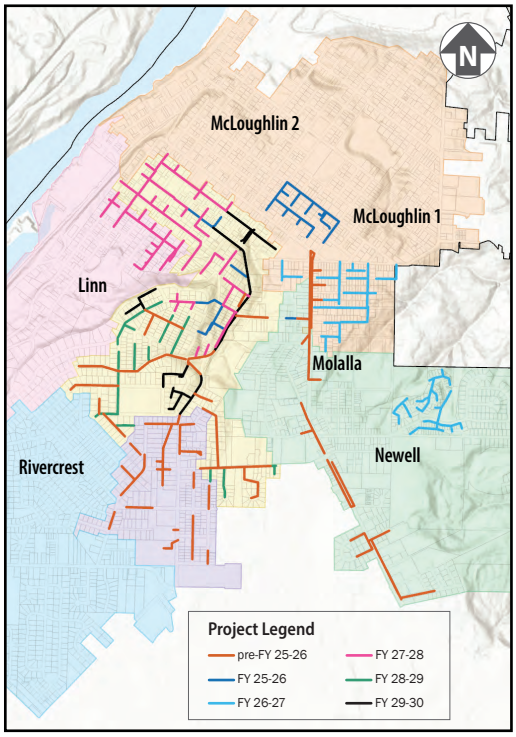
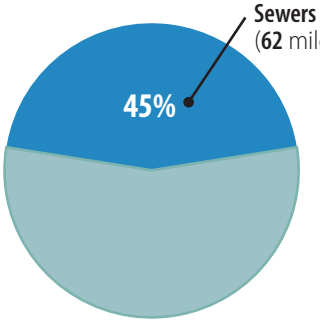


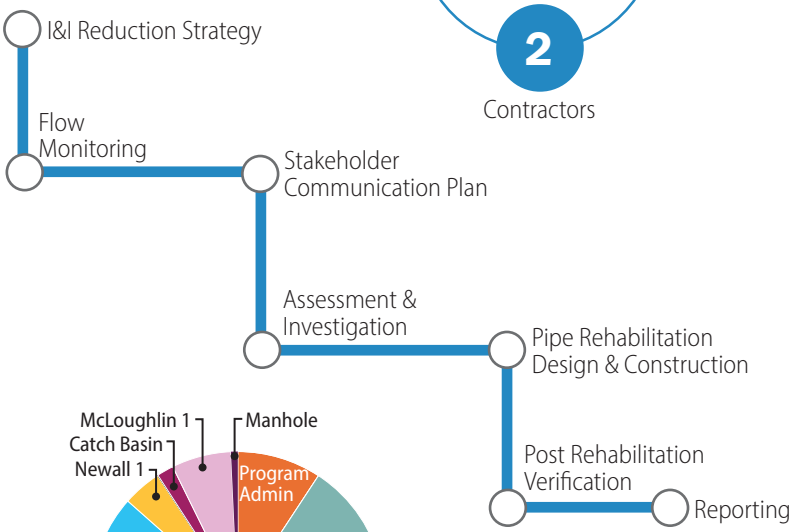
Sewer Basins in I&I Program

This is the third year of a 5-year program to reduce inflow and infiltration into Oregon City's sanitary sewer system, and the portion owned and operated by WES (Clackamas Water Environment Services).

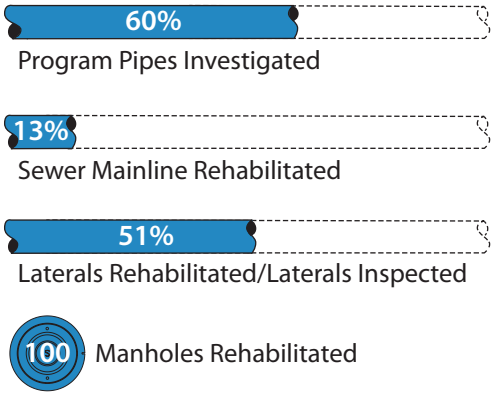


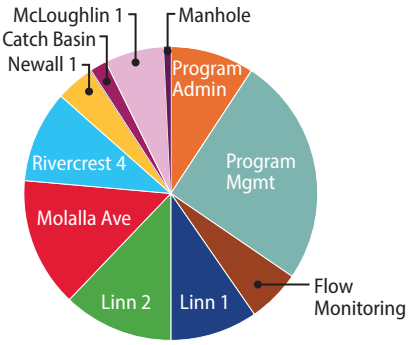
Oregon City Sanitary Sewer System

I&I Program Steps



Rehabilitation Highlights
(through June 2025)





FY 24-25 Budget Breakdown

Types of Pipe Rehabilitation Used

- Open Trench Construction
- Pipe Bursting
- CIPP (Cured-in-Place-Pipe Lining)
- HDD (Horizontal Directional Drilling)

Public Outreach

- 7 City Commission Meetings
- 92 website updates
- 391 Right-of-Entry Forms Approved
- 3 Presentations to Professional Orgs.
- 1 Project Award (League of Oregon Cities)

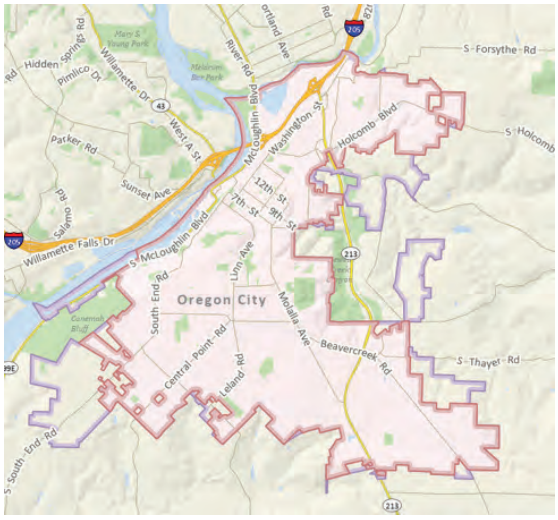
SECTION 1 Introduction

1.1 Purpose and Background

The Oregon City I&I Rehabilitation Program continues to investigate, design, and construct projects that will reduce Inflow and Infiltration (I & I) into the Oregon City sewer system and into the Water Environment Services (WES) Tri-City Wastewater Treatment Plant.

During its third full year, the program has moved three design packages into construction and has two more packages in final design, with bidding anticipated before the close of the fiscal year. These packages include rehabilitation of nearly 15,000 linear feet of sanitary sewer main, 475 sanitary sewer laterals, and more than 120 sanitary sewer manholes.

In addition to package delivery, the program conducts ongoing investigation, condition assessment and basin monitoring. Extensive CCTV and smoke testing efforts were conducted in FY 24-25, and flow monitoring in each of the City's identified I&I basins indicates program success.



The program continues to rely on the collaborative efforts of a variety of different engineering firms, specialty consulting firms, construction firms, and City engineering and operations divisions. FY25-26 will continue this trend, with three packages scheduled for construction, five scheduled for various stages of design, and as many as four additional packages scheduled for scoping based on ongoing investigation efforts.

1.2 Roles and Responsibilities

This I&I Reduction Program includes the effort of multiple organizations and individuals, in addition to the Wallis Engineering team. This organization chart summarizes the roles and responsibilities for those involved with the I&I Reduction Program in FY 24-25. Table 1.1 on page 4 summarizes the current I&I Reduction Program team members, their tasks, and program wide responsibilities. A contact list for the key personnel is included in "Appendix B Key Personnel".

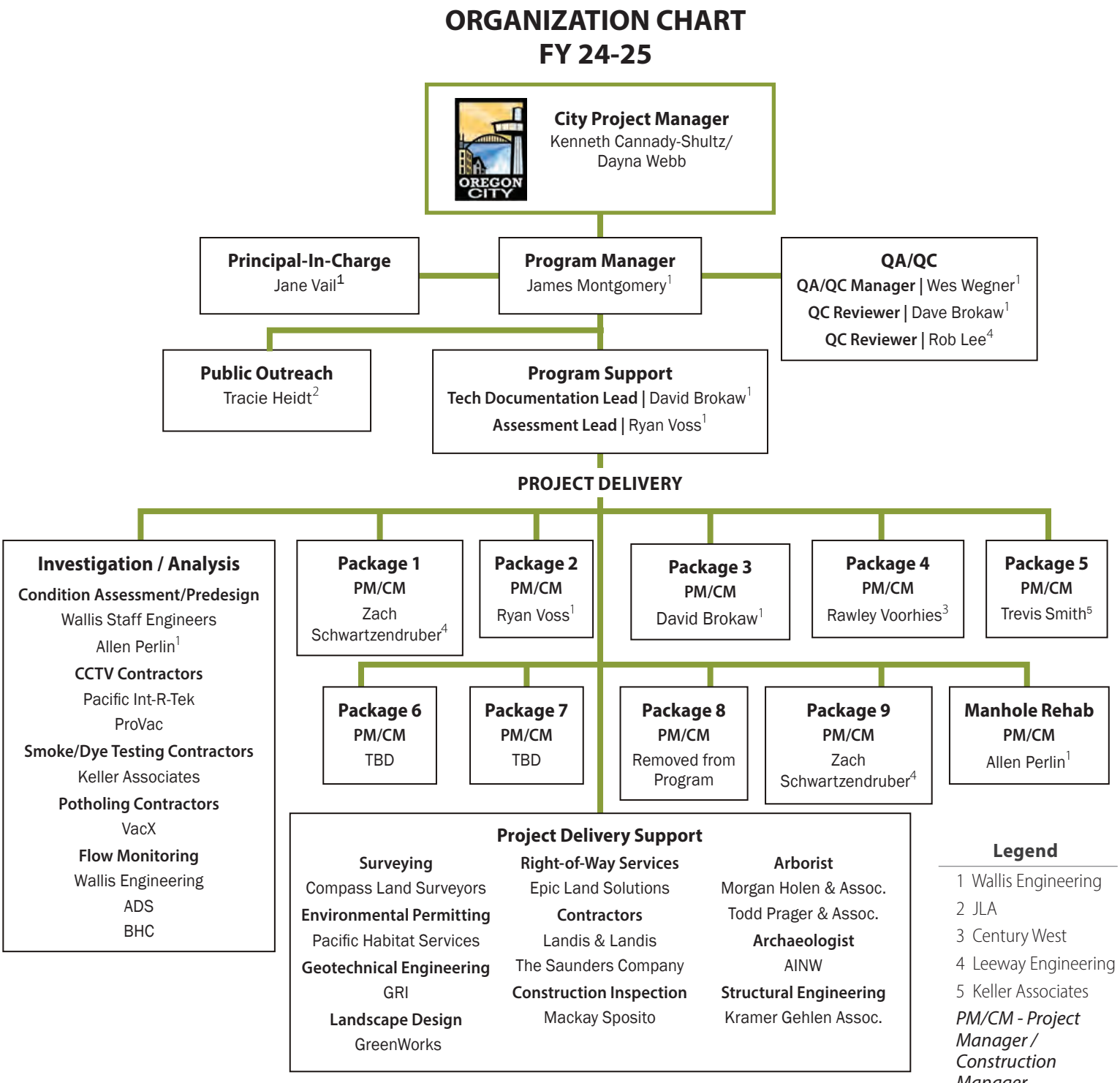


Figure 1.1—Organization Chart

Table 1.1—Roles and Responsibilities

Firm	Task	I&I Reduction Program Effort
Wallis Engineering, PLLC	Program Management	Program wide
	Package Design	Linn 2, Molalla Ave, Manhole Rehabilitation
	Construction Management	Linn 2, Molalla Ave, Manhole Rehabilitation
	Flow Monitoring	Program wide
Leeway Engineering Solutions	Package Design	McLoughlin 1
	Construction Management	McLoughlin 1
Keller Associates	Package Design	Newell Basin 1
	Smoke Testing	Program wide
Century West	Construction Management	Rivercrest Phase 4
Mackay Sposito	Inspection	Program wide
Compass	Surveying, monumentation	Program wide
GRI	Geotechnical engineering	Program wide
Kramer Gehlin and Associates, Inc	Structural engineering	Program wide
Morgen Holen & Assoc.	Arborist	Program wide
Todd Prager & Assoc.	Arborist	Program wide
VacX	Potholing	Program wide
Pacific Int-R-Tek	CCTV	Program wide
ProVac	CCTV	Program wide
Pacific Habitat Services	Environmental Permitting	Program wide
Greenworks	Landscape Restoration	Program wide
EPIC Land Solutions	Right of Way	Program wide
ADS	Flow Monitoring	Flow monitoring
BHC Consultants	Flow Monitoring Analysis	Flow monitoring and modeling
AINW	Archaeological Services	Program wide
Landis & Landis	Contractor	Molalla Ave
The Saunders Company	Contractor	Rivercrest Phase 4

SECTION 2 I&I Reduction Program Administration and Management—FY 24-25

2.1 Program Administration

Wallis Engineering continues to manage the Oregon City I&I Reduction Program, which advanced investigation, design, and construction efforts in FY 24-25.

Administrative work focused on budget management, program standards, operations, and contract administration—including financial tracking, record-keeping, public engagement, documentation standardization, and reporting progress to city officials. As the program expanded from investigation to implementation, administrative efforts increased, and a similar level of work is expected to continue in FY 25-26.

2.2 Program Management

I&I Reduction Program Activities in FY 24-25 included:

PROGRAM OVERSIGHT:

- The program manager played a key role in managing the I&I Reduction Program, organizing and overseeing work teams assigned to specific tasks. Acted as the primary liaison between the work teams and City leadership to ensure clear communication and effective execution of the program's goals.
- Program team has worked with Oregon City to develop and refine a 10 year plan for I&I rehabilitation package areas and associated projected costs.

Sewer mainline spot repair

PUBLIC OUTREACH:

- Developed and implemented a robust communication plan to engage the community about program activities, including CCTV inspections, smoke testing, dye testing, and construction projects.
- Collaborated with JLA to streamline public notifications and outreach efforts, ensuring residents stayed informed and engaged.
- Focused on securing Rights of Entry (ROEs) from private property owners to allow lateral repairs and investigations. Efforts included contractor-led outreach during construction, which raised ROE response ratings from 80% to 95% on Linn 1 construction.
- Incorporated lessons learned into program boilerplate specifications to improve future public outreach and communication strategies.

CONDITION ASSESSMENT & DESIGN CRITERIA:

- Condition assessments targeted high-priority sewer system areas with apparent defects or faulty connections to maximize I&I reduction efforts.
- Utilized CCTV pipeline inspections, smoke testing results, and dye testing results to evaluate approximately 18,000 lineal feet of mainline sewers and scope project designs.
- Smoke testing in the summer of 2024 spanned 152,370 lineal feet of mainlines, identifying 34 sources of inflow across various sewer basins (e.g. Warner Parrot, South End, and Rivercrest Basins), with most sources coming from degraded manholes.
- Created data-driven, holistic project packages to ensure prioritized areas received complete rehabilitation before moving to the next zone, while coordinating efforts with City programs like PMUF and WIFIA to avoid duplicative work.

PROJECT PACKAGE DELIVERY:

- Designed project packages by addressing critical factors like geohazard planning, cultural resource investigations, and easement/Right of Way (ROW) acquisitions.
- Conducted extensive research and planning for areas within geologic hazard zones, often requiring Type II permits for package approvals.
- Coordinated with property owners for easement acquisitions when adding infrastructure to private properties, ensuring legal compliance and preventing disputes.
- Managed timelines to account for additional complexities, such as historic property preservations, as seen with examples like the Rose Farm property.

CIPP lining of mainline sewer pipe

PRIVATE LATERAL POLICY & BOILERPLATE SPECIFICATIONS:

- Updated the Private Lateral Policy and boilerplate specifications based on lessons learned from recent projects (e.g. Linn 1 and Rivercrest packages).
- Incorporated feedback from contractors and City staff during construction, using these opportunities to continuously refine policy and specification documents.

CROSS-CONNECTION IDENTIFICATION:

- Continued efforts to identify and address cross connections between stormwater and sewer systems, reducing inflow from sources such as private downspouts.
- Ensured identified cross connections were incorporated into project designs for corrective action during construction.

ADDITIONAL WORK:

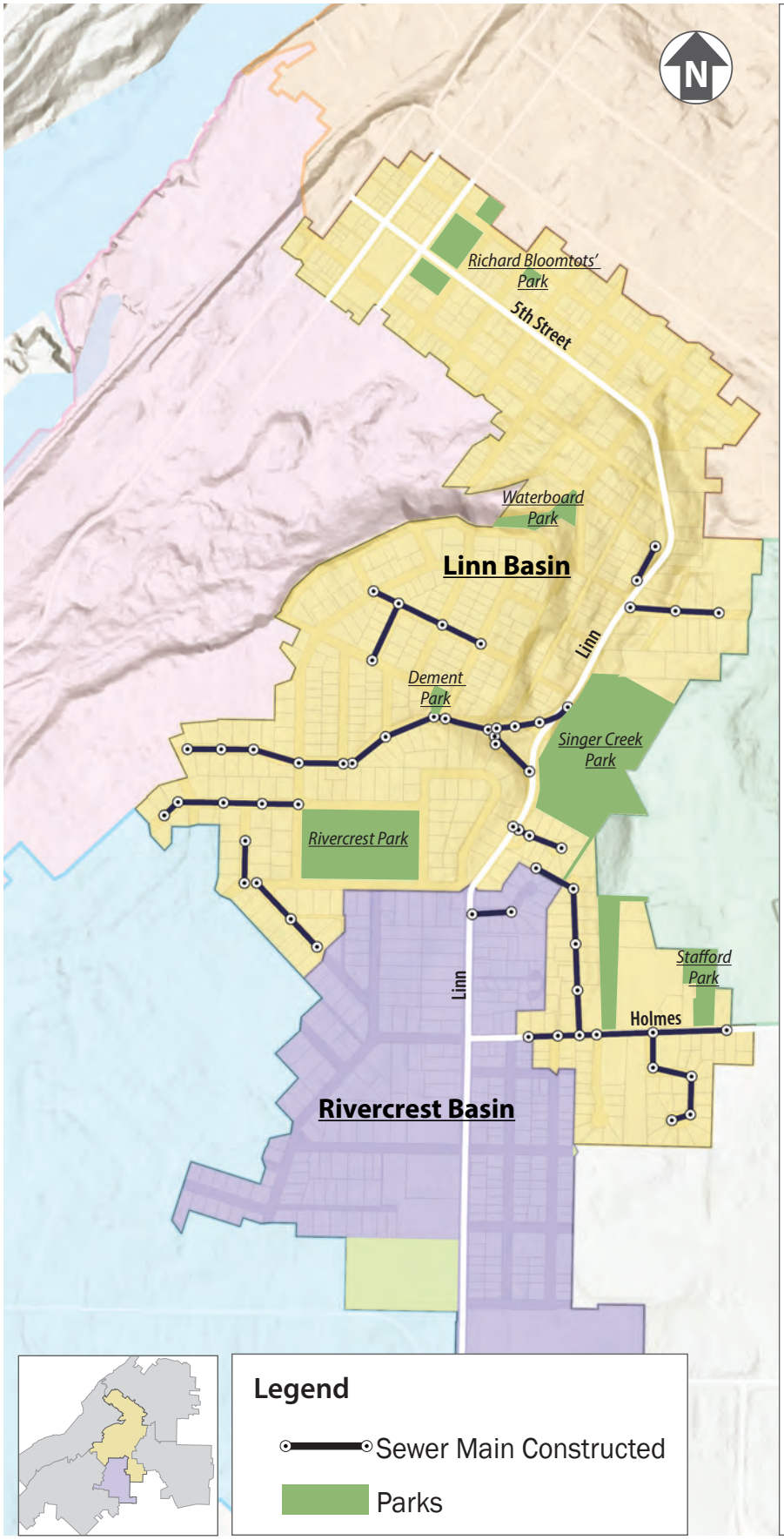
- Addressed discrepancies between public works standards and building code requirements through coordination workshops, improving understanding and alignment on lateral rehabilitation and replacement standards.
- Managed unexpected challenges during project design, such as easement negotiations and infrastructure additions, which required creative problem-solving (e.g., the Terrace Avenue and East Street sewer line addition in the Linn 2 package).
- Worked with City project manager to develop and present I&I accomplishments and learnings at professional organization conferences.
- Provided material and application submission outlining the successes of the I&I Program to League of Oregon Cities. Oregon City won the 2025 Large City Award of the Year for the I&I Rehabilitation Program.
- Utilized program capabilities to address immediate maintenance and operations priorities for Oregon City Public Works. This work included emergency repairs to sewer sections in non-project areas, realigning project areas to include a larger area when field conditions indicated a larger area of concern, and moving work from one design package to another to address other Public Works project needs.

SECTION 3 Package Information

Several project packages have been part of the I&I Reduction Program this fiscal year. The following pages describe the Oregon City I&I Rehabilitation Packages. Eight packages are in progress, from design to construction stage.

Oregon City I&I Rehabilitation Packages

1.	Linn Basin SS I&I Rehabilitation 1	CI 23-001 — Construction complete
2.	Linn Basin SS I&I Rehabilitation 2	CI 23-002 — Bidding
3.	Molalla Ave. SS I&I Rehabilitation	CI 23-013 — Construction complete
4.	Rivercrest SS I&I Rehabilitation 4	CI 23-009 — Construction
5.	Newell Basin SS I&I Rehabilitation 1	CI 23-012 — Preliminary Design
6.	Linn Basin SS I&I Rehabilitation 3	CI 23-003 — Scoping
7.	McLoughlin SS I&I Rehabilitation 2	No CI Number — Scoping
8.	Center St/Catch Basin Disconnect	CI 23-005 — Removed from program
9.	McLoughlin SS I&I Rehabilitation 1	CI 24-005 — Bidding
10.	Manhole Rehabilitation	CI 24-012 — Construction
11.	Linn Basin SS I&I Rehabilitation 4	No CI Number — Scoping



LINN BASIN: PACKAGE 1

Year completed:

2024

Highlights:

Constructed using a variety of techniques including pipe bursting, CIPP and open cut, the project functioned as a litmus test for the hybrid private/public sewer work that has become symbolic of the I&I program.

Designers:

- Leeway Engineering Solutions
- Century West Engineering

Inspector:

- Mackay Sposito

Prime Contractor:

- Landis & Landis

Subcontractors:

- Oxbow Construction
- Linescape
- Local Plumbing
- Bulls Eye Boring
- River City Environmental
- ATS Electrical
- McCoy Electrical
- S2 Contractor
- RLC Contractor

Linear Feet of Sewer Main:

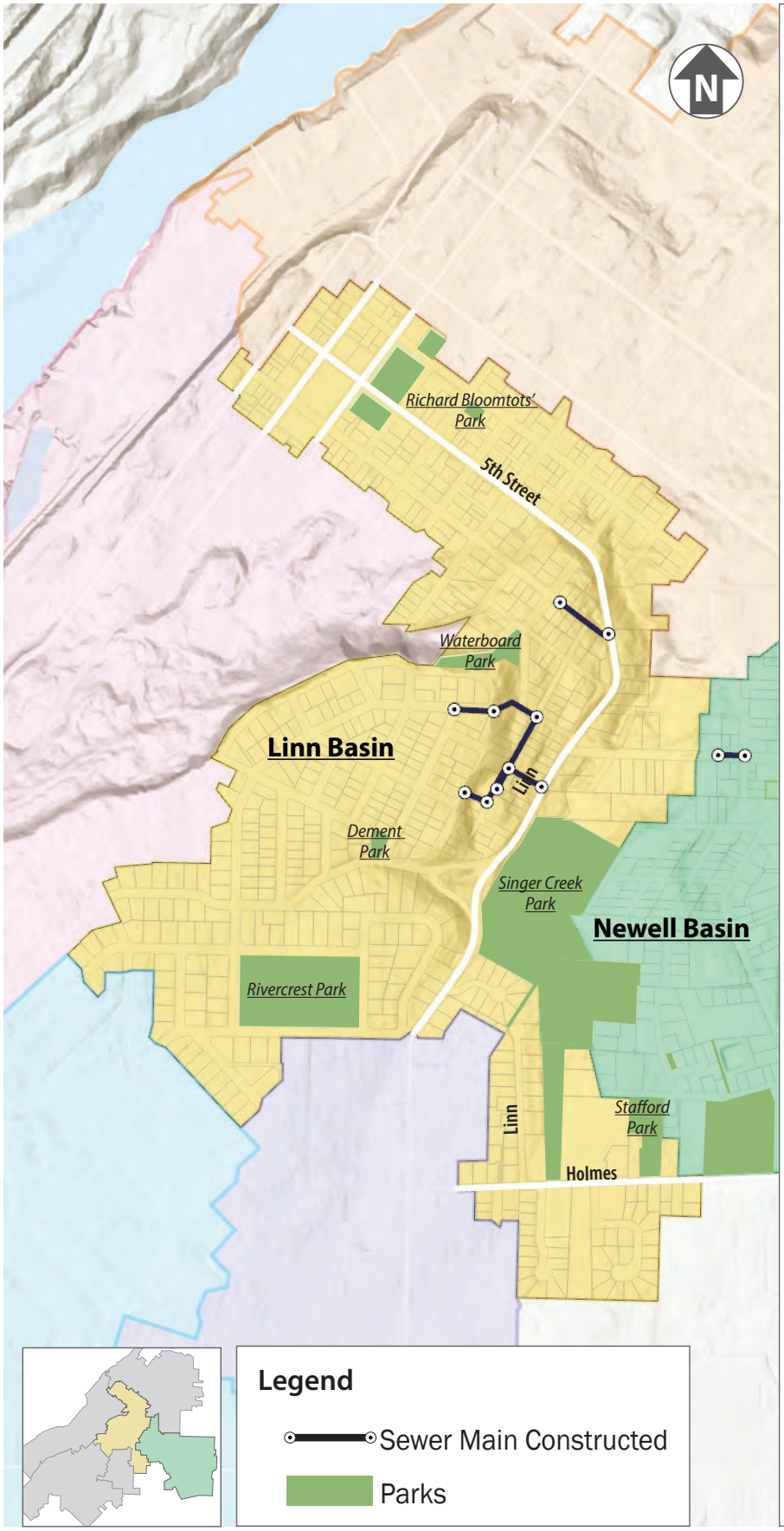
9,700

Number of Sewer Laterals:

172

Budget:

- Design $377,997
- Construction: $3,431,604



LINN BASIN: PACKAGE 2

Projected completion:

Fall 2026

Highlights:

Projected to be built over the next two dry seasons, the package includes construction within technical overlays, including steep slopes in the geohazard zone and the natural resource overlay district. Sewer mainline pipes in roadways will be constructed using pipe bursting or open-cut techniques, while two mainline pipes conveying flows down steep, vegetated slopes will be constructed using above-ground, steel-encased HDPE pipe mounted on concrete footings.

Designers:

- Wallis Engineering
- Kramer Gehlen & Associates, Inc. (Structural)
- Geotechnical Resources, Inc. (Geotechnical)

Linear Feet of Sewer Main:

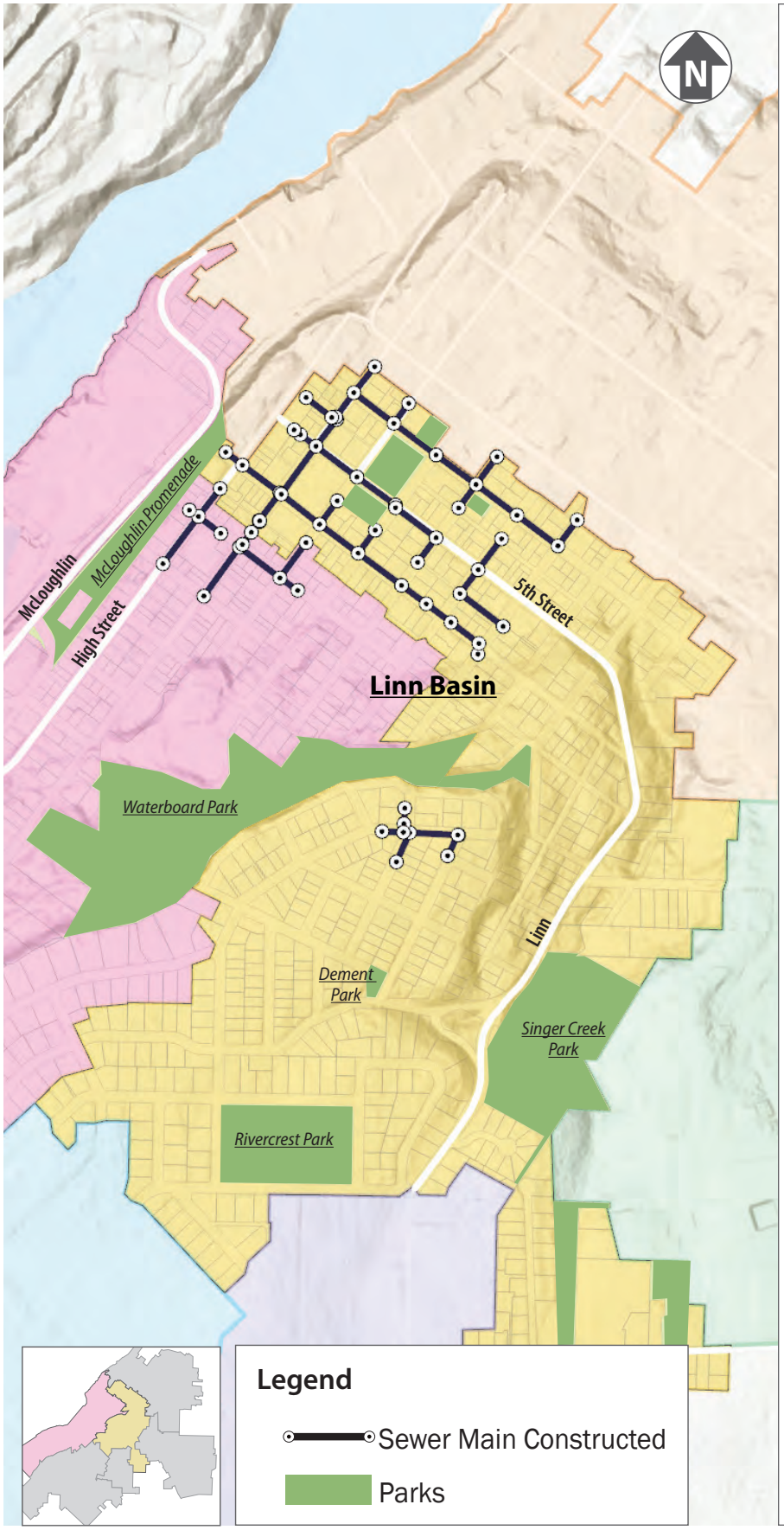
4,100

Number of Sewer Laterals:

47

Budget:

- Design: $356,316
- Construction: $3,488,126 (est.)



LINN BASIN: PACKAGE 3

Projected completion:

2027

Highlights:

This package will prioritize areas of Linn and Central Basins that have anticipated paving scheduled for 2029. The Linn Package #3 will not include work in vegetated corridors, landslide areas and natural resource boundaries.

Designers:

- TBD

Linear Feet of Sewer Main:

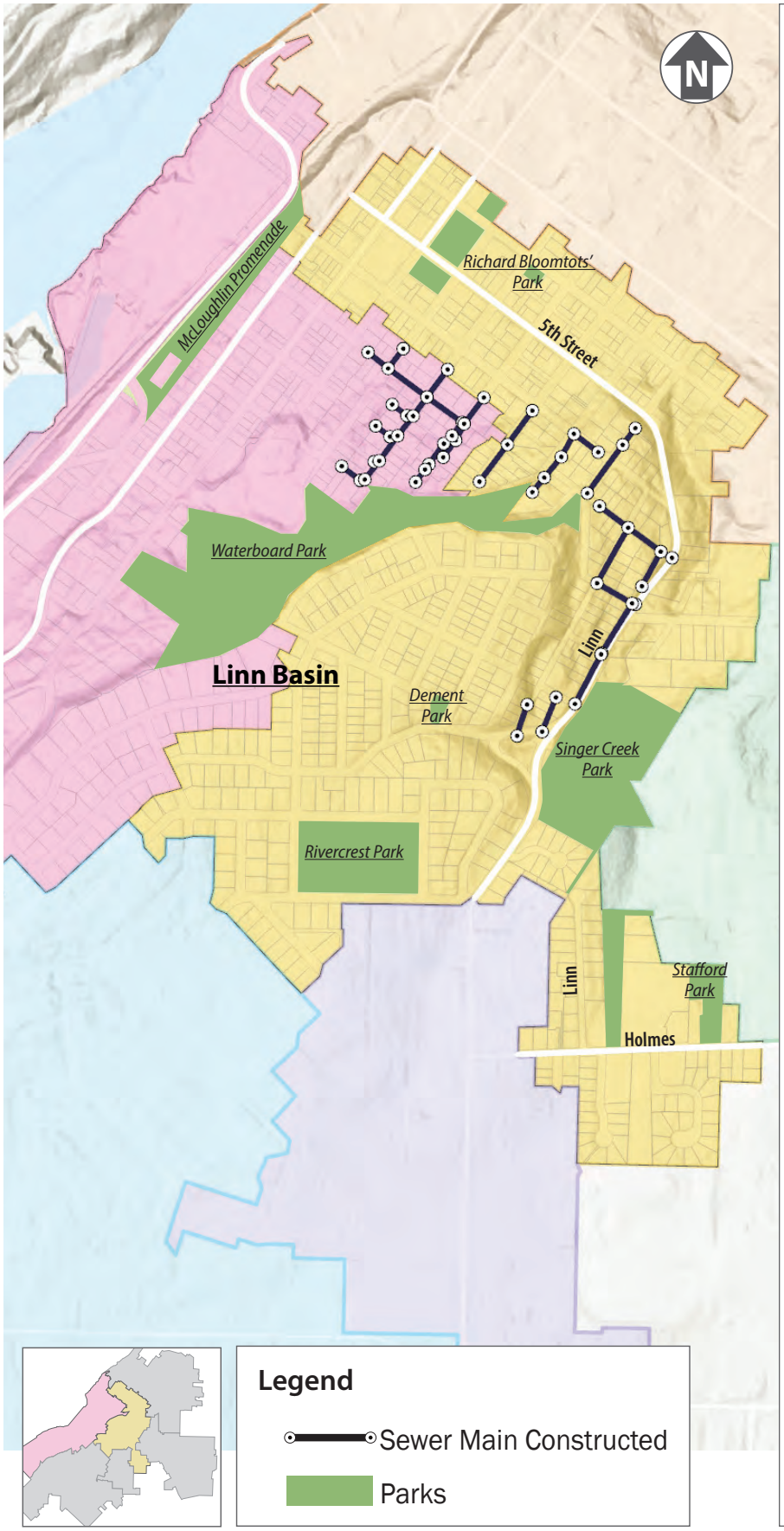
7,900

Number of Sewer Laterals:

157

Budget:

- Design: $500,000 (est.)
- Construction: $3,000,000 (est.)



LINN BASIN: PACKAGE 4

Projected completion:

2027

Highlights:

Similar to Linn Package #2, this package will prioritize mainline and lateral sewer pipes within technical overlays including vegetated corridors, landslide areas and natural resource boundaries. Additionally, this package will prioritize areas of Linn and Central Basins that have anticipated paving scheduled for 2029. Design is scheduled to last two years to accommodate the additional complexities.

Designers:

- Wallis Engineering

Linear Feet of Sewer Main:

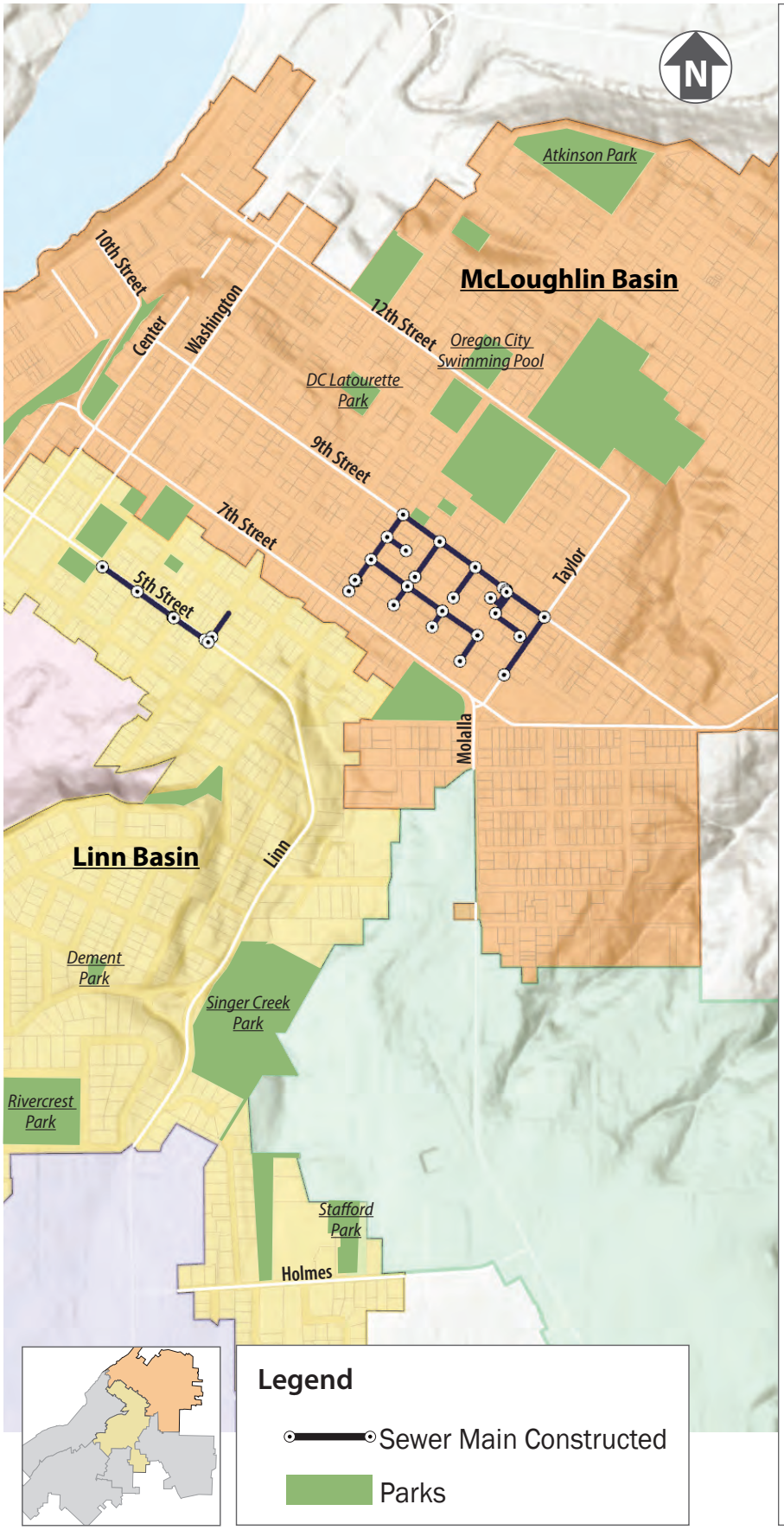
6,400

Number of Sewer Laterals:

88

Budget:

- Design: $400,000 (est.)
- Construction: $4,000,000 (est.)



MCLOUGHLIN BASIN: PACKAGE 9

Currently in construction:

2025

Highlights:

The package seeks to rehabilitate a small portion of the McLoughlin Basin ahead of paving projects scheduled in the area. The package includes a small portion of mainline pipe in the Linn basin as well. The project area presents some difficulties including "party" laterals and undersized storm pipes that are cross-connected with the sanitary sewer system.

Designers:

- Leeway Engineering Solutions

Linear Feet of Sewer Main:

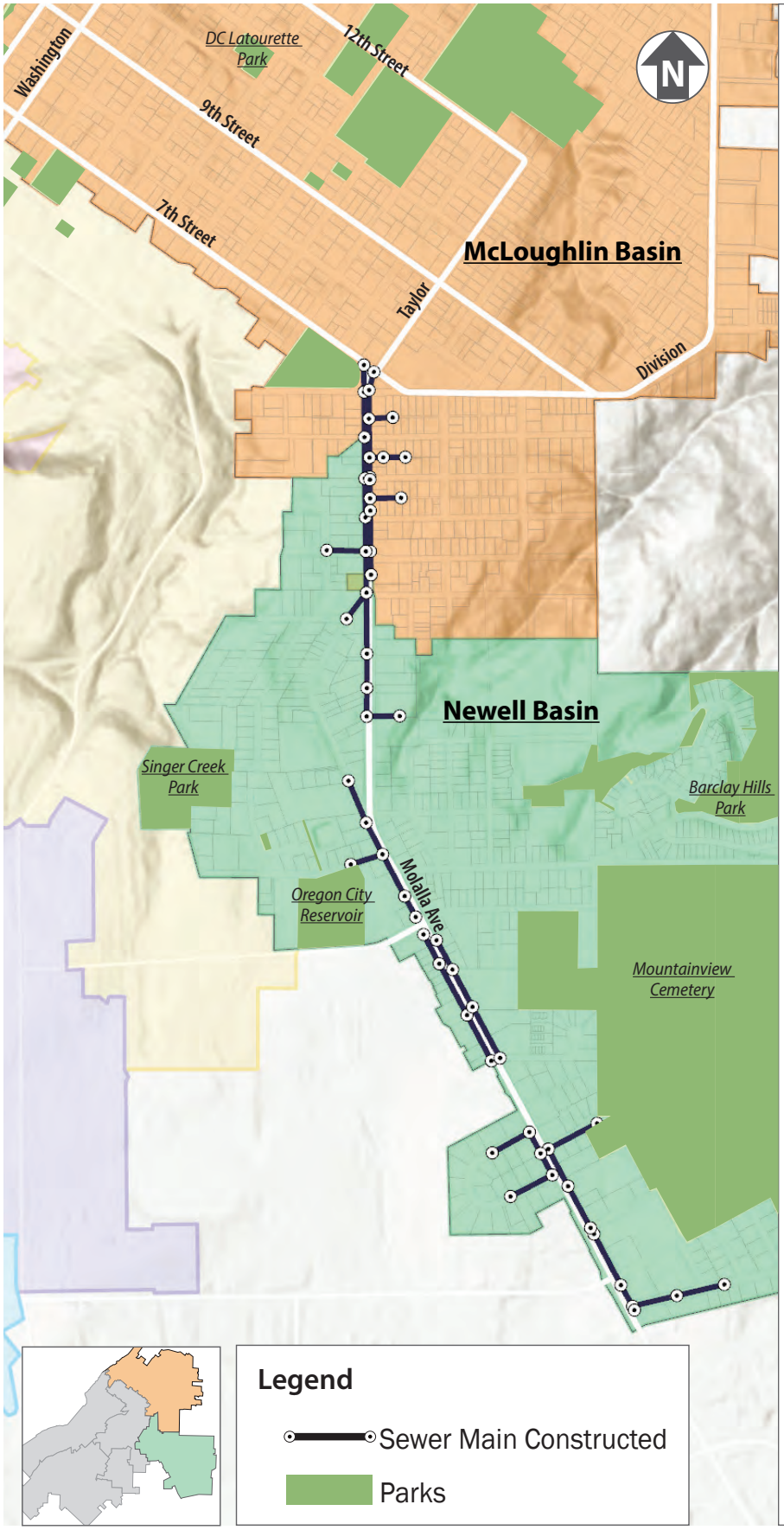
4,400

Number of Sewer Laterals:

58

Budget:

- Design: $429,958
- Construction: $4,000,000 (est.)



MOLALLA AVENUE: PACKAGE 3

Completed:

2025

Highlights:

Molalla Ave. is a major commercial thoroughfare and former state highway. A Water Infrastructure Finance and Innovation Act (WIFIA) project is currently underway through the project corridor, and repaving will be included as a part of that project. To avoid pavement moratoriums, sewer rehabilitation along Molalla Ave. was prioritized. The project included a variety of challenges for the program, including integrating commercial lateral replacement into the program and incorporating emergency realignments due to existing utility conflicts. The project was constructed primarily via CIPP construction methods.

Designers:

- Wallis Engineering

Inspector:

- Mackay Sposito

Prime Contractor:

- Landis & Landis

Subcontractors:

- Oxbow for CIPP lining
- C&C Flagging
- Van Lom Concrete
- S2 Contractors
- New Systems Plumbing

Linear Feet of Sewer Main:

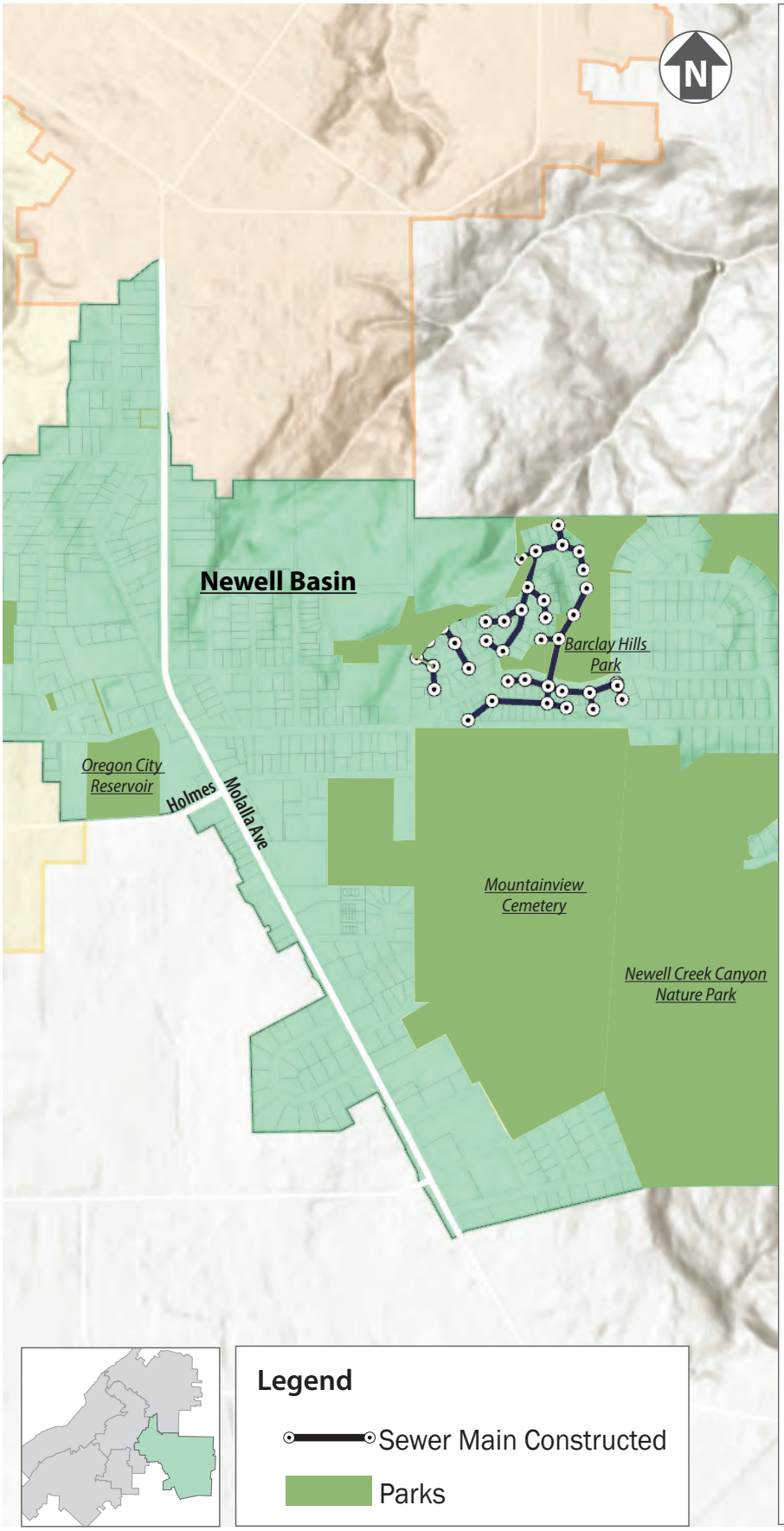
10,000

Number of Sewer Laterals:

83

Budget:

- Design: $359,878
- Construction: $3,953,341



NEWELL BASIN: PACKAGE 5

Projected completion:

2030

Highlights:

Newell Package #5 includes a wide area of western Newell Basin. The package includes both sanitary and storm sewer upgrades due to a notable overlap between systems in the area. Design delays based on the late incorporation of the storm upgrades have led to a hold on project design at the 30% milestone. The package area includes technical overlays including geohazard and natural resource overlay district.

Designers:

- Keller Associates

Linear Feet of Sewer Main:

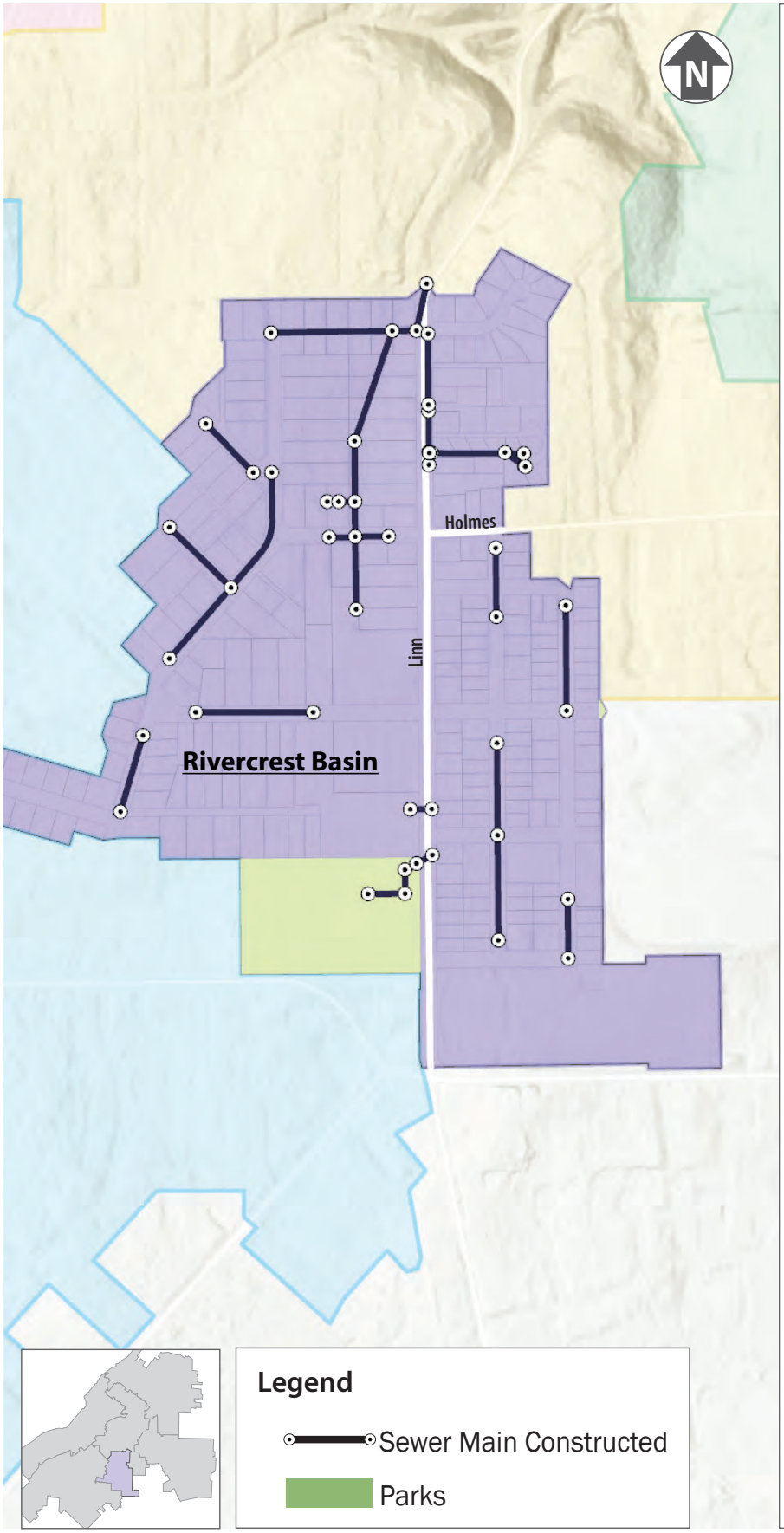
4,800

Number of Sewer Laterals:

86

Budget:

- Design: $500,000 (est.)
- Construction: 3,000,000 (est.)



RIVERCREST BASIN: PACKAGE 4

Year completed:
2025

Highlights:
Rivercrest Basin has seen three previous phases of sewer rehabilitation, encompassing mainline sewer for the entire basin. However, the basin was rehabilitated before the I&I program was developed, so private sewer laterals had never been included in rehabilitation efforts. Rivercrest Phase 4 was intended to correct this, with over 80% of private laterals rehabilitated as part of the construction package.

Designers:
- Century West Engineering

Inspector:
- Mackay Sposito

Prime Contractor:
- The Saunders Company

Subcontractors:
- Brothers Concrete
- A Cut Above
- A+ Flagging
- Multiple private truck drivers
- OR Vac West
- Pacific Intr-Tek
- Oxbow

Linear Feet of Sewer Main:
600

Number of Sewer Laterals:
236

Budget:
- Design: $420,374
- Construction: $4,307,874

SECTION 4 Flow Monitoring Results

The City of Oregon City's I&I Reduction Program aims to minimize infiltration and inflow in the sanitary sewer system, with flow monitoring playing a crucial role in measuring progress. Since I&I is influenced by precipitation and winter water tables, peak flows during the winter season strain sewer infrastructure. The program tracks wet weather flow before and after construction projects and conducts annual monitoring to reach its ultimate goal of a 65% reduction in I&I peak flows. In FY 24-25, a revision of the City's flow model was prepared by Wallis in collaboration with BHC Consulting. A report summarizing the modeling results and analyzing the collected flow data is included in "2024 Flow Monitoring Report". An update of this model including FY 24-25 flow data will be prepared and issued in the Fall of FY 25-26.

Table 4.1—Flow Monitoring Results

	2023	2024	2025
Peak Event Date	4/10/2023	2/29/2024	3/1/2025
Peak 24 hr Total Rainfall (inch)	1.16	1.51	1.12
Total Storm Duration[a] (hr)	91	204	160
Newell (5B) Basin Flow (mgd)	1.23	Not Monitored	0.77
Linn (8) Basin Flow (mgd)	3.00	3.00	1.81
Rivercrest (10) Basin Flow (mgd)	0.60	0.68	0.57
Warner Parrott (12) Basin Flow (mgd)	Data Rejected	2.56	2.95
South End (12A) Basin Flow[b] (mgd)	Not Monitored	Not Monitored	0.21

Notes:
1. The unit mgd is million gallons per day.
2. Storm duration[a] is measured from the first rain after a 24 hr dry period to last rain before a 24 hr dry period.
3. Flow[b] in basin 12A does not correlate strongly with rainfall, indicating minimal I&I in the basin.

A brief overview of the FY 24-25 findings are:

- Newell Basin was not monitored during FY 23-24 but has been monitored during the wet season of FY 24-25. This monitoring took place in tandem with the construction phase of the Molalla Ave package, providing a unique glimpse into real-time program results. Although there has been an indication of peak flow reduction, the analysis of the data is not complete at this time. The 2025 Flow Monitoring report, to be issued in November 2025, will give a more detailed analysis of this basin flow monitoring results.
- Linn Basin 2024 peak sewer flows indicate the I&I repairs completed as part of the Linn Basin I&I Rehab Project 1 successfully removed some

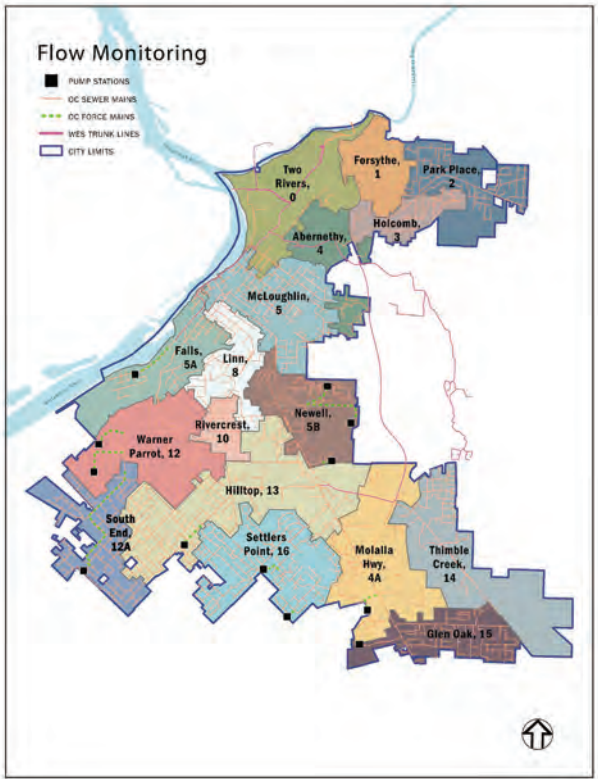


Figure 4.1—Flow Monitoring Basin Map

amount of I&I from the system. Flow monitoring was conducted in Linn Basin during FY 24-25, and upstream construction impacts from the Rivercrest Basin may be realized during modeling and analysis. Analysis of the results is on-going at this time and the 2025 Flow Monitoring will provide a more definitive result.

- Rivercrest Basin has had ongoing construction since the end of 2024, and monitoring was completed for the basin during this construction, potentially providing real-time program results. It is anticipated that the flow monitoring from this fiscal year will provide some clarity to past flow monitoring information. This year's flow monitoring was completed before the Rivercrest Basin phase 4 construction on private laterals was completed. The next flow monitoring period in FY 25-26 will provide information on a completed I&I basin that will help quantify I&I reduction due to private lateral rehabilitation.
- Warner Parrot Basin has not seen consistent flow data since the program's inception, and flow monitoring conducted in FY 24-25 using a new permanent flow measuring device will hopefully be used to establish true baseline flow results for the basin. No construction has occurred in this basin to date as part of the program.
- South End Basin was a late addition to the I&I program, and the presence of newer infrastructure in the basin has led to low prioritization of work there. Most of the basin flows through the Parrish Rd pump station, so flow monitoring was conducted near the pump station's influent pipe segment to establish baseline flows for the basin. Initial results from this year's monitoring indicate pump station flows do not correlate strongly with rainfall events, and I&I in the basin may be minimal.

Installation of flow monitors

Over the next few months, flow monitoring results from FY 24-25 will be incorporated into the hydraulic modeling completed as part of Fall 2024's technical memorandum. The model will update, when completed, peak flow projections in each basin during 5-year and 10-year storm events. This information will be critical to determine progress towards the I&I reduction goals.

Work is currently ongoing to quantify the I&I reduction as it relates to the overall I&I Reduction Program goals. Flow modeling and data analysis from FY 23-24 show encouraging results in the one post-construction basin area that was monitored. Updates to the hydraulic model in the coming fiscal year will include post-construction results in several basins and will hopefully provide further evidence of program success.

SECTION 5 Budget

Wallis has overseen a program budget of over $6,809,143.07 to date since 2022. Last year, the amendment to Wallis covering the I&I program management was $$2,430,230.51. This budget covers Wallis Engineering and the work of several other firms hired to support the Oregon City I&I Reduction Program efforts.

The two tables that follow show how program funds were budgeted and spent this last year. The Annual Report is issued prior to the close of the fiscal year, which runs from July 1st, 2024 through June 30th, 2025 in Oregon City. The budget numbers in this document reflect billed numbers through April 2025.

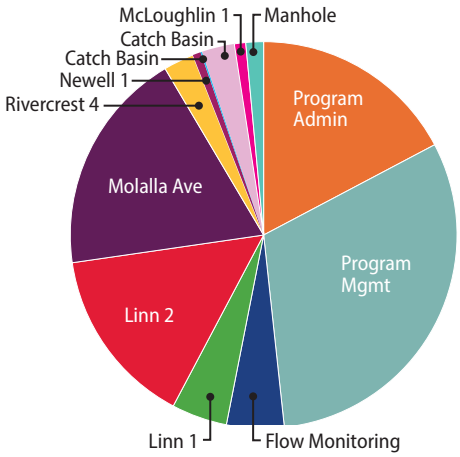


Figure 5.1—Wallis FY 24-25 Expenses

The Wallis Engineering budget and billed to date numbers are shown below. This is the program cost for Wallis Engineering to perform investigation, design, construction, administration, and public outreach portions of the I&I Reduction Program.

Table 5.1— Wallis Contract

Project Task	Program Costs from 2022	
	Wallis Engineering Budget To Date	Wallis Engineering Billings (billed through 4/2025)
Program Administration	$355,950.90	$330,937.23
Program Management	$700,083.64	$594,401.39
Flow Monitoring	$91,725.56	$92,019.28
Design Pkg 1 — Linn 1	$67,244.28	$89,148.43
Design Pkg 2 — Linn 2	$355,948.06	$286,801.25
Design Pkg 3 — Molalla Ave	$337,768.34	$359,878.65
Design Pkg 4 — Rivercrest Ph 4	$111,704.18	$48,652.52
Design Pkg 5 — Newell 1	$42,073.20	$13,005.57
Design Pkg 6 — Linn 3	$285,100.00	$2,558.70
Design Pkg 7 — McLoughlin 2	$150,000.00	$0.00
Design Pkg 8 — Catch Basin	$52,300.97	$52,300.97
Design Pkg 9 — McLoughlin 1	$70,042.00	$18,190.36
Design Pkg 10 — Linn 4	$200,000.00	$0.00
Design Pkg 11 — McLoughlin 3	No budget assigned	
Manhole Sealing Program	$75,000.00	$28,325.65
Total	**$2,894,941.13**	**$1,916,220.00**

As program manager, Wallis Engineering is supported by the efforts of several engineering and specialty subconsultants. These firms provide the necessary skills to investigate, design, and execute the program goals. Wallis provides program management oversight of these firms' work.

Overall, the I&I Reduction Program expenses are expected to come in under budget this year. A full accounting of the program expenses are included in "Appendix D FY 2024-2025 Budget (through April 2025)". A summary by task of the program budget and expenses to date is included in "Appendix E OC23II Program Cost Summary".

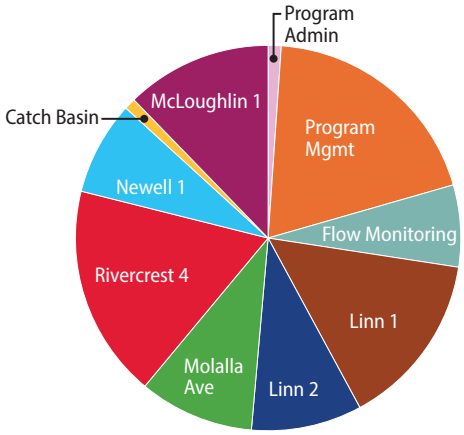


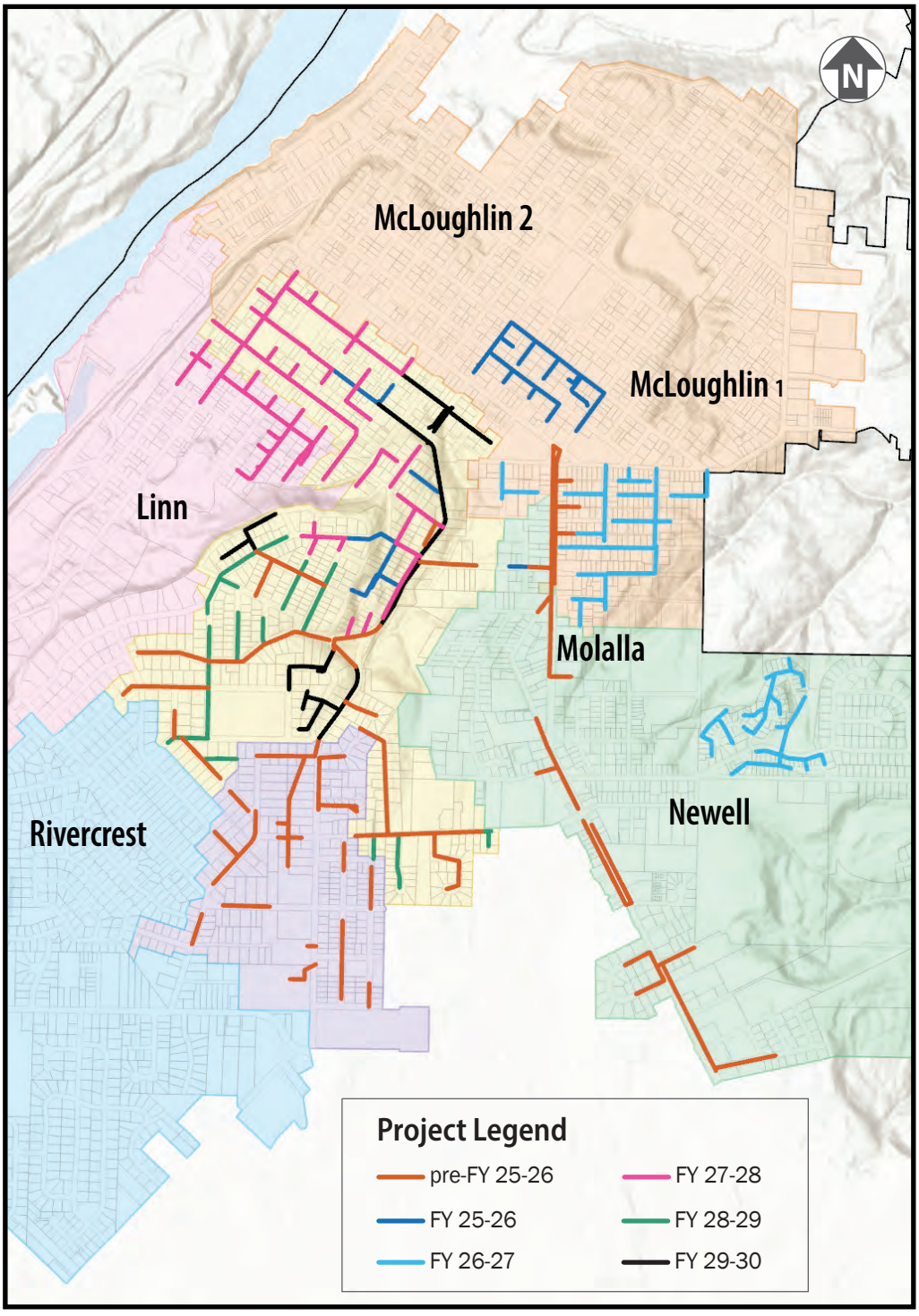
Figure 5.2—Subconsultant FY 24-25 Expenses

Table 5.2—Program Subcontractor Expenses

Project Task	Program Costs from 2022	
	Subconsultant Budgets To Date	Subconsultant Billings (billed through 4/2025)
Program Administration	$33,651.50	$20,593.55
Program Management	$532,879.50	$366,383.81
Flow Monitoring	$200,204.44	$129,339.77
Design Pkg 1 — Linn 1	$310,753.00	$276,440.19
Design Pkg 2 — Linn 2	$255,468.29	$174,813.75
Design Pkg 3 — Molalla Ave	$228,916.66	$181,866.73
Design Pkg 4 — Rivercrest ph 4	$420,374.48	$336,455.95
Design Pkg 5 — Newell 1	$403,708.80	$148,189.21
Design Pkg 6 — Linn 3	$0.00	$0.00
Design Pkg 7 — McLoughlin 2	$0.00	$0.00
Design Pkg 8 — Catch Basin	$18,006.45	$18,006.45
Design Pkg 9 — McLoughlin 1	$429,958.00	$230,878.28
Design Pkg 10 — Linn 4	$0.00	$0.00
Design Pkg 11 — McLoughlin 3	$0.00	$0.00
Manhole Sealing Program	$0.00	$0.00
Total	**$ 2,833,963.12**	**$1,882,013.17**

SECTION 6 Five Year Plan

The Oregon City I&I Reduction Program develops project designs for the identified high priority areas in the reimbursable basins. The five year plan is revised yearly with a high level budget and schedule. This year's five year plan is summarized below, and included in "Appendix F Five Year Plan". The Manhole Rehabilitation project is now an annual task.



Sewer Basins in I&I Program

INFLOW & INFILTRATION PROGRAM MANAGEMENT ANNUAL REPORT FY 2024-2025

June 2025 | WE #OC23-II

Appendices

Appendix A

List of Commonly Used Terms

Appendix A List of Commonly Used Terms

The Annual Report will use many of the following terms defined here.

Basin: a collection of homes, laterals, and mainlines into a sewer system whose sewage all flows into a single location.

Burst: a mechanical repair method of inserting new plastic pipeline within an older pipeline that requires repair. The old pipeline is broken as the new pipeline is fed through on a line. Requires more groundwork than CIPP, but less than full trenching pipeline repairs.

CCTV: A type of camera system that travels through a pipeline filming the pipe conditions.

CIPP: Cured In Place Pipe lining. A flexible liner that can be inserted into pipelines and cured with UV lights to repair a leaking pipe. The ability to utilize manhole or cleanout access limits ground work to areas where a cleanout needs to be installed..

Cleanout: a cap and pipe that allows access to the lateral or mainline sewer.

Dry Weather Flow (DWF): a measurement of sewer flows in pipes during dry weather. There are two types of DWF, wet season DWF captures the non-storm ground water infiltration and base flow. The other is dry season DWF which captures base flow only that establishes a baseline flow without any groundwater infiltration.

Dye Testing: a method where UV or colored dye is added to a water source to trace flows through pipelines.

FY: fiscal year; in Oregon City the fiscal year is from July 1 through June 30.

HDD: Horizontal Directional Drilling. This method allows for the installation of pipe underground without disturbing the surface ground at sending and receiving pits.

I&I: abbreviation for Inflow and Infiltration, which are two ways that water other than wastewater enters sewer pipelines. Inflow is water from non-sewage sources such as stormwater that enters the sewer system through roof drains or storm basin cross connections. Infiltration is groundwater that enters pipelines through cracks, breaks, or disconnected pipelines. Pipes, pumps, and the wastewater treatment plant for the sewer are sized based on predicted sewer flows, not for this extra water entering the pipes.

Lateral: the connecting pipeline or pipelines from a building or residence that flows to the mainline sewer. A group of pipelines are referred to as a Private Sewer System. These are generally on private property.

Main: or mainline; the publicly owned sewer line that collects flow from private laterals and drains into the Tri-City Wastewater Treatment Plant.

NROD: Natural Resource Overlay District. An Oregon City designated area that protects environmental assets within the City. This designation impacts design and construction in the overlay.

Package: an area to be assessed and evaluated as a probable priority contributor to inflow and infiltration in Oregon City. After assessment and evaluation, package refers to that area where construction will take place to rehabilitate/reconstruct laterals and/or sewer mains.

RDII: Rain Derived Inflow and Infiltration. This is the extra flow added from an increase in ground water that causes an immediate inflow peak and short term infiltration increase to a sewer system during a rain event.

Right of Entry: a document that gives the City, engineers, and contractors the permission to investigate and potentially repair infrastructure on private property.

Right of Way: In this document, Right of Way refers to two different areas: 1) the area of the street managed by the municipality, and 2) the land that has been subject to an easement agreement that allows for passage of people, utilities, or infrastructure from one property to another.

Smoke Testing: a method of locating openings in the sewer system that allow inflow. Air combined with non-toxic smoke is forced into the sewer lines, causing smoke to come out of the gutters or catch basins where there are cross connections or where there are defects in the lines.

SSMP (Sanitary System Master Plan): a document that provides an evaluation of the City's existing sewer collection system and recommends improvements. It measures conditions of area pipes' capacity, modeling of DWF and WWF for the area, pipe conditions, and suggests best growth practices.

Task: another way of identifying an I&I design area in Wallis budgets.

WES: Water Environmental Services is the Clackamas County group that operates the Tri-City Wastewater Treatment Plant and some trunk lines in Oregon City.

Wet Weather Flow (WWF): a measurement of sewer flows in pipes during rainy periods that determines peak flows in the pipes.

Appendix B

Key Personnel

Appendix B Key Personnel

Firm	Contact Name	Contact Information
Wallis Engineering, PLLC	**Program Management:** Jim Montgomery **Program Support:** David Brokaw	360-852-9178, jim.montgomery@walliseng.net 360-852-9153, david.brokaw@walliseng.net
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Keller Associates	Trevis Smith	tsmith@kellerassociates.com
Century West	Rawley Voorhies	rvoorhies@centurywest.com
Mackay Sposito	Mike Bayautet Scott Sapp	mbayautet@mackaysposito.com ssapp@mackaysposito.com
Compass	Don Devlaeminck	dond@compass-landsurveyors.com
Geotechnical Resources Inc. (GRI)	Per Onsager	ponsager@gri.com
Morgan Holen & Assoc.	Morgan Holen	morgan@mholen.com
Todd Prager & Assoc.	Todd Prager	todd@toddprager.com
VacX	Jason Jones	jj@vacx.com
Pacific Int-R-Tek	Adam Scott	adam@tvmypipe.com
ProVac	James McColeman	james.mccoleman@pro-vac.com
Pacific Habitat Services	John van Staveren	jvs@pacifichabitat.com
Greenworks	Mike Faha	mikef@greenworkspc.com
EPIC Land Solutions	Dave Nickerson	dnickerson@epicland.com
ADS	Brian Sheehy	bsheehy@idexcorp.com
BHC Consultants	Kevin Cook	kevin.cook@bhcconsultants.com
Archaeological Investigations Northwest (AINW)	Teresa Trost	teresa@ainw.com
Landis & Landis	Myke Landis	mlandis@llconstruction.com
The Saunders Company	Clair Moore	clair@thesaunderscompany.net
Cascade Industrial Services	Roger Brown	rbrown.cascadeind@gmail.com

Appendix C

2024 Flow Monitoring Report

wallis engineering

TECHNICAL MEMORANDUM

City of Oregon City | OC I&I Program – Flow Monitoring and Analysis

WE#OC21 - I I

DATE: November 15, 2024

TO: Kenny Cannady-Shultz, PE
City of Oregon City

FROM: Jack Wallis, PE

Wallis Engineering

RE: **Oregon City I&I Program – Flow Monitoring and Analysis**

ATTACHMENTS:

SECTION 1: INTRODUCTION AND BACKGROUND

Oregon City, Oregon (City) is in the midst of a multi-year infiltration and inflow (I&I) Reduction Project, with the goal of reducing rainfall derived I&I (RDII) by 65% in multiple sewer basins. The I&I reduction work includes rehabilitating degraded sewer lines, manholes, and sewer laterals to prevent groundwater and stormwater from infiltrating and inflowing into the sewer system.

Prior to the current I&I Reduction Project flow monitoring, the most recent flow monitoring was completed in 2012. The 2012 flow monitoring was used to calibrate a hydraulic and hydrologic model to determine the adequacy of the City's sanitary sewer system to convey peak flows during 5-year and 10-year storm events. This work was summarized in the City's 2014 Sanitary Sewer Master Plan (2014 SSMP). The 2014 SSMP found multiple sewer segments that were undersized to convey peak flows, and predicted sewer surcharges and overflows during peak flow events at several locations throughout the City.

The identified undersized pipes have been upsized to prevent excessive surcharge and overflows. But it is also likely that sewer pipes have further degraded since 2014. These two physical changes in the sewer system make it possible that the sewer system responds differently to rainfall events now compared to 2012 measurements. Therefore, additional monitoring is needed to provide current baseline I&I flow rates. Flow monitoring is also needed following sewer rehabilitation to determine the effectiveness of the I&I Reduction Project work at reducing I&I. To date, flow monitoring has been conducted in 2023 and 2024.

The goals of the I&I Reduction Project flow monitoring efforts are:

1. Establish baseline I&I flow rates for select basins prior to completing sewer rehabilitation work.
2. Determine I&I flow rates after sewer rehabilitation work is completed.

This work will be used to determine the effectiveness of the I&I reduction work being completed and to determine the City's progress toward the 65% RDII reduction goal. The purpose of this technical memorandum is to summarize the results of the flow monitoring work completed to date. Because the flow monitoring effort is intertwined with the condition assessment and rehabilitation work, this memorandum also includes a summary of those efforts.

This report is organized into the following sections:

Section 1: Provides an introduction and background to the I&I Reduction Project and the background information regarding prior modeling work in the project area.

Section 2: Oregon City sewer system overview

Section 3: Flow monitoring in the I&I Reduction Project sewer basins

Section 4: Condition Assessment overview

Section 5: Basins 8 & 10 Evaluation

Section 6: Basin 5B Evaluation

Section 7: Basins 12 & 12A Evaluation

Section 8: Basins 5 & 5A Evaluation

Section 9: Conclusions and Recommendations

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ATTACHMENTS

Attachment A: Technical Memorandum – Basins 5,8,10, and 12 Model Recalibration

Attachment B: ADS Oregon City Sanitary Sewer Flow Study 2024

Attachment C: TM ORC CS I-I Reduction and Capacity Draft 9-29-2023

Attachment D: 2024 BHC Flow Monitoring and Analysis Technical Memorandum Peer Review

Attachment E: ADS Oregon City Flow and Rain Monitoring Report 2023

SECTION 2: SYSTEM OVERVIEW

The current flow monitoring efforts are focused on the four reimbursable sewer basins: 5, 8, 10, and 12.

These four basins have been further subdivided according to hydraulic characteristics summarized below:

- Due to hydraulic issues with the monitoring location previously used for Basin 5, a new monitoring location was identified, and the resultant basin is designated as Basin 5B.
- Additional monitoring by Water Environmental Services (WES) along the Oregon City Interceptor running along McLoughlin Boulevard has led to the designation of an additional basin – Basin 5A – to isolate flows from the southwestern portion of the reimbursable sewershed.
- Basin 12 has been additionally subdivided to isolate a hydraulically independent area that relies on the Parrish Road pump station to connect to the rest of the sewer system. This area has been designated as Basin 12A.

Characteristics of the reimbursable sewer basins are shown in Figure 1, and a basin map is included as Figure 2.

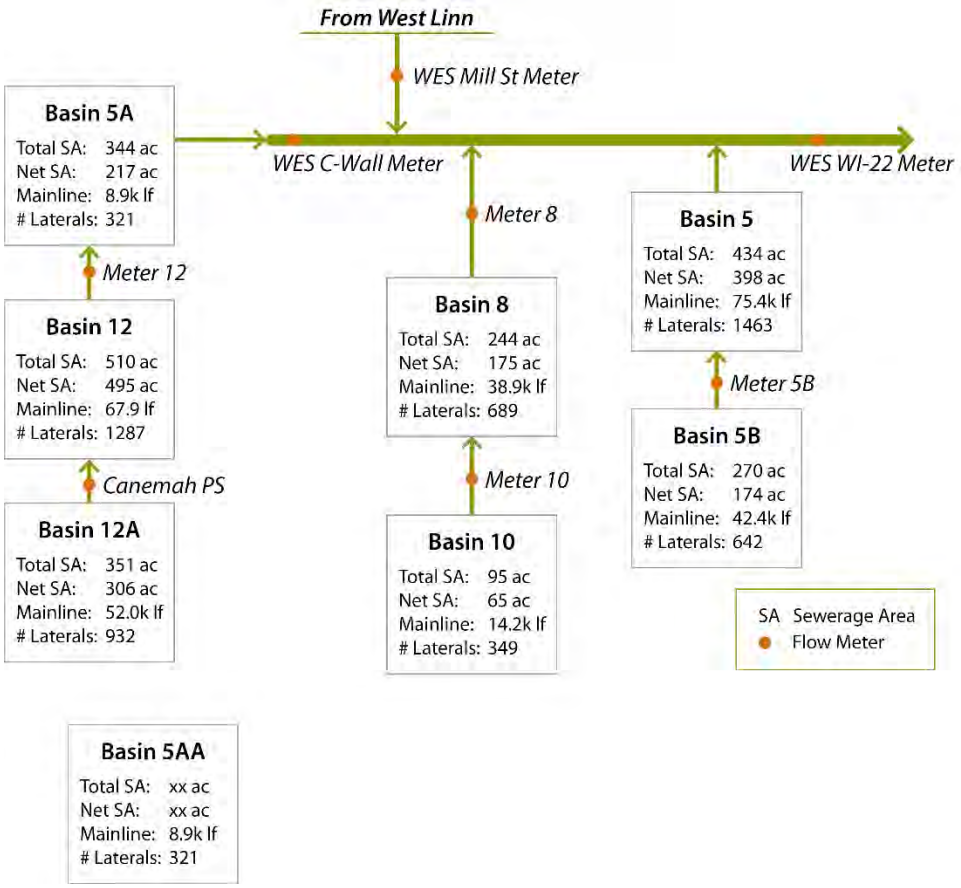

Figure 1: Basin Characteristics and Flow Schematic

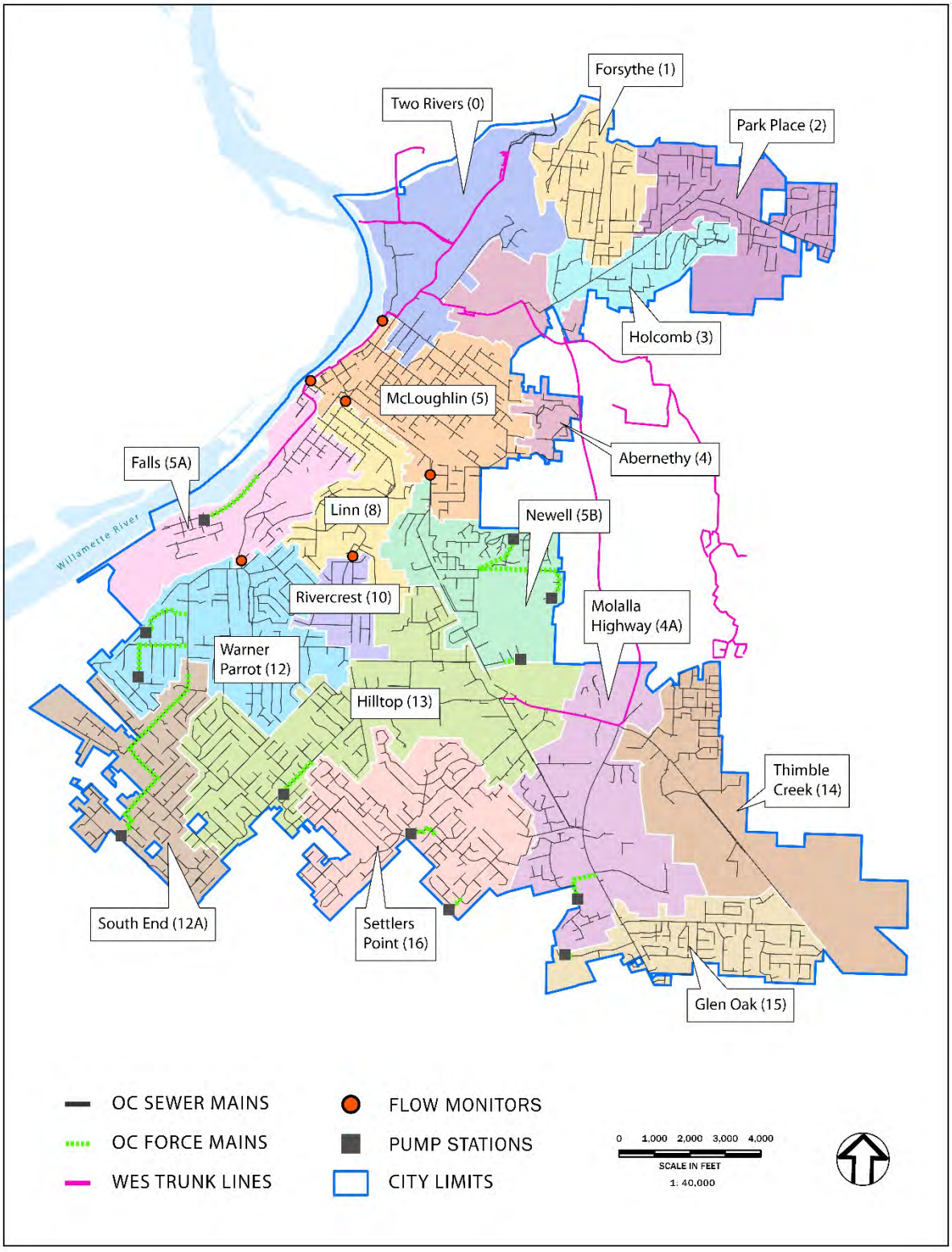

Figure 2: Basin Map

SECTION 3: FLOW MONITORING OVERVIEW

Flow monitoring was completed by ADS in 2023 and 2024, Attachments B and E, and included four flow metering locations and one rain gauge. The monitoring locations in 2023 included meters 5B, 8, 10, and 12. The 2024 monitoring locations included 8, 10, 12, and a location downstream of Pease Pump Station. Flow data from permanent WES-owned metering devices at locations WI-22, C-Wall, and Mill Street was also obtained for a preliminary review. A detailed analysis of the WES flow meter data was not performed as part of this effort.

Rainfall Data Summary

Total Rainfall During Monitoring Period

Cumulative rainfall data for the 2023 and 2024 monitoring periods are shown below in Figure 3 . The two monitoring periods had similar total rainfall amounts. However, the 2024 monitoring period had a higher intensity storm, with more rain falling over a shorter time period, as indicated by the steeper slope of the cumulative rainfall plot.

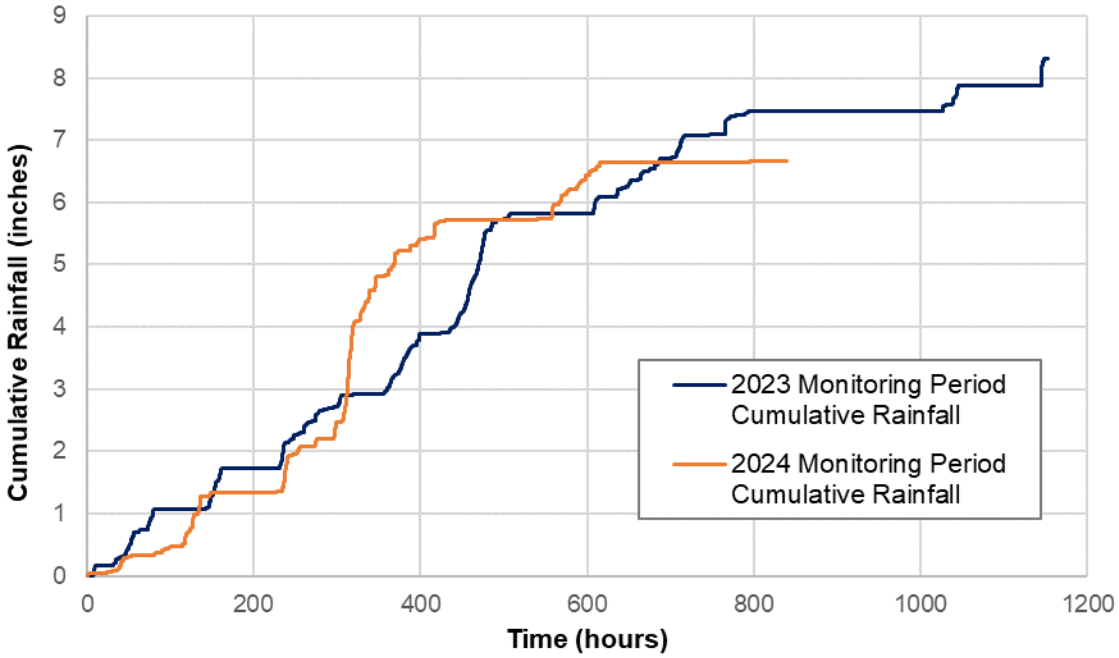

Figure 3: Cumulative Rainfall Data for 2023 and 2024 Monitoring Periods

Peak Rainfall Event During Monitoring Periods

To compare peak flow rates observed during the 2023 and 2024 monitoring periods, the peak rainfall event from each monitoring period was extracted, shown below in Figure 4. These rainfall events had similar cumulative rainfall totals, but the 2024 rainfall event was shorter and higher intensity.

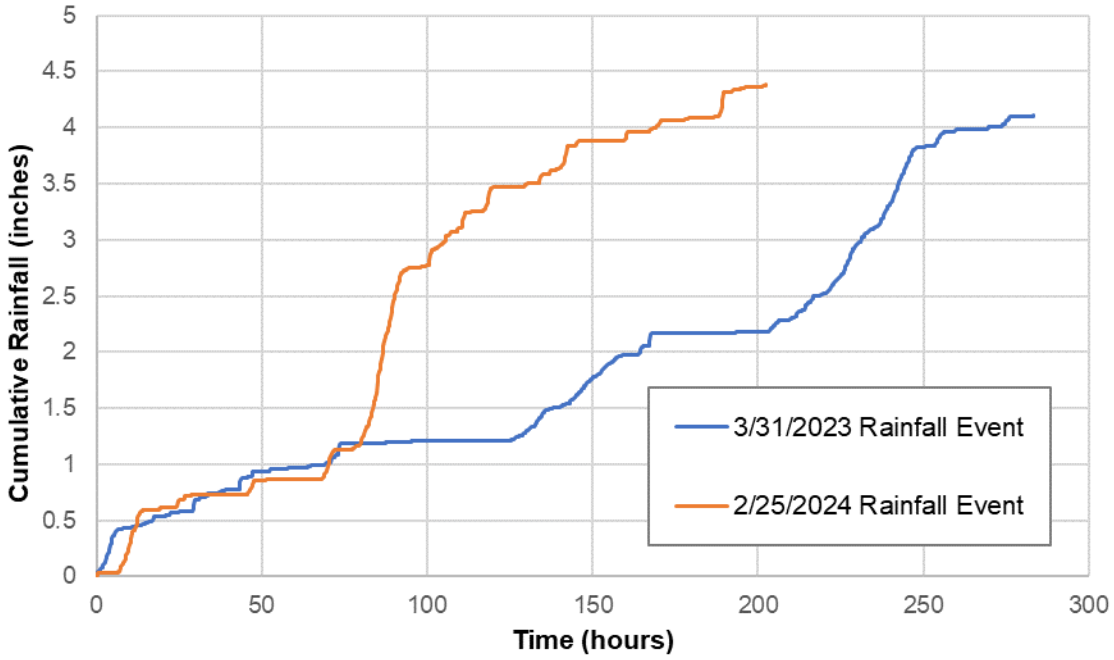

Figure 4: Cumulative Rainfall During Peak Events

Antecedent Moisture Conditions

Antecedent moisture conditions can affect groundwater levels and thus impact infiltration and inflow. To compare antecedent moisture conditions, monthly rainfall data from the Global Historical Climatology Network (GHCN) Site USC00356334 (located in Oregon City) was evaluated. Monthly rainfall totals are shown in Figure 5.

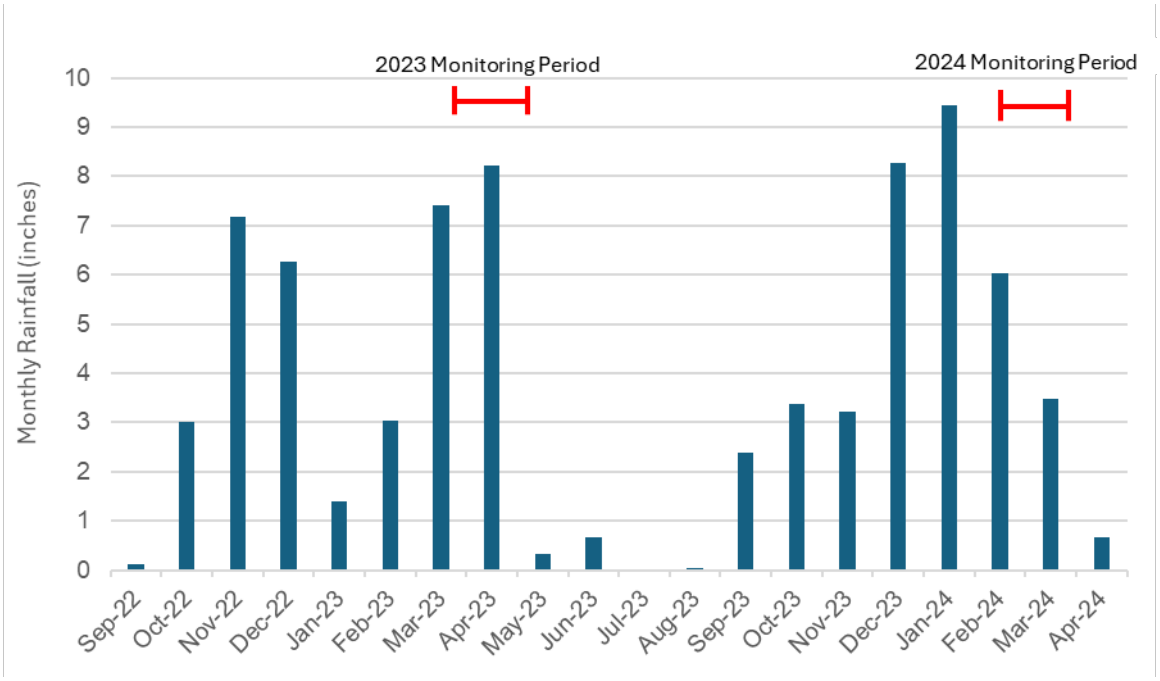

Figure 5: Oregon City Monthly Rainfall Totals.

Total rainfall during the preceding 30-day and 60-day periods prior to the monitoring is shown below in Table 1. The 2023 and 2024 monitoring had similar rainfall over preceding 30-day periods, and the 2024 monitoring period had higher rainfall over the preceding 60-day period.

Table 1: Preceding Rainfall 2023 and 2024 Monitoring Periods.

Evaluation Period	2023 Monitoring	2024 Monitoring
30 days preceding rainfall	6.9 inches	7.0 inches
60 days preceding rainfall	8.7 inches	12.8 inches

Based on the rainfall characteristics preceding and during the 2023 and 2024 monitoring periods, the infiltration and inflow characteristics are expected to be reasonably comparable.

Dry Weather During Monitoring Periods

Dry weather during monitoring is used to determine the base flow and groundwater infiltration. Both monitoring periods included a nine-day dry period with no more than 0.05 inches of rain on any day. During the beginning of a dry period following a rainfall event, there is still significant amounts of infiltration and inflow. Therefore, base flow and groundwater infiltration values are calculated based on periods with at least four preceding dry days.

The EPA SSOAP Toolbox was used to calculated dry weather flow and groundwater infiltration for weekdays and weekends. The 2023 monitoring period included 3 weekdays and 2 weekend days with at least four preceding dry days. The 2024 monitoring period included 4 weekdays and 1 weekend days with at least four preceding dry days. This is a relatively small amount of data to determine base flow and groundwater infiltration values, and therefore variability should be expected.

Table 2:Dry Days during Monitoring Periods.

Parameter	2023 Monitoring Period	2024 Monitoring Period
Weekdays with ≥4 preceding dry days	3	4
Weekend days with ≥4 preceding dry days	2	1

Flow Data Characterization and Quality Assurance

Flow data from 2023 was evaluated by Leeway, in Attachment C, using the following methods:

- Flow and rain time series plots were reviewed to ensure reasonable and accurate responses to rain events.
- Velocity and depth time series plots were reviewed to identify instances where depth and velocity readings did not track.
- Depth and velocity scatterplots were evaluated to determine whether depth and velocity were correlated during the monitoring period.
- A flow balance check between meters was performed to ensure continuity of flow. This was only done on meters that are upstream/downstream of each other.

Flow meter data from 2024 was analysed in a similar manner by Wallis. Flow meter data quality is summarized below in Table 3. An evaluation of 2023 data quality is included in the Attachment A: *Technical Memorandum RE: Basins 5, 8, 10, and 12 Model Recalibration* (Leeway, March 2024). An evaluation of the 2024 data quality is discussed below.

Table 3:Flow Data Quality

Meter	2023 Data Quality	2024 Data Quality	Notes
5B	Good	n/a	
8	Good	Good	
10	Fair	Good	2023 velocity and depth do not track at times
12	Poor	Good	2023 flows are not consistent with downstream WES C-Wall meter

2024 Flow Monitoring Data Quality

The flow data for 2024 appeared to be good quality at all flow meters. Flow and rainfall correlated well at each flow meter, with flow increasing during rainfall events and dropping after rainfall stopped. Velocity data also correlated well with depth data at all flow meters, with velocity increasing with increased depth. Meter depth and velocity scatter plots are included in the Attachment B: *Oregon City Sanitary Sewer Flow Study 2024* (ADS, April 2024).

A flow balance was conducted to determine whether upstream meters were consistent with the downstream meters. Flow observed at meter 8 was consistently higher than the upstream meter 10, as expected, and similar responses to rainfall were observed (see Figure 6). Note that the difference between meter 8 and meter 10 is equal to the flow from Basin 10.

Flow at the WES Willamette C Wall meter was also consistently higher than the upstream meter 12 (see Figure 7). The difference between flow at meter 12 and Willamette C Wall meter is equal to the flow from basin 5A. Note that in 2023, flow in meter 12 was observed to be higher than the downstream Willamette C Wall meter, and analysis by Leeway indicated that the flow meter data from meter 12 was poor quality and likely erroneous. The 2024 flow meter data from meter 12 appears to be better quality than 2023 and is consistent with the downstream flow meter.

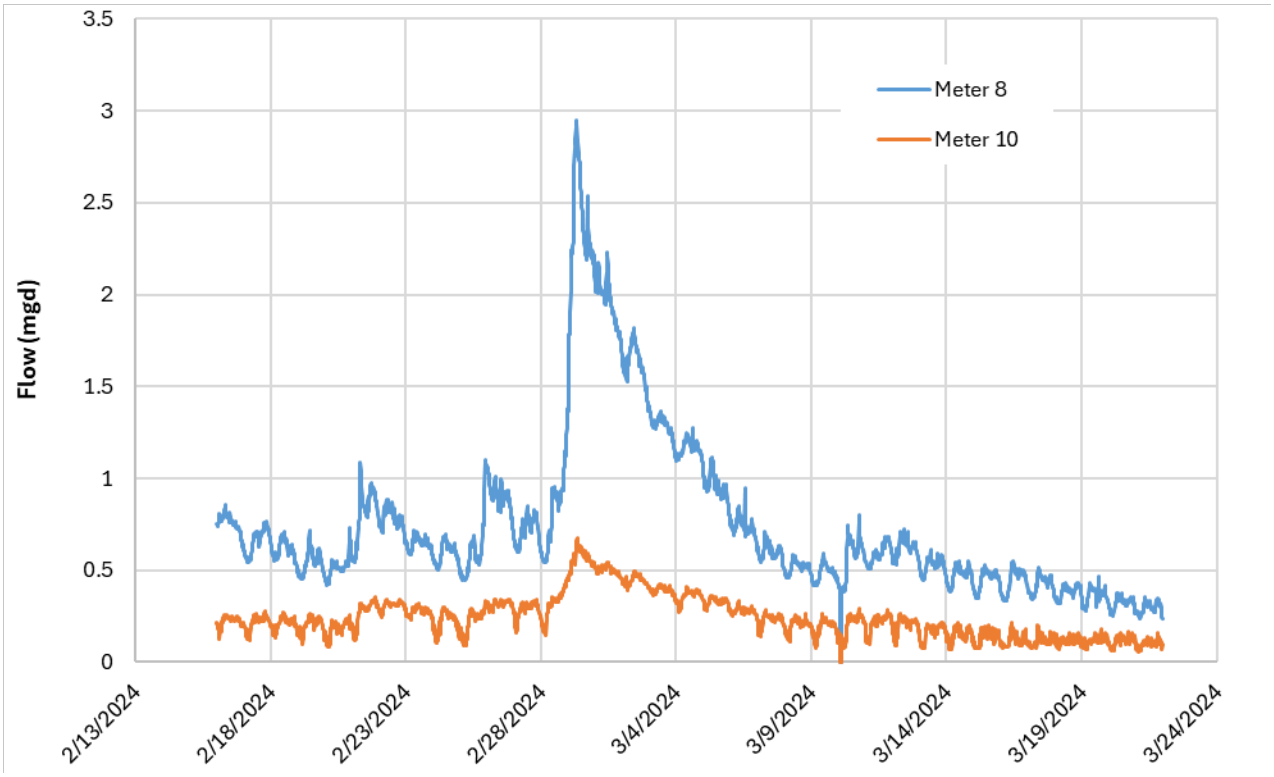

Figure 6: Flow Balance between Basin 8 and Basin 10

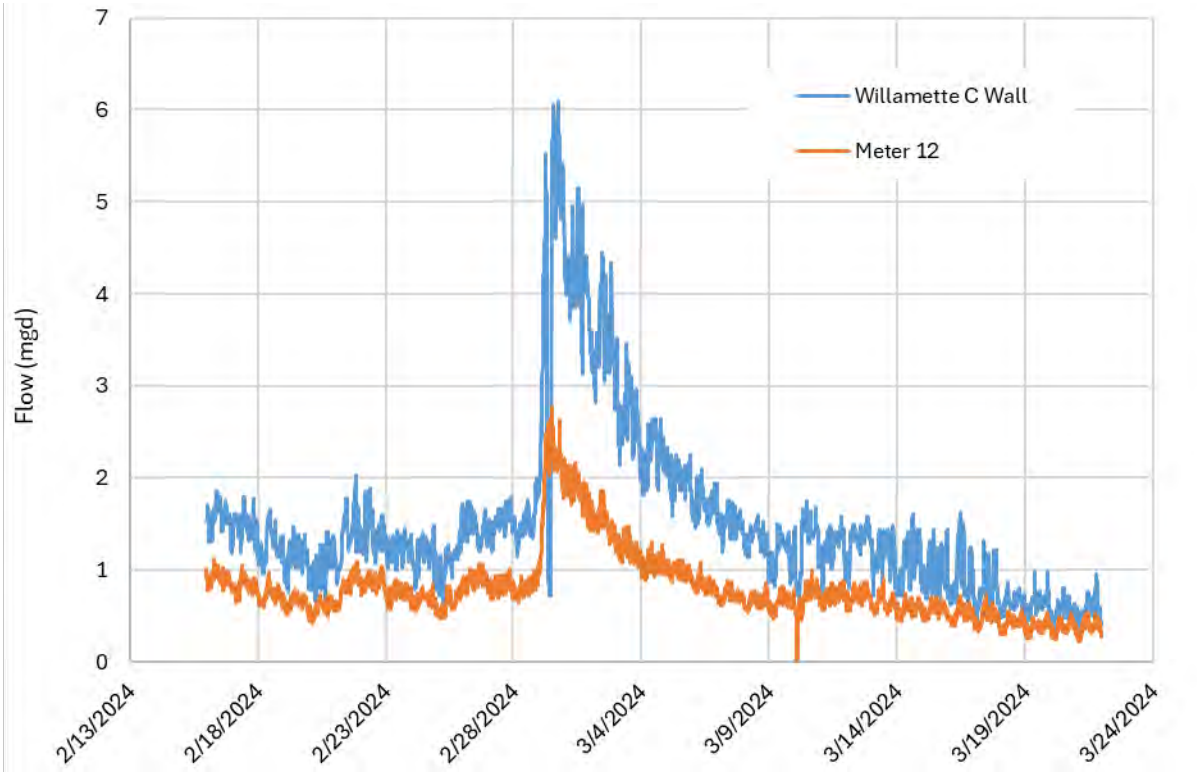

Figure 7: Flow Balance between Basin 12 and WES Willamette C Wall

2024 Flow Monitoring Data Analysis Methods

Flow monitoring data was analysed in this report using EPA SSOAP Toolbox software. The SSOAP software include tools to decompose the flow data into three components, defined below and shown in Figure 8.

- **Rainfall dependent infiltration and inflow (RDII)**: the component of infiltration and inflow that enters the sewer system during and after rainfall events.
- **Base wastewater flow (BWF)**: the portion of wastewater entering the sewer system through residential, commercial and industrial users.
- **Groundwater infiltration (GWI)**: the component of infiltration and inflow that enters the sewer system at a relatively constant rate and is relatively unaffected by rainfall.

The BWF and GWI are calculated during dry weather periods as discussed in the previous section. Note that the SSOAP Toolbox calculates groundwater infiltration by assuming that all flow entering the sewer system at the diurnal low point is groundwater infiltration. Because it is likely that at least some flow during the diurnal low point comes from users, this may overestimate groundwater infiltration values and underestimate base wastewater flow.

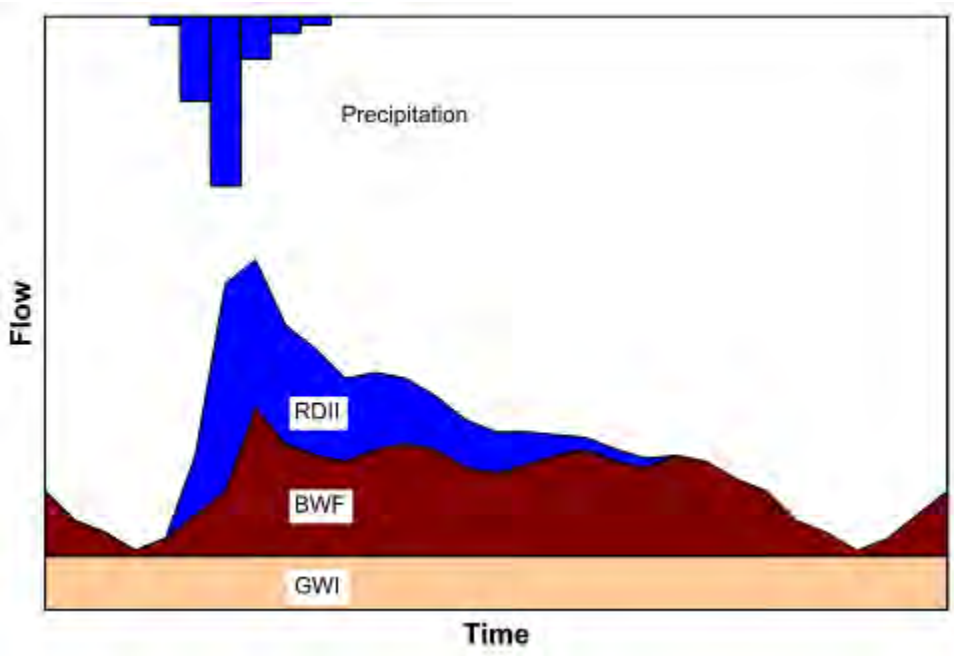

Figure 8: SSOAP Toolbox Flow Decomposition.

The SSOAP software also includes tools to calculate RDII using the RTK unit hydrograph method. Previous modeling efforts in 2014 and 2023 calibrated RTK values using EPA SWMM software. As part of this work, RDII was calculated in the SSOAP Toolbox using the previously determined RTK values. This was done as a preliminary screening tool and is likely not as accurate as modeling using SWMM software. In addition to the modeling using SSOAP software, basins 8 and 10 were evaluated and recalibrated by BHC, in Attachment D, using PCSWMM software.

SECTION 4: CONDITION ASSESSMENT OVERVIEW

Pipe condition assessment was completed based on review of CCTV footage. Various conditions noted during condition assessment include cracks, fractures and breaks, root intrusions, intruding taps and other obstructions, visible infiltration through the pipe wall, material changes along the segment, sags in the pipe run, and full pipe collapse. The pipe condition was ranked from one to five, with rank one consisting of one to no defects in pipe and no visible infiltration, and rank five consisting of a pipe collapse, multiple large holes or breaks where soil is visible, multiple sags greater than 40% of segment length or spot repair work required on more than 20% of pipe. Pipe segments where CCTV could not be completed due to the pipe condition were automatically assigned rank five. Condition ranking was completed with rehabilitation in mind, with pipe bursting and cured-in-place pipe rehabilitation are assumed as a default repair methods.

To supplement the CCTV assessment, smoke testing was completed throughout the program area. During smoke testing, visible smoke is introduced into the sanitary system where it is emitted from any connected structures that are open to the air. Smoke testing was used as the primary method to gauge lateral condition where CCTV could not be completed. Smoke testing hits consisted of visible smoke emitted from sewer cleanouts, illicit connections such as downspouts or sump connections, private standpipes and sewer stacks, private and public storm catch basins, and a general note for “ground” hits generally indicating breaks in a lateral. Smoke testing hits are included in the figures to show approximate areas of assumed lateral deficiencies and stormwater connections contributing to I&I flow into the sanitary sewer system.

The third and final approach to condition assessment involves manhole inspection and rehabilitation. So far, the program has responded to City Operations Staff noting manholes that have a history of maintenance concerns and prioritizing these manholes for rehabilitation. The City provided condition reports for approximately two dozen manholes that were rehabilitated during Spring 2024 rehabilitation efforts, with more expected for future manhole rehabilitation prioritization.

SECTION 5: BASINS 8 AND 10 EVALUATION

Because basin 10 flows directly into basin 8, these two basins are evaluated together. This evaluation includes a summary of the condition assessment work, sewer rehabilitation work, and the flow monitoring efforts to date.

Basin 8 and 10 Condition Assessment Summary

During the early stages of Oregon City's I&I Reduction Program, rehabilitation of infrastructure in Basin 8 and 10 was prioritized based on identified operational challenges and suspected high I&I. City Operations and Wallis Engineering mobilized considerable CCTV efforts within the basins, covering 80% of Basin 10 and nearly 100% of Basin 8. Wallis was tasked to review the collected CCTV footage and assess the condition of each segment on a scale from one (signifying pipes requiring little to no rehab) up to five (pipes requiring nearly full excavation and replacement). Several manholes within Basin 10 were also identified for rehabilitation during these efforts. Figure 9 shows the results of this condition assessment.

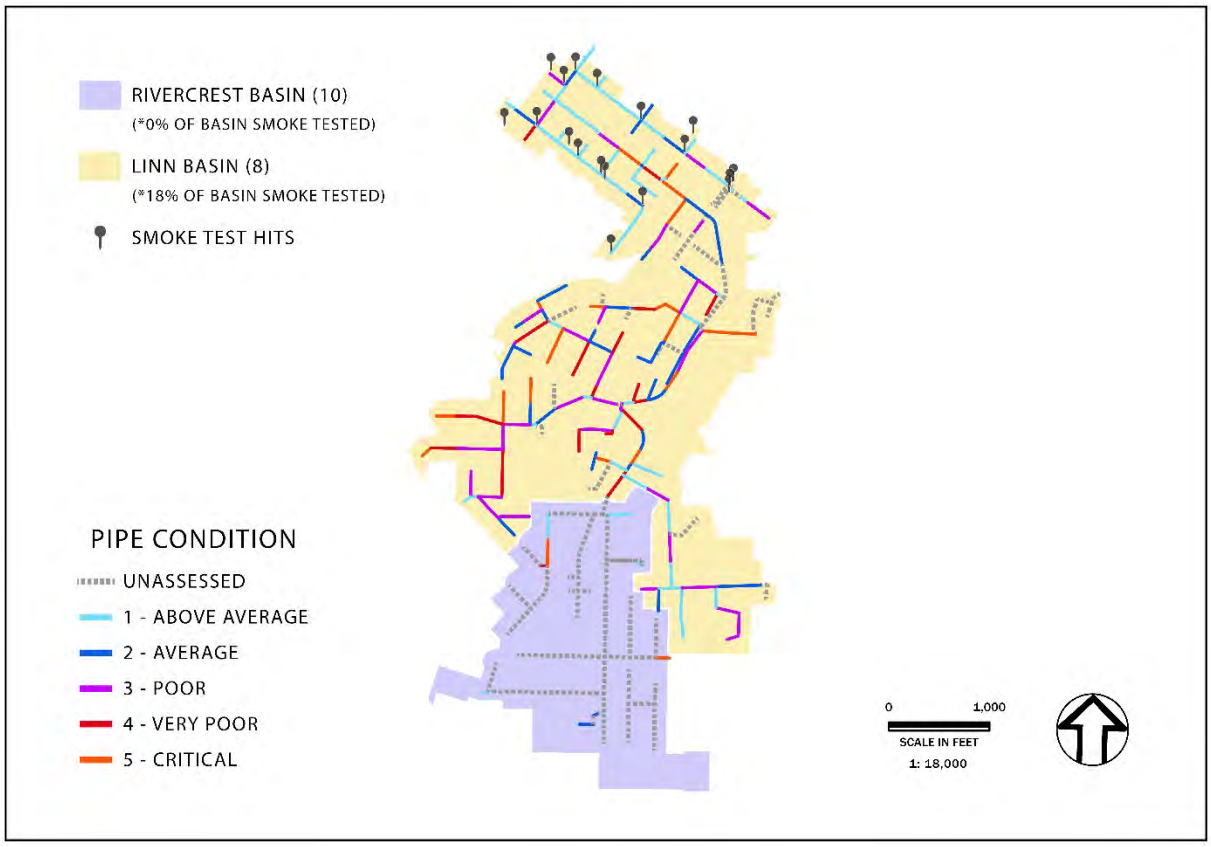

Figure 9: Basins 8 and 10 Condition Assessment

Basins 8 and 10 Rehabilitation Summary

Basin 8 and Basin 10 have been prioritized since the program's inception based on historical indicators of high I&I. Basins 8 and 10 both had significant rehabilitation work completed in 2022 and 2023, shown below in Figure 10. A summary of the rehabilitation work is also shown in Tables 4 and 5.

Basin 8 has had one mainline rehabilitation package completed in 2023, covering 25% of the mainline in the basin. This package was the first in the program to include private lateral rehabilitation. This package now functions as a model for future work in the basin and throughout the program. Basin 8 has three additional I&I Reduction Project construction packages in the pipeline – Package 2 is in the final design phase and will be constructed in Summer 2025. The remaining proposed packages are in the scoping phase and are scheduled for construction in Summer 2026 and Summer 2027 respectively. The end goal is complete rehabilitation of mainline and laterals within the basin. Basin 8 manhole rehabilitation is scheduled for Early 2025 and will include manholes within the completed rehabilitation package area. Additional manhole rehabilitation will occur as mainline rehabilitation projects commence.

Nearly all mainline pipe has been rehabilitated in Basin 10, along with many of the manholes. A lateral rehabilitation package is currently underway and will complete the rehabilitation of all mainline and lateral segments in the basin.

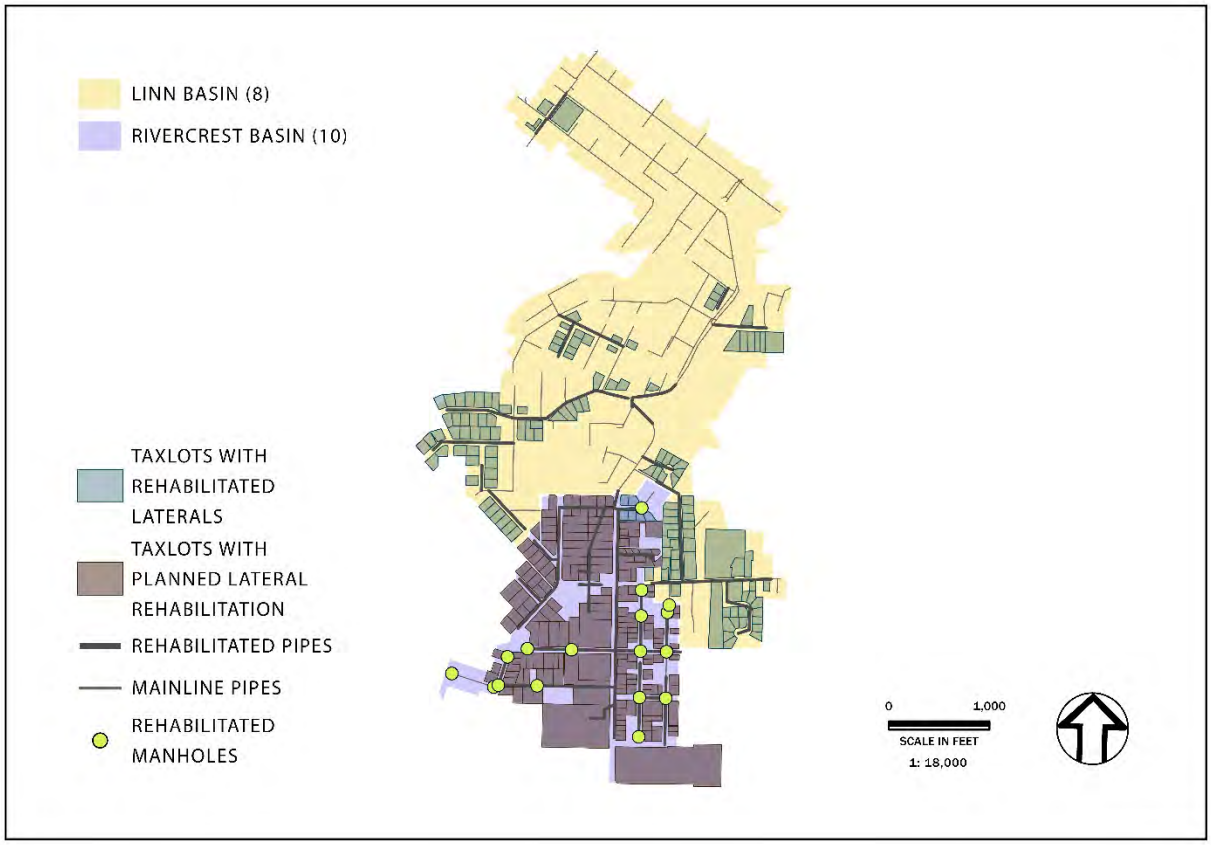

Figure 10: Basins 8 and 10 Rehabilitation Summary..

Table 4: Basin 8 Sewer Rehabilitation Summary

Property	Total	Rehabilitated 2023	% Rehabilitated
Laterals[a]			
Quantity	689	91	13%
Mainline[b]			
Length, 6" Dia.	5,038 ft	3,269 ft	65%
Length, 8" Dia.	26,769 ft	9,288 ft	35%
Length, 10" Dia.	360 ft	0 ft	0%
Length, 12" Dia.	4,725 ft	795 ft	17%
Manholes[c]			
Quantity	168	0	0%

a) Lateral rehabilitation consisted of either pipe bursting or CIPP lining from the mainline to the home. Only laterals rehabilitated for the full length from the mainline to the plumbing connection at the home have been counted.
b) Mainline rehabilitation consisted of either pipe-bursting or CIPP lining.
c) No manholes have been rehabilitated to date in Basin 8.

Table 5: Basin 10 Sewer Rehabilitation Summary

Property	Total	Rehabilitated 2022	% Rehabilitated
Laterals[a]			
Quantity	349	0	0%
Mainline[b]			
Length, 6" Dia.	794 ft	794 ft	100%
Length, 8" Dia.	10,410 ft	9,976 ft	96%
Length, 10" Dia.	2,899 ft	2,899 ft	100%
Length, 12" Dia.	0 ft	0 ft	100%
Manholes[c]			
Quantity	45	17	38%

a) No laterals were rehabilitated before or during the monitoring period in Basin 10.
b) Mainline rehabilitation consisted of either pipe-bursting or CIPP lining.
c) Manhole rehabilitation consisted of epoxy lining.

Basins 8 and 10 Flow Monitoring Data

Flow monitoring results for meters 8 and 10 are shown below in Figure 11-14. Peak flow at meter 8 was 3.0 mgd during both the 2023 and 2024 monitoring periods, despite the higher intensity storm in 2024. Note that meter 8 flows include flow from upstream basin 10.

Peak flow at meter 10 was 0.57 mgd in 2023 and 0.66 mgd in 2024, consistent with the higher intensity storm event in 2024. An evaluation of dry period and RDII flows is discussed below.

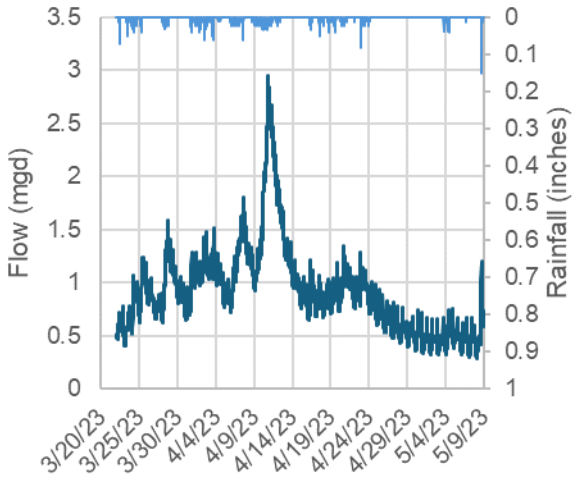

Figure 11: Meter 8, 2024 Monitoring Results

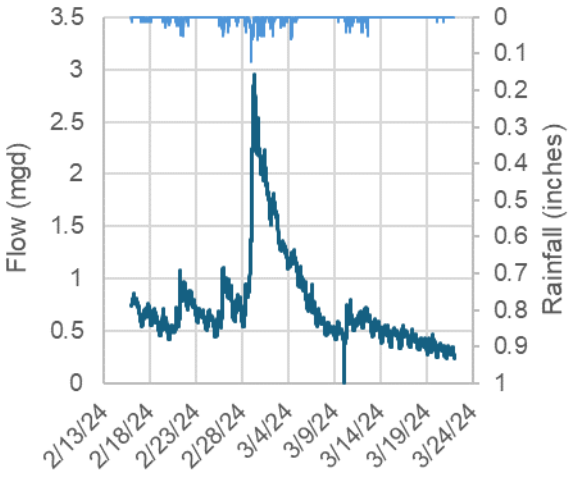

Figure 12: Meter 8, 2023 Monitoring Results

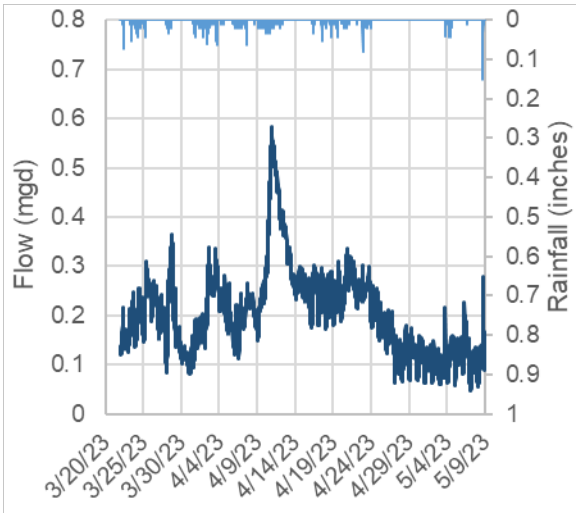

Figure 13: Meter 10, 2023 Monitoring Results

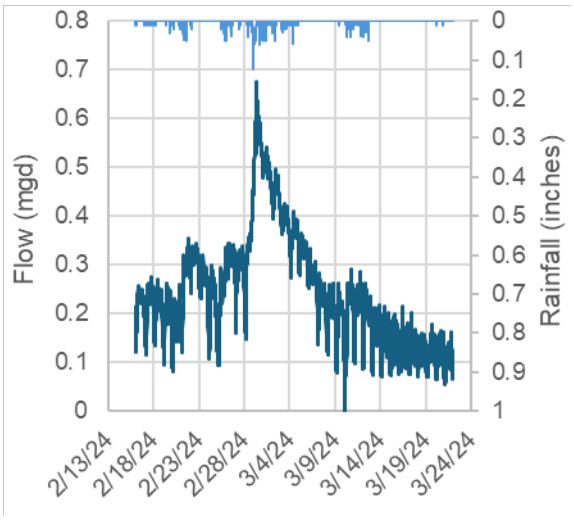

Figure 14: Meter 10, 2024 Monitoring Results

Basins 8 and 10 Dry Period Flow

Observed flow during dry periods and simulated GWI and BWF are shown below in Figure 15-18. Because the simulated flows are calculated based on the observed flow rates during these periods, the simulated flows correlate well with the observed flow rates. Note that the SSOAP toolbox estimates BWF and GWI for weekends and weekdays separately, and GWI is determined assuming all flow at the diurnal minimum is GWI. The simulated GWI appears to increase on weekends, but it is unlikely that this is actually occurring. Instead, the GWI is likely estimated as higher due the small sample size of dry days in each monitoring period, and the timing of the rainfall events. It is also possible that nighttime flows are higher on weekends from users.

Meter 10 flows are significantly more variable in 2024 compared to 2023, potentially indicating poorer quality data during the 2024 dry period. The ADS flow study also noted a hydraulic shift at the beginning of the dry period, indicating lower data confidence. Despite the lower confidence in the dry period data in

2024, the minimum flow and average flow were similar in 2023 and 2024. The 2024 period did show a higher maximum flow during the dry weather.

At both meters and both monitoring periods, the flow rate decreases slightly throughout the dry weather period. This indicates that RDII is still decreasing since the previous rainfall event, and therefore the actual GWI may be lower than estimated.

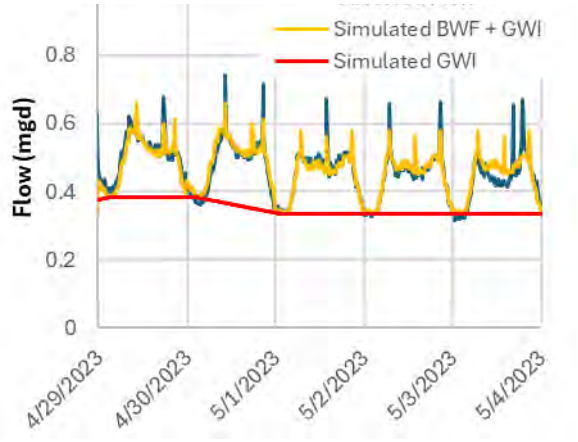

Figure 15: Meter 8, 2023 Monitoring Results

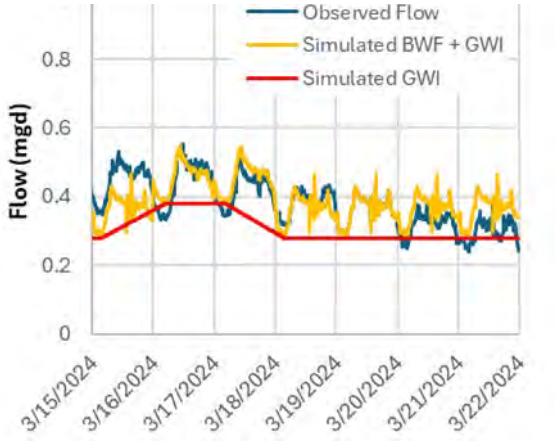

Figure 16: Meter 8, 2024 Monitoring Results

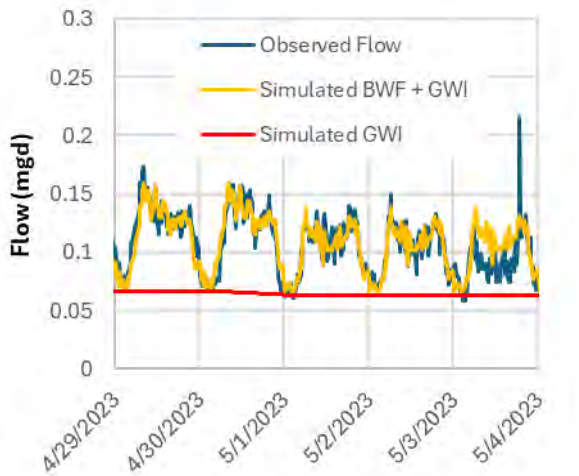

Figure 17: Meter 10, 2023 Monitoring Results

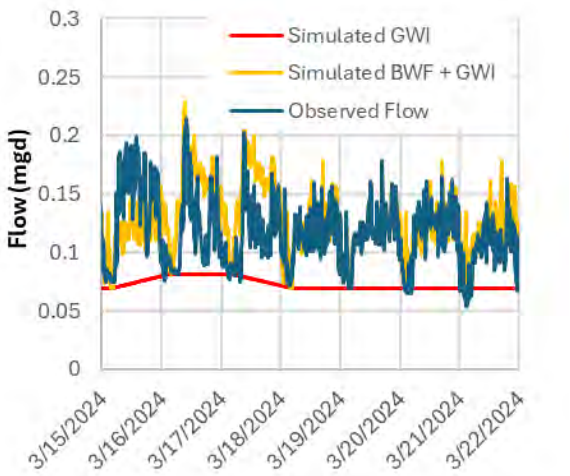

Figure 18: Meter 10, 2024 Monitoring Results

Average base wastewater flow and groundwater infiltration from the 2023 and 2024 monitoring periods are shown below in Table 6, along with the values from the 2014 SSMP. At meter 8, both the groundwater infiltration and the base wastewater flow decreased slightly from 2014 to 2023, and from 2023 to 2024. The decreased GWI flow is consistent with the rehabilitation work within both basin 8 and 10, which should have the effect of reducing GWI. However, an explanation for the decrease in BWF is not clear. It may be possible that differences between monitoring years are simply due to accuracy of the data, and that there are no actual trends in the flow rates. Future monitoring efforts will help indicate whether these trends continue.

At meter 10, the BWF is fairly constant between 2014-2024. The GWI decreased significantly between 2014 and 2023, however the flow in 2014 was estimated and not based on actual flow monitoring. The GWI was constant between 2023 to 2024, which is consistent with no rehabilitation work completed during that time interval.

Table 6: Basins 8 and 10 Base Flow and GWI

Parameter	2014 SSMP Model	2023 Monitoring Period	2024 Monitoring Period
Meter 8[a]			
Average BWF (mgd)	0.17	0.11	0.08
Average GWI (mgd)	0.79	0.35	0.31
Average BWF + GWI	0.86	0.46	0.41
Meter 10			
Base Flow (mgd)	0.05[b]	0.04	0.05
GWI (mgd)	0.21[b]	0.06	0.07
Base Flow + GWI	0.26[b]	0.11	0.13

a) Meter 8 flows include upstream basin 10 flows.
b) Monitoring data was considered poor in this location during the 2014 flow monitoring, therefore 2014 SSMP flow values for basin 10 were not based on actual flow monitoring data.

Basin 8 and 10 RDII Flow

Rainfall derived infiltration and inflow was previously modeled by Leeway using EPA SWMM5 software, with RTK values calibrated using the 2023 flow monitoring data. A peer review of the Leeway model calibration was completed by BHC in 2024, and the model was recalibrated for basins 8 and 10, improving the fit of the modeled flow to observed flow. The BHC flow modeling work is included as Appendix A and summarized below.

Basin 10 flows were recalibrated first, because basin 10 is upstream of basin 8. Since no rehabilitation work was completed in Basin 10 between 2023 and 2024, the recalibration was completed with the goal of finding RTK values that fit both the 2023 and 2024 flow data. The recalibrated model fit the flow data reasonably well but underestimated peak flow in 2023 and overestimated peak flow in 2024. Modeled flow in 2023 was 0.50 mgd, compared to the observed flow of 0.60 mgd. Modeled flow in 2024 was 0.76 mgd, compared to the observed flow of 0.67 mgd. The observed and modeled flow is shown below in Figure 19.

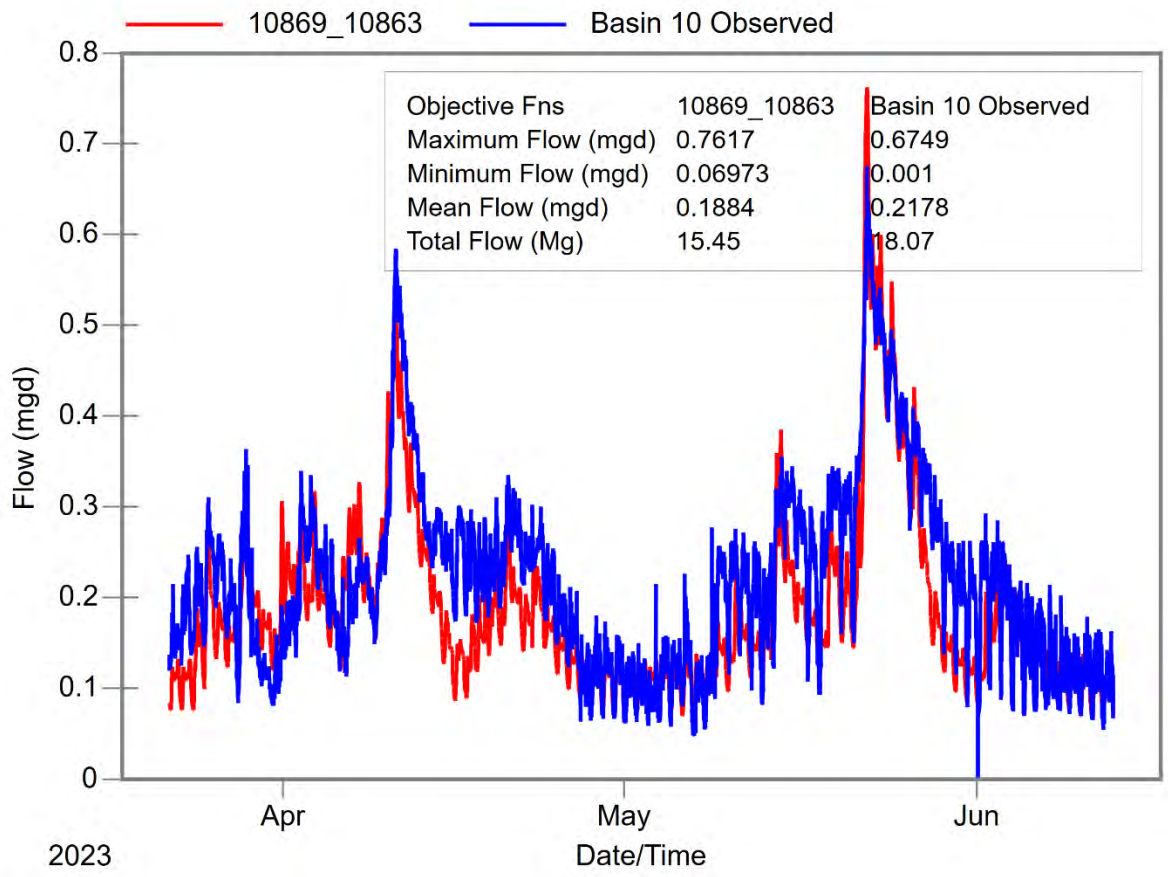

Figure 19: Meter 10, 2023 and 2024 Observed and Simulated Flow, BHC recalibration to both 2023 and 2023 flow data.

Following recalibration of Basin 10, Basin 8 was recalibrated to 2023 flow data, shown below in Figure 20. The recalibration fit the 2023 observed flows well, with a modeled peak flow of 2.96 mgd and an observed peak flow of 3.00 mgd. However, the model calibrated to 2023 flow data significantly overestimated the peak flow in 2024, with a modeled peak flow of 4.41 mgd and an observed peak flow of 2.95 mgd. This indicates that RDII decreased in Basin 8 between 2023 and 2024, consistent with the sewer rehabilitation work completed in basin 8.

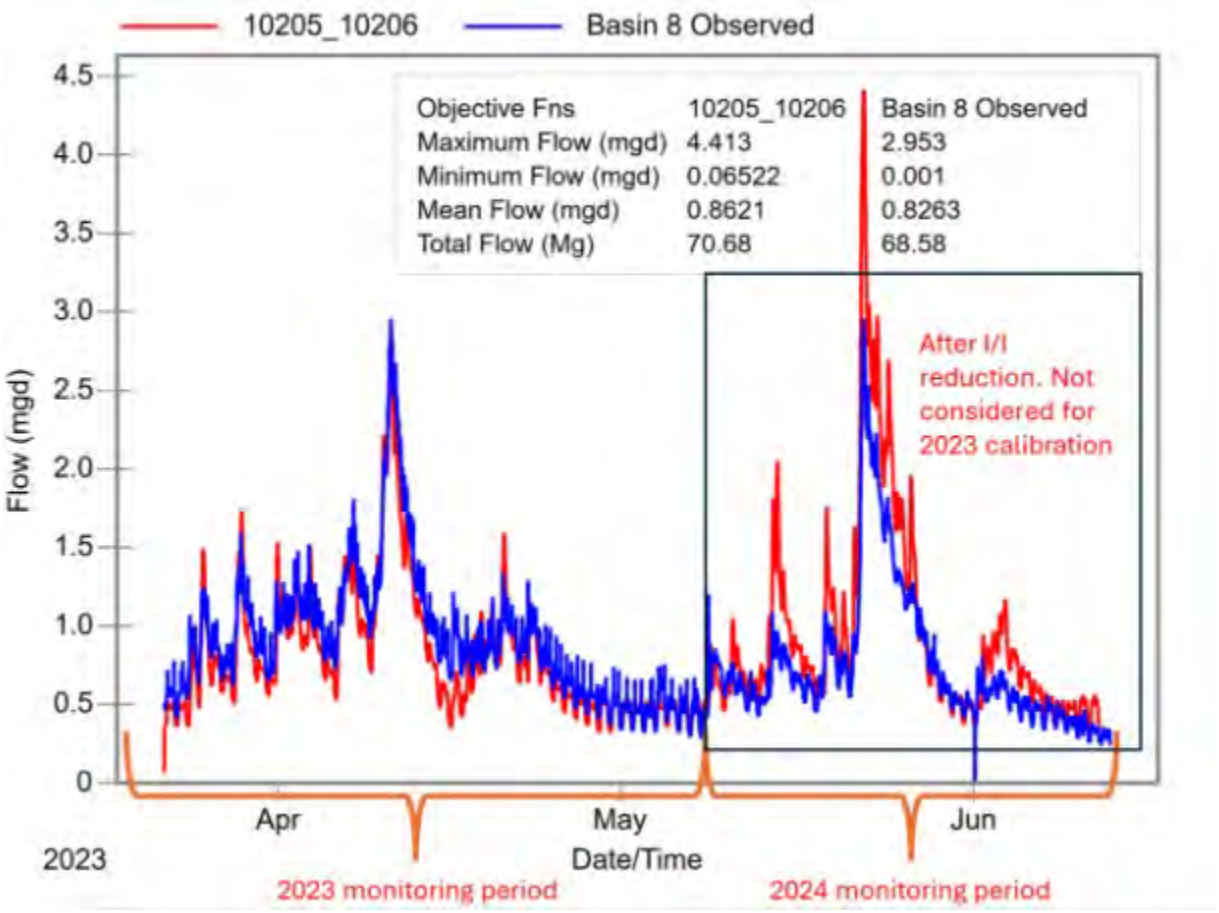

Figure 20: Meter 8, 2023 and 2024 Observed and Simulated Flow, BHC recalibration to 2023 flow data.

Basin 8 was then recalibrated to the 2024 flow data, shown below in Figure 21. The modeled flow fit the observed flow well, with a modeled peak flow of 3.01 mgd and an observed peak flow of 2.95 mgd. The model calibrated to 2024 flow data significantly underestimated the 2023 flows, again indicating that RDII decreased in Basin 8 between 2023 and 2024, consistent with the sewer rehabilitation work completed in Basin 8.

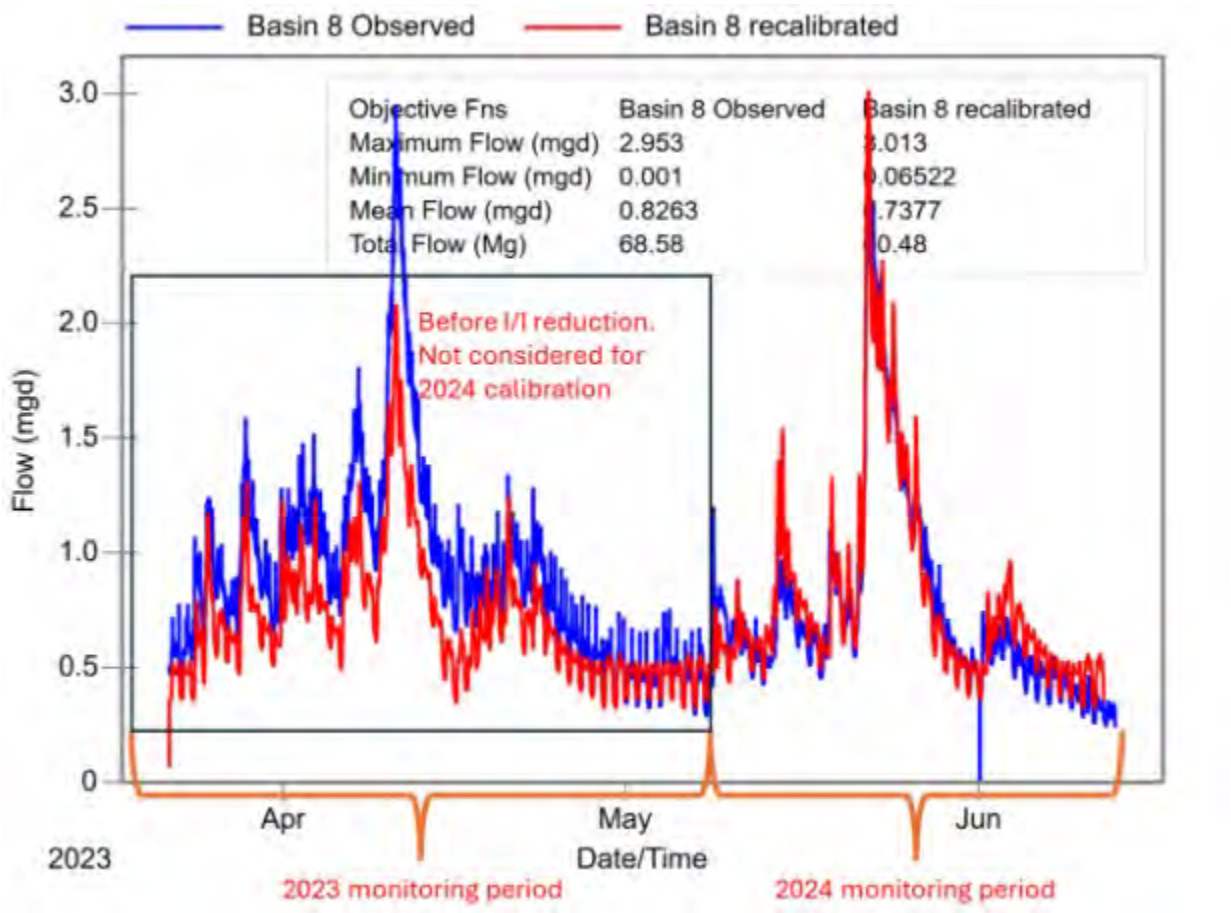

Figure 21: Meter 8, 2023 and 2024 Observed and Simulated Flow, BHC recalibration to 2024 flow data.

It is important to note that peak flows in Basin 10 did not increase as much as the model predicted between the 2023 and 2024 peak rainfall events. It is therefore possible that the apparent decrease in RDII in Basin 8 may be due in part to differences in the antecedent moisture conditions and rainfall characteristics, and not solely due to sewer rehabilitation work.

Basins 8 and 10 Peak RDII Flow Projections

Peak 5-year storm flow projections were previously made in the 2014 OC SSMP, the 2019 WES SSMP, and the 2023 Flow Monitoring Report. The 2014 OC SSMP and the 2023 Flow Monitoring Report both determined peak flows using a SWMM hydrologic and hydraulic model, calibrated to flow monitoring data. The 2019 WES SSMP also used a SWMM hydrologic and hydraulic model but calibrated the model to larger basins and distributed flow to individual Oregon City basins based in part on the flow proportions in 2014 OC SSMP.

The peak flow projections were re-evaluated by BHC using the recalibrated RTK values discussed above. Peak flows from past and current work are shown below in Table 7. The peak flows reported in the 2023 Flow Monitoring Report are higher than the 2014 SSMP, likely because the 2014 SSMP model showed overflows and significant surcharging, which reduces peak flows. The peak flow projections based on the 2024 recalibration by BHC were similar to the flows reported in the 2023 Flow Monitoring Report, with only slight differences due to differences in Basin 10. These differences may be due to the fact that Basin

10 was recalibrated based on two years of flow monitoring data, compared to the one year of flow monitoring data available in 2023.

The 2024 projections show slightly lower peak flows than included in the 2019 WES SSMP. This may be due in part to the smaller sub-basins used to calibrate the RTK values used by the SSOAP model, which may increase accuracy. However, the 2019 WES SSMP was calibrated based on flows during a rainfall event similar to an actual 5-year storm, which may also increase the accuracy. The lower flows in Basin 10 in the 2024 SSOAP model may be due in part to the rehabilitation work that was completed in Basin 10 prior to 2023.

Table 7: Basin 8 and 10 Peak 5-Year RDII Flow Projections.

Basin	Peak 5-Year Storm RDII Flow[a], Pre-Rehabilitation (mgd)				RDII Rate (gpad)	
	2014 OC SSMP	2023 Flow Monitoring Report	2019 WES SSMP[b]	2024 Recalibration[c]	2019 WES SSMP[b]	2024 Recalibration
8	2.5	4.4	4.7	4.2	43,900	29,700
8 + 10	3.4	5.1	7.3	5.1	41,200	25,800
10	0.9	1.1	2.6	0.9	36,900	16,900

a) These values are RDII flows only, and do not include BWF or GWI.
b) Peak 5-year storm flow for 2019 WES SSMP calculated based on the per acre RDII rate and net sewershed areas reported in tables 5-1 and 5-3 of the WES SSMP. The net sewershed areas used in the WES SSMP differ slightly than those used by the other reports.
c) The Basin 10 RDII rates in this table are based on BHC's recalibration of RTK values to both the 2023 and 2024 flow monitoring data, as no rehabilitation work was done between these two periods. The Basin 8 RDII rates are based on BHC's recalibration of RTK values to the 2023 flow monitoring data, as rehabilitation work was completed following the 2023 flow monitoring.

The peak 5-year flow rate was also estimated using the re-calibrated 2024 RTK values for Basin 8. The peak 5-year RDII flow rates for 2023 and 2024 are shown in Table 8, along with the percent reduction. These basins have a 65% RDII reduction goal. Basin 8 has shown a 33% reduction in RDII, likely due to the significant rehabilitation work that was completed. No rehabilitation work was completed in Basin 10 between the 2023 and 2024 monitoring periods, and therefore the peak flow is assumed to have no change between 2023 and 2024. Because no monitoring was completed prior to the Basin 10 rehabilitation efforts, there is no way to determine the RDII reduction.

Table 8: Basins 8 and 10 RDII Reduction

Basin	2023 RDII		2024 RDII		RDII Reduction, 2023 to 2024
	mgd	gpad	mgd	gpad	
8	4.2	29,700	2.8	17,700	33%
8 + 10	5.1	25,800	3.7	17,000	27%
10	0.9	16,900	0.9	16,900	0%

The RDII percent reduction goals are based on reducing flow rates entering the WES system by a specific amount. Therefore, the target values that used in the WES SSMP cost effective analysis are also relevant. Target RDII rates are shown below in Table 9. The combined target for Basins 8 and 10 is 2.6 mgd, and the current 2024 RDII is 4.1 mgd. The total peak flow from these basins needs to be reduced by an additional 1.1 mgd to meet this target.

Table 9: Basins 8 and 10 RDII Reduction Targets.

Basin	Peak 5-Year Storm RDII Flow (mgd)		
	Pre-Rehabilitation RDII, 2019 WES SSMP	Target RDII, 65% Reduction	2024 RDII
8	4.7	1.6	2.8
8 + 10	7.3	2.6	3.7
10	2.6	0.9	0.9

SECTION 6: BASIN 5B EVALUATION

The Basin 5B evaluation includes a summary of the condition assessment work, sewer rehabilitation work, and the flow monitoring efforts to date.

Basin 5B Condition Assessment Summary

Basin 5B has seen considerable CCTV and condition assessment efforts covering 80% of the basin, as well as extensive smoke testing. The results of the condition assessment on a scale from one to five and the identified smoke test defects are shown in Figure 24.

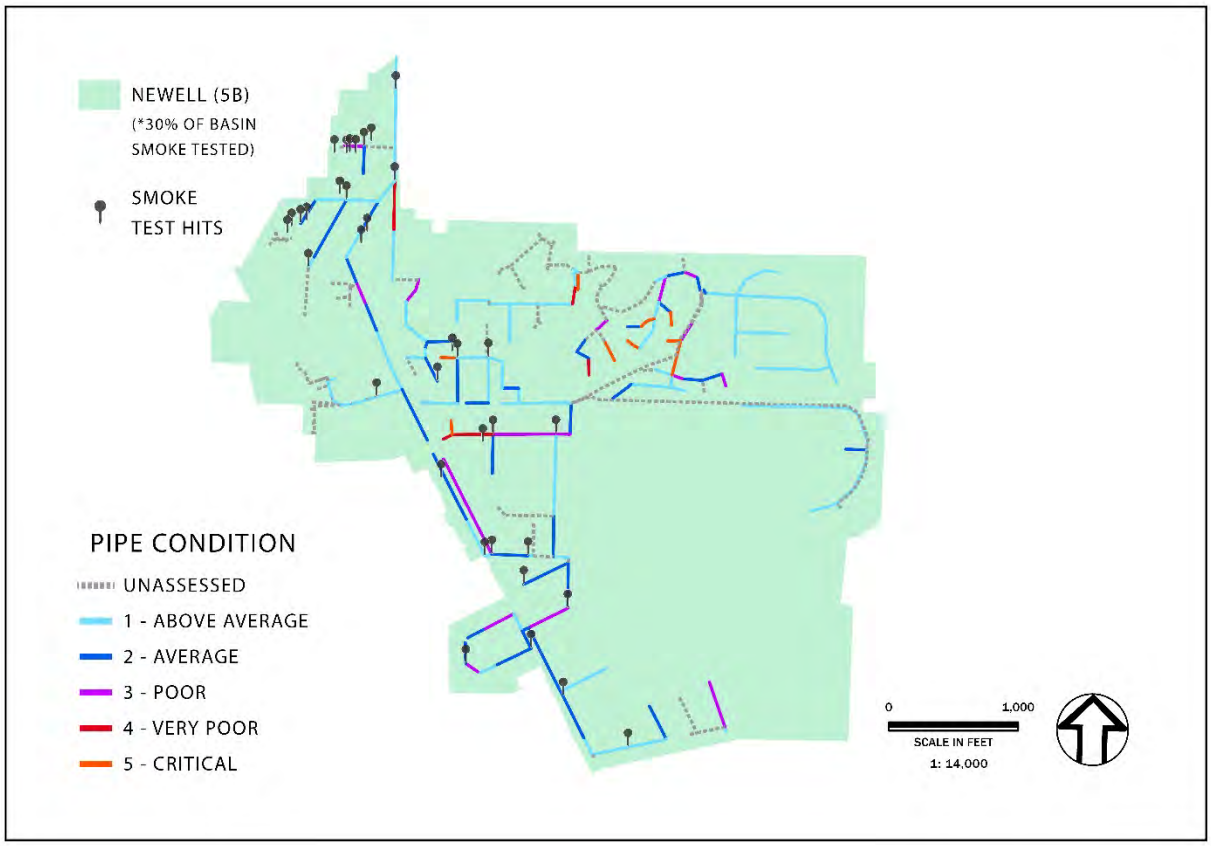

Figure 22: Basin 5B Condition Assessment.

Basin 5B Rehabilitation Summary

No rehabilitation work has occurred in Basin 5B to date. However, two rehabilitation packages have been outlined and are currently in design.

The first major rehabilitation package – designated as the Molalla Avenue Sanitary Sewer I&I Rehabilitation Package – includes 10,000 feet of mainline rehabilitation and will likely be completed before the 2025 wet weather flow monitoring efforts commence. The boundaries of this rehabilitation package are shown in Figure 25. The second package, totaling 4,800LF of mainline rehabilitation, is in

the preliminary design phase but will not be constructed until 2026 at the earliest (this package is not shown in Figure 25). Together, the two packages represent nearly 35% of the total mainline in the basin. Basin 5B manhole rehabilitation is scheduled for early 2025 and will include manholes within the Molalla Avenue rehabilitation package area. Additional manhole rehabilitation will occur as mainline rehabilitation projects commence.

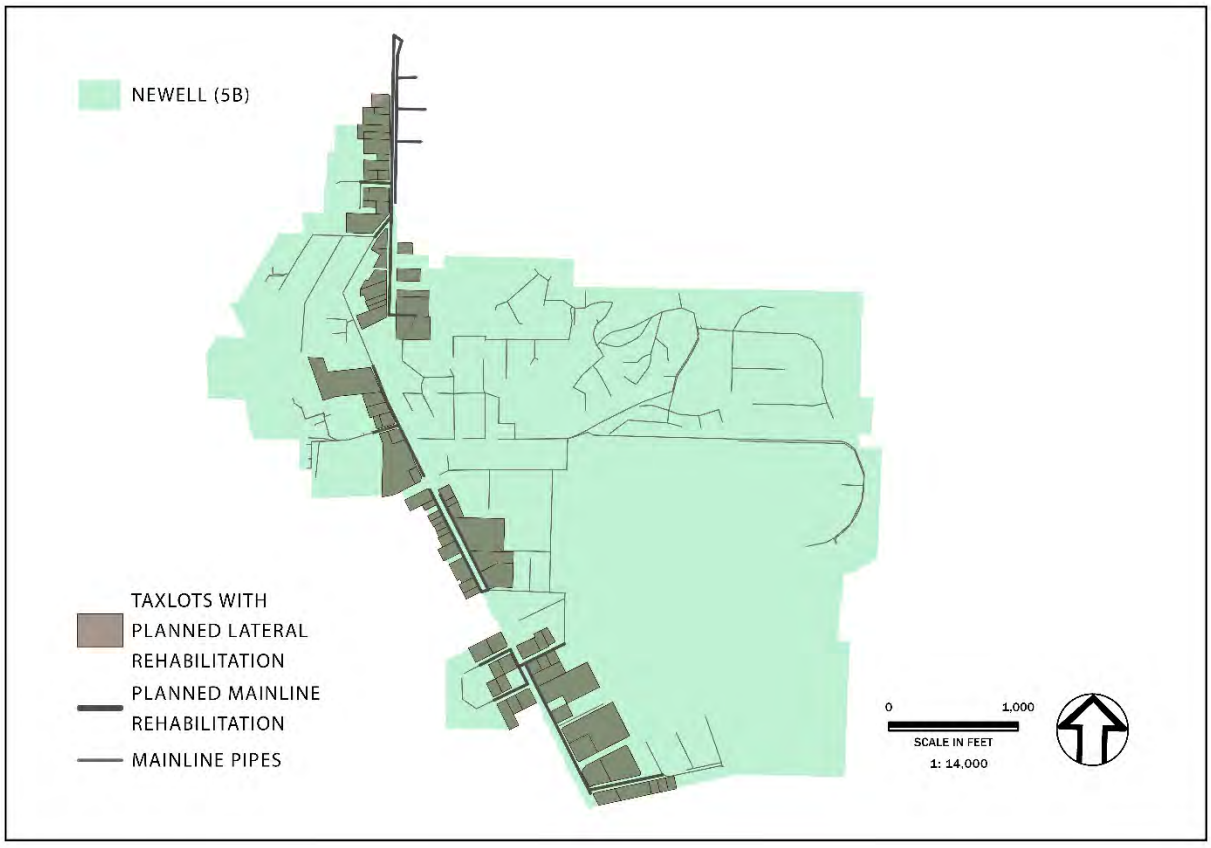

Figure 23: Basin 5B Rehabilitation Summary.

Basin 5B Flow Monitoring Data

Flow monitoring results for meter 5B is shown below in Figure 26. Peak flow at meter 5B was 1.1 mgd in 2023. An evaluation of dry period and RDII flows is discussed below.

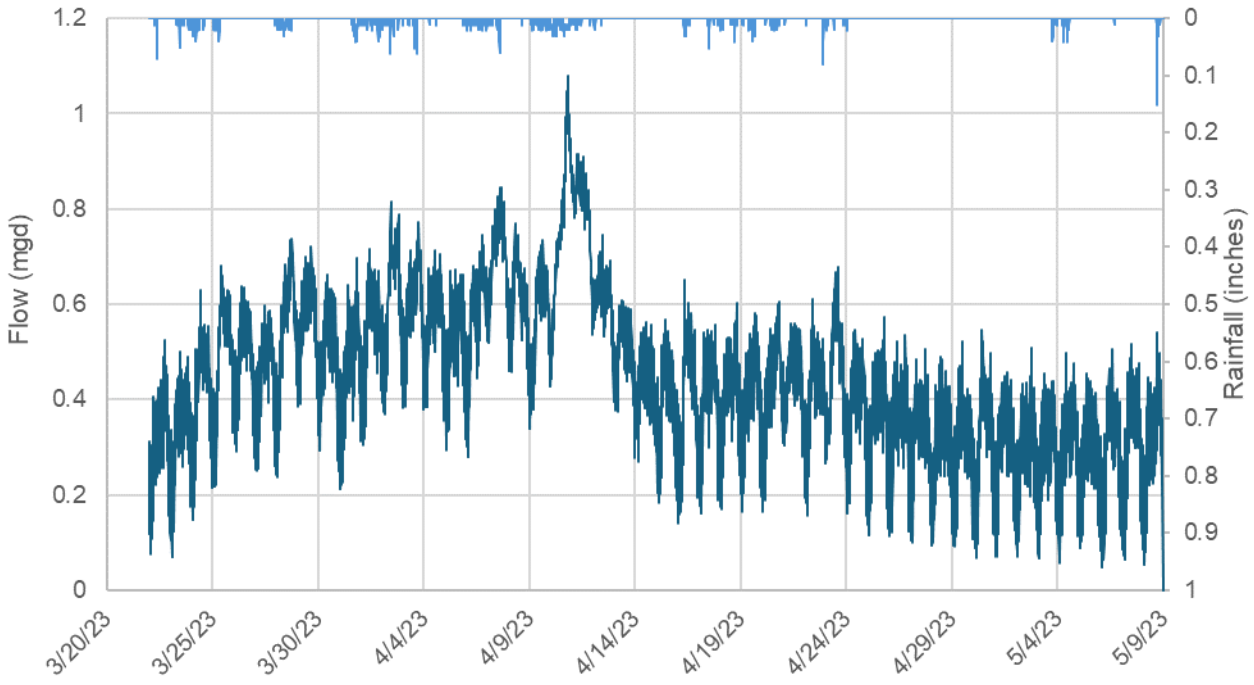

Figure 24: Meter 5B, 2023 Flow Monitoring Results.

Dry Period Flow Analysis

Observed flow during the 2023 dry period and simulated GWI and BWF are shown below in Figure 27. Whereas the flow at meters 8 and 10 decreased throughout the dry period, the meter 5B flow rate was relatively constant during the dry period. This may indicate that RDII decreases more quickly in Basin 5B compared to Basins 8 and 10.

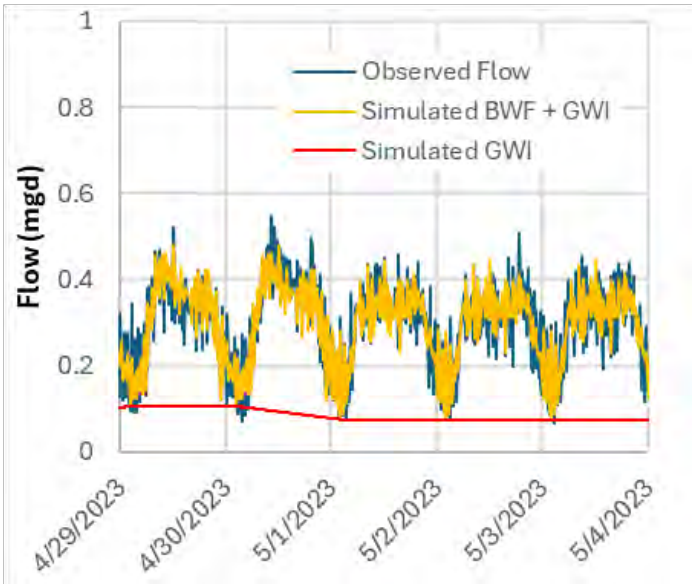

Figure 25: Meter 5B, 2023 Dry Weather Flow Monitoring and Simulation Results.

Average base wastewater flow and groundwater infiltration during the 2023 monitoring periods are shown below in Table 10: Meter 5B Base Flow and GWI., along with the values from the 2014 OC SSMP model. The 2023 values differ slightly from the model, likely because the 2014 model did not include flow monitoring at the meter 5B location, but instead metered at a downstream location and apportioned flows throughout the basin.

Table 10: Meter 5B Base Flow and GWI.

Parameter	2014 OC SSMP Model	2023 Monitoring Period
Average BWF (mgd)	0.11	0.21
Average GWI (mgd)	0.13	0.09
Average BWF + GWI	0.24	0.30

RDII Flow

The 2023 flow monitoring data was analysed using SSOAP as described previously. The simulated flow matches observed flow well during both smaller and larger rainfall events, as shown in Figure 28. The simulated and observed peak flow rate was 1.1 mgd.

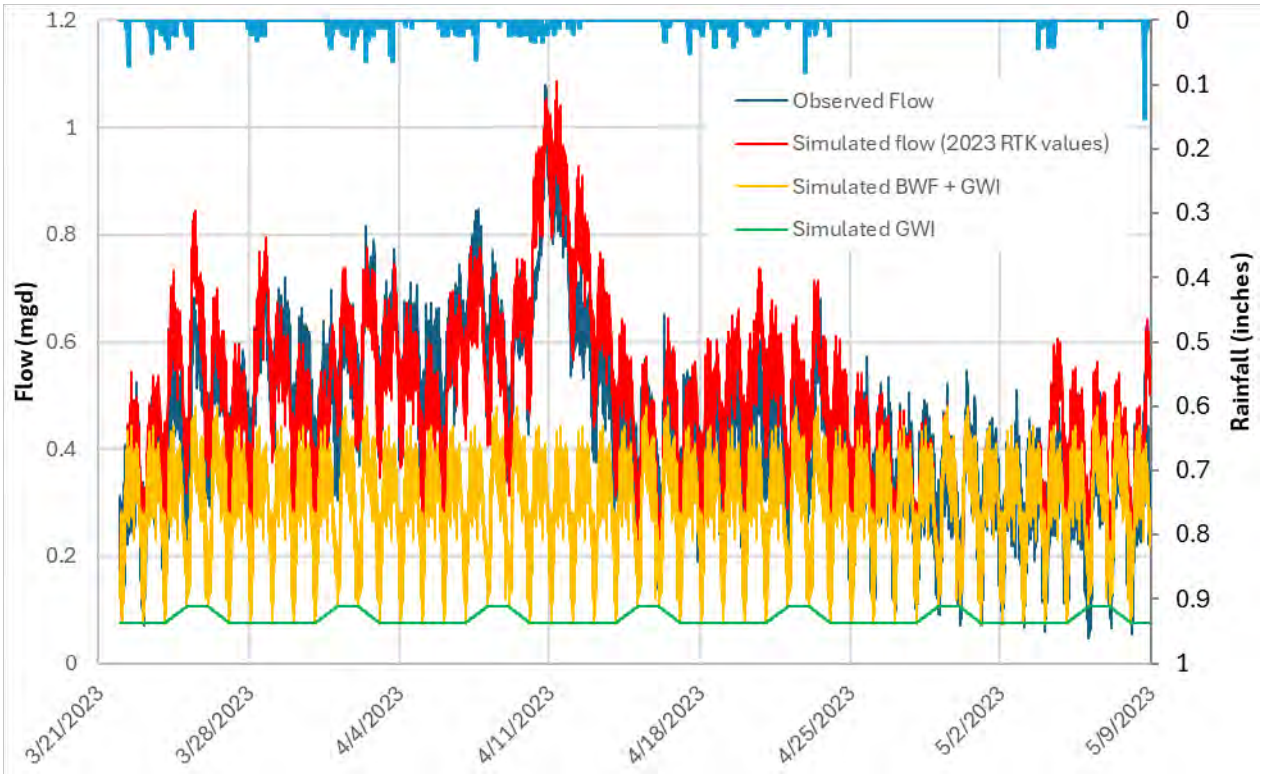

Figure 26: Basin 5B, 2023 Observed and Simulated Flow.

Basin 5B Peak Flow Projections

Peak 5-year storm RDII flow projections for basin 5B are shown below in Table 11. The 2014 OC SSMP model, the 2023 flow monitoring report, and the 2024 SSOAP model all resulted in similar peak flow rates. The 2019 WES SSMP estimated flow rates for Basin 5 only and are therefore not compared here.

Table 11: Basin 5B, 5 Year RDII Flow Projections.

Basin	Peak 5-Year Storm RDII Flow[a] (mgd)			RDII Rate (gpad)
	2014 OC SSMP	2023 Flow Monitoring Report	2024 SSOAP Model (2023 RTK)	2024 SSOAP Model (2023 RTK)
5B	1.9	1.8	1.7	9,800

a) These values are RDII flows only, and do not include BWF or GWI.
b) Peak 5-year storm flow for 2019 WES SSMP calculated based on the per acre RDII rate and net sewershed areas reported in tables 5-1 and 5-3 of the WES SSMP.

Because the WES SSMP did not include flow estimates for basin 5B, target RDII values were determined based on the pre-rehabilitation RDII estimated with the SSOAP model, shown in Table 12. The target RDII flow rate for basin 5b is 0.6 mgd.

Table 12: Basin 5B RDII Reduction Target.

Basin	Peak 5-Year Storm RDII Flow (mgd)	
	Pre-Rehabilitation RDII, SSOAP Model (2023 RTK)	Target RDII, 65% Reduction
5B	1.7	0.6

SECTION 7: BASINS 12 AND 12A EVALUATIONS

The Basin 12 and 12A evaluations include a summary of the condition assessment work, sewer rehabilitation work, and the flow monitoring efforts to date.

Basin 12 Condition Assessment Summary

Basin 12 has had little in the way of condition assessment as part of the I&I reduction program. Smoke testing was completed on approximately 20% of the combined Basin 12/12A area in August 2023. Across the 24k LF of smoke tested mainline, only one defect was identified, with the majority of smoke test hits coming from roof downspouts, catch basins, and private side laterals. Future condition assessment efforts in Basin 12/12A will include mainline CCTV and manhole inspections. The extents of smoke testing and identified smoke test defects are shown in Figure 29.

Additional CCTV and smoke testing has been scoped for the two basins and assessment efforts may help delineate projected rehabilitation needs. The area has been flagged for investigation of manhole conditions and efforts in this regard are ongoing. Manhole investigations are scheduled for early 2025 during wet weather months and will inform design efforts for a large manhole rehabilitation package scheduled for construction in early 2026.

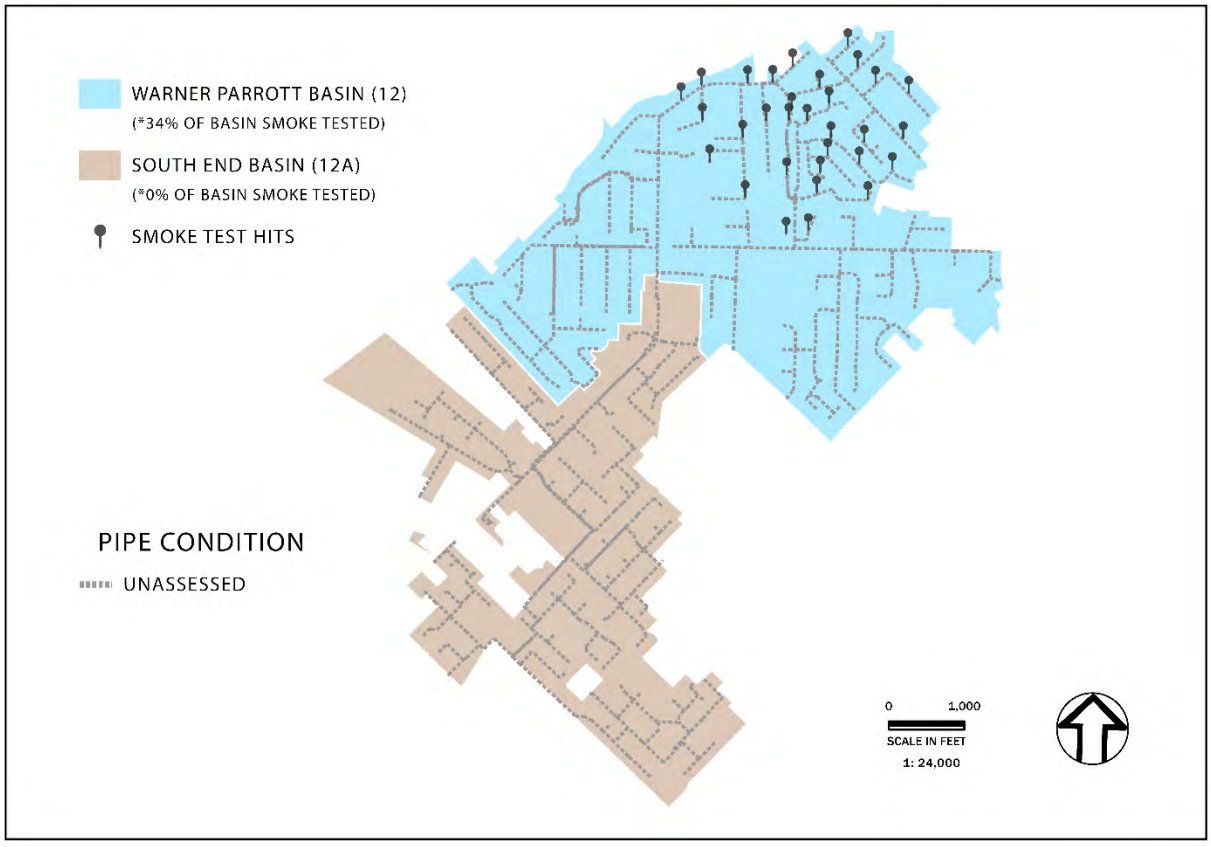

Figure 27: Basin 12 Condition Assessment.

Basin 12 Rehabilitation Summary

No rehabilitation work has occurred in Basins 12 or 12A to date. No rehabilitation projects are planned for the near term.

Basins 12 and 12A Flow Monitoring Data

Flow monitoring results for meter 12 is shown below in Figure 30. Note that meter 12 includes flow from both Basin 12 and the upstream Basin 12A. Peak flow at meter 12 was 2.8 mgd in 2024. Due to the poor data quality during the 2023 monitoring period, 2023 flows are not evaluated in this report. An evaluation of dry period and RDII flows is discussed below.

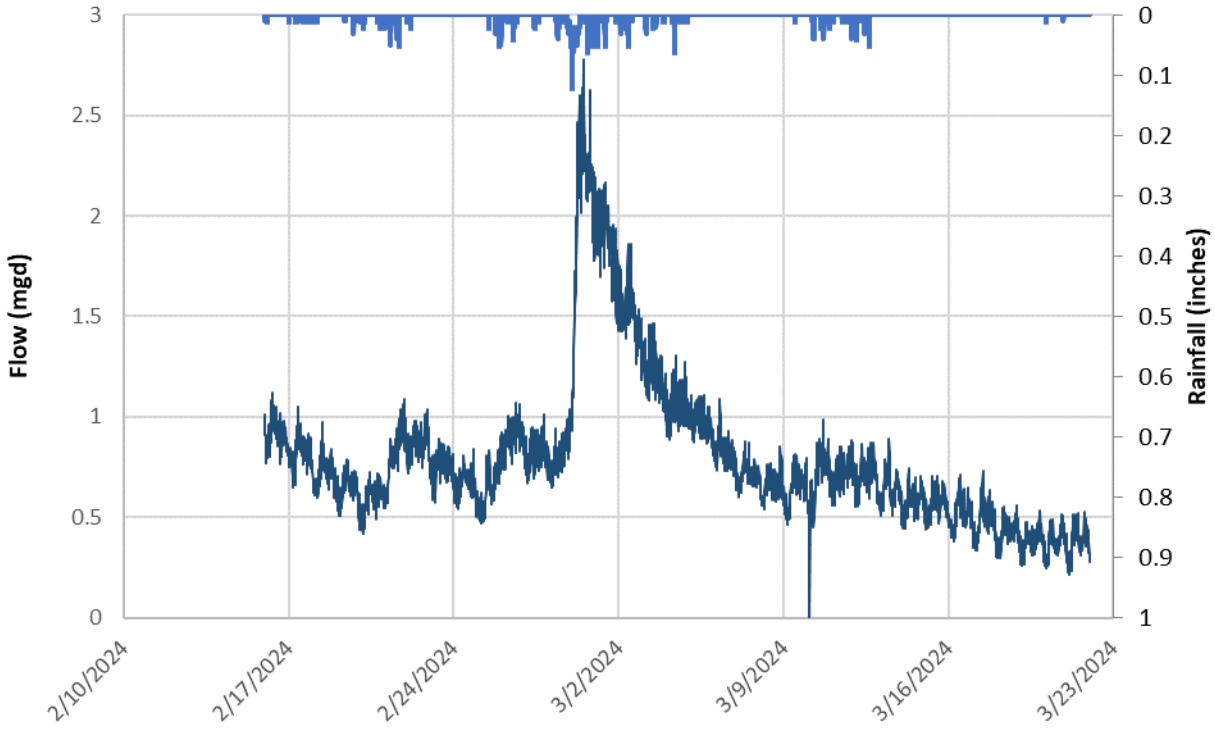

Figure 28: Meter 12, 2024 Flow Monitoring Results.

Dry Period Flow Analysis

Observed flow during the 2024 dry period and simulated GWI and BWF are shown below in Figure 31. The flow rate decreases slightly throughout the dry weather period. This indicates that RDII is still decreasing since the previous rainfall event, and therefore the actual GWI may be lower than estimated.

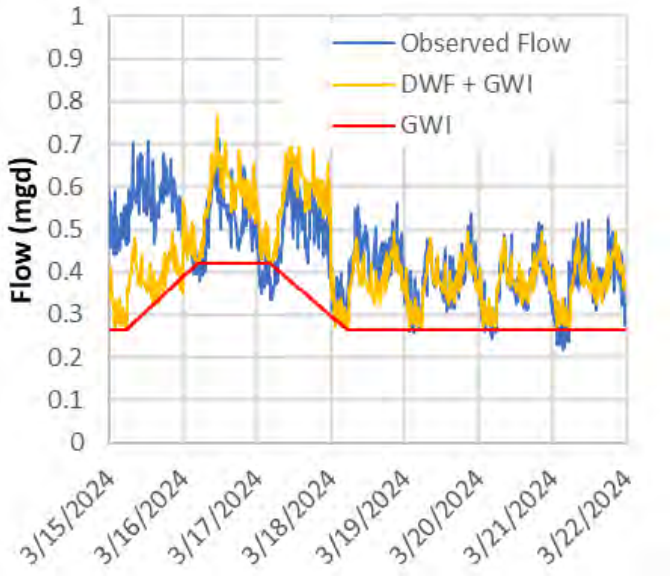

Figure 29: Meter 12, 2023 Dry Weather Flow Monitoring and Simulation Results.

Average base wastewater flow and groundwater infiltration from the 2023 and 2024 monitoring periods are shown below in Table 13, along with the values from the 2014 SSMP. Although the 2023 flow monitoring period was considered poor quality, it did agree well with the 2014 SSMP values. These values were slightly more than double compared to the values observed in the 2024 monitoring period. Additional flow monitoring is recommended to determine an accurate baseline.

Table 13: Meter 12 Base Flow and GWI.

Parameter	2014 SSMP Model	2023 Monitoring Period	2024 Monitoring Period
Average BWF (mgd)	0.32	0.33	0.12
Average GWI (mgd)	0.68	0.72	0.31
Average BWF + GWI (mgd)	1.0	1.1	0.43

RDII Flow

The 2024 flow monitoring data was analysed using SSOAP as described previously. The analysis was initially completed using the 2023 RTK values. However, the simulated flow using those values was significantly overestimated flow rates for all rainfall events. This is likely due to the fact that the SWMM model used to calibrate the 2023 RTK values showed surcharging and overflows because the pipe network was not updated to reflect upsized pipes. The analysis was then completed using the 2014 RTK values, shown in Figure 32. The simulated flows using the 2014 RTK values fit the data better, but still overpredicts flow rates.

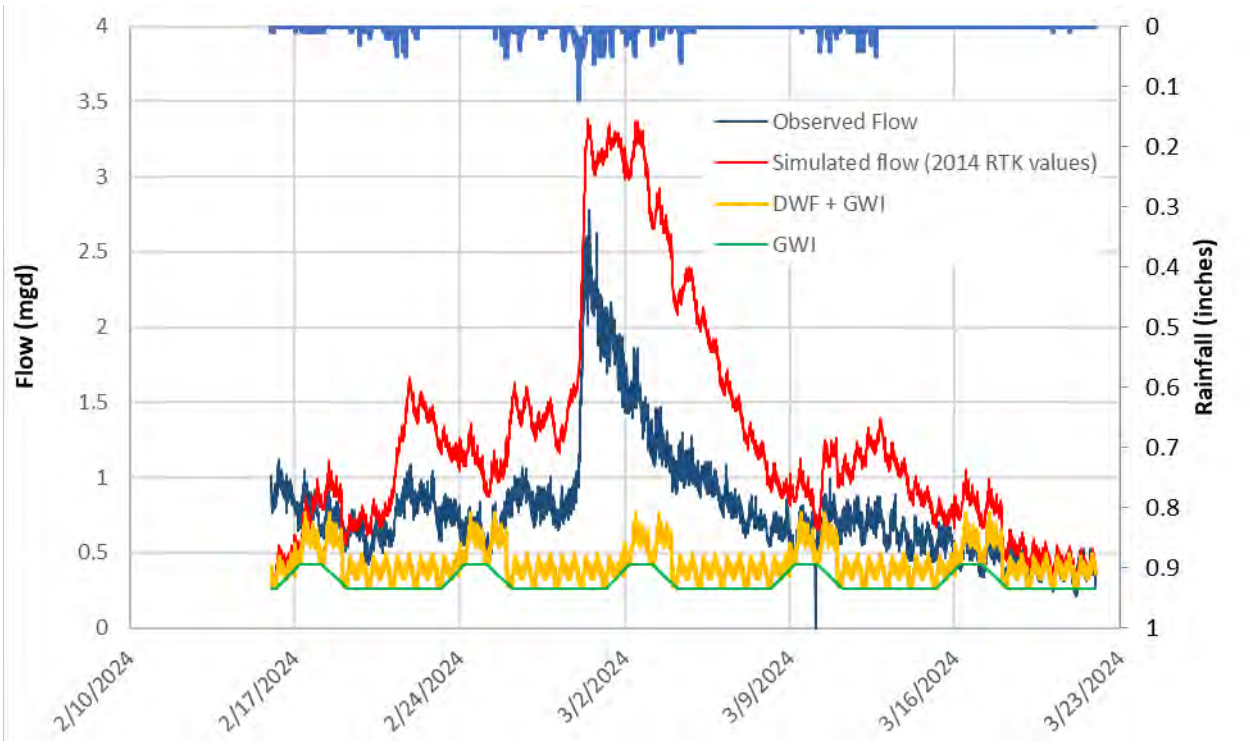

Figure 30: Meter 12, 2024 Observed and Simulated Flow, 2014 RTK Values.

The RTK values were recalibrated in SSOAP using the 2024 flow data, shown below in Figure 33. The simulated flows match the flows well during the peak rainfall event, but overestimate flow rates during smaller rainfall events. Note that a significant portion of flow into basin 12 originates from a pump station, which may impact the flow patterns and make calibration more difficult. In addition, ADS noted that there were brief periods of backwater conditions during the peak flow event of 2/20/2024. This could have impacted the calibration, as hydraulic conditions are not modeled in SSOAP. Recalibrating using SWMM software is recommended once additional flow monitoring is available.

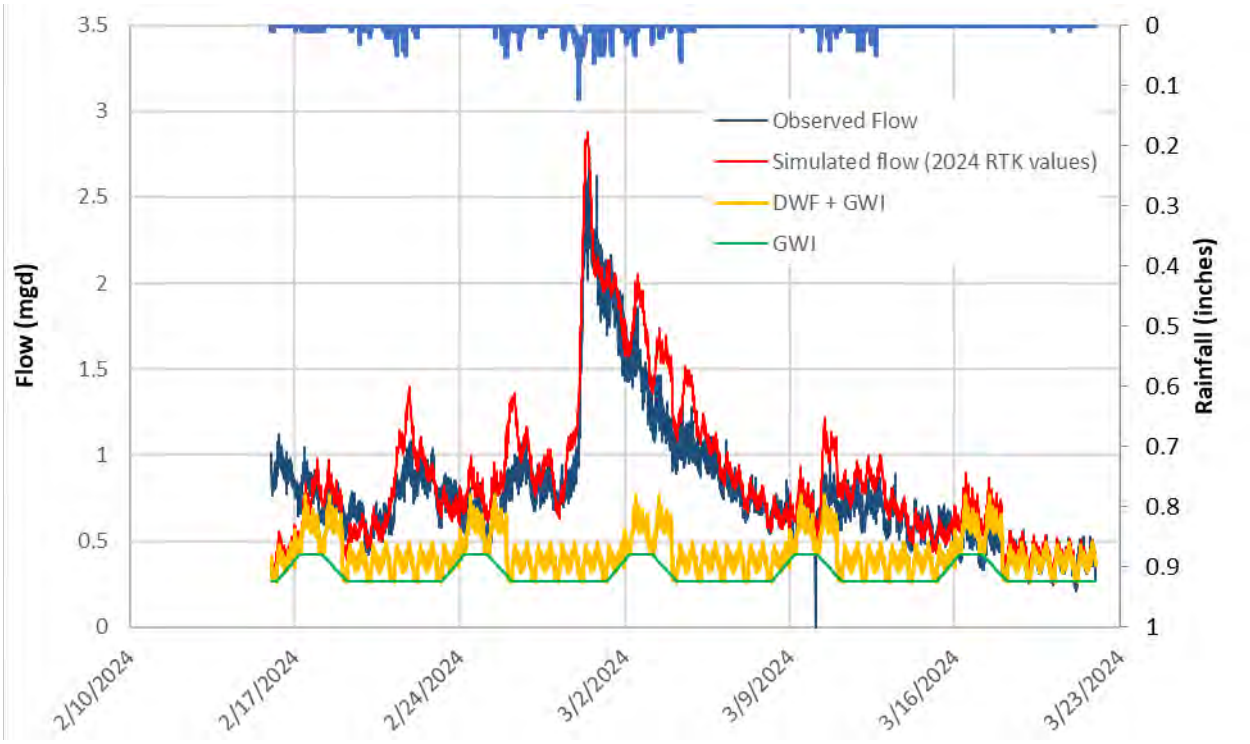

Figure 31: Meter 12, 2024 Observed and Simulated Flow, 2024 RTK Values.

Basin 12 Peak Flow Projections

Peak 5-year storm RDII flow projections for meter 12 are shown below in Table 14. The 2014 OC SSMP and the 2024 SSOAP model resulted in similar peak flow rates, but the 2023 flow monitoring report and the 2019 WES SSMP had significantly higher flow rates. Additional flow monitoring is recommended to improve calibration of the simulated flows.

Table 14: Basins 12 and 12A Peak 5-Year RDII Flow Projections.

Basin	Peak 5-Year Storm RDII Flow[a] (mgd)				RDII Rate (gpad)	
	2014 OC SSMP	2023 Flow Monitoring Report	2019 WES SSMP[b]	2024 SSOAP Model (2023 RTK)	2019 WES SSMP[b]	2024 SSOAP Model (2023 RTK)
12 + 12A	3.4	5.5	7.1	3.6	13,600	7,300

a) These values are RDII flows only, and do not include BWF or GWI.
b) Peak 5-year storm flow for 2019 WES SSMP calculated based on the per acre RDII rate and net sewershed areas reported in tables 5-1 and 5-3 of the WES SSMP.

The target RDII rate for the combined Basin 12 and 12A are shown below in Table 15. The combined target for Basins 12 and 12A is 2.5 mgd. Note that the RDII flow rate estimated by WES is significantly higher than other estimates, and results in a higher target flow rate. This target flow rate may decrease significantly if the 65% reduction goal is based on the peak flow value of 3.6 as estimated by the current SSOAP model.

Table 15: Basin 12 and 12A RDII Reduction Targets.

Basin	Peak 5-Year Storm RDII Flow (mgd)	
	Pre-Rehabilitation RDII, 2019 WES SSMP[b]	Target RDII, 65% Reduction
12 + 12A	7.1	2.5

SECTION 8: BASINS 5 AND 5A EVALUATIONS

The Basins 5 and 5A evaluation includes a summary of the condition assessment work and sewer rehabilitation work. Flow meter data for Basins 5 and 5A was not evaluated in detail as part of this effort, but flow data is presented for reference.

Basins 5 and 5A Condition Assessment Summary

Basin 5 is the largest of the basins contained within the reimbursable program boundaries. Only a small portion of the basin- totaling less than 10% of the mainline length- has had CCTV and condition assessment completed. Preliminary assessment indicates that extensive PVC replacement of mainline in the basin completed between 1988 and 2002 has held up well and the basin may not demand CIPP rehabilitation as required in other portion of the reimbursable program area. However, near basin-wide smoke testing indicates extensive private-side deficiencies to be addressed as part of the lateral replacement and downspout disconnection efforts. The results of the condition assessment on a scale from 1-5 and the identified smoke test defects are shown in Figure 34.

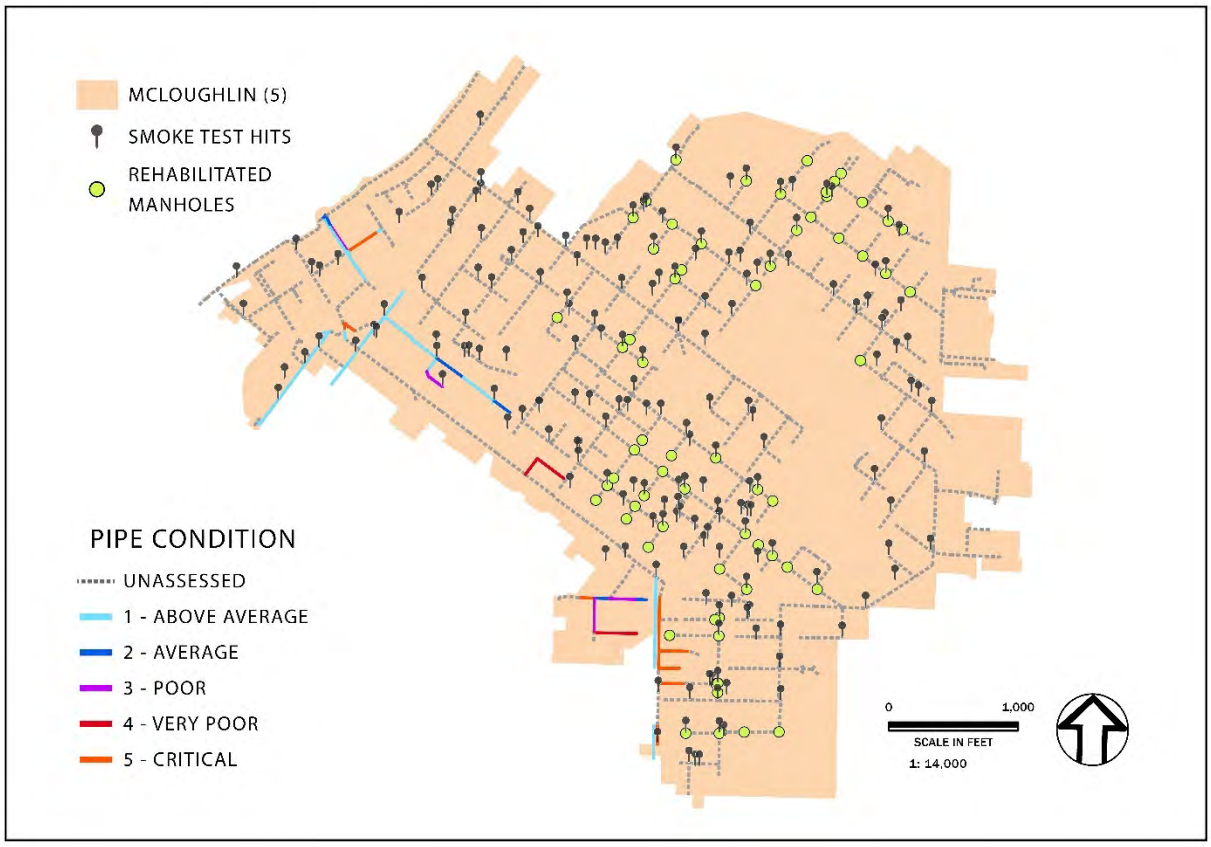

Figure 32: Basin 5 Condition Assessment.

CCTV has been completed on approximately 55% of the mainline in Basin 5A, with the remaining mainline scoped for CCTV in the next year. Condition assessment has not been completed on any of the

mainline videos at this time, but smoke testing has been completed throughout the basin. The mainline pipe segments that have been videoed to date and the identified smoke test defects are shown in Figure 35

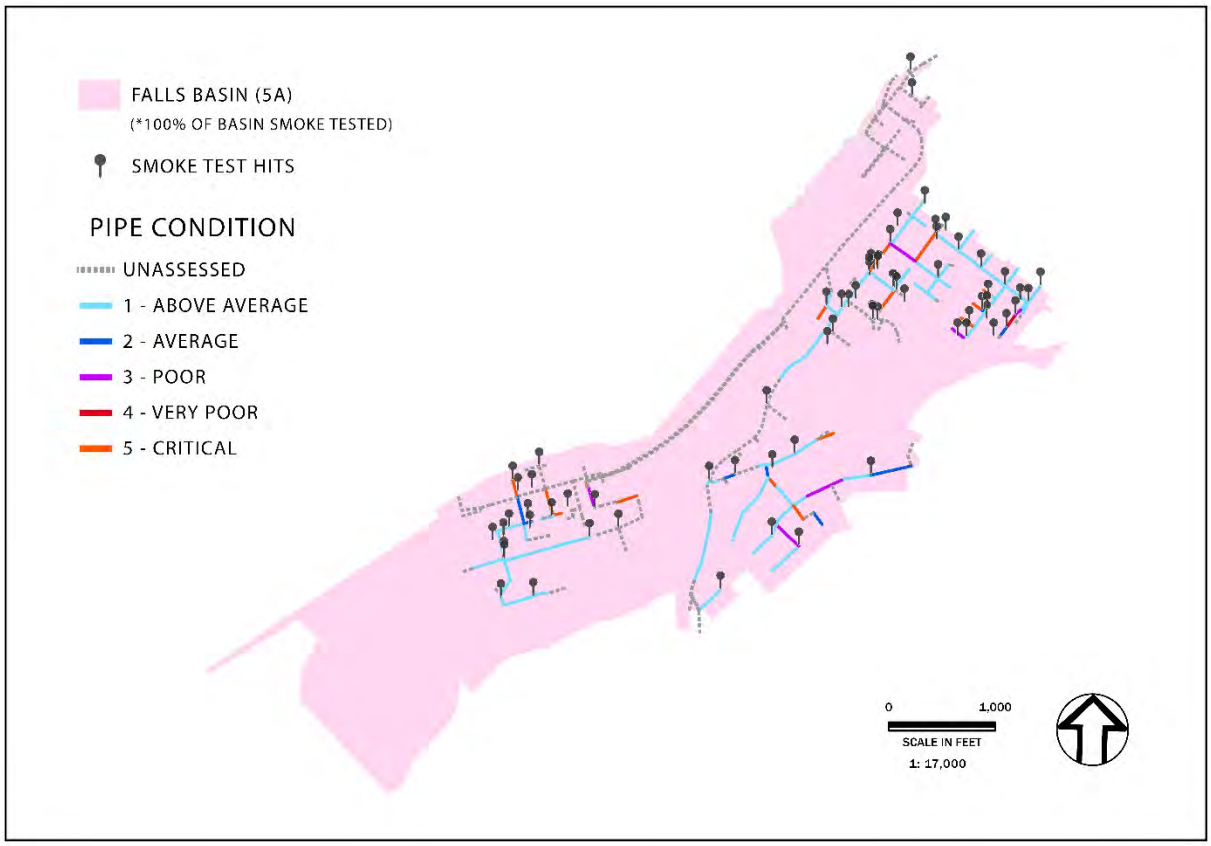

Figure 33: Basin 5A Condition Assessment.

Basins 5 and 5A Rehabilitation Summary

No mainline rehabilitation work has occurred in Basins 5 or 5A to date. However, a number of manholes within Basin 5 have received structural repair as part of the 2024 Manhole Rehabilitation program.

Two mainline rehabilitation projects are currently planned for Basin 5, totaling approximately 6,800 feet. The first package is currently in the preliminary design phase and is scheduled for construction in Spring of 2025. The second package is in the scoping phase and will not be designed and constructed until 2027. The two packages represent a relatively small portion of the basin – less than 10% of the total mainline length – but have been identified for rehabilitation based on other criteria such as pavement management and maintenance concerns. Basin 5 has seen considerable manhole rehabilitation efforts across 45% of the basin, with the remaining manholes scheduled for rehabilitation in Winter 2025.

Basin 5A has no scoped or scheduled rehabilitation packages. Based on assessed mainline conditions, there may be piecemeal rehabilitation of specific pipe segments in Basin 5A included in other rehabilitation packages. Manhole rehabilitation within the basin will occur based on identified maintenance concerns.

Basin 5 Flow Monitoring Data

Flow from Basin 5 is continuously monitored by the WES WI-22 flow meter. This flow meter measures flow in the Willamette Interceptor downstream of Basin 5, Basin 5A, Basin 5B, Basin 8, Basin 10, Basin 12, Basin 12A, and a portion of West Linn.

Flow from Basin 5A is continuously monitored by the WES CWall flow meter. This flow meter measures flow in the Willamette Interceptor upstream of the WI-22 flow meter, and receives flow from Basin 5A, Basin 12, and Basin 12A.

A detailed evaluation of flow data from Meter's WI-22 and CWall was not completed as part of this effort. Additional work is recommended to calibrate RTK values for these meters as well as all upstream meters. This work should be coordinated with WES to avoid duplicating efforts and to ensure that consistent methodologies are used. Flow meter data for the two WES flow meters is shown below for the 2024 monitoring periods as a reference.

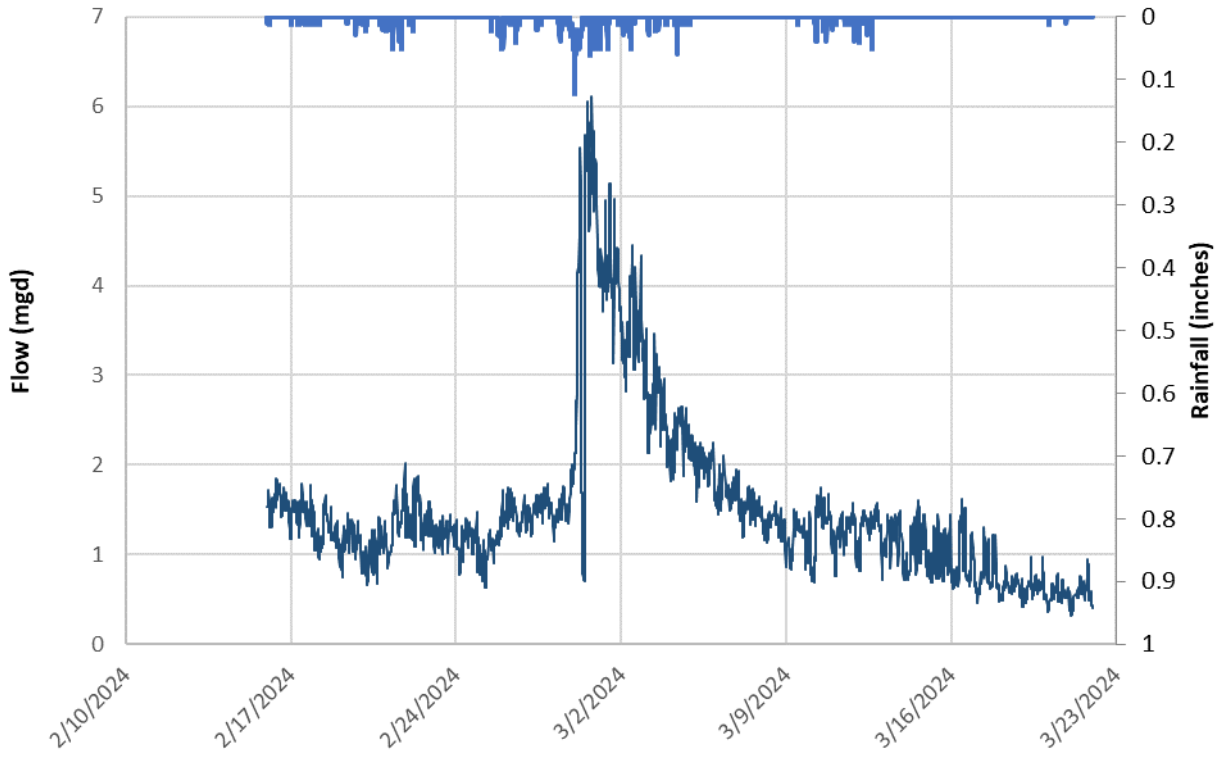

Figure 34: Meter C Wall, 2024 Flow Monitoring Results.

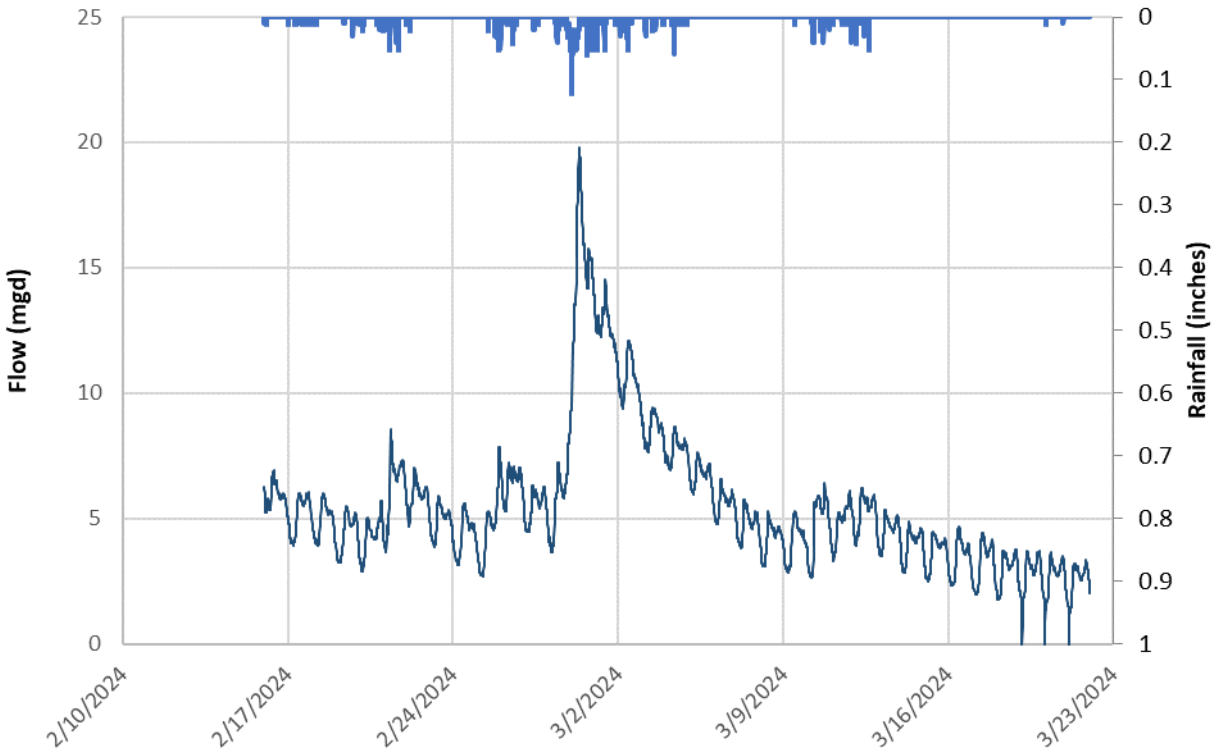

Figure 35: Meter WI-22, 2024 Flow Monitoring Results.

SECTION 9: CONCLUSION AND RECOMMENDATIONS

Conclusions and recommendations of the flow monitoring efforts are described below.

All Basins

- Evaluating WES flow monitoring data is recommended, as the longer periods of data available from the WES flow meters may increase the accuracy of the analysis. This will also allow for an analysis of basins 5 and 5A. Calibration of metered basins may also be improved by correlating flow volume ratios before and after rehabilitation projects. Coordinating with WES for these efforts is recommended to ensure consistency and to avoid duplicating efforts.
- The short flow monitoring periods may result in poorly calibrated models. As seen in Basin 10, calibrating the model to small storm events does not accurately predict peak flows. Longer monitoring periods may capture peak flows, which could allow more accurate prediction of peak 5-year RDII. The following modeling scenarios should be considered:
    - Continue with similar quantity of meters and similar duration monitoring. This has the advantage of being cheaper and may be sufficient if larger rainfall events are captured. However, the limited duration may give incomplete view of hydrologic response.
    - Install fewer meters, but for a longer duration. This has the advantage of increasing confidence in the analysis and calibration, but the smaller resolution may make it more difficult to evaluate all basins where rehabilitation work is being completed.
    - Install a similar quantity of meters for a longer duration. This has the advantage of increasing confidence in the analysis and calibration for all basins, but at an increased cost that may reach diminishing returns on investment.

Basins 8 and 10

- Rehabilitation of 25% of mainline and 13% of laterals appears to have been successful in reducing RDII by approximately 33% in Basin 8. This indicates that the planned rehabilitation projects are on track to reduce RDII by the 65% target.
- Based on the apparent reduction of RDII in Basin 10 despite no sewer rehabilitation work, 33% RDII reduction value may be an overestimate. A portion of the I&I reduction may be due to differing hydrological conditions between the two monitoring periods used for the RTK calibration.
- Due to the timing of the flow monitoring in Basin 10, the effectiveness of the completed mainline rehabilitation project cannot be determined.
- The simulated flow in Basin 10 based on RTK values calibrated to 2023 flow data did not fit the 2024 flow data well. The model was recalibrated to both 2023 flow and 2024 flow but underestimated peak flow in 2023 and overestimated peak flow in 2024. This indicates limitations with the RTK method. Longer periods of flow monitoring may be able to improve model calibration.
- Wet weather flow monitoring may be considered for Basin 8 in 2025 following the manhole

rehabilitation work. This would allow for an analysis of the RDII reduction of manhole rehabilitation.

- Wet weather flow monitoring is recommended for Basin 10 in 2025 following the lateral rehabilitation work. This will allow for an analysis of the I&I reduction due to lateral replacement alone.
- A slight downward trend of GWI was observed in Basins 8 and 10. Future dry period flows during the wet season should be analysed to determine whether this trend continues as rehabilitation work proceeds, or if the trend is due to variability in the data.

Basin 5B

- Wet weather flow monitoring is recommended for Basin 5B following the mainline and lateral rehabilitation work that is planned to be completed in early 2025. This will allow for an analysis of the RDII reduction of that work.

Basins 12 and 12A

- Wet weather flow monitoring for Basin 12 is recommended in 2025. This will provide better confidence in the data, given the discrepancies between the 2023 and 2024 flow data.
- Installation of a flow meter at the Parrish Road Pump Station is recommended to allow for an analysis of flow from Basin 12A.

Basins 5 and 5A

- Collaboration with WES is recommended to continue calibrating the RTK values for the WES C-Wall, WI-22, and Mill St. flow meters. This will allow for an analysis RDII reduction in Basins 5 and 5A. In addition, evaluating data from the WI-22 meter will allow for an evaluation of the total RDII reduction in all the target basins.

Appendix D

FY 2024-2025 Budget (through April 2025)

Project PTD Figures

OC23-I I.01 Program Administration	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	353,462.85	328,228.03	25,234.82		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	353,462.85	328,228.03	25,234.82	14,246.98	342,475.01
Consultant (OCC)	33,651.50	20,593.55	13,057.95	0.00	20,593.55
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	2,488.05	2,709.20	-221.15	0.00	2,709.21
Total	389,602.40	351,530.78	38,071.62	14,246.98	365,777.77
Non Reim./Write Off					0.01
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					2,351.60

OC23-I I.01.01 Administration	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	132,604.06	79,733.37	52,870.69		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	132,604.06	79,733.37	52,870.69	1,079.76	80,813.13
Brown and Caldwell	*5,250.00*	*0.00*	*5,250.00*	*0.00*	*0.00*
JLA Public Involvement, Inc.	*3,151.50*	*3,130.35*	*21.15*	*0.00*	*3,130.35*
Keller Associates, Inc.	*5,250.00*	*3,068.63*	*2,181.37*	*0.00*	*3,068.63*
Leeway Engineering Solutions, LLC	*20,000.00*	*14,394.57*	*5,605.43*	*0.00*	*14,394.57*
Consultant (OCC)	33,651.50	20,593.55	13,057.95	0.00	20,593.55
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	1,503.44	1,503.44	0.00	0.00	1,503.45
Total	167,759.00	101,830.36	65,928.64	1,079.76	102,910.13
Non Reim./Write Off					0.01
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					600.90

Project PTD Figures

OC23-I I.01.02 Program Meetings	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	118,814.59	161,950.97	-43,136.38		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	118,814.59	161,950.97	-43,136.38	3,638.98	165,589.95
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	984.61	1,131.57	-146.96	0.00	1,131.57
Total	119,799.20	163,082.54	-43,283.34	3,638.98	166,721.52
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					1,049.90

OC23-I I.01.03 Monthly Reports and Invoicing	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	27,632.20	27,398.47	233.73		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	27,632.20	27,398.47	233.73	478.74	27,877.21
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	27,632.20	27,398.47	233.73	478.74	27,877.21
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					152.80

Project PTD Figures

OC23-I I.01.04 Annual Report	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	44,412.00	59,145.22	-14,733.22		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	44,412.00	59,145.22	-14,733.22	9,049.50	68,194.72
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	74.19	-74.19	0.00	74.19
Total	44,412.00	59,219.41	-14,807.41	9,049.50	68,268.91
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					548.00

OC23-I I.01.05 Additional Services - Program Administration	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	30,000.00	0.00	30,000.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	30,000.00	0.00	30,000.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	30,000.00	0.00	30,000.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.02 Program Management	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	699,700.90	591,568.22	108,132.68		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	699,700.90	591,568.22	108,132.68	22,928.39	614,496.61
Consultant (OCC)	532,879.50	366,383.81	166,495.69	0.00	366,383.81
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	382.74	2,833.17	-2,450.43	0.00	2,833.17
Total	1,232,963.14	960,785.20	272,177.94	22,928.39	983,713.59
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					4,576.70

OC23-I I.02.01 Public Outreach	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	67,957.83	117,852.97	-49,895.14		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	67,957.83	117,852.97	-49,895.14	3,514.27	121,367.24
JLA Public Involvement, Inc.	*107,100.00*	*65,964.33*	*41,135.67*	*0.00*	*65,964.33*
Consultant (OCC)	107,100.00	65,964.33	41,135.67	0.00	65,964.33
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	2,110.09	-2,110.09	0.00	2,110.09
Total	175,057.83	185,927.39	-10,869.56	3,514.27	189,441.66
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					796.95

OC23-I I.02.02 CCTV Program	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	67,686.57	50,608.64	17,077.93		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	67,686.57	50,608.64	17,077.93	679.77	51,288.41
Pacific Int-R-Tek	*114,858.07*	*114,858.07*	*0.00*	*0.00*	*114,858.07*
Pro-Vac, LLC	*40,781.00*	*0.00*	*40,781.00*	*0.00*	*0.00*
Consultant (OCC)	208,750.00	114,858.07	93,891.93	0.00	114,858.07
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	276,436.57	165,466.71	110,969.86	679.77	166,146.48
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			

Project PTD Figures

	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					363.90
OC23-I I.02.03 Basin Condition Assessment		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	348,924.63	248,847.30	100,077.33		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	348,924.63	248,847.30	100,077.33	16,060.93	264,908.23
	Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	348,924.63	248,847.30	100,077.33	16,060.93	264,908.23
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					2,354.35
OC23-I I.02.04 Smoke Testing Program		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	43,554.00	28,114.96	15,439.04		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	43,554.00	28,114.96	15,439.04	0.00	28,114.96
	Keller Associates, Inc.	*109,757.00*	*164,488.20*	*-54,731.20*	*0.00*	*164,488.20*
	Consultant (OCC)	188,492.50	164,488.20	24,004.30	0.00	164,488.20
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	407.29	-407.29	0.00	407.29
	Total	232,046.50	193,010.45	39,036.05	0.00	193,010.45
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					184.10

Project PTD Figures

OC23-I I.02.05 Downspout Disconnection	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	49,227.00	3,398.35	45,828.65		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	49,227.00	3,398.35	45,828.65	0.00	3,398.35
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	49,227.00	3,398.35	45,828.65	0.00	3,398.35
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					20.50

OC23-I I.02.06 Manhole Sealing Pilot Program	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	60,340.87	60,340.87	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	60,340.87	60,340.87	0.00	0.00	60,340.87
MacKay Sposito	*11,931.00*	*6,132.00*	*5,799.00*	*0.00*	*6,132.00*
Consultant (OCC)	6,132.00	6,132.00	0.00	0.00	6,132.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	282.74	282.74	0.00	0.00	282.74
Total	66,755.61	66,755.61	0.00	0.00	66,755.61
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					411.30

OC23-I I.02.07 Develop Project Design Criteria	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	62,010.00	82,405.13	-20,395.13		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	62,010.00	82,405.13	-20,395.13	2,673.42	85,078.55
Geotechnical Resources, Inc.	*10,500.00*	*10,482.94*	*17.06*	*0.00*	*10,482.94*
Leeway Engineering Solutions, LLC	*4,001.00*	*1,459.47*	*2,541.53*	*0.00*	*1,459.47*
MacKay Sposito	*0.00*	*2,998.80*	*-2,998.80*	*0.00*	*2,998.80*
Consultant (OCC)	22,405.00	14,941.21	7,463.79	0.00	14,941.21
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	100.00	33.05	66.95	0.00	33.05
Total	84,515.00	97,379.39	-12,864.39	2,673.42	100,052.81
Non Reim./Write Off					0.00
Other Revenue		0.00			

Project PTD Figures

	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					445.60
OC23-I I.02.08 Additional Services - Program Management		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.03 Flow Monitoring and Analysis		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	91,725.56	84,377.28	7,348.28		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	91,725.56	84,377.28	7,348.28	191.73	84,569.01
	Consultant (OCC)	200,204.44	129,339.77	70,864.67	10,786.49	140,126.26
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	7,642.00	-7,642.00	0.00	7,642.00
	Total	291,930.00	221,359.05	70,570.95	10,978.22	232,337.27
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					498.00
OC23-I I.03.01 Flow Monitoring and Analysis		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	81,725.56	80,582.67	1,142.89		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	81,725.56	80,582.67	1,142.89	191.73	80,774.40
	ADS LLC	*68,670.00*	*35,010.92*	*33,659.08*	*10,786.49*	*45,797.41*
	BHC Consultants LLC	*22,512.00*	*0.00*	*22,512.00*	*0.00*	*0.00*
	Leeway Engineering Solutions, LLC	*67,272.15*	*67,272.15*	*0.00*	*0.00*	*67,272.15*
	Consultant (OCC)	158,454.15	102,283.07	56,171.08	10,786.49	113,069.56

Project PTD Figures

	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	7,642.00	-7,642.00	0.00	7,642.00
	Total	240,179.71	190,507.74	49,671.97	10,978.22	201,485.96
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					476.30
OC23-I I.03.02 Flow Modeling		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	10,000.00	3,794.61	6,205.39		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	10,000.00	3,794.61	6,205.39	0.00	3,794.61
	BHC Consultants LLC	*41,750.29*	*27,056.70*	*14,693.59*	*0.00*	*27,056.70*
	Consultant (OCC)	41,750.29	27,056.70	14,693.59	0.00	27,056.70
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	51,750.29	30,851.31	20,898.98	0.00	30,851.31
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					21.70
OC23-I I.04 Design Pkg 1 - Linn Basin SS #1		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	67,144.28	89,140.18	-21,995.90		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	67,144.28	89,140.18	-21,995.90	1,220.10	90,360.28
	Consultant (OCC)	310,753.00	276,440.19	34,312.81	0.00	276,440.19
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	100.00	8.25	91.75	0.00	8.25
	Total	377,997.28	365,588.62	12,408.66	1,220.10	366,808.72
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					517.60

Project PTD Figures

OC23-I I.04.01 Design Services for Construction Pkg 1	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	3,821.98	3,907.54	-85.56		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	3,821.98	3,907.54	-85.56	0.00	3,907.54
Leeway Engineering Solutions, LLC	*40,601.00*	*40,514.44*	*86.56*	*0.00*	*40,514.44*
Consultant (OCC)	40,600.00	40,514.44	85.56	0.00	40,514.44
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	44,421.98	44,421.98	0.00	0.00	44,421.98
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					31.70

OC23-I I.04.02 Pre-Design Investigations / Data Review	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.04.03 QA/QC Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.04.04 Utility Coordination / Survey & Geotechnical	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Geotechnical Resources, Inc.	*3,675.00*	*3,654.00*	*21.00*	*0.00*	*3,654.00*
Consultant (OCC)	3,654.00	3,654.00	0.00	0.00	3,654.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	3,654.00	3,654.00	0.00	0.00	3,654.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.04.05 Right-of-Way and Easement Acquisition Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.04.06 Bidding Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	13,993.10	14,053.84	-60.74		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	13,993.10	14,053.84	-60.74	0.00	14,053.84
Leeway Engineering Solutions, LLC	*3,110.00*	*3,049.26*	*60.74*	*0.00*	*3,049.26*
Consultant (OCC)	3,110.00	3,049.26	60.74	0.00	3,049.26
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	17,103.10	17,103.10	0.00	0.00	17,103.10
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					75.90

OC23-I I.04.07 Construction Management Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	48,829.20	71,178.80	-22,349.60		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	48,829.20	71,178.80	-22,349.60	1,220.10	72,398.90
Archaeological Investigations NW, Inc.	*5,750.46*	*4,958.64*	*791.82*	*0.00*	*4,958.64*
Leeway Engineering Solutions, LLC	*94,130.00*	*94,084.82*	*45.18*	*0.00*	*94,084.82*
MacKay Sposito	*127,241.00*	*114,221.33*	*13,019.67*	*0.00*	*114,221.33*
Consultant (OCC)	237,789.00	213,264.79	24,524.21	0.00	213,264.79
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	100.00	8.25	91.75	0.00	8.25
Total	286,718.20	284,451.84	2,266.36	1,220.10	285,671.94
Non Reim./Write Off					0.00
Other Revenue		0.00			

Project PTD Figures

	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					410.00
OC23-I I.04.08 Additional Services - Design		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Compass Land Surveyors, Inc.	*12,600.00*	*0.00*	*12,600.00*	*0.00*	*0.00*
	Leeway Engineering Solutions, LLC	*13,001.00*	*0.00*	*13,001.00*	*0.00*	*0.00*
	Morgan Holen & Associates LLC	*3,150.00*	*0.00*	*3,150.00*	*0.00*	*0.00*
	Todd Prager & Associates, LLC	*5,250.00*	*0.00*	*5,250.00*	*0.00*	*0.00*
	Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.04.09 Additional Services - Construction		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	500.00	0.00	500.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	500.00	0.00	500.00	0.00	0.00
	Compass Land Surveyors, Inc.	*13,200.00*	*2,979.90*	*10,220.10*	*0.00*	*2,979.90*
	Leeway Engineering Solutions, LLC	*13,000.00*	*12,977.80*	*22.20*	*0.00*	*12,977.80*
	Consultant (OCC)	25,600.00	15,957.70	9,642.30	0.00	15,957.70
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	26,100.00	15,957.70	10,142.30	0.00	15,957.70
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00

Project PTD Figures

OC23-I I.05 Design Pkg 2 - Linn Basin SS #2	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	355,848.06	286,383.59	69,464.47		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	355,848.06	286,383.59	69,464.47	11,003.30	297,386.89
Consultant (OCC)	255,468.29	174,813.75	80,654.54	3,689.44	178,503.19
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	100.00	417.66	-317.66	0.00	417.66
Total	611,416.35	461,615.00	149,801.35	14,692.74	476,307.74
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					1,897.80

OC23-I I.05.01 Design Services for Construction Pkg 2	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	156,843.07	277,006.51	-120,163.44		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	156,843.07	277,006.51	-120,163.44	11,003.30	288,009.81
Kramer Gehlen and Associates, Inc.	*18,775.00*	*16,024.32*	*2,750.68*	*3,689.44*	*19,713.76*
PACE Engineers, Inc.	*0.00*	*6,286.35*	*-6,286.35*	*0.00*	*6,286.35*
Consultant (OCC)	0.00	22,310.67	-22,310.67	3,689.44	26,000.11
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	417.66	-417.66	0.00	417.66
Total	156,843.07	299,734.84	-142,891.77	14,692.74	314,427.58
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					1,838.10

Project PTD Figures

OC23-I I.05.02 Pre-Design Investigations / Data Review	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.05.03 QA/QC Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	195.60	195.60	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	195.60	195.60	0.00	0.00	195.60
Leeway Engineering Solutions, LLC	*7,001.00*	*4,180.90*	*2,820.10*	*0.00*	*4,180.90*
Consultant (OCC)	7,000.00	4,180.90	2,819.10	0.00	4,180.90
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	7,195.60	4,376.50	2,819.10	0.00	4,376.50
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					1.50

OC23-I I.05.04 Utility Coordination / Survey & Geotechnical	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	5,095.90	45.90	5,050.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	5,095.90	45.90	5,050.00	0.00	45.90
Geotechnical Resources, Inc.	*9,495.00*	*122,144.03*	*-112,649.03*	*0.00*	*122,144.03*
PACE Engineers, Inc.	*7,502.00*	*17,077.20*	*-9,575.20*	*0.00*	*17,077.20*
Consultant (OCC)	127,715.90	139,221.23	-11,505.33	0.00	139,221.23
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	132,811.80	139,267.13	-6,455.33	0.00	139,267.13
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			

Project PTD Figures

	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.50
OC23-I I.05.05 Right-of-Way and Easement Acquisition Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	8,507.68	9,135.58	-627.90		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	8,507.68	9,135.58	-627.90	0.00	9,135.58
	Epic Land Solutions, Inc.	*7,631.00*	*7,602.39*	*28.61*	*0.00*	*7,602.39*
	Consultant (OCC)	7,602.39	7,602.39	0.00	0.00	7,602.39
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	16,110.07	16,737.97	-627.90	0.00	16,737.97
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					57.70
OC23-I I.05.06 Bidding Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	7,408.50	0.00	7,408.50		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	7,408.50	0.00	7,408.50	0.00	0.00
	Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	7,408.50	0.00	7,408.50	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.05.07 Construction Management Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	145,000.00	0.00	145,000.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	145,000.00	0.00	145,000.00	0.00	0.00
	MacKay Sposito	*65,000.00*	*0.00*	*65,000.00*	*0.00*	*0.00*
	Consultant (OCC)	110,000.00	0.00	110,000.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	100.00	0.00	100.00	0.00	0.00

Project PTD Figures

	Total	255,100.00	0.00	255,100.00	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.05.08 Additional Services - Design		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	14,897.31	0.00	14,897.31		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	14,897.31	0.00	14,897.31	0.00	0.00
	Morgan Holen & Associates LLC	*1,050.00*	*947.31*	*102.69*	*0.00*	*947.31*
	Todd Prager & Associates, LLC	*1,050.00*	*551.25*	*498.75*	*0.00*	*551.25*
	Consultant (OCC)	1,050.00	1,498.56	-448.56	0.00	1,498.56
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	15,947.31	1,498.56	14,448.75	0.00	1,498.56
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.05.09 Additional Services - Construction		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	17,900.00	0.00	17,900.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	17,900.00	0.00	17,900.00	0.00	0.00
	Morgan Holen & Associates LLC	*2,100.00*	*0.00*	*2,100.00*	*0.00*	*0.00*
	Todd Prager & Associates, LLC	*2,100.00*	*0.00*	*2,100.00*	*0.00*	*0.00*
	Consultant (OCC)	2,100.00	0.00	2,100.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	20,000.00	0.00	20,000.00	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00

Project PTD Figures

OC23-I I.06 Design Pkg 3 - Molalla	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	336,624.56	358,874.16	-22,249.60		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	336,624.56	358,874.16	-22,249.60	5,458.31	364,332.47
Consultant (OCC)	228,916.66	181,866.73	47,049.93	0.00	181,866.73
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	1,143.78	1,004.49	139.29	0.00	1,004.49
Total	566,685.00	541,745.38	24,939.62	5,458.31	547,203.69
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					2,177.70

OC23-I I.06.01 Design Services for Construction Pkg 3	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	187,242.36	187,242.36	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	187,242.36	187,242.36	0.00	0.00	187,242.36
Compass Land Surveyors, Inc.	*5,451.00*	*5,202.75*	*248.25*	*0.00*	*5,202.75*
Morgan Holen & Associates LLC	*2,625.00*	*2,187.41*	*437.59*	*0.00*	*2,187.41*
Consultant (OCC)	7,390.16	7,390.16	0.00	0.00	7,390.16
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	143.78	143.78	0.00	0.00	143.78
Total	194,776.30	194,776.30	0.00	0.00	194,776.30
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					1,226.30

Project PTD Figures

OC23-I I.06.02 Pre-Design Investigations / Data Review	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	9,746.46	9,746.46	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	9,746.46	9,746.46	0.00	0.00	9,746.46
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	9,746.46	9,746.46	0.00	0.00	9,746.46
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					56.60

OC23-I I.06.03 QA/QC Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	3,156.17	3,156.17	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	3,156.17	3,156.17	0.00	0.00	3,156.17
Leeway Engineering Solutions, LLC	*13,650.00*	*4,735.50*	*8,914.50*	*0.00*	*4,735.50*
Consultant (OCC)	4,735.50	4,735.50	0.00	0.00	4,735.50
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	7,891.67	7,891.67	0.00	0.00	7,891.67
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					14.10

Project PTD Figures

OC23-I I.06.04 Utility Coordination / Survey & Geotechnical	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	5,336.52	5,336.52	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	5,336.52	5,336.52	0.00	0.00	5,336.52
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	5,336.52	5,336.52	0.00	0.00	5,336.52
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					37.40

OC23-I I.06.05 Right-of-Way and Easement Acquisition Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.06.06 Bidding Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	3,997.40	1,987.40	2,010.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	3,997.40	1,987.40	2,010.00	0.00	1,987.40
Ben Thomas	*0.00*	*2,010.00*	*-2,010.00*	*0.00*	*2,010.00*
Consultant (OCC)	0.00	2,010.00	-2,010.00	0.00	2,010.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	3,997.40	3,997.40	0.00	0.00	3,997.40
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			

Project PTD Figures

	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					11.80
OC23-I I.06.07 Construction Management Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	127,145.65	151,405.25	-24,259.60		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	127,145.65	151,405.25	-24,259.60	5,458.31	156,863.56
	Ben Thomas	*0.00*	*10,050.00*	*-10,050.00*	*0.00*	*10,050.00*
	Geotechnical Resources, Inc.	*4,490.00*	*2,519.42*	*1,970.58*	*0.00*	*2,519.42*
	MacKay Sposito	*208,301.00*	*154,724.59*	*53,576.41*	*0.00*	*154,724.59*
	Consultant (OCC)	212,791.00	167,294.01	45,496.99	0.00	167,294.01
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	1,000.00	860.71	139.29	0.00	860.71
	Total	340,936.65	319,559.97	21,376.68	5,458.31	325,018.28
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					831.50
OC23-I I.06.08 Additional Services - Design		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Morgan Holen & Associates LLC	*1,050.00*	*0.00*	*1,050.00*	*0.00*	*0.00*
	Todd Prager & Associates, LLC	*1,050.00*	*0.00*	*1,050.00*	*0.00*	*0.00*
	Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.06.09 Additional Services - Construction		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Morgan Holen & Associates LLC	*2,100.00*	*437.06*	*1,662.94*	*0.00*	*437.06*
	Todd Prager & Associates, LLC	*2,100.00*	*0.00*	*2,100.00*	*0.00*	*0.00*

Project PTD Figures

	Consultant (OCC)	4,000.00	437.06	3,562.94	0.00	437.06
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	4,000.00	437.06	3,562.94	0.00	437.06
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.07 Design Pkg 4 - Rivercrest Lateral Rehab		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	111,604.18	48,417.05	63,187.13		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	111,604.18	48,417.05	63,187.13	1,291.87	49,708.92
	Consultant (OCC)	420,374.48	336,455.95	83,918.53	39,238.82	375,694.77
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	100.00	235.47	-135.47	0.00	235.47
	Total	532,078.66	385,108.47	146,970.19	40,530.69	425,639.16
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					252.10
OC23-I I.07.01 Design Services for Construction Pkg 4		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	7,850.14	7,850.14	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	7,850.14	7,850.14	0.00	0.00	7,850.14
	Century West Engineering Corp.	*82,792.66*	*81,962.00*	*830.66*	*0.00*	*81,962.00*
	Consultant (OCC)	81,962.00	81,962.00	0.00	0.00	81,962.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	89,812.14	89,812.14	0.00	0.00	89,812.14
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					36.20

Project PTD Figures

OC23-I I.07.02 Pre-Design Investigations / Data Review	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Century West Engineering Corp.	*24,913.00*	*22,445.32*	*2,467.68*	*0.00*	*22,445.32*
Consultant (OCC)	22,445.32	22,445.32	0.00	0.00	22,445.32
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	22,445.32	22,445.32	0.00	0.00	22,445.32
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.07.03 QA/QC Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	4,752.30	4,752.30	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	4,752.30	4,752.30	0.00	0.00	4,752.30
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	4,752.30	4,752.30	0.00	0.00	4,752.30
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					21.00

OC23-I I.07.04 Utility Coordination / Survey & Geotechnical	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Century West Engineering Corp.	*7,254.00*	*1,846.43*	*5,407.57*	*0.00*	*1,846.43*
Geotechnical Resources, Inc.	*50,000.00*	*0.00*	*50,000.00*	*0.00*	*0.00*
Consultant (OCC)	1,846.43	1,846.43	0.00	0.00	1,846.43
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	1,846.43	1,846.43	0.00	0.00	1,846.43
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			

Project PTD Figures

	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.07.05 Right-of-Way and Easement Acquisition Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Century West Engineering Corp.	*4,737.00*	*2,164.05*	*2,572.95*	*0.00*	*2,164.05*
	Consultant (OCC)	2,164.05	2,164.05	0.00	0.00	2,164.05
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	2,164.05	2,164.05	0.00	0.00	2,164.05
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.07.06 Bidding Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	3,271.80	3,271.80	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	3,271.80	3,271.80	0.00	0.00	3,271.80
	Century West Engineering Corp.	*1,703.00*	*862.68*	*840.32*	*0.00*	*862.68*
	Consultant (OCC)	862.68	862.68	0.00	0.00	862.68
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	4,134.48	4,134.48	0.00	0.00	4,134.48
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					14.00
OC23-I I.07.07 Construction Management Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	80,729.94	32,542.81	48,187.13		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	80,729.94	32,542.81	48,187.13	1,291.87	33,834.68
	Century West Engineering Corp.	*95,000.00*	*52,763.22*	*42,236.78*	*0.00*	*52,763.22*
	MacKay Sposito	*231,664.12*	*160,641.11*	*71,023.01*	*34,009.29*	*194,650.40*
	Consultant (OCC)	239,044.00	213,404.33	25,639.67	34,009.29	247,413.62

Project PTD Figures

	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	100.00	235.47	-135.47	0.00	235.47
	Total	319,873.94	246,182.61	73,691.33	35,301.16	281,483.77
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					180.90
OC23-I I.07.08 Additional Services - Design		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Century West Engineering Corp.	*21,000.00*	*0.00*	*21,000.00*	*0.00*	*0.00*
	Morgan Holen & Associates LLC	*1,050.00*	*0.00*	*1,050.00*	*0.00*	*0.00*
	Todd Prager & Associates, LLC	*1,050.00*	*385.88*	*664.12*	*0.00*	*385.88*
	Consultant (OCC)	22,050.00	385.88	21,664.12	0.00	385.88
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	22,050.00	385.88	21,664.12	0.00	385.88
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.07.09 Additional Services - Construction		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	15,000.00	0.00	15,000.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	15,000.00	0.00	15,000.00	0.00	0.00
	Morgan Holen & Associates LLC	*2,100.00*	*0.00*	*2,100.00*	*0.00*	*0.00*
	Todd Prager & Associates, LLC	*22,100.00*	*13,385.26*	*8,714.74*	*5,229.53*	*18,614.79*
	Consultant (OCC)	50,000.00	13,385.26	36,614.74	5,229.53	18,614.79
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	65,000.00	13,385.26	51,614.74	5,229.53	18,614.79
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					

Project PTD Figures

	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.08 Design Pkg 5 - Newell Basin 1 (Applegate)		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	41,973.20	13,005.57	28,967.63		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	41,973.20	13,005.57	28,967.63	0.00	13,005.57
	Consultant (OCC)	403,708.80	148,189.21	255,519.59	4,592.44	152,781.65
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	100.00	0.00	100.00	0.00	0.00
	Total	445,782.00	161,194.78	284,587.22	4,592.44	165,787.22
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					59.90
OC23-I I.08.01 Design Services for Construction Pkg 5		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	13,848.00	11,481.32	2,366.68		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	13,848.00	11,481.32	2,366.68	0.00	11,481.32
	Keller Associates, Inc.	*220,331.00*	*42,584.98*	*177,746.02*	*4,592.44*	*47,177.42*
	Consultant (OCC)	220,331.00	42,584.98	177,746.02	4,592.44	47,177.42
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	100.00	0.00	100.00	0.00	0.00
	Total	234,279.00	54,066.30	180,212.70	4,592.44	58,658.74
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					50.90
OC23-I I.08.02 Pre-Design Investigations / Data Review		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	823.15	-823.15		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	823.15	-823.15	0.00	823.15
	Keller Associates, Inc.	*34,041.00*	*60,787.47*	*-26,746.47*	*0.00*	*60,787.47*
	Consultant (OCC)	34,041.00	60,787.47	-26,746.47	0.00	60,787.47
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	34,041.00	61,610.62	-27,569.62	0.00	61,610.62
	Non Reim./Write Off					0.00
	Other Revenue		0.00			

Project PTD Figures

	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					6.00
OC23-I I.08.03 QA/QC Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	14,617.00	701.10	13,915.90		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	14,617.00	701.10	13,915.90	0.00	701.10
	Keller Associates, Inc.	*18,270.00*	*5,509.88*	*12,760.12*	*0.00*	*5,509.88*
	Consultant (OCC)	18,270.00	5,509.88	12,760.12	0.00	5,509.88
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	32,887.00	6,210.98	26,676.02	0.00	6,210.98
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					3.00
OC23-I I.08.04 Utility Coordination / Survey & Geotechnical		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Compass Land Surveyors, Inc.	*34,902.00*	*29,993.25*	*4,908.75*	*0.00*	*29,993.25*
	Keller Associates, Inc.	*12,023.00*	*4,449.51*	*7,573.49*	*0.00*	*4,449.51*
	Consultant (OCC)	96,925.00	34,442.76	62,482.24	0.00	34,442.76
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	96,925.00	34,442.76	62,482.24	0.00	34,442.76
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.08.05 Right-of-Way and Easement Acquisition Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	1,231.00	0.00	1,231.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	1,231.00	0.00	1,231.00	0.00	0.00
	Keller Associates, Inc.	*16,853.00*	*4,864.12*	*11,988.88*	*0.00*	*4,864.12*

Project PTD Figures

	Consultant (OCC)	16,853.00	4,864.12	11,988.88	0.00	4,864.12
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	18,084.00	4,864.12	13,219.88	0.00	4,864.12
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.08.06 Bidding Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	2,277.20	0.00	2,277.20		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	2,277.20	0.00	2,277.20	0.00	0.00
	Keller Associates, Inc.	*5,912.00*	*0.00*	*5,912.00*	*0.00*	*0.00*
	Consultant (OCC)	5,912.00	0.00	5,912.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	8,189.20	0.00	8,189.20	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.08.07 Construction Management Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00

Project PTD Figures

OC23-I I.08.08 Additional Services - Design	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	10,000.00	0.00	10,000.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	10,000.00	0.00	10,000.00	0.00	0.00
Keller Associates, Inc.	*1,376.00*	*0.00*	*1,376.00*	*0.00*	*0.00*
Morgan Holen & Associates LLC	*1,050.00*	*0.00*	*1,050.00*	*0.00*	*0.00*
Todd Prager & Associates, LLC	*1,050.00*	*0.00*	*1,050.00*	*0.00*	*0.00*
Consultant (OCC)	11,376.80	0.00	11,376.80	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	21,376.80	0.00	21,376.80	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.08.09 Additional Services - Construction	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Morgan Holen & Associates LLC	*2,100.00*	*0.00*	*2,100.00*	*0.00*	*0.00*
Todd Prager & Associates, LLC	*2,100.00*	*0.00*	*2,100.00*	*0.00*	*0.00*
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.09 Design Pkg 6 - Linn Basin SS #3	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	285,000.00	2,558.70	282,441.30		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	285,000.00	2,558.70	282,441.30	0.00	2,558.70
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	100.00	0.00	100.00	0.00	0.00
Total	285,100.00	2,558.70	282,541.30	0.00	2,558.70
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					15.00

OC23-I I.09.01 Design Services for Construction Pkg 6	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	285,000.00	2,558.70	282,441.30		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	285,000.00	2,558.70	282,441.30	0.00	2,558.70
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	100.00	0.00	100.00	0.00	0.00
Total	285,100.00	2,558.70	282,541.30	0.00	2,558.70
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					15.00

Project PTD Figures

OC23-I I.09.02 Pre-Design Investigations / Data Review	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.09.03 QA/QC Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.09.04 Utility Coordination / Survey & Geotechnical	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.09.05 Right-of-Way and Easement Acquisition Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.09.06 Bidding Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.09.07 Construction Management Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.09.08 Additional Services - Design	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.09.09 Additional Services - Construction	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.10 Design Pkg 7 - McLoughlin Basin #2 (Singer Hill)	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	150,000.00	0.00	150,000.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	150,000.00	0.00	150,000.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	150,000.00	0.00	150,000.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.10.01 Design Services for Construction Pkg 7	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	150,000.00	0.00	150,000.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	150,000.00	0.00	150,000.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	150,000.00	0.00	150,000.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.10.02 Pre-Design Investigations / Data Review	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.10.03 QA/QC Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.10.04 Utility Coordination / Survey & Geotechnical	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.10.05 Right-of-Way and Easement Acquisition Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.10.06 Bidding Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.10.07 Construction Management Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.10.08 Additional Services - Design	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.10.09 Additional Services - Construction	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.11 Design Pkg 8 - Center St Catch Basin Disconnect	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	52,300.97	52,300.97	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	52,300.97	52,300.97	0.00	0.00	52,300.97
Consultant (OCC)	18,006.45	18,006.45	0.00	0.00	18,006.45
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	70,307.42	70,307.42	0.00	0.00	70,307.42
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					362.40

OC23-I I.11.01 Design Services for Construction Pkg 8	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	35,852.73	35,852.73	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	35,852.73	35,852.73	0.00	0.00	35,852.73
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	35,852.73	35,852.73	0.00	0.00	35,852.73
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					253.20

Project PTD Figures

OC23-I I.11.02 Pre-Design Investigations / Data Review	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	10,936.74	10,936.74	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	10,936.74	10,936.74	0.00	0.00	10,936.74
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	10,936.74	10,936.74	0.00	0.00	10,936.74
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					69.70

OC23-I I.11.03 QA/QC Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	678.90	678.90	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	678.90	678.90	0.00	0.00	678.90
Leeway Engineering Solutions, LLC	*7,875.00*	*0.00*	*7,875.00*	*0.00*	*0.00*
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	678.90	678.90	0.00	0.00	678.90
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					3.00

OC23-I I.11.04 Utility Coordination / Survey & Geotechnical	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Compass Land Surveyors, Inc.	*19,068.00*	*18,006.45*	*1,061.55*	*0.00*	*18,006.45*
Consultant (OCC)	18,006.45	18,006.45	0.00	0.00	18,006.45
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	18,006.45	18,006.45	0.00	0.00	18,006.45
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			

Project PTD Figures

	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.11.05 Right-of-Way and Easement Acquisition Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.11.06 Bidding Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.11.07 Construction Management Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	4,832.60	4,832.60	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	4,832.60	4,832.60	0.00	0.00	4,832.60
	MacKay Sposito	*30,000.00*	*0.00*	*30,000.00*	*0.00*	*0.00*
	Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	4,832.60	4,832.60	0.00	0.00	4,832.60
	Non Reim./Write Off					0.00

Project PTD Figures

Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					36.50
OC23-I I.11.08 Additional Services - Design	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Morgan Holen & Associates LLC	*1,050.00*	*0.00*	*1,050.00*	*0.00*	*0.00*
Todd Prager & Associates, LLC	*1,050.00*	*0.00*	*1,050.00*	*0.00*	*0.00*
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00
OC23-I I.11.09 Additional Services - Construction	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Morgan Holen & Associates LLC	*2,100.00*	*0.00*	*2,100.00*	*0.00*	*0.00*
Todd Prager & Associates, LLC	*2,100.00*	*0.00*	*2,100.00*	*0.00*	*0.00*
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.12 Design Pkg 9 - McLoughlin Basin #1	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	70,042.00	18,190.36	51,851.64		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	70,042.00	18,190.36	51,851.64	963.60	19,153.96
Consultant (OCC)	429,958.00	230,878.28	199,079.72	0.00	230,878.28
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	500,000.00	249,068.64	250,931.36	963.60	250,032.24
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					90.60

OC23-I I.12.01 Design Services for Construction Pkg 9	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	37,626.00	18,190.36	19,435.64		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	37,626.00	18,190.36	19,435.64	963.60	19,153.96
Leeway Engineering Solutions, LLC	*157,605.00*	*151,582.28*	*6,022.72*	*0.00*	*151,582.28*
Consultant (OCC)	157,605.00	151,582.28	6,022.72	0.00	151,582.28
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	195,231.00	169,772.64	25,458.36	963.60	170,736.24
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					90.60

OC23-I I.12.01A Stormwater Analysis	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	467.40	0.00	467.40		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	467.40	0.00	467.40	0.00	0.00
Leeway Engineering Solutions, LLC	*39,333.00*	*13,521.48*	*25,811.52*	*0.00*	*13,521.48*
Consultant (OCC)	39,333.00	13,521.48	25,811.52	0.00	13,521.48
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	39,800.40	13,521.48	26,278.92	0.00	13,521.48
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			

Project PTD Figures

	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.12.01B Stormwater Imp Design		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Leeway Engineering Solutions, LLC	*16,032.00*	*4,353.04*	*11,678.96*	*0.00*	*4,353.04*
	Consultant (OCC)	16,032.00	4,353.04	11,678.96	0.00	4,353.04
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	16,032.00	4,353.04	11,678.96	0.00	4,353.04
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.12.02 Pre-Design Investigations / Data Review		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	1,148.00	0.00	1,148.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	1,148.00	0.00	1,148.00	0.00	0.00
	Archaeological Investigations NW, Inc.	*31,500.00*	*0.00*	*31,500.00*	*0.00*	*0.00*
	Leeway Engineering Solutions, LLC	*38,539.00*	*38,500.80*	*38.20*	*0.00*	*38,500.80*
	Consultant (OCC)	70,039.00	38,500.80	31,538.20	0.00	38,500.80
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	71,187.00	38,500.80	32,686.20	0.00	38,500.80
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.12.03 QA/QC Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	10,701.00	0.00	10,701.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	10,701.00	0.00	10,701.00	0.00	0.00
	Leeway Engineering Solutions, LLC	*6,003.00*	*976.15*	*5,026.85*	*0.00*	*976.15*
	Consultant (OCC)	6,003.00	976.15	5,026.85	0.00	976.15
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00

Project PTD Figures

	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	16,704.00	976.15	15,727.85	0.00	976.15
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.12.04 Utility Coordination / Survey & Geotechnical		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	0.00	0.00	0.00		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	0.00	0.00	0.00	0.00	0.00
	Compass Land Surveyors, Inc.	*23,582.00*	*18,984.00*	*4,598.00*	*0.00*	*18,984.00*
	Leeway Engineering Solutions, LLC	*8,127.00*	*2,960.53*	*5,166.47*	*0.00*	*2,960.53*
	Consultant (OCC)	31,709.00	21,944.53	9,764.47	0.00	21,944.53
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	31,709.00	21,944.53	9,764.47	0.00	21,944.53
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00
OC23-I I.12.05 Right-of-Way and Easement Acquisition Services		Contract	Billed	Balance	UnBilled	Effort
	Hourly Labor	13,246.80	0.00	13,246.80		
	Fixed Fee Labor	0.00	0.00	0.00		
	Total Labor	13,246.80	0.00	13,246.80	0.00	0.00
	Compass Land Surveyors, Inc.	*1,840.00*	*0.00*	*1,840.00*	*0.00*	*0.00*
	Consultant (OCC)	1,840.00	0.00	1,840.00	0.00	0.00
	Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
	Reimbursable	0.00	0.00	0.00	0.00	0.00
	Total	15,086.80	0.00	15,086.80	0.00	0.00
	Non Reim./Write Off					0.00
	Other Revenue		0.00			
	Late Charges		0.00			
	Retainage		0.00			
	Bad Debt		0.00			
	Unapplied Advances					
	Labor % Complete	0.00%				
	Hours					0.00

Project PTD Figures

OC23-I I.12.06 Bidding Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	2,410.80	0.00	2,410.80		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	2,410.80	0.00	2,410.80	0.00	0.00
Leeway Engineering Solutions, LLC	*7,397.00*	*0.00*	*7,397.00*	*0.00*	*0.00*
Consultant (OCC)	7,397.00	0.00	7,397.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	9,807.80	0.00	9,807.80	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.12.07 Construction Management Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	100,000.00	0.00	100,000.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	100,000.00	0.00	100,000.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.12.08 Additional Services - Design	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	4,442.00	0.00	4,442.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	4,442.00	0.00	4,442.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	4,442.00	0.00	4,442.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.12.09 Additional Services - Construction	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.13 Design Pkg 10 - Linn Basin SS #4	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	200,000.00	0.00	200,000.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	200,000.00	0.00	200,000.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	200,000.00	0.00	200,000.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.13.01 Design Services for Construction Pkg 10	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	200,000.00	0.00	200,000.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	200,000.00	0.00	200,000.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	200,000.00	0.00	200,000.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.13.02 Pre-Design Investigations / Data Review	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.13.03 QA/QC Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.13.04 Utility Coordination / Survey & Geotechnical	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.13.05 Right-of-Way and Easement Acquisition Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.13.06 Bidding Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.13.07 Construction Management Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.13.08 Additional Services - Design	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.13.09 Additional Services - Construction	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.14 Design Pkg 11 - McLoughlin Basin #3	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.14.01 Design Services for Construction Pkg 11	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.14.02 Pre-Design Investigations / Data Review	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.14.03 QA/QC Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.14.04 Utility Coordination / Survey & Geotechnical	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.14.05 Right-of-Way and Easement Acquisition Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.14.06 Bidding Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.14.07 Construction Management Services	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.14.08 Additional Services - Design	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

OC23-I I.14.09 Additional Services - Construction	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	0.00	0.00	0.00		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	0.00	0.00	0.00	0.00	0.00
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					0.00

Project PTD Figures

OC23-I I.15 Manhole Sealing Program	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	75,000.00	28,311.65	46,688.35		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	75,000.00	28,311.65	46,688.35	775.56	29,087.21
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	14.00	-14.00	0.00	14.00
Total	75,000.00	28,325.65	46,674.35	775.56	29,101.21
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					183.20

OC23-I I.15.01 Design Services for Manhole Sealing Program	Contract	Billed	Balance	UnBilled	Effort
Hourly Labor	75,000.00	28,311.65	46,688.35		
Fixed Fee Labor	0.00	0.00	0.00		
Total Labor	75,000.00	28,311.65	46,688.35	775.56	29,087.21
Consultant (OCC)	0.00	0.00	0.00	0.00	0.00
Consultant (ICC)	0.00	0.00	0.00	0.00	0.00
Reimbursable	0.00	14.00	-14.00	0.00	14.00
Total	75,000.00	28,325.65	46,674.35	775.56	29,101.21
Non Reim./Write Off					0.00
Other Revenue		0.00			
Late Charges		0.00			
Retainage		0.00			
Bad Debt		0.00			
Unapplied Advances					
Labor % Complete	0.00%				
Hours					183.20

Appendix E

OC23II Program Cost Summary

CITY OF OREGON CITY
INFLOW / INFILTRATION PROGRAM MANAGEMENT (CI 21-015)

PROGRAM COST SUMMARY

Task #	Task Title	21-23 Contract	21-23 Remaining budget adjustments	23-24 Amendment	24-25 Amendment	Program Total	Program Billed (Through April 2025)	Program Unbilled
OC23-I I.01	Program Administration	$ 119,927.98	$ 11,199.00	$ 244,602.40	$ 145,000.00	$ 520,729.38	$ 351,530.78	$ 169,198.60
OC23-I I.02	Program Management	$ 573,222.13	$ (96,080.85)	$ 1,044,122.40	$ 189,000.00	$ 1,710,263.68	$ 960,785.20	$ 749,478.48
OC23-I I.03	Flow Monitoring and Analysis	$ 142,631.03	$ (67,378.13)	$ 136,930.00	$ 155,000.00	$ 367,182.90	$ 221,359.05	$ 145,823.85
OC23-I I.04	Design Pkg 1 - Linn Basin SS #1*	$ 409,948.37	$ (178,461.05)	$ 233,282.70	$ 144,714.58	$ 609,484.60	$ 365,588.62	$ 243,895.98
OC23-I I.05	Design Pkg 2 - Linn Basin SS #2	$ 156,158.84	$ 9,113.50	$ 235,668.50	$ 375,747.85	$ 776,688.69	$ 461,615.00	$ 315,073.69
OC23-I I.06	Design Pkg 3 - Molalla Ave	$ -		$ 466,685.00	$ 100,000.00	$ 566,685.00	$ 541,745.38	$ 24,939.62
OC23-I I.07	Design Pkg 4 - Rivercrest Lateral Rehab	$ -		$ 192,200.00	$ 339,878.66	$ 532,078.66	$ 385,108.47	$ 146,970.19
OC23-I I.08	Design Pkg 5 - Newell Basin #1 (Applegate)	$ -		$ 285,100.00	$ 160,682.00	$ 445,782.00	$ 161,194.78	$ 284,587.22
OC23-I I.09	Design Pkg 6 - Linn Basin SS #3	$ -		$ 285,100.00	$ -	$ 285,100.00	$ -	$ 285,100.00
OC23-I I.10	Design Pkg 7 - McLoughling Bain #2 (Singer Hill)	$ -		$ -	$ 150,000.00	$ 150,000.00	$ -	$ 150,000.00
OC23-I I.11	Design Pkg 8 - Center St Catch Basin Disconnect	$ -		$ 175,100.00	$ (104,792.58)	$ 70,307.42	$ 70,307.42	$ -
OC23-I I.12	Design Pkg 9 - McLoughlin Basin #1	$ -		$ -	$ 500,000.00	$ 500,000.00	$ 249,068.64	$ 250,931.36
OC23-I I.13	Design Pkg 10 - Linn Basin SS #4	$ -		$ -	$ 200,000.00	$ 200,000.00	$ -	$ 200,000.00
OC23-I I.14	Design Pkg 11 - McLoughlin Basin #3	$ -		$ -	$ -	$ -	$ -	$ -
OC23-I I.15	Manhole Sealing Program	$ -		$ -	$ 75,000.00	$ 75,000.00	$ 28,325.65	$ 46,674.35
	Contract In Full	$ 1,401,888.35	$ (321,607.53)	$ 3,298,791.00	$ 2,430,230.51	$ 6,809,302.33	$ 3,796,628.99	$ 3,012,673.34
						Subconsultant Contracted (unbilled)	$	(777,473.99)
						Available Program Budget	**$**	**2,235,199.35**

* Original Contract T7 was LS , remaining budget at FY was removed by the Contract adjustment

Appendix F

Five Year Plan

Appendix F Five Year Plan

Budget FY 25-26 TO FY 29-30

Project	Project Number	25-26		26-27		27-28		28-29		29-30	
		Program Mgmt / Design / CM / Insp	Const/ Field Investigation	Program Mgmt / Design / CM / Insp	Const/ Field Investigation	Program Mgmt / Design / CM / Insp	Const/ Field Investigation	Program Mgmt / Design / CM / Insp	Const/ Field Investigation	Program Mgmt / Design / CM / Insp	Const/ Field Investigation
Program Management		$500,000		$500,000		$500,000		$500,000		$500,000	
Manhole Sealing	Yearly Number Provided	$72,734	$426,000	$75,000	$300,000	$75,000	$300,000	$75,000	$300,000	$75,000	$300,000
Design Pkg 1 - Linn Basin SS #1	CI 23-001	**Construction Completed FY 2023-2024**									
Design Pkg 2 - Linn Basin SS #2	CI 23-002	$350,000	$1,500,000	$100,000	$2,700,000						
Design Pkg 3 - Molalla	CI 23-013	$20,000	**Construction Completed FY 2024-2025**								
Design Pkg 4 - Rivercrest Lateral Rehab	CI 23-009	$50,000	**Construction Completed FY 2024-2025**								
Design Pkg 5 - Newell 1	CI 23-012	$100,000								$250,000	$1,500,000
Design Pkg 6 - Linn Basin SS #3	CI 23-003	$250,000		$250,000	$3,000,000						
Design Pkg 7 - Main St	CI 24-010	$75,000		$75,000	$1,000,000						
Design Pkg 8 - Center St Catch Basin Disconnect	**Package Removed - Project areas incorporated into other design packages**										
Design Pkg 9 - McLoughlin Basin #1	CI 24-005	$300,000	$4,000,000								
Design Pkg 10 -Linn #4	CI 24-011	$200,000		$200,000				$100,000	$2,000,000	$100,000	$ 2,000,000
Pkg 11 -TBD (McLoughlin #3)	No Number Assigned										
Design Pkg Not Assigned - Linn #5	No Number Assigned					$100,000		$300,000	$2,000,000		
Design Pkg Not Assigned - Linn #6	No Number Assigned										
	TOTALS	**$1,992,734**	**$5,926,000**	**$1,525,000**	**$9,500,000**	**$825,000**	**$1,800,000**	**$875,000**	**$4,300,000**	**$575,000**	**$2,300,000**

Appendix F Five Year Plan

Schedule