



Discovery Clean
Water Alliance

Board of Directors Agenda Quarterly Meeting

Friday, September 18, 2026, 10:00 a.m.

District Board Meeting Room, 8000 NE 52nd Court, Vancouver, WA 98665

The Board of Directors will be accepting public comment on published agenda items via in-person or virtual attendance during this meeting. *Written comments may be submitted to lmattos@crwwd.com by 5:00 PM the day before the meeting. Comments will be compiled and sent to the Board of Directors.*

Please join the meeting from your computer, tablet or smartphone:

<https://meet.goto.com/DiscoveryCleanWaterAlliance/allianceboardofdirectorsmeeting>

You can also dial in using your phone: **(872) 240-3412**; Access Code: **894-253-477**

Regular Meeting

No	Item	Action/Info	Presenter	Time (minutes)
1.	Call To Order			
2.	Flag Salute			
3.	Late Additions to the Agenda			
4.	Public Comment <i>This item is to provide an opportunity for citizen comment.</i>	INFORMATION		5
5.	Consent Agenda a. Board of Directors Meeting Minutes of June 18, 2026 b. Audit of Accounts c. Agreement for Legal Services for 2027-2030	ACTION		5
6.	Reports a. Capital Program Report b. Treasurer Report – Second Quarter 2026 c. Draft 2027-2028 Operating and Capital Budget d. Administrative Lead Report e. General Sewer Plan Update	INFORMATION	Owen Logan Logan Peterson Peterson	10 5 20 10 65
7.	Adjourn Meeting			

Next Meeting: Friday, December 18, 2026, 10:00 a.m., Regular Business Meeting
District Board Meeting Room, 8000 NE 52nd Court, Vancouver, WA 98665

The Board provides reasonable accommodations to persons with disabilities. Please contact a staff member (by noon Thursday) if we can be of assistance. If you should experience difficulty hearing the proceedings, please bring this to the attention of the Board by raising your hand.



Discovery Clean
Water Alliance

Board of Directors Meeting Second Quarter 2026 MINUTES

Thursday, June 18, 2026, 10:00 a.m.

In-Person / Remote Meeting via GoToMeeting

District Board Meeting Room, 8000 NE 52nd Court, Vancouver, WA 98665

Present:

City of Battle Ground: Shane Bowman*

Clark County: Glen Yung*

City of Ridgefield: Lee Wells

Clark Regional Wastewater District: Norm Harker

Staff: Clark Regional Wastewater District: John Peterson; City of Battle Ground: None; Clark County: None; City of Ridgefield: None.

Attendees: Clark Regional Wastewater District: Dan Clark, Denny Kiggins, David Logan, Bill Owen, Leanne Mattos, Michaela Loveridge, Maria Swinger-Inskeep, Bob Sanguinetti*, Marc Yarlott*, Kayla Brown; City of Vancouver: Steve Wall, Frank Dick*; Clark County: None; City of Battle Ground: Mark Herceg*; Interested Citizens: Tim Mills, Greg Kimsey, Timothy Keal*, Zach Girod*, Leah Lothspeich*; Clyde Burkle; Brady Fuller*; Foster Garvey Legal Counsel: Lee Marchisio*; Guest Speakers: None

(*remote attendance)

Special Meeting

Call to order:

Vice Chair Wells called the meeting to order at 10:00 a.m.

Chair Bowman has requested Vice Chair Wells to preside over today's meeting.

1. Late Additions/Deletions to the Agenda

None.

2. Public Comment

None.

3. Consent Agenda

Action:

Norm Harker moved, seconded by Shane Bowman, to approve the Consent Agenda, approving the March 20, 2026 meeting minutes; ratifying claim warrants #10762-10763 & ACH transactions in the amount of \$868,617.88 for March 2026, claim warrants #10764-10766 & ACH transactions in the amount of \$1,652,362.01 for April 2026, and claim warrants #10767-10768 & ACH transactions in the amount of \$2,480,284.12 for May 2026. Motion carried unanimously.

4. Capital Program Report (2025-2026 Budget)

Bill Owen presented a brief update on the Capital Program status of schedules and budgets for the District-led R&R and CIP projects included in the current 2025-2026 budget period.

5. Treasurer Report – First Quarter 2026

David Logan presented the First Quarter 2026 Financial Report reflecting the results from operations for all funds, as well as cash and investment balances as of March 31, 2026.

Mr. Logan also provided a brief update on the status of the SAO audit and the 2027/2028 budget calendar.

6. 2026 Draft Capital Plan Update (2027-2028 Budget)

John Peterson and Bill Owen presented the 2026 Draft Capital Plan Update report, highlighting the following items, which were included in the agenda packet: an overview of the Capital Plan update process, the updated Existing Regional Assets Repair & Replacement (Asset Management) Program with recommendations summarized in Tables 2.3 and 2.4, and the updated New Regional Assets Capital Improvement Program with recommendations summarized in Tables 3.2 and 3.4. The plan will be presented to the Board for a second review at the September meeting if there are material changes, and for anticipated adoption at the December meeting.

7. Administrative Lead Report

John Peterson presented the Administrative Lead report, which included a brief update on the Operations Program, Regulatory Compliance Program, and Federal & State Advocacy for potential funding opportunities.

Mr. Peterson also introduced Kayla Brown, the District's new Regulatory Compliance Manager.

8. General Sewer Plan Update

John Peterson presented an update on the progress of the General Sewer Plan, including two presentations.

The first presentation covered SCTP Solids System Evaluation Overview of Alternatives, explaining the current program, an overview of the evaluated alternatives and associated costs, the decision process considering past evaluations and recommendations, and future adaptive pathways. Discussions took place regarding the recommendation to switch to an "adaptive pathway" approach, building only what is needed in Phase 6, while preserving all future options and recognizing that it is not possible to make a 20-year decision today, due to regulatory, legislative, and legal uncertainty. The Board concurred.

The second presentation covered the SCTP Transmission System Overview of Recommendations for the 20-year planning period, explaining the current system as well as future needs. Mr. Peterson further explained the results of the system capacity assessment of the interceptor system and the 36th Avenue and 117th Street Pump Stations. Discussions took place regarding the recommendation to implement a 3-step expansion of the 117th Street Pump Station, generally aligned with the Phase 6, 7 and 8 eras. The Board concurred.

The Board thanked staff for a thorough explanation of the presentations and recommendations.

The meeting was adjourned at 11:48 a.m.

Prepared and edited by Alliance Administrative Lead staff. Approved by the
Discovery Clean Water Alliance Board of Directors on:

September 18, 2026

Secretary

Accounts Payable

Blanket Voucher Approval Document



We, the undersigned Board of Directors of Discovery Clean Water Alliance, Clark County, Washington, do hereby certify that the merchandise and / or services hereinafter specified have been received and approved for payment in the amount of \$1,255,159.89 this 26th day of June 2026.

APPROVED
By David Logan at 12:07 pm, Jun 29, 2026

Treasurer

Director

Director

Director

Director

Line	Claimant	Check No.	Amount
1	CFM STRATEGIC COMMUNICATIONS, INC	10769	5,000.00
2	CLARK REGIONAL WASTEWATER DISTRICT	ACH	785,129.83
3	DEPARTMENT OF COMMERCE	10770	427,368.42
4	DEPARTMENT OF ECOLOGY	10771	33012.42
5	FOSTER GARVEY	10772	3568.50
6	GOVERNMENT PORTFOLIO ADVISORS	ACH	621.96
7	RAILROAD MANAGEMENT COMPANY III, LLC	10773	458.76
Page Total:			<u>\$1,255,159.89</u>

Accounts Payable

Blanket Voucher Approval Document



We, the undersigned Board of Directors of Discovery Clean Water Alliance, Clark County, Washington, do hereby certify that the merchandise and / or services hereinafter specified have been received and approved for payment in the amount of \$1,284,606.96 this 24th day of July 2026.

APPROVED
By David Logan at 10:24 am, Jul 24, 2026

Treasurer

Director

Director

Director

Director

Line	Claimant	Check No.	Amount
1	CFM STRATEGIC COMMUNICATIONS, INC	10774	5,000.00
2	CLARK REGIONAL WASTEWATER DISTRICT	ACH	1,278,558.40
3	GOVERNMENT PORTFOLIO ADVISORS	ACH	623.56
4	WATER & SEWER RISK MANAGEMENT POOL	10775	425.00
Page Total:			<u>\$1,284,606.96</u>

Accounts Payable

Blanket Voucher Approval Document



We, the undersigned Board of Directors of Discovery Clean Water Alliance, Clark County, Washington, do hereby certify that the merchandise and / or services hereinafter specified have been received and approved for payment in the amount of \$1,051,621.05 this 20th day of August 2026.

APPROVED
By David Logan at 10:43 am, Aug 20, 2026

Treasurer

Director

Director

Director

Director

Line	Claimant	Check No.	Amount
1	CFM STRATEGIC COMMUNICATIONS, INC	10776	5,000.00
2	CLARK REGIONAL WASTEWATER DISTRICT	ACH	1,045,921.05
3	U.S. BANK	10777	700.00
Page Total:			<u>\$1,051,621.05</u>



Discovery Clean
Water Alliance

Consent Staff Report

Board Meeting of September 18, 2026

5c. Agreement for Legal Services for 2027-2030

STAFF CONTACTS	PHONE	EMAIL
John M. Peterson, P.E., Executive Director Lee Marchisio, Alliance Attorney	360-993-8819 206-447-6264	jpeterson@crwwd.com lee.marchisio@foster.com

PURPOSE: The Alliance as a separate legal entity needs to continue to have its own legal counsel, distinct from that of the individual Member agencies. The succeeding agreement for legal services (Attachment A) is now being presented for approval.

BACKGROUND: The Transition Board reviewed alternatives for legal counsel services and selected Foster Pepper, PLLC (now Foster Garvey PC) to serve as initial Alliance legal counsel. The Alliance Board elected to continue legal services with Foster Pepper / Foster Garvey through the 2023-2026 period. The current agreement expires on December 31, 2026.

The Administrative Lead recommends that continuing the relationship with Foster Garvey would provide high-quality legal services at a reasonable cost to the Alliance Members. This will maintain continuity through the upcoming period of General Sewer Plan & SCTP Phase 6 Plant Expansion Engineering Report, as well as adjudication of several state and federal water quality, permit and environmental review processes, during the four-year period 2027-2030. Foster Garvey is already up-to-speed on the key issues facing the Alliance. Because of this status, any other approach would involve significant additional administrative time and costs to recruit the firm and then develop the institutional knowledge required for a new firm to be effective.

ACTION REQUESTED: Authorization for the Board Chair to sign the Agreement for Legal Services with Foster Garvey PC.

AGREEMENT FOR LEGAL SERVICES

The Discovery Clean Water Alliance, a Washington municipal corporation (“Alliance”), and the law firm of Foster Garvey P.C., whose address is 1111 Third Avenue, Suite 3000, Seattle, Washington 98101-3296 (“Law Firm”), agree as follows:

I. LEGAL SERVICES

A. The Law Firm agrees to provide legal services relating to the formation, governance and operational implementation of the Alliance and such other matters as may be requested from time to time by the Board of Directors of the Alliance (“Board”) or by the Administrative Lead of the Alliance (“Administrative Lead”). The scope of the Law Firm’s services is described in more detail in Attachment A (General Counsel Services) and in Attachment B (Special Counsel Services for Capital Projects).

B. The Law Firm will use its best efforts to expedite the Alliance’s legal matters promptly and efficiently according to its legal and ethical obligations.

C. Nothing in this Agreement shall prevent the Alliance from engaging other legal counsel for specific tasks during the period that the Law Firm is providing legal services to the Alliance.

II. FEES

A. The Alliance shall pay the Law Firm, as sole compensation for the services performed under this Agreement, such sums of money as are arrived at by computing the actual number of hours expended in the performance of this agreement and multiplying such total hours by the respective hourly rates that are approximately 90% of the standard hourly rates then being charged by the Law Firm’s attorneys performing the service. For purposes of illustration, the Law Firm’s 2026 standard and adjusted hourly rates for the attorneys expected to assist the Alliance appear at Attachment C. The Alliance also shall reimburse the Law Firm for actual out-of-pocket costs incurred in connection with the services the Law Firm provides, including, without limitation, travel expenses, overnight delivery charges, and photocopying. Travel to and from Clark County for meetings must be requested by the Board Chair or designated official of the Administrative Lead. Car travel will be reimbursed at IRS-approved reimbursement rates in effect at the time of travel. Air travel will be reimbursed at actual costs, but not in excess of coach rates, and train travel may be reimbursed at business class rates. Travel time will not be reimbursed for time spent working on non-Alliance matters.

B. Billings should be submitted on a monthly basis. The Alliance will be charged for services rendered on an hourly basis and billings will be reflected in increments of one-tenth of an hour. Each billing statement should set forth for each date services were performed:

- A brief summary of the services provided
- The number of hours, or fractions of hours spent
- Expenses and disbursements in detail

C. The Alliance anticipates the Law Firm’s general counsel services (Attachment A) will be supported by the Alliance’s operating budget and the Law Firm’s special counsel services for capital projects (Attachment B) will be supported by the Alliance’s capital budget. The general counsel and

special counsel services provided by the Law Firm will not exceed the amounts allocated in the Alliance's adopted operating and capital budgets, respectively, unless specifically authorized by the Alliance Board or designated official of the Administrative Lead.

D. The Law Firm and assigned attorneys have been retained because of their expertise. The Alliance should not be billed for general legal or technical research necessary to educate staff or less experienced attorneys in the firm without advance approval by the Board Chair or designated official of the Administrative Lead. The Alliance should not be billed for time spent in preparing or reviewing the firm's billings to the Alliance or in internal firm quality control procedures. The Law Firm will keep the Alliance fully informed of time used for conferences, telephone calls, drafting documents, research, court time, and necessary travel time.

E. Payment shall not be made until the Alliance is fully satisfied with the services performed for the previous month. Payments shall be made through the Alliance's ordinary payment process and shall be considered timely if made within 45 days of actual receipt of a properly completed billing. All payments shall be subject to adjustment for any amounts, upon audit or otherwise, determined to have been improperly billed.

III. INTERACTION WITH ALLIANCE

A. Consistent with Section IV.C of the Interlocal Formation Agreement creating the Alliance, the Law Firm shall report directly to the Board. However, on a day-to-day basis, the Law Firm shall coordinate closely with the Administrative Lead and Operator(s), recognizing the Administrative Lead's role under Section V.B and the Operator(s) role under Section V.C of the Interlocal Formation Agreement. Upon request of the Board or designated official of the Administrative Lead, the Law Firm shall also coordinate with any Standing Committees formed by the Board. Except under special circumstances in which the Law Firm determines that confidentiality concerns require otherwise, or when the Board determines otherwise, the Law Firm will submit invoices to the Administrative Lead for review, recommendation and processing prior to submittal to the Board.

B. The Law Firm will keep the Alliance well informed of all legal matters it handles on the Alliance's behalf. The Law Firm will send the Alliance copies of all material papers coming in or going out of its offices to or from third parties. The Alliance's files at the Law Firm and its progress shall be open to the Alliance for inspection at any time.

IV. INDEPENDENT CONTRACTOR STATUS

A. The Law Firm shall serve as an attorney for the Alliance and shall at all times perform its duties and responsibilities and carry out all services as an independent contractor.

B. The Law Firm, at its sole expense, shall obtain and keep in force any and all necessary licenses, permits, and tax certificates. The Law Firm shall maintain all necessary insurance to protect Law Firm from losses and claims which may arise out of or arise from performance of duties related to this agreement, including Worker's Compensation and professional liability insurance.

V. TERM; SUSPENSION OR TERMINATION

A. This Agreement shall be effective from January 1, 2027, to December 31, 2030, and shall replace all prior agreements for legal services entered into between the Alliance and the Law Firm.

B. The Alliance may suspend or terminate the performance of services under this Agreement by written notice to the Law Firm, in whole, or from time to time in part, at the Alliance's discretion. The Law Firm may withdraw for any reason in accordance with the Rules of Professional Conduct promulgated by the Washington State Supreme Court.

VI. NONDISCRIMINATION

A. The Law Firm shall, in all hiring or employment made possible or resulting from this Agreement, take affirmative action to ensure that there shall be no unlawful discrimination against any employee or applicant for employment because of sex, race, age, ancestry, color, religion/creed, national origin, marital status, parental/family status, sexual orientation, retaliation, the presence of any sensory, mental or physical disability or the use of a guide dog or service animal, unless based upon a bona fide occupational qualification, and this requirement shall apply to but not be limited to the following: employment, advertising, layoff or termination, rates or pay or other forms of compensation and selection for training, including apprenticeship.

B. No person shall be denied or subject to discrimination in receipt of the benefit of any services or activities made possible by or resulting from this Agreement on the grounds of sex, race, ancestry, color, religion/creed, national origin, age except minimum age and retirement provisions, marital status, parental/family status, sexual orientation, retaliation, the presence of any sensory, mental or physical handicap or the use of a guide dog or service animal.

VII. MODIFICATION

This Agreement may be amended, modified or added to only by written instrument properly signed by both parties hereto.

VIII. NOTICE

Notice given pursuant to this Agreement shall be given in writing by directing it to: The Discovery Clean Water Alliance Board of Directors, c/o Clark Regional Wastewater District, Clark Regional Wastewater District, 8000 NE 52nd Court, P.O. Box 8979, Vancouver, WA 98668-8979, and to Foster Garvey P.C. at 1111 Third Avenue, Suite 3000, Seattle, WA 98101-3296, or at such other address as the either party may request.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates written below:

FOSTER GARVEY P.C.

**DISCOVERY CLEAN WATER
ALLIANCE**

By: _____
Emily Harris Gant, Managing Principal

By: _____
Shane Bowman, Board Chair

Date: _____

Date: _____

ATTACHMENT A

Scope of General Counsel Services

The general counsel services to be provided by Law Firm, upon the request of the Alliance, include:

1. Assistance and advice concerning the formation and governance of the Alliance and the adoption of procedures and documents relating to the operational implementation of a municipal corporation.
2. Advice on Washington law and regulations relating to joint municipal utility services authorities, including but not limited to Chapter 39.106 RCW.
3. Advice on public records, open public meetings, procurement, and other matters of municipal law.
4. Assistance and advice concerning federal, state, and local environmental laws and regulations, and representation of the Alliance in negotiations and proceedings with regulatory authorities.
5. Review and comment on interlocal agreements, administrative and operator agreements, other service agreements, and contracts that have been drafted by counsel to other entities, and, when expressly requested, negotiation and drafting of such contracts.
6. Review and comment on administrative and operational code provisions, and, when expressly requested, drafting of such provisions.
7. Review and comment on asset transfer documents, franchises and other documents relating to the acquisition and operation of various assets for regional service purposes, and, when expressly requested, drafting and negotiating such documents.
8. Representation of the Alliance in legal proceedings, if any.
9. General background advice on state law and federal tax and securities law relating to the issuance of municipal bonds and other obligations for wastewater capital purposes.
10. Other general legal advice and assistance as requested.

The Law Firm may also be retained to serve as bond counsel in connection with one or more borrowings by the Alliance, but those services would be the subject of a separate services agreement.

ATTACHMENT B

Scope of Special Counsel Services for Capital Projects

The special counsel services for capital projects to be provided by Law Firm, upon the request of the Alliance, include:

1. Assistance and advice concerning federal, state, and local environmental laws and regulations, and representation of the Alliance in negotiations and proceedings with regulatory authorities.
2. Assistance and advice concerning state and local land use laws and regulations, and representation of the Alliance in negotiations and proceedings with regulatory authorities.
3. Review, comment, and provide advice regarding real property transfers, conveyances, franchises, and other documents relating to the implementation of the Alliance's capital projects, and, when expressly requested, drafting and negotiating such documents.
4. Assistance in dispute resolution, including representation in contested matters before administrative and court proceedings.
5. Other special counsel legal services related to the Alliance's capital projects, as requested.

ATTACHMENT C

2026 Standard and Adjusted Hourly Rates

Name of Attorney	2026 Standard Rates	2026 Alliance Rates
Andrea Bradford	\$595	\$535
Devra Cohen	\$590	\$535
Steve DiJulio	\$900	\$810
Jay Donovan	\$795	\$715
Marc Greenough	\$865	\$780
Bryan Helfer	\$685	\$620
William Kenick	\$395	\$355
Tina Kyle	\$865	\$780
Mikaela Louie	\$545	\$490
Lee Marchisio	\$705	\$635
Matt Maynard	\$915	\$825
Pam Miller	\$355	\$320
Barbara Rothwell	\$260	\$235
Pat Schneider	\$795	\$715
Lori Terry Gregory	\$950	\$855
William Tonkin	\$865	\$780
Jared Van Kirk	\$690	\$625
Matthew Wells	\$695	\$625



Discovery Clean
Water Alliance

Staff Report

Board Meeting of September 18, 2026

6a. Capital Program Report

STAFF CONTACTS	PHONE	EMAIL
John M. Peterson, P.E., Alliance Executive Director	360-993-8819	jpeterson@crwwd.com
Bill Owen, P.E., P.M.P., Principal Engineer	360-839-2059	bowen@crwwd.com

PURPOSE: This staff report provides an update on the ongoing capital program and capital project activities for the Regional Assets (RAs).

Please see the attached presentation covering the following:

- Capital Program Report
 - Capital Program Update (2025-2026 Budget)
 - Capital Plan Update (2027-2028 Budget)

ACTION REQUESTED: No specific action required. Please provide policy-level guidance for the various activities described in this report.

Discovery Clean Water Alliance

Capital Program Update

Alliance
Board of Directors
September 18, 2026



Laying the foundation
for a **vibrant economy**
and **healthy environment**

2025-26 Capital Program Update

Project Dashboard – R&R Projects



Project Name	2025-26 Adopted Budget	2025-26 Projected Expenses	Budget Status	Schedule Status	Comments
R&R Projects					
CO SCTP Primary Clarifier Mechanism Replacements	127	145			Project complete
CO SCTP Primary Sludge Pump Replacement	1,200	569			Project complete
CO SCTP Network Separation	-	29			Project complete
CO SCTP Fire Alarm System Replacement	-	47			Project complete
SCTP Dewatering Equipment Replacement	6,196	2,049			Total project cost higher than projected
117th Street Pump Station Controls Replacement	858	850			Project complete
SCTP UV System Replacement	3,557	2,524			Project under construction
SCTP Influent Flow Meter Replacements	537	258			Updating design; Bid in Summer 2027
SCTP Aeration Equipment Replacement (Blowers 1-4)	320	545			Started 90% design stage
SCTP Well House Rehabilitation	-	-			Developing initial project concept for 2027-28, if needed
SCTP Thickening Equipment Replacement (Phase 6)	264	-			Will begin with Phase 6 Improvements
SCTP Waste Gas Burner Replacement (Phase 6)	208	-			Will begin with Phase 6 Improvements
SCTP Influent Screen Replacement (Phase 6)	54	-			Will begin with Phase 6 Improvements
SCTP Secondary Clarifier Rehabilitation	537	-			Deferred to a future biennium
Program Building Systems R&R Program	2,629	2,610			Operations Center HVAC under construction
Program Annual R&R Allowance	318	627			Odor Control Improvements under construction
Total Annual R&R Projects Expenditures	16,805	10,253			

All values expressed in \$1,000s

	Project is significantly under budget and/or ahead of schedule		Project within 20% of budget or minor delays
	Project within budget or on schedule		Project more than 20% over budget or significant delay

2025-26 Capital Program Update

Project Dashboard – CIP Projects (New Assets)



Project Name	2025-26 Adopted Budget	2025-26 Projected Expenses	Budget Status	Schedule Status	Comments
<i>CIP Projects</i>					
SCTP Phase 5A (Outfall/Effluent Pipeline) Expansion	100	300			Project complete
SCTP Phase 5B (Treatment Plant) Expansion	1,500	2,900			Close-out stage; digester gas treatment ongoing
SCTP Phase 6 Expansion (Without UV)	3,699	1,155			Will begin after GSP completed
SCTP Class A Biosolids Upgrade	892	-			Will begin after GSP completed
RTP Secondary Treatment Process Improvements	300	196			Project complete
Alliance General Sewer Plan (GSP)	1,897	2,200			Tied to timing of County's Comprehensive Plan
New RTP Effluent Cooling (Alternatives Evaluation)	-	100			Starting design to install canopy by Summer 2027
Total Annual CIP Projects Expenditures	8,388	6,851			

All values expressed in \$1,000s

	Project is significantly under budget and/or ahead of schedule
	Project within budget or on schedule
	Project within 20% of budget or minor delays
	Project more than 20% over budget or significant delay

2025-26 Capital Program Update

Keeping Rates Affordable



Updates on grants and loan for active capital projects:

- **WA PWB loan** – Submitted application on July 30 to finance \$10M of construction costs; decision anticipated October 2
- **2026 WA Supplemental Budget Capital Grant** – Received grant award letter on July 1 for \$600k towards the SCTP Aeration Equipment Replacement
- **EPA Community Grant** – Completed requirements to-date for \$3.0M award for construction of SCTP UV System Improvements

2027-28 Capital Program Update

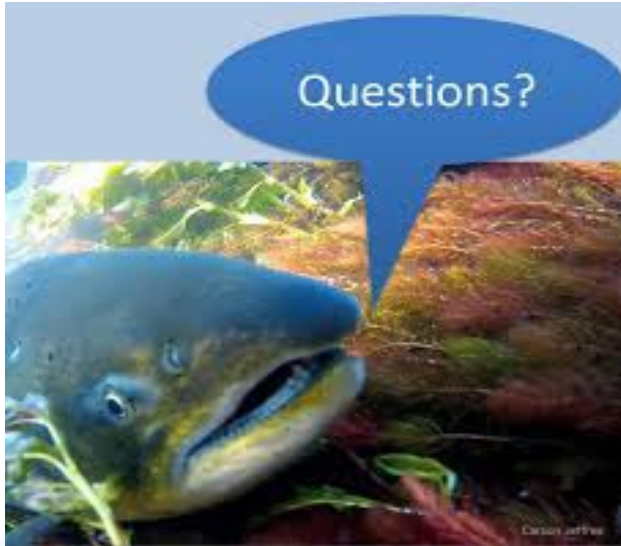
2026 Capital Plan



- Plan covers program expenses from 2027 through 2046
- No substantive changes to June 2026 Draft
- Proposed final version to be adopted in December



Capital Program Update



Bill Owen, PE, PMP

Principal Engineer | Transmission & Treatment
Clark Regional Wastewater District

(360) 839-2059

bowen@crwwd.com

John M. Peterson, PE

Executive Director
Discovery Clean Water Alliance

General Manager
Clark Regional Wastewater District

(360) 993-8819

jpeterson@crwwd.com



Discovery Clean
Water Alliance

Staff Report

Board Meeting of September 18, 2026

6b. Treasurer Report – Second Quarter 2026

STAFF CONTACTS	PHONE	EMAIL
David Logan, Alliance Treasurer	360-993-8802	dlogan@crwwd.com

PURPOSE: The goal of the Treasurer Report is to provide a quarterly update of ongoing activities in the financial and treasury areas of responsibility for the Alliance.

Please see the attached presentation covering the following:

- Financial Management / Reporting Update
 - Second Quarter 2026 Financial Report
- Budget / ACFR / SAO Audit
 - 2027/2028 Operating & Capital Budget Calendar
- Treasury (no update this quarter)
- Federal Grant Compliance (no update this quarter)

ACTION REQUESTED: No specific action required. Please provide policy-level guidance for the various activities described in this report.

Discovery Clean Water Alliance

Treasurer Report

Alliance
Board of Directors
September 18, 2026



Laying the foundation
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and **healthy environment**

Treasurer Report



- Financial Management / Reporting Update
 - Second Quarter 2026 Financial Report
- Budget / ACFR / SAO Audit
 - 2027/2028 Operating & Capital Budget Calendar
- Treasury (no update this quarter)
- Federal Grant Compliance (no update this quarter)



Financial Management / Reporting Update

Second Quarter 2026 Financial Report



- **All Funds - Cash and Investments**

	As of 6/30/2026	As of 12/31/2025	As of 12/31/2024
Cash	\$ 4,516,490	\$ 3,196,169	\$ 1,075,411
Investments	26,053,688	25,641,910	30,960,042
Total	\$ 30,570,178	\$ 28,838,079	\$ 32,035,453

* 12/31/2026 Anticipated Cash Balance per 2025-2026 Budget = \$10,482,000

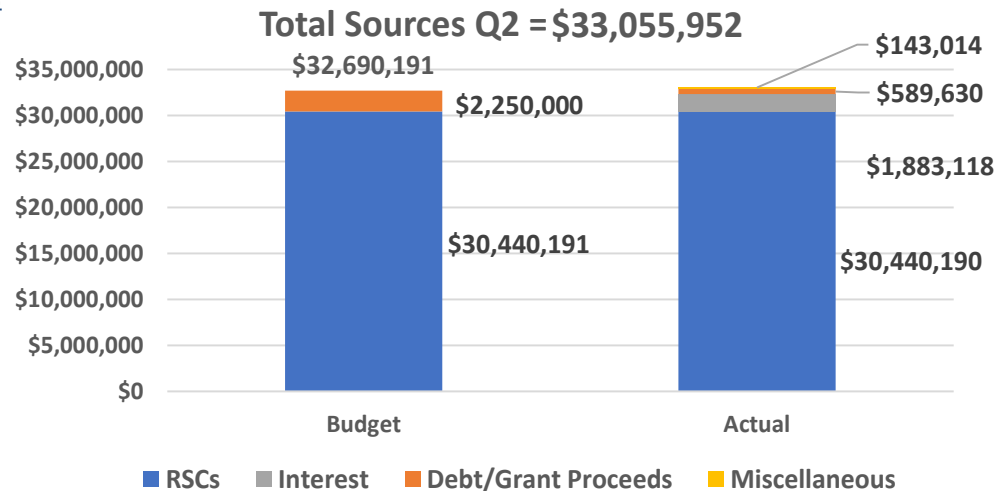
Second Quarter 2026 Financial Report

• All Funds – Sources

Total Sources - \$0.4M (1.1%) over budget

- **RSCs** – \$0 (0%) over budget
- **Interest income** – \$1.9M (100%) over budget*
- **Debt/grant proceeds** – \$1.6M (73.8%) under budget. Budgeted \$3.0M EPA grant. Actual: \$589k from previous PWB loan
- **Miscellaneous income** – \$0.1M* ; Insurance proceeds related to Building 10 Ceiling Repair

* Not formally budgeted



Second Quarter 2026 Financial Report

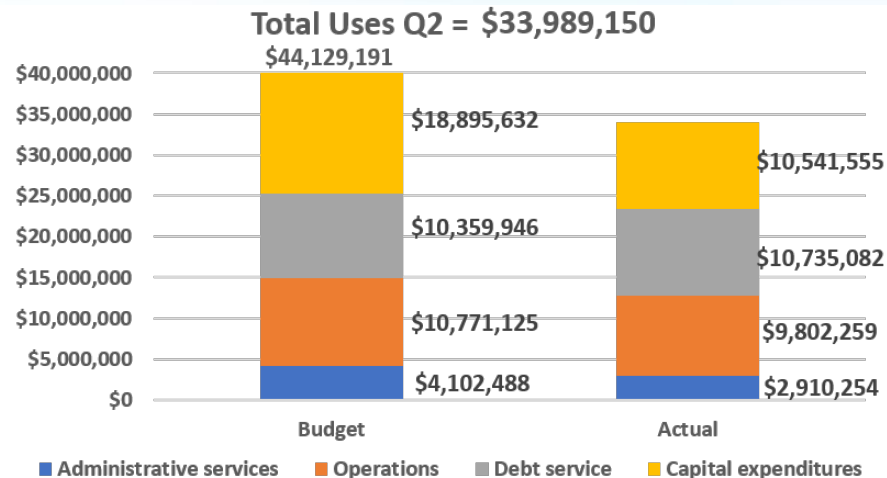


• All Funds – Uses

Total Uses - \$10.1M (23.0%) under budget

- **Administrative services** – \$1.2M (29.1%) under budget
- **Operations** – \$1.0M (9.0%) under budget
- **Debt service** – \$0.4M (3.6%) over budget*
- **Capital** – \$8.4M (44.2%) under budget – several projects bid in Q1/Q2 2026

* Related to timing of debt service payments





Budget / Annual Report / Audit Update

2027/2028 Operating & Capital Budget Calendar



- Draft biennial budget and RSCs for 2027-2028 have been reviewed by the Standing Committees
- Draft to be reviewed with the Board today
- Adoption at December Board meeting

Discovery Clean Water Alliance
Budget Preparation Calendar, Budget Years 2027-2028

2026 MAY							2026 JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2		1	2	3	4	5	6
3	4	5	6	7	8	9	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28	29	30				
31													

2026 JULY							2026 AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4							1
5	6	7	8	9	10	11	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29
							30	31					

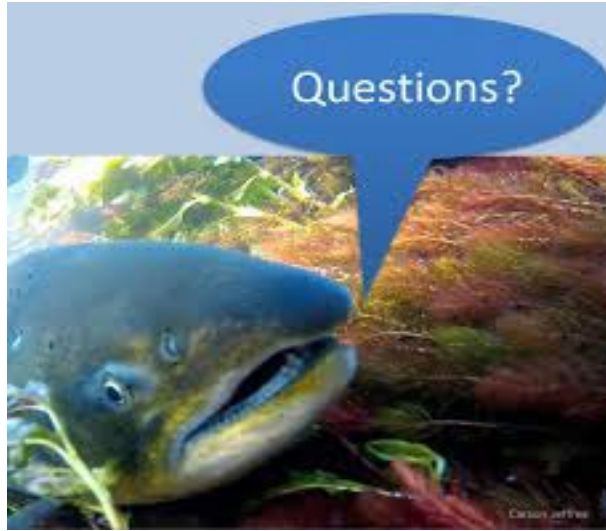
2026 SEPTEMBER							2026 OCTOBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2							1
			1	2	3	4	2	3	4	5	6	7	8
5	6	7	8	9	10	11	9	10	11	12	13	14	15
12	13	14	15	16	17	18	16	17	18	19	20	21	22
19	20	21	22	23	24	25	23	24	25	26	27	28	29
26	27	28	29	30	31		30	31					

2026 NOVEMBER							2026 DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4
8	9	10	11	12	13	14	5	6	7	8	9	10	11
15	16	17	18	19	20	21	12	13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25
29	30						26	27	28	29	30	31	

 Materials Due to Admin Lead
 Materials Due to L&P
 FAC/MC Committee Meetings
 Finance Board Meeting

© Discovery Clean Water Alliance, 2027/2028 Budget Calendar. The Discovery Clean Water Alliance 2027-2028 Budget Calendar.

Treasurer Report



David Logan

Treasurer,
Discovery Clean Water Alliance

Finance Director,
Clark Regional Wastewater District

(360) 993-8802
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Discovery Clean
Water Alliance

Staff Report

Board Meeting of September 18, 2026

6c. Draft 2027-2028 Operating and Capital Budget and Regional Service Charges

STAFF CONTACTS	PHONE	EMAIL
David Logan, Alliance Treasurer	360-993-8802	dlogan@crwwd.com
John Peterson, P.E., District General Manager	360-993-8819	jpeterson@crwwd.com

PURPOSE

This staff report introduces the draft 2027-2028 Operating and Capital Budget for Board consideration, along with Regional Services Charges (RSCs) necessary to fund the budget. The final Budget will be presented for adoption at the December 18, 2026 Board meeting, incorporating input received over the next several weeks from the Board of Directors and from Member agencies.

BUDGET CONTEXT

The Alliance has entered a brief interval between capital-intensive periods between the Phase 5 and Phase 6 Expansion Programs. While the R&R program continues to ramp upwards in the 2027-2028 biennium due to deferred maintenance, the CIP program contains no major construction projects. The 2027-2028 Alliance Budget is influenced by several significant but anticipated factors:

- SCTP Phase 6 planning and early design phase
- Deferred maintenance catchup
- Depletion of 2022 bond proceeds
- Retirement of SCTP Phase 4-era debt instruments

As a result of these budget drivers, Regional Service Charges (RSCs) paid by Members in the 2027-2028 biennium are approximately 19.3% higher than RSCs in the 2025-2026 biennium. However, this increase is lower than forecast in the previous period.

COMPLETE OPERATING AND CAPITAL BUDGET

The total Operating and Capital amounts to \$62.4 million in expenditures over the two-year budget period.

Operating expenditures (\$22.7 million) include:

- Administrative Services (\$5.8 million)
- Contract Operations – District (\$16.9 million)

Capital expenditures (\$39.7 million) include:

- Debt Service (\$11.2 million)
- Existing Assets Restoration and Replacement (R&R) (\$21.0 million)
- New Assets Construction in Process (CIP) (\$7.5 million)

Below is a summary of the draft 2027-2028 Operating and Capital Budget (in thousands):

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Sources				
Regional Service Charges - District	\$ 31,851	\$ 39,582	\$ 7,731	24%
Regional Service Charges - CofBG	8,736	8,854	118	1%
Interest Income	-	2,072	2,072	100%
Grant/Loan Proceeds	-	3,582	3,582	100%
Reserve Drawdown	20,244	8,274	(11,970)	-59%
Total Sources	60,831	62,364	1,533	3%
Uses				
O&M Administrative Services	5,471	5,816	345	
O&M District Operations	14,362	16,852	2,490	
Debt Service	13,813	11,242	(2,571)	
Existing Assets R&R	15,971	20,999	5,028	
New Assets Capital	11,214	7,455	(3,759)	
Total Uses	60,831	62,364	1,533	3%

Note: The 2027-2028 budget assumes that the BGFM Parallel Force Main Project is funded outside of RSCs and paid directly by the City of Battle Ground

REGIONAL SERVICE CHARGES SUMMARY

The District and Battle Ground fund \$48.4 million in RSCs to cover all operating and capital costs of the Alliance for sewer treatment services. Biennial and monthly RSCs are detailed as follows (in thousands):

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Annual Sources				
Regional Service Charges - District	\$ 31,851	\$ 39,582	\$ 7,731	24%
Regional Service Charges - CofBG	8,736	8,854	118	1%
Total Annual Sources	40,587	48,436	7,849	19%
Monthly Sources				
Regional Service Charges - District	\$ 1,327	\$ 1,649	\$ 322	24%
Regional Service Charges - CofBG	364	369	5	1%
Total Monthly Sources	1,691	2,018	327	19%

ADMINISTRATIVE SERVICES BUDGET

The 2027-2028 budget includes administrative expenses of \$5.8M, detailed as follows (in thousands):

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
Administrative Lead Contract				
Contract Services	2,880	3,639	759	
Professional Services	1,087	1,056	(31)	
Other Expenses	21	8	(13)	
Other Contracts/Expenses				
Insurance	1,113	700	(413)	
Legal Services	110	120	10	
Professional Services	210	251	41	
Other Expenses	50	42	(8)	
Total Uses	5,471	5,816	345	6%

One of the two components of the operating budget is the Administrative Services budget, which is divided into two parts: expenses paid by the District under the Administrative Lead Contract and expenses paid directly by the Alliance as administrative costs.

Significant changes from the amended 2025-2026 budget for the two components include:

Administrative Lead – Paid by District – Increase of \$715k

- Contract Services (District) – Increase of \$759k.
 - Propose a new position dedicated to the Alliance Capital Program as a Senior Project Manager (included in the previous forecast to begin in 2027). Position would allow advancement of the Alliance Capital Program, lower consultant costs and reduction inflation impacts.
 - Propose 0.25 FTE support related to Environmental Affairs to support changing regulatory requirements.
 - Routine annual salary and benefit increases.

Administrative Expenses – Paid by Alliance – Increase of \$232k

1. Insurance (WSRMP) – Decrease of \$413k. Insurance rates increases were historically budgeted at approximately 15%, but actual rate increases have slowed down significantly, so much so that the previous biennium was overbudgeted and the insurance budget has decreased for 2027-2028.

CONTRACT OPERATOR BUDGET

A two-year budget totaling \$16.9 million was provided by the District to operate all Regional Assets under contract, summarized as follows (in thousands):

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
SCTP Operations	12,948	15,112	2,164	
RTP Operations	1,295	1,593	298	
BGFM Operations	77	74	(3)	
Regional Biofilter Operations	29	66	37	
Regional Interceptors Operations	11	6	(5)	
Total Uses	14,360	16,851	2,491	17%

Significant changes from the 2025-2026 budget include:

- SCTP:
 - Treatment Chemicals – Increase of \$0.2 million. There is a new chemical requirement at SCTP for Ferric Chloride. As a result, chemical costs have increased by 49%.
 - Consultant Support – Increase of \$1.1M. Consultant support is programmed in the 2027-2028 biennium related to Asset Management and OT Engineering Support. These costs are not new to the Alliance, as they were previously carried in the Capital program.
- RTP:
 - Salaries & Benefits – Increase of \$197k. The 2027-2028 biennium programs 2.0 FTEs dedicated to RTP operations, where the previous biennium programmed 1.5 FTEs.
- Regional Biofilter:
 - Maintenance – Increase of \$37k. The current biennium includes additional maintenance costs relating to duty fan replacement, along with other minor necessary improvements.

DEBT SERVICE

The 2027-2028 budget includes debt service expenses of \$11.2M, detailed as follows (in thousands):

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
2021 Bonds	2,502	1,096	(1,406)	
2022 Bonds	7,102	7,102	-	
PWB Loans	4,077	3,044	(1,033)	
SRF Loans	132	-	(132)	
Total Uses	13,813	11,242	(2,572)	-19%

Significant changes from the 2025-2026 budget include:

- 2021 Bonds. The 2021 bonds are structured in tiers, with the principal portion of the bonds scheduled to decrease in 2027.
- PWB Loans. Three PWB loans and one SRF loan that were active in the 2025-2026 biennium were paid off in 2025-2026, resulting in lower debt service costs in 2027-2028.

EXISTING ASSETS REPAIR & REPLACEMENT (R&R)

The 2027-2028 budget includes 10 R&R projects and 2 R&R programs with expenses totaling \$21.0M, detailed as follows (in thousands):

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
SCTP Primary Sludge Pump Replacement	1,200	-		
SCTP Primary Clarifier Mechanism Replacement	127	-		
SCTP Dewatering Equipment Replacement	6,196	6,431		
SCTP Influent Screen Replacement (Phase 6)	54	171		
SCTP UV System Replacement (Phase 6)	2,723	4,037		
SCTP Waste Gas Burner Replacement	208	-		
117th Street Pump Station Controls Replacement	858	-		
SCTP Influent Flow Meter Replacements	537	1,139		
SCTP Aeration Equipment Replacement	320	2,845		
SCTP Thickening Equipment Replacement	264	418		
SCTP Secondary Clarifier Rehabilitation	537	160		
SCTP Solids Hopper	-	214		
SCTP Aeration Blower 5 Improvement	-	266		
Battle Ground Force Main / Eaton Road Relocation		354		
Building Systems R&R Program	2,629	1,613		
Annual R&R Allowance	318	3,351		
Total Uses	15,971	20,999	5,028	31%

A portion of the R&R projects budgeted for 2027-2028 will be funded with reserves generated from the 2022 Bond issuance. Additionally, a \$3 million grant has been awarded for the SCTP UV System Replacement project, and a \$0.6 million grant has been awarded for the SCTP Aeration Equipment Replacement project, with funds to be drawn down between 2027 and 2028.

NEW ASSET CAPITAL (CIP)

The 2025-2026 budget includes 7 CIP projects with expenses totaling \$7.5M, detailed as follows (in thousands):

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
117th Street PS Capacity Upgrade	-	1,071		
SCTP Phase 5A2	100	-		
SCTP Phase 5B2	1,500	550		
RTP Secondary Process Improvements	300	-		
SCTP Phase 6 Expansion	3,972	2,885		
SCTP Class A Biosolids Upgrade	892	-		
RTP Effluent Cooling	-	500		
Ridgefield Treatment Plant Decommission	-	428		
BGFM Parallel Force Main*	2,553	1,607		
General Sewer Plan	1,897	414		
Total Uses	11,214	7,455	(3,759)	-34%

* Not included in Regional Service Charges

There is no major construction programmed in the 2027-2028 biennium. In 2027, the design phases of the SCTP Phase 6 project and the BGFM Parallel Force Main project will begin (funded directly by Battle Ground, not through RSCs). In 2029-2030, the construction phase of several projects will begin.

SUMMARY

The complete Operating and Capital Budget totals \$62.4 million in expenditures over the two-year budget period, with sources and uses as follows (in thousands):

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Sources				
Regional Service Charges - District	\$ 31,851	\$ 39,582	\$ 7,731	24%
Regional Service Charges - CofBG	8,736	8,854	118	1%
Interest Income	-	2,072	2,072	100%
Grant/Loan Proceeds	-	3,582	3,582	100%
Reserve Drawdown	20,244	8,274	(11,970)	-59%
Total Sources	60,831	62,364	1,533	3%
Uses				
O&M Administrative Services	5,471	5,816	345	
O&M District Operations	14,362	16,852	2,490	
Debt Service	13,813	11,242	(2,571)	
Existing Assets R&R	15,971	20,999	5,028	
New Assets Capital	11,214	7,455	(3,759)	
Total Uses	60,831	62,364	1,533	3%

Note: The 2027-2028 budget assumes that the BGFM Parallel Force Main Project is funded outside of RSCs and paid directly by the City of Battle Ground

The primary drivers of the increases in Regional Service Charges are as follows:

- Less of the R&R program is funded by bond proceeds from the 2022 issuance, resulting in higher RSCs related to R&R expenses.
- Increase in Operator expenditures, specifically in treatment chemicals.

ACTION REQUESTED: Board endorsement of the draft 2027-2028 Operating and Capital Budget and referral for adoption at the December 18 Board meeting.

Discovery Clean Water Alliance

2027-2028 Draft Operating and Capital Budget
and Regional Service Charges

Alliance
Board of Directors
September 18, 2026



Laying the foundation
for a **vibrant economy**
and **healthy environment**

2027-2028 Draft Budget Overview



- Executive Director Message
- Total Budget Summary
- Regional Service Charges
- Operating Budget Overview and Drivers
 - 2027-2028 Administrative Services
 - 2027-2028 Operator Budgets
- Capital Budget Overview and Drivers
 - 2027-2028 Debt Service Budget
 - 2027-2028 R&R Budget
 - 2027-2028 CIP Budget
- Total Budget Summary





Executive Director Message



Executive Director Message



- **Administrative Lead Budget Overview**
 - Develop sustaining capital program team
 - Additional project management support
 - Additional regulatory support – environmental affairs
- **Operations Budget Overview**
 - Continue to work toward sustaining O&M program
 - Catch up on deferred maintenance
 - Reduce on-demand failures
 - Addressing new chemical requirements
 - Transfer of asset management and engineering operations consultant support to Operations budget, previously held in the Capital program

Executive Director Message



- **Capital Budget Overview**
 - R&R Program Implementation
 - Addressing deferred maintenance
 - Use balance of available bond proceeds
 - Phasing into a sustaining program over 20 years
 - Capital Improvement Program
 - Beginning SCTP Phase 6 Expansion, 117th St PS Upgrade
 - One new project: RTP Effluent Cooling
 - Primary focus: 20-Year General Sewer Plan
 - GMA Compliance
 - Important near-term decisions
 - Viable long-term program



Total Budget Summary



2027-2028 Budget Summary



- Sources (funding) – Total \$62.4M
 - RSCs – District and Battle Ground (\$48.4M)
 - Planned reserve drawdown (\$8.3M)
 - Federal and State grants (\$3.0M and \$0.6M)
 - Interest Income (\$2.1M)
- Uses (expenditures) – Total \$62.4M
 - Debt instruments phasing out
 - Addresses deferred maintenance and R&R program catch-up
 - Increased operational chemical requirements
 - Shift in consultant support from AL to Operator budget (asset management)
- Market Conditions
 - Inflation beginning to stabilize



2027-2028 Total Budget Summary



Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Sources				
Regional Service Charges - District	\$ 31,851	\$ 39,582	\$ 7,731	24%
Regional Service Charges - CofBG	8,736	8,854	118	1%
Interest Income	-	2,072	2,072	100%
Grant/Loan Proceeds	-	3,582	3,582	100%
Reserve Drawdown	20,244	8,274	(11,970)	-59%
Total Sources	60,831	62,364	1,533	3%
Uses				
O&M Administrative Services	5,471	5,816	345	
O&M District Operations	14,362	16,852	2,490	
Debt Service	13,813	11,242	(2,571)	
Existing Assets R&R	15,971	20,999	5,028	
New Assets Capital	11,214	7,455	(3,759)	
Total Uses	60,831	62,364	1,533	3%

NOTE: The 2027-2028 budget assumes that the BGFM Parallel Force Main Project is funded outside of RSCs and paid directly by the City of Battle Ground



Regional Service Charges



2027-2028 Regional Service Charges



Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Annual Sources				
Regional Service Charges - District	\$ 31,851	\$ 39,582	\$ 7,731	24%
Regional Service Charges - CofBG	8,736	8,854	118	1%
Total Annual Sources	40,587	48,436	7,849	19%
Monthly Sources				
Regional Service Charges - District	\$ 1,327	\$ 1,649	\$ 322	24%
Regional Service Charges - CofBG	364	369	5	1%
Total Monthly Sources	1,691	2,018	327	19%

NOTE: Draft 2027-2028 RSCs are lower than previously forecast

2027-2028 Regional Service Charges (continued)



Total RSC Increase - \$7.8M or 19%

Note: The BGFM Parallel Force Main Project is modeled to be paid directly by the City of Battle Ground, not through RSCs

Key Increase Drivers

- RSCs for R&R and CIP – In the previous biennium, most R&R costs were funded by the 2022 bond issuance. Those bond proceeds will be fully expended in 2027 and will only partially cover capital expenditures, as the Alliance transitions to a sustaining asset management funding model over time.

Major Decrease

- RSCs for Debt Service – Four debt instruments either were or will be paid off going into the 2027-2028 biennium
 - More debt instruments were retired that were City-funded than District-funded, leading to District RSCs increasing more proportionally



Operating Budget Overview & Drivers





2027-2028 Administrative Services

Total Expense Increase - \$289k or 5%

Key Increase Drivers

- Contract Services
 - Additional Senior Project Manager to support Alliance Capital Program (as previously modeled)
 - 0.25 FTE Environmental Affairs position
 - Routine Salary increases (3% COLA for 2027)
- Professional Services – increase Capital Program Support

Major Decreases

- Insurance – rates increased less than expected in previous biennium

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
Administrative Lead Contract				
Contract Services	2,880	3,639	759	
Professional Services	1,087	1,056	(31)	
Other Expenses	21	8	(13)	
Other Contracts/Expenses				
Insurance	1,113	700	(413)	
Legal Services	110	120	10	
Professional Services	210	251	41	
Other Expenses	50	42	(8)	
Total Uses	5,471	5,816	345	6%

2027-2028 Operator Budgets

Total Expense Increase - \$2.5M or 17%

Key Increase Drivers

- SCTP Operations
 - New chemical requirements
 - Asset Management & Engineering Support Consultant cost increases (previously held in Capital Program)
 - Routine annual salary increases (3% COLA in 2025)
- RTP Operations
 - 2.0 dedicated FTEs rather than 1.5 FTE
- Regional Biofilter Operations
 - Maintenance cost increases – fan replacement

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
SCTP Operations	12,948	15,112	2,164	
RTP Operations	1,295	1,593	298	
BGFM Operations	77	74	(3)	
Regional Biofilter Operations	29	66	37	
Regional Interceptors Operations	11	6	(5)	
Total Uses	14,360	16,851	2,491	17%

Major Decreases

- None



Capital Budget Overview & Drivers





2027-2028 Debt Service Budget

Total Expense Decrease - \$2.6M or 19%

Key Increase Drivers

- None

Major Decreases

- 2021 Bonds – these bonds are tiered, and the principal portion is reducing in 2027
- PWB Loans – three of the SCTP Phase 4 PWB loans and the SRF loan were paid off in the previous biennium

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
2021 Bonds	2,502	1,096	(1,406)	
2022 Bonds	7,102	7,102	-	
PWB Loans	4,077	3,044	(1,033)	
SRF Loans	132	-	(132)	
Total Uses	13,813	11,242	(2,572)	-19%

2027-2028 R&R Budget

Total Expense Increase - \$5.0M or 31%

Key Increase Drivers

- Several key projects are under construction in the 2027-2028 biennium
- Several projects were expected to be completed in the previous biennium, but work is extending into the current period

NOTE: A large portion of the 2025-2026 R&R budget was funded with proceeds from the 2022 bond issuance. Those proceeds will be fully spent in 2027 and will only fund a portion of the 2027-2028 expenditures

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
SCTP Primary Sludge Pump Replacement	1,200	-		
SCTP Primary Clarifier Mechanism Replacement	127	-		
SCTP Dewatering Equipment Replacement	6,196	6,431		
SCTP Influent Screen Replacement (Phase 6)	54	171		
SCTP UV System Replacement (Phase 6)	2,723	4,037		
SCTP Waste Gas Burner Replacement	208	-		
117th Street Pump Station Controls Replacement	858	-		
SCTP Influent Flow Meter Replacements	537	1,139		
SCTP Aeration Equipment Replacement	320	2,845		
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SCTP Aeration Blower 5 Improvement	-	266		
Battle Ground Force Main / Eaton Road Relocation		354		
Building Systems R&R Program	2,629	1,613		
Annual R&R Allowance	318	3,351		
Total Uses	15,971	20,999	5,028	31%

2027-2028 CIP Budget

Total Expense Decrease - \$3.8M or 34%

Key Decrease Drivers

- The CIP program continues wind-down related to the completion of Phase 5 and ramp-in efforts for Phase 6

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Uses				
117th Street PS Capacity Upgrade	-	1,071		
SCTP Phase 5A2	100	-		
SCTP Phase 5B2	1,500	550		
RTP Secondary Process Improvements	300	-		
SCTP Phase 6 Expansion	3,972	2,885		
SCTP Class A Biosolids Upgrade	892	-		
RTP Effluent Cooling	-	500		
Ridgefield Treatment Plant Decommission	-	428		
BGFM Parallel Force Main*	2,553	1,607		
General Sewer Plan	1,897	414		
Total Uses	11,214	7,455	(3,759)	-34%

* Not included in Regional Service Charges



Total Budget Summary



2027-2028 Total Budget Summary



Total Sources Increase – \$1.5M or 3%

- 2022 Bond proceeds will be fully spent in 2027 and not available to fund capital expenditures, as in previous biennia

Total Uses Increase - \$1.5M or 3%

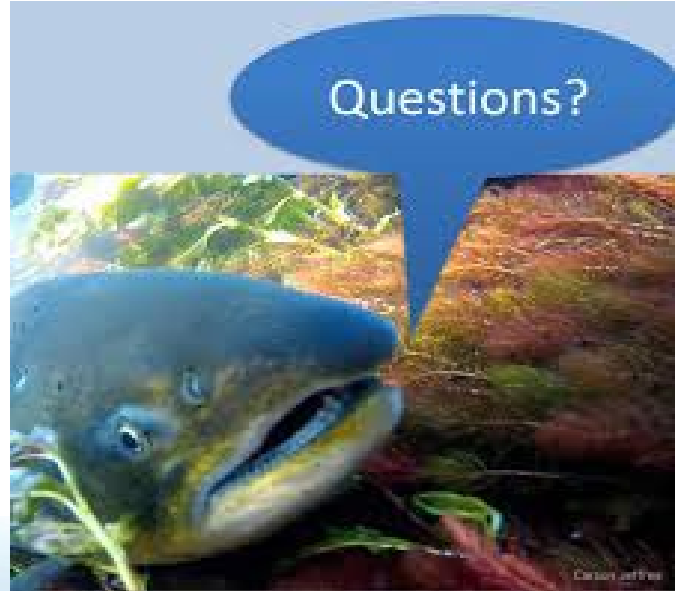
- New chemical requirements
- Increase in R&R Program costs
- Debt instruments paid off and reduction in related debt service

Description	Amended Budget 2025-2026	Draft Budget 2027-2028	\$ Change	% Change
Sources				
Regional Service Charges - District	\$ 31,851	\$ 39,582	\$ 7,731	24%
Regional Service Charges - CofBG	8,736	8,854	118	1%
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New Assets Capital	11,214	7,455	(3,759)	
Total Uses	60,831	62,364	1,533	3%

Note: The 2027-2028 budget assumes that the BGFM Parallel Force Main Project is funded outside of RSCs and paid directly by the City of Battle Ground

Questions and Answers

2027-2028 Draft Operating and Capital Budget and Regional Service Charges





Discovery Clean
Water Alliance

Staff Report

Board Meeting of September 18, 2026

6d. Administrative Lead Report

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Leanne Mattos, Board Clerk / Administrative Supervisor	360-993-8823	lmattos@crwwd.com

PURPOSE: The Alliance is a regional wastewater transmission and treatment utility now in its twelfth year of operation. The Administrative Lead (AL) Report provides a quarterly update for the Board of Directors highlighting key efforts.

Please see the attached presentation covering the following topics:

- Operations Program Update
- Regulatory Compliance Program Update
- Federal Advocacy Update
- State Advocacy Update

Attachments:

- A. Ecology & NACWA Performance Awards
- B. Goldendale Sentinel article (Part 2) regarding biosolids land application
- C. Ecology's Sampling Guidance for PFAS in Biosolids
- D. EPA's Draft Guidance Memorandum for Reducing Risk from PFOA and PFOS in Biosolids
- E. NACWA's Advocacy Alert analysis of EPA's Draft Guidance and next steps

ACTION REQUESTED: No specific action required. Please provide policy-level guidance for the various activities described in this report.

Discovery Clean Water Alliance

Administrative Lead Report

Alliance
Board of Directors
September 18, 2026



Laying the foundation
for a **vibrant economy**
and **healthy environment**

Administrative Lead Report



- Operations Program
- Regulatory Compliance Program
- Federal Advocacy
- State Advocacy



Operations Program

Operations Program Update



Salmon Creek Treatment Plant Operations

- SCTP and RTP received Ecology's 2025 WWTP Outstanding Performance Award and NACWA's 2025 Gold Peak Performance Award (attached to AL Report)
- All required annual compliance reports submitted in 2Q
- New biosolids hauling contracts awarded to Denali Water Solutions and Wayne Resleff Dump Trucking
- Battle Ground PS / CPU energy efficiency optimization efforts underway
- Ferric chloride digester gas pilot began July 27
- Goldendale Sentinel article regarding biosolids application in Klickitat County (attached to AL Report)

Ridgefield Treatment Plant Operations

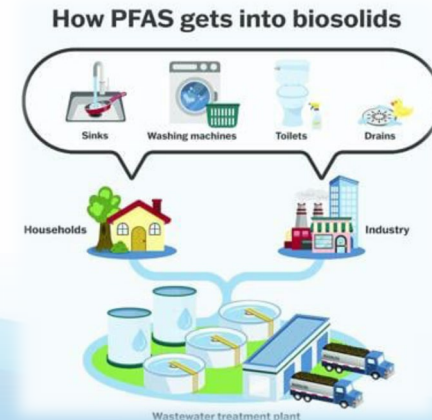
- Full NPDES compliance in 2Q 2026
- Continuing to pilot single AB operation to mitigate effluent discharge temperatures

117th Street Pump Station

- Offline for dry season

36th Avenue Pump Station

- Fully operational; no issues





Regulatory Compliance Program

Regulatory Compliance Program Update

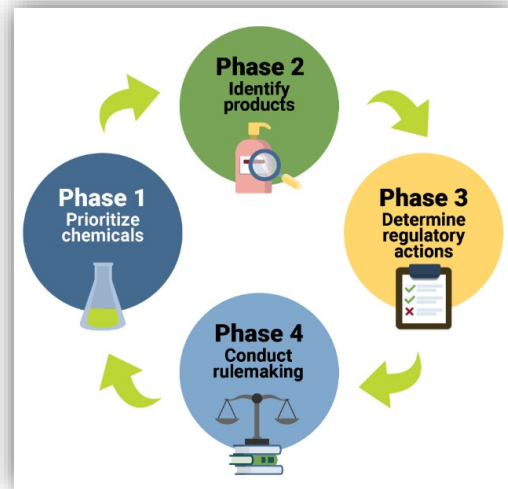


Industrial Pretreatment Program

- Fats Oils & Grease (FOG): Preferred pumper program – one vendor placed on probation – responding and making improvements
- New Categorical Industrial User has applied for coverage under Alliance Pretreatment Program – under review & site improvements are underway

PFAS in Biosolids

- **State Regulatory Actions: Biosolids General Permit**
 - Permit is in effect through 2030 and no longer under appeal
- **Ecology PFAS Study – Next Steps:**
 - SB 5033 implementation (Amended Chapter 70A.226 RCW)
 - ECY Sampling Guidance has been released (attached to AL Report)
 - Sampling Action Plan (SAP) to be developed and approved by ECY prior to the 2027 sampling implementation
- **EPA Draft Guidance for Reducing Risk from PFOA and PFOS in Biosolids**
 - Taking comments until October 5 (date extended)



Southwest Clean Air Agency

- New permit issued 4/30/2026
- Chemical dosing pilot is underway; trending toward meeting Oct 27 partial compliance schedule



Federal Advocacy

Federal Advocacy Update



- **Tracking Bills in current Congress:**
 - WIPPES Bill (HR2269/S1092) – Prohibits marketing of wipes as “flushable”
 - Passed Senate and House, differences to be reconciled
 - CERCLA Bill (HR1267) – Legislation regarding PFAS liability exemption for public utilities
 - Currently in a relevant House Committee; House Bill has 34 sponsors
- **Federal Earmark Request to all 3 offices for Salmon Creek Treatment Plant (SCTP) Aeration Equipment Replacement, \$2M request**
 - Congresswoman Gluesenkamp Perez and Senator Cantwell submitted to relevant Appropriations Committees
 - House Committee approved at \$746,868
 - Senate Committee action TBD





State Advocacy

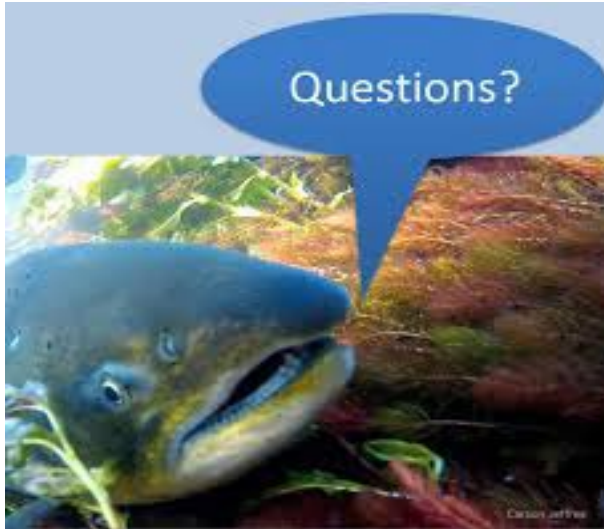
State Advocacy Update



- **Public Works Board (PWB) 2026 Loan Program**
 - \$202M loan program authorized during May 15 PWB meeting
 - \$10M loan application submitted July 30
- **\$600k State Capital Budget request** for Salmon Creek Treatment Plant (SCTP) Aeration Equipment Replacement Project – **approved** in final budget package, supported by Representative McClintock
 - Alliance contracting for grant with Commerce



Administrative Lead Report



John M. Peterson, P.E.

Executive Director
Discovery Clean Water Alliance

General Manager
Clark Regional Wastewater District

(360) 993-8819
jpeterson@crwwd.com

Attachment A



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

July 6, 2026

Discovery Clean Water Alliance Board of Directors
Discovery Clean Water Alliance
8000 NE 52nd Ct.
Vancouver, WA 98665

RE: 2025 Wastewater Treatment Plant Outstanding Performance Awards

Dear Discovery Clean Water Alliance Board of Directors:

Congratulations! The Ridgefield Wastewater Treatment Facility is receiving the 2025 "Wastewater Treatment Plant Outstanding Performance" award. Of approximately 300 wastewater treatment plants statewide, yours was among the top wastewater treatment plant operations in 2025.

Ecology evaluates specific domestic wastewater treatment plant information for individual permit compliance. Your plant is one of the top performers for regularly meeting permit criteria, conducting monitoring, and reporting data.

Ecology acknowledges the exceptional level of effort required to protect water quality and provide this critical service to the communities you serve. Dedicated and proficient operators are essential to successful plant operations and to protecting the health of Washington's waters.

Thank you for your continued commitment to excellence.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Kenning", is written over a light gray circular stamp.

Jon Kenning, PhD.
Water Quality Program Manager

Discovery Clean Water Alliance Board of Directors
July 6, 2026
Page 2

cc: Andrew Kolosseus
Bolun Wang
Ginger Reddig





STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

July 6, 2026

Discovery Clean Water Alliance Board of Directors
Discovery Clean Water Alliance
8000 NE 52nd Ct.
Vancouver, WA 98665

RE: 2025 Wastewater Treatment Plant Outstanding Performance Awards

Dear Discovery Clean Water Alliance Board of Directors:

Congratulations! The Salmon Creek Wastewater Treatment Plant is receiving the 2025 "Wastewater Treatment Plant Outstanding Performance" award. Of approximately 300 wastewater treatment plants statewide, yours was among the top wastewater treatment plant operations in 2025.

Ecology evaluates specific domestic wastewater treatment plant information for individual permit compliance. Your plant is one of the top performers for regularly meeting permit criteria, conducting monitoring, and reporting data.

Ecology acknowledges the exceptional level of effort required to protect water quality and provide this critical service to the communities you serve. Dedicated and proficient operators are essential to successful plant operations and to protecting the health of Washington's waters.

Thank you for your continued commitment to excellence.

Sincerely,

Jon Kenning, PhD.
Water Quality Program Manager

Discovery Clean Water Alliance Board of Directors

July 6, 2026

Page 2

cc: Andrew Kolosseus
Bolun Wang
Ginger Reddig



Gold AWARD



The National Association of Clean Water Agencies is pleased to recognize

**Clark Regional Wastewater District, WA
Ridgefield Wastewater Treatment Plant**

in recognition of its complete and consistent permit compliance during the calendar year

2025

A handwritten signature in black ink that reads "Adam Krantz". The signature is written in a cursive style with a horizontal line underneath it.

NACWA Chief Executive Officer



Gold AWARD



The National Association of Clean Water Agencies is pleased to recognize

Clark Regional Wastewater District, WA
Salmon Creek Wastewater Treatment Plant

in recognition of its complete and consistent permit compliance during the calendar year

2025

A handwritten signature in black ink that reads "Adam Krantz". The signature is written over a thin horizontal line.

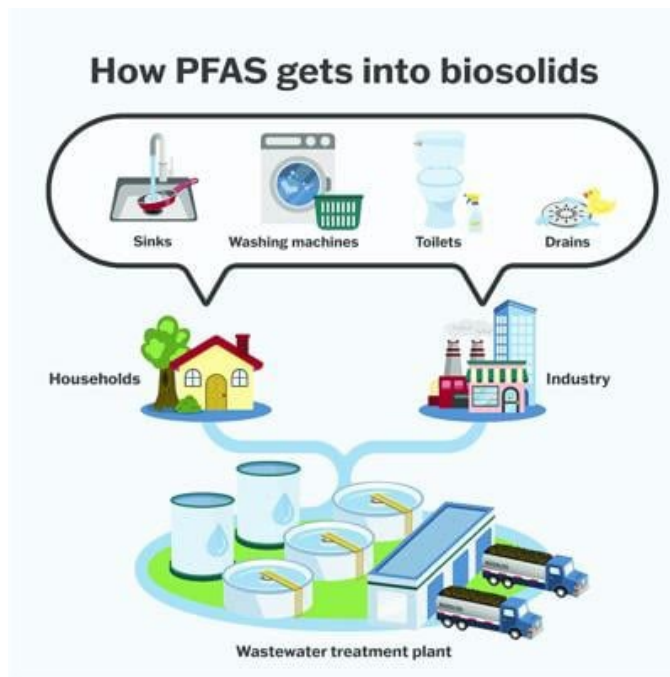
NACWA Chief Executive Officer



Attachment B

Biosolids part 2: The biosolid divide

Lorrie Fox For The Sentinel | Jun 17, 2026



FOREVER CHEMICALS: The issue with biosolids may boil down to chemicals in them (PFAS) that never break down.
Washington Department of Ecology

(This is the second in a series of stories on the use of biosolids—processed human waste—in the county.)

The pungent scent that drifted across Centerville in recent weeks focused public attention on biosolids and their use on Klickitat County hay and wheat fields. Some local farmers view biosolids as a tool for improving soil health and crop production, while others view them as harmful to the environment, people, and animals, as statewide biosolids testing and restrictions continue to evolve.

Since concerns first surfaced in the county, additional reporting and regulatory information has added context to the debate.



A review of information from the 2024 (Biosolids) Annual Report from the Washington State Department of Ecology (Ecology) obtained through a public records request includes Klickitat County records. Those records indicate biosolids from several wastewater treatment facilities were land-applied, sent to landfill, or transferred for further treatment within the county.

Dave Bennett, communications manager for Ecology's Solid Waste Management Program, added:

- North Bend WWTP (wastewater treatment plant) in North Bend, King County, Washington, sent 91.12 dry tons to the Roosevelt [Regional] Landfill (in Roosevelt, WA) for disposal. "North Bend generated materials at about 16% solids content and transports it to Roosevelt for landfiling. There is no incineration occurring here. North Bend is not a Central Region facility," said Bennett.
- Bingen/White Salmon WWTP (Klickitat County) sent 41 dry tons for land application (pasture grass) on an agricultural site at Fernandez Ranch, in Centerville, Washington. "This facility no longer land applies. The last application was in 2024..." Bennett said.
- Dallesport WWTP sent 8.12 dry tons from their own customers and received 8.12 dry tons from Lyle WWTP. According to Bennett, in total they sent one load of 16.24 dry tons of Class B biosolids to Natural Selection Farms BUF (beneficial use facility) for land application.
- Klickitat WWTP sent 2.29 dry tons to Bishop Sanitation SMF (sludge management facility) for further treatment "into Class B biosolids," Bennett noted.

One dry ton is equal to 2,000 pounds of material at zero percent moisture content.

According to a fifth-generation Klickitat County farmer who requested anonymity due to concerns about how his comments would be portrayed, the effects of biosolids are more apparent in the field than in the ongoing public and regulatory debate. The farmer, who has worked in agriculture since childhood and said he has training in crop and soil science, said biosolids have become an important part of his soil management practices.

“The saying is a pound of biology is worth 10 of chemistry,” the farmer said, noting that biosolids provide a slow-release package of nitrogen, phosphorus, and calcium that is not economically viable in standard synthetic fertilizers.

His perspective is supported by long-term research from Washington State University (WSU), which has found that in semi-arid systems biosolids can, under certain conditions, improve soil water-holding capacity, enhance soil structure and reduce compaction, and increase soil organic carbon over time.

The farmer said that using biosolids “is the closest we can [come] to completing the nutrient cycle replenishing the nutrients of the soil depleted over the last 150 years.”

Research from the USDA Agricultural Research Service in the Columbia Plateau shows that eastern Washington soils have been farmed for more than a century and have, in many cases, lost roughly half of their original soil organic carbon compared to pre-settlement conditions, largely due to tillage, residue loss, and erosion.

“We can tell to the line where biosolids are applied and have seen a 3 to 5 times increase in plant health and vigor, which equals yield,” he said, adding that biosolids provide organic nitrogen that breaks down over time and offers longer-term benefits without the same nitrogen toxicity concerns associated with synthetic inputs.

According to the U.S. Environmental Protection Agency (EPA), biosolids supply nutrients and organic matter that become available to plants as they decompose, with results that vary based on soil conditions, crops, and how the material is applied.

Additionally, the farmer referenced what he called “the biological effects of the material,” saying microbes are reintroduced into the soil in a way that helps “prime” the soil ecosystem and support greater biodiversity, “which translates into healthier soil, which leads to healthier plants, livestock, and people...Soil and forage tests show improvement with every application to the historical baselines of this area” he said.

Soil science research from the EPA and USDA describes biosolids as a source of organic matter that can stimulate microbial activity and nutrient cycling in soil. Studies in soil ecology also refer to a “priming effect,” where organic inputs increase biological activity that helps break down and redistribute nutrients. The USDA Natural Resources Conservation Service notes that these soil microbes play a key role in overall soil function, though outcomes vary depending on soil type, climate, and management practices.

The farmer said using biosolids requires significant investment in infrastructure, including facilities for year-round receiving and storage, and said that coordinating and spreading deliveries is a time-consuming process.

According to the EPA, getting biosolids from treatment plants to farmland involves transporting the material, coordinating with permitted sites, and timing applications around weather, soil conditions, and crop cycles.

Biosolids programs require significant infrastructure because the material is produced year-round but often applied to fields only during certain seasons.

While supporters argue biosolids provide an affordable source of nutrients and help improve soil conditions, not all farmers agree.

Local no-till farmer Robby James is concerned about potential contaminants in biosolids and their long-term impacts on soil health, water quality, and human and animal health. “We simply cannot allow these toxins in our system... In my opinion it is the affordability aspect that keeps this stuff in Klickitat County. Our producers are struggling to stay above water,” James said.

No-till farming involves planting crops without disturbing the soil to reduce erosion, preserve soil structure, and improve water retention, according to the U.S. Department of Agriculture’s Natural Resources Conservation Service.

James’s concerns point to the complexity of modern wastewater treatment and the potential for contaminants to persist in biosolids. “Modern wastewater receives everything society washes down the drain, including pharmaceuticals, household chemicals, industrial compounds, and PFAS, ‘forever chemicals,’” he said. “Treatment can reduce pathogens, but many chemicals are not completely removed and may remain in the biosolids. Biosolids contain trace amounts of metals and other contaminants. Repeated applications over many years can lead to accumulation in soil. Nutrients, pathogens, or chemicals can also move off-site through runoff or leaching, particularly if biosolids are overapplied or used on unsuitable ground.”

According to the EPA, modern wastewater treatment plants receive waste from homes, businesses, and industries, meaning everything from household chemicals to industrial compounds can enter the treatment process. While treatment removes many contaminants and reduces pathogens, some substances can remain in biosolids, leading to regulations that govern how they are tested and used in land applications.

James described several approaches used by producers in the region, including synthetic fertilizers, biosolids, and reduced-tillage systems such as

no-till. The WSU Extension and USDA's Natural Resources Conservation Service note that these practices are widely used across Washington agriculture, with adoption varying by crop type, soil conditions, climate, and individual farm management goals.

For James, the concern extends to the soil's living ecosystem. "Damage to the rhizosphere is the real issue, as these toxins reduce activity in the soil, meaning it kills beneficial bacteria and mycelium, the things that make our food more nutritious and provide information for our immune system to program itself," he said. "It is the bacteria that makes nutrients more available to plants... This weakens resistance to disease in plants and depletes soil of usable nutrients."

Soil scientists and the USDA's Natural Resources Conservation Service describe the rhizosphere as a biologically active zone around plant roots where bacteria and fungi help cycle nutrients, break down organic matter, and support plant growth. Researchers say these microbial communities can be sensitive to changes in soil conditions and land management practices, which may influence nutrient availability and plant resilience. While biosolids are regulated and commonly used as fertilizer, federal agencies acknowledge that their composition can vary and that they must be managed to protect soil health and water quality.

According to James, biosolids can also create risks for farmers working under regenerative or organic certification standards. "If you have a regenerative system or want to grow organic, the use of biosolids in your system means those toxins will also get picked up by your system and not only harm your soil health but it can also disqualify a producer from achieving organic certification," he said.

USDA organic standards prohibit the use of sewage sludge (biosolids) in certified organic production, meaning land where biosolids have been applied cannot qualify for organic certification. Regenerative certification programs vary, but several, particularly those aligned with organic standards, also restrict or exclude biosolids as an input, which can limit certification eligibility for producers who use them. Input restrictions tied to soil health and production standards can affect eligibility depending on the certifier's criteria.

Field-level observations sit alongside ongoing scientific and regulatory work examining how biosolids behave in the environment and how contaminants such as PFAS are measured and regulated.

Biosolids have been scrutinized nationwide over PFAS, or per- and polyfluoroalkyl substances, a class of chemicals also referred to as “forever chemicals” because they never break down. Under Washington's Senate Bill 5033, the Department of Ecology must publish PFAS biosolids sampling guidance by July 1, 2026, followed by statewide testing through 2028 and recommendations to lawmakers in 2029 (Washington State Department of Ecology; Ballard Spahr). Beginning in 2027, municipal wastewater facilities will be required to conduct regular PFAS sampling.

Ecology has cautioned that federal modeling relies on assumptions that may not reflect local conditions and has emphasized the need for Washington-specific data (Washington State Department of Ecology; Ballard Spahr). For instance, a 2024 Ecology study of 37 wastewater treatment facilities found PFAS levels varied across facilities but were generally low relative to screening benchmarks (Washington State Department of Ecology).

Other states have taken restrictive approaches to biosolids use. Maine, for example, tightened biosolids regulations after PFAS contamination linked to



land-applied biosolids affected some farms, leading to higher disposal costs and changes in waste management practices (BioCycle; NACWA Cost Analysis).

Additionally, Washington's rules limiting organic material in landfills under RCW 70A.205 are gradually reducing what can be disposed of in landfills and shifting pressure toward other disposal options.

"Recently, a law has passed that limits the amount of organic material being put into landfills. Landfilling biosolids is already pretty expensive, I'm not exactly sure of the cost, but as that law comes into effect, there may be a possibility that application sites will be more in demand," Bennett said. "That would be a definite question for biosolids companies, whether they're planning for that or not."

In Klickitat County, supporters say biosolids return nutrients to soil, reduce waste, and support farmland productivity, while opponents cite odor and contamination concerns as Washington expands PFAS testing and debate continues over how risks are defined and managed.

Attachment C



Sampling Guidance for PFAS in Biosolids

**In support of 2025 amendments to Revised Code of
Washington (RCW) 70A.226.020**

Solid Waste Management Program

Washington State Department of Ecology
Olympia, Washington

June 2026, Publication 26-07-033

Publication Information

This document is available on the Department of Ecology's website at:
<https://apps.ecology.wa.gov/publications/summarypages/2607033.html>

Related Information

Ecology biosolids webpage: [PFAS in biosolids sampling law](#)
[Biosolids PFAS Field Log \(ECY 26-07-034\)](#)

Contact Information

Solid Waste Management Program

P.O. Box 47600
Olympia, WA 98504-7600
Phone: 360-407-6000

Website: [Washington State Department of Ecology](#)

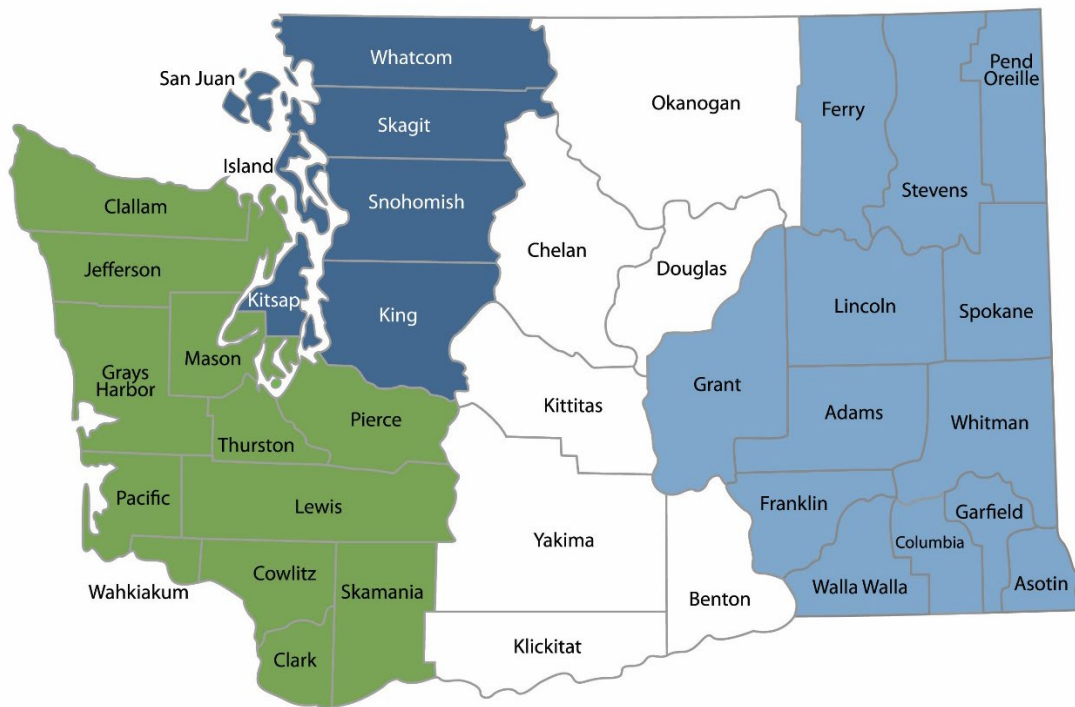
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To request an ADA accommodation, contact Ecology by phone at 360-407-6831 or email at ecyadacoordinator@ecy.wa.gov, or visit <https://ecology.wa.gov/accessibility>. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit ecology.wa.gov/ADA for more accessibility information.

Department of Ecology's Regional Offices

Map of Counties Served



Southwest Region
360-407-6300

Northwest Region
206-594-0000

Central Region
509-575-2490

Eastern Region
509-329-3400

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	P.O. Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	P.O. Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 West Alder Street Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 North Monroe Spokane, WA 99205	509-329-3400
Headquarters	Statewide	P.O. Box 46700 Olympia, WA 98504	360-407-6000

Sampling Guidance for PFAS in Biosolids

**In support of 2025 amendments to
Revised Code of Washington (RCW) 70A.226.020**

Solid Waste Management Program
Washington State Department of Ecology
Olympia, WA

June 2026 | Publication 26-07-033



DEPARTMENT OF
ECOLOGY
State of Washington

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Acknowledgements

Ecology met with a Biosolids Workgroup made up of representatives within and adjacent to the biosolids field to discuss this sampling guidance document. We thank these participants for providing Ecology input on sampling frequency that balances treatment plant resources with the need to produce quality data.

1. Introduction

In 2025, the Legislature passed House Bill 5033, amending chapter 70A.226 Revised Code of Washington (RCW). The changes enacted by this bill require the Department of Ecology (Ecology) to publish sampling guidance for facilities generating biosolids. This guidance must clarify sampling requirements for Per- and Polyfluoroalkyl Substances (PFAS), including frequency of sampling and methodology. This publication establishes the biosolids sampling frequency and provides additional information about the required sampling event(s) for facilities subject to the law.

1.2. Law summary

House Bill 5033 amended chapter 70A.226 RCW to require sampling and analysis for PFAS in biosolids at facilities regulated under the Statewide General Permit for Biosolids Management (General Permit). Those facilities must have their biosolids analyzed at the frequency established in this document between January 1, 2027, and June 30, 2028. Samples must be analyzed by an accredited lab using [EPA method 1633A](#) (or EPA method 1633).

Chapter 70A.226 RCW requires all sampling results be provided to Ecology for review and compilation into a report. The report will summarize the levels of PFAS found in biosolids generated and/or land-applied in Washington state, as well as recommendations on how to proceed based on the analysis. While drafting the report, Ecology must consult with an advisory committee made up of representatives outlined in RCW 70A.226.025. The report will be made available to the legislature and public by July 1, 2029.

1.3. Biosolids Workgroup

RCW 70A.226.020 directs Ecology to establish the sampling frequency for biosolids facilities during the 18-month mandatory sampling period. To receive input on the sampling frequency Ecology assembled the Biosolids Workgroup, made up of representatives within and adjacent to the biosolids field. The main concerns Ecology identified during these discussions were:

- The quantity of data that could be collected given the 18-month sampling period and sampling frequency restriction in the law
- Whether the data would be specific enough to be able to identify trends like seasonal variation
- The high costs of mandated sampling, especially for small facilities with few resources

1.4. Decision-making process

Ecology worked to address concerns identified by the Biosolids Workgroup to the furthest extent possible while developing the sampling frequency. The law established the 18-month sampling period and restrictions on sampling frequency. Also, the timing at which biosolids are generated at each facility is highly variable, making capturing seasonal variation and differences in treatment technologies challenging or impossible during the sampling period. This means the data generated will not provide statistically significant results for individual facilities. As a result of these challenges, we are focusing on gathering data at a statewide level for larger categories of facilities.

Ecology also considered the following:

- The well-documented limitation identified with using EPA method 1633A to analyze liquid biosolids. The current best practice to address this limitation doubles the cost of sampling for facilities generating liquid biosolids. This impacts over half of the estimated 310 biosolids facilities subject to this sampling.
- We based our PFAS sampling frequency on the monitoring schedule already established in federal biosolids regulations and our state rules, Washington Administrative Code (WAC) 173-308-150. This monitoring schedule was developed by the EPA to ensure biosolids meet standards and is supported by biosolids research.

2. Who is Required to Sample

Ecology identified all facilities subject to these PFAS sampling requirements in [Appendix A](#). All facilities permitted under the Statewide General Permit for Biosolids Management (general permit) are required to sample except the following:

- Beneficial Use Facilities (BUFs) as defined in WAC 173-308-080,
- facilities that manage ONLY septage and do NOT treat to biosolids standards,
- facilities that land apply ONLY septage,
- facilities informed by Ecology in advance that sampling requirements don't apply.

To verify whether a facility is subject to these PFAS sampling requirements review [Appendix A](#).

3. Using an Accredited Lab for Analysis

Facilities must use a lab accredited by Ecology to conduct analysis of their biosolids for PFAS. A list of accredited labs can be found in [Ecology's Lab Search Database](#).

Ecology recommends facilities get in touch with an accredited lab early to discuss sampling needs. EPA method 1633A has strict temperature and time requirements for shipping. At the time of publication, there were a limited number of laboratories accredited for EPA method

1633A within or close to Washington state. These conditions could result in lab backlogs and longer processing times.

Ecology is developing two documents to assist facilities with lab coordination and results submission. These documents should be provided to the lab when establishing a contract and with the Chain of Custody (COC) when submitting samples. Ecology will publish these documents to the [PFAS in biosolids sampling law webpage](#) before the start of the sampling period:

- **Biosolids PFAS Lab Instructions Cover Sheet (pdf)**. This is intended to assist facilities when communicating sampling needs to the lab.
- **Biosolids PFAS Results Template (excel)**. This is the format in which results must be submitted to Ecology.

3.1. How to identify an accredited lab

1. Navigate to [Ecology's Lab Search Database](#).
2. Select **Search by method**.
3. Enter "1633" into the search bar and check the box to **Show only labs that accept public samples**.
4. Select **Search by partial method name**.
5. Confirm **Solid and chemical materials** is listed under the **MatrixTypeDescription** column.
6. Select a lab from the list.

4. Approved Sampling and Analysis Plan (SAP)

A Sampling and Analysis Plan (SAP) is a complete and concise plan that will enable facilities to conduct sample collection, preservation, and shipment to a lab with little or no assistance outside of this document.

All facilities subject to the PFAS sampling law must conduct sampling in accordance with an approved SAP. Ecology is developing a SAP template specific to this PFAS sampling requirement and will publish it to the [PFAS in biosolids sampling law webpage](#) before the start of the sampling period.

Facilities must complete the SAP template and submit to Ecology for review and approval in advance of sampling activities. Results submitted from sampling conducted without an approved SAP will not be accepted and may be cause for enforcement actions.

5. Sampling Frequency

Required sampling frequencies can be found in [Table 1](#) below. Individual facility sampling requirements can be found in [Appendix A](#). **If facilities foresee an issue with their assigned sampling frequency, they must notify Ecology immediately to identify a solution.**

Ecology referenced the existing biosolids monitoring frequency established in rule under chapter 173-308-150 WAC when generating the PFAS sampling frequency. Additionally, RCW 70A.226.020 limits sampling frequency to no more than quarterly. Ecology based the sampling frequency on:

- The amount of biosolids a facility generates on an annual basis. Ecology calculated each facility's average annual generation using annual report data from 2020-2024.
- The type of biosolids a facility generates: dewatered or liquid, and
- The facility operations.

5.1. Voluntary sampling

The sampling frequencies assigned in [Appendix A](#) represent the minimum frequency required by law. If facilities are conducting additional PFAS sampling using EPA method 1633A (or EPA method 1633) during the sampling period and are willing to share those results with Ecology, please inform the appropriate [region biosolids coordinator](#) as soon as possible. Ecology is interested in reviewing additional results and would appreciate the opportunity to include them in our analysis and final report.

5.2. Biosolids types

Dewatered biosolids refer to biosolids or sewage sludge that has a percent solids of greater than 5%.

Liquid biosolids refer to biosolids or sewage sludge that has a percent solids of 5% or less.

5.2.1. Liquid biosolids analysis

Ecology used percent solids in determining sampling frequency because there is a limitation with EPA method 1633A (or EPA method 1633) when used on biosolids of 5% solids or less. Other states have identified this same limitation.

To address this limitation, facilities generating liquid biosolids will also be required to have the lab run a duplicate to confirm results are representative of the biosolids sampled. **This means costs for a single liquid biosolids sample will be twice that of a single dewatered biosolids sample.** The required sampling frequency for facilities generating liquid biosolids is half of what is required for dewatered facilities to keep costs balanced.

Additional info about this method limitation is discussed in Ecology's [Assessment of PFAS levels in Washington state biosolids](#) under the *Liquid biosolids samples* section.

5.3. Biosolids Sampling Frequency Tables

Table 1 identifies the required sampling frequencies for different categories of operations. Additional information and schedules for each category follow.

Table 1. Biosolids PFAS Sampling Frequency

	Metric tons (U.S. tons) per 365-day period	Sampling events	Samples taken per sampling event	Frequency
Drying Beds	Greater than zero but less than 1,500 (1,653)	1	2	Once
	Equal to or greater than 1,500 (1,653)	1	6	Once
Mechanical Dewatering and Heat Drying	Greater than zero but less than 1,500 (1,653)	2	1	Once a year (annually)
	Equal to or greater than 1,500 (1,653)	6	1	Every three months (quarterly)
Non-Lagoon Liquid Biosolids	Greater than zero but less than 1,500 (1,653)	1	1	Once
	Equal to or greater than 1,500 (1,653)	3	1	Every six months (biannually)
Lagoons	N/A	1	1	Once

Drying beds

Facilities sampling from drying beds will only be required to have one sampling event. During the event they must collect either 2 or 6 samples, depending on their average annual generation. Facilities conducting this sampling will be directed to create a sampling grid map as part of their SAP. Using the grid map will, to the extent possible, ensure each sample is representative of different time periods.

Facilities with drying beds must provide their lab results to Ecology according to the sampling schedule in Table 2.

Table 2. Drying bed sampling schedule

Sampling start date	Sampling end date	Results due to Ecology by
1/1/2027	5/18/2028	6/1/2028

5.3.1. Mechanical dewatering and heat drying

Facilities generating dewatered biosolids via mechanical dewatering or heat drying, and without the use of lagoons, must provide their lab results to Ecology according to the appropriate sampling schedule below in either Table 3 or 4 depending on their required sampling frequency. To determine which schedule to use, refer to [Table 1](#).

Storage

Facilities that store dewatered biosolids (not in a drying bed, or from a lagoon) will sample according to this category (mechanical dewatering and heat drying). These facilities should take samples directly from the dewatering machinery, not the storage location when possible.

Incinerators

Facilities that incinerate biosolids will sample according to this category (mechanical dewatering and heat drying). These facilities must pull samples after dewatering but before incineration.

Composters

Facilities that compost biosolids will sample according to this category (mechanical dewatering and heat drying). These facilities must pull samples after dewatering but before composting.

Table 3. Mechanical dewatering and heat drying sampling schedule, annually

Sampling event	Sampling start date	Sampling end date	Results due to Ecology by
First	1/1/2027	12/24/2027	1/7/2028
Second	1/1/2028	5/18/2028	6/1/2028

Table 4. Mechanical dewatering and heat drying sampling schedule, quarterly

Sampling event	Sampling start date	Sampling end date	Results due to Ecology by
First	1/1/2027	3/17/2027	3/31/2027
Second	3/18/2027	6/16/2027	6/30/2027
Third	6/17/2027	9/16/2027	9/30/2027
Fourth	9/17/2027	12/24/2027	1/7/2028
Fifth	12/25/2027	3/17/2028	3/31/2028
Sixth	3/18/2028	5/18/2028	6/1/2028

5.3.2. Non-lagoon liquid biosolids

For facilities generating liquid biosolids that do not operate lagoons, each sampling event will require a single sample to be sent to the lab. The lab will run two analyses on the sample.

Facilities should communicate this with the lab in advance.

This means costs for a single liquid biosolids sample will be twice that of a single dewatered biosolids sample.

Facilities generating liquid biosolids that do not operate lagoons must provide their lab results to Ecology according to the appropriate sampling schedule below in either Table 5 or 6 depending on their required sampling frequency. To determine which schedule to use, refer to [Table 1](#).

Table 5. Non-lagoon liquid biosolid sampling schedule, once

Sampling start date	Sampling end date	Results due to Ecology by
1/1/2027	5/18/2028	6/1/2028

Table 6. Non-lagoon liquid biosolid sampling schedule, biannually

Sampling event	Sampling start date	Sampling end date	Results due to Ecology by
First	1/1/2027	6/16/2027	6/30/2027
Second	6/17/2027	12/24/2027	1/7/2028
Third	12/25/2027	5/18/2028	6/1/2028

5.3.3.All lagoons

For facilities that operate lagoons only one sample is required, regardless of whether the materials are dewatered after removal. Each sampling event will require a single sample to be sent to the lab. For facilities that send a liquid biosolids sample, the lab will run two analyses on the sample. **Facilities should communicate this with the lab in advance.**

This means costs for a single liquid biosolids sample will be twice that of a single dewatered biosolids sample.

Facilities with lagoons will only be required to conduct sampling once during the sampling period. Lagoons often store multiple years of material ranging from 1 year to 20 or more years, so sampling once from these materials is sufficient for this sampling period.

Table 7. Lagoon sampling schedule

Sampling start date	Sampling end date	Results due to Ecology by
1/1/2027	5/18/2028	6/1/2028

5.3.4.Special case facilities

The treatment plants across Washington use a wide variety of technologies and systems to treat wastewater. As such not all facilities required to sample fit within one of the sampling frequency categories above. An example of this is facilities that generate both dewatered and liquid biosolids. When determining appropriate sampling frequencies for these facilities, Ecology will prioritize sampling dewatered materials intended for beneficial use.

6. Biosolids PFAS Monitoring Portal

The Biosolids PFAS Monitoring Portal is an online platform developed to simplify the results submission process and assist with tracking sampling event(s). Facilities will have access to this portal via WA.gov and must use it to submit their results to Ecology.

Secure Access Washington (SAW) is the current platform used for submitting various Ecology reports, including Annual Biosolids Reports. SAW is being retired because it was based on outdated technology that no longer meets the needs of residents or state agencies. When these sampling requirements take effect in 2027, SAW will be replaced with WA.gov accounts. **When WA.gov launches, users will need to set up a new WA.gov account to access the Biosolids PFAS Monitoring Portal.**

6.1. Tracking sampling event(s)

The Biosolids PFAS Monitoring Portal will indicate each facility's sampling event(s) as prescribed by [Table 1](#) above. It will reflect all associated sampling timeframes and due dates for results submission as outlined in Tables 2-7.

Ecology has assigned due dates for each sampling event earlier than the deadline included in the law (September 30, 2028). This will help to ensure facilities are submitting samples appropriately. It will also mitigate impacts from potentially long lab turnaround times and provide Ecology time to help troubleshoot sampling issues that may arise.

6.2. Submitting results

At a minimum, facilities will be required to submit the following for each sampling event:

- Biosolids PFAS Results Template (excel) (introduced under [Using an accredited lab for analysis](#) above),
- Full data analysis results including Quality Assurance /Quality Controls (QA/QC) and COC (pdf), and
- Copy of the [Biosolids PFAS Field Log \(pdf\)](#).

Facilities should provide the Biosolids PFAS Results Template to the lab with the PFAS Lab Instruction Cover Sheet (introduced under [Using an accredited lab for analysis](#) above) when submitting results. Some labs may charge an additional fee to make use of this format. **In the event results are received in another format, facilities are responsible for transferring the data into the template before submitting them to Ecology.**

The template, lab cover sheet and [field log](#) will be made available on the [PFAS in biosolids sampling law webpage](#) before the start of the sampling period.

7. Enforcement Procedures

Facilities who fail to have their biosolids analyzed by an accredited lab and submit the results to Ecology in accordance with this guidance and their assigned sampling frequency due dates may receive a civil penalty of up to \$5,000 per day, per violation.

If Ecology determines there is an acceptable explanation for noncompliance, Ecology may accept a late results submission. **If a facility foresees an issue with the prescribed sampling period, they must notify Ecology immediately to identify a solution and/or ask for a submittal extension.**

Appendix A. Facility Sampling Frequency for PFAS in Biosolids

Table 8 is a list of all facilities subject to the PFAS sampling requirements and their required sampling frequency. **If facilities foresee an issue with their prescribed sampling frequency, they must notify Ecology immediately to identify a solution.**

In addition, if facilities are interested in conducting additional voluntary sampling, please inform the appropriate [region biosolids coordinator](#) as soon as possible. Ecology is interested in reviewing additional results and would appreciate the opportunity to include them in our analysis and final report.

Table 8. Biosolids facility list with required PFAS sampling frequency

Permitted facilities	Permit #	Sampling frequency	Sampling schedule table	Coordinator
33575 PARK LAKE LAG	BT8054	Once	Section 5.3.4, Table 7	Mounia Sassi
ABERDEEN WWTP	BA0037192	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
ACE ACME SEPTIC	BT0501	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
AIRWAY HEIGHTS WRP	BT1203	Once a year (annually)	Section 5.3.2, Table 3	Mounia Sassi
ALBION WWTP	BA0022608	Once	Section 5.3.4, Table 7	Terri Costello
ALCOA WENATCHEE WWTP	BA0000680	Once	Section 5.3.1, Table 2	Ruby Irving-Hewey
ALDERBROOK RESORT WWTF	BA0037753	Once	Section 5.3.3, Table 5	Eddie Simons
ALDERWOOD PICNIC POINT WWTF	BA0020826	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
ALMIRA WWTP	BT5295	Once	Section 5.3.4, Table 7	Mounia Sassi
ANACORTES WWTP	BA0020257	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
ARLINGTON WWTP	BA0022560	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
ASOTIN COUNTY PUD WWTP	BA0021113	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
ASOTIN WWTF	BA0020818	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
AW JBLM SOLO POINT WWTP	BA0021954	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
BADGER LAKE ESTATES	BT8057	Once	Section 5.3.4, Table 7	Mounia Sassi

BAINBRIDGE ISLAND WINSLOW WWTP	BA0020907	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
BELLINGHAM POST POINT WWTP	BA0023744	Every three months (quarterly)	Section 5.3.2, Table 4	Amber Corfman
BENTON CITY WWTP	BA0051349	Once	Section 5.3.4, Table 7	Ruby Irving-Hewey
BINGEN WHITE SALMON WWTP	BA0022373	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
BIORECYCLING LSP CENTRALIA	BT9901	Once	Section 5.3.3, Table 5	Eddie Simons
BIORECYCLING LSP NORTH RANCH	BT9908	Once	Section 5.3.4, Table 7	Eddie Simons
BIRCH BAY WS DIST	BA0029556	Once	Section 5.3.3, Table 5	Amber Corfman
BLAINE LIGHTHOUSE POINT WRF	BT1007	Once	Section 5.3.3, Table 5	Amber Corfman
BREMERTON WESTSIDE WWTP	BA0029289	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
BREWSTER WWTP	BA0021008	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
BRIDGEPORT WWTP	BA0024066	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
BUCKLEY WWTP	BA0023361	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
BURLINGTON WWTP	BA0020150	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
CAMAS WWTP	BA0020249	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
CARBONADO WWTP	BA0020834	Once	Section 5.3.4, Table 7	Eddie Simons
CARLYON BEACH WWTP	BA0037915	Once	Section 5.3.3, Table 5	Shawnté Greenway
CARNATION FARMS WWTP	BT5139	Once	Section 5.3.3, Table 5	Amber Corfman
CASHMERE WWTP	BA0023183	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
CASTLE ROCK WWTP	BA0022683	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
CATHLAMET WWTP	BA0022667	Once	Section 5.3.1, Table 2	Shawnté Greenway
CENTRALIA WWTP	BA0020982	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway

CHEHALIS REG WRF	BA0021105	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
CHELAN CO PESHASTIN WWTP	BA0052175	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
CHELAN CO PUD NO 1 LAKE WENATCHEE WWTP	BA0052094	Once	Section 5.3.4, Table 7	Ruby Irving-Hewey
CHELAN WWTP	BA0020605	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
CHENEY WWTP	BA0020842	Once a year (annually)	Section 5.3.2, Table 3	Mounia Sassi
CHEWELAH WWTP	BA0023604	Once a year (annually)	Section 5.3.2, Table 3	Mounia Sassi
CLALLAM BAY POTW	BA0024431	Once	Section 5.3.3, Table 5	Eddie Simons
CLAYTON SEWER SYSTEM WWTP	BT5392	Once	Section 5.3.4, Table 7	Mounia Sassi
CLE ELUM UPPER KITTITAS CO REG WWTP	BA0021938	Once	Section 5.3.4, Table 7	Ruby Irving-Hewey
COLFAX WWTP	BA0020613	Once	Section 5.3.4, Table 7	Terri Costello
COLLEGE PLACE WWTP	BA0020656	Once	Section 5.3.1, Table 2	Terri Costello
COLTON WWTF	BA0023175	Once	Section 5.3.4, Table 7	Terri Costello
COLVILLE WWTP	BA0022616	Once	Section 5.3.4, Table 7	Mounia Sassi
COMMUNITY WS DIST WWTP	BT5529	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
CONCONULLY WWTP	BT5528	Once	Section 5.3.4, Table 7	Ruby Irving-Hewey
CONCRETE WWTP	BA0020851	Once	Section 5.3.4, Table 7	Amber Corfman
CONNELL WWTP	BT5342	Once	Section 5.3.4, Table 7	Terri Costello
COULEE CITY WWTF	BA0020711	Once	Section 5.3.4, Table 7	Mounia Sassi
COULEE DAM WWTP	BT0905	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
COUPEVILLE WWTP	BA0029378	Once	Section 5.3.3, Table 5	Amber Corfman
COWICHE REG WWTP	BA0052396	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
COWLITZ CO RYDERWOOD WWTP	BA0038695	Once	Section 5.3.4, Table 7	Shawnté Greenway

COWLITZ CO TOUTLE WWTP	BA0037770	Once	Section 5.3.1, Table 2	Shawnté Greenway
COWLITZ CO WOODBROOK WWTP	BA0023975	Once	Section 5.3.4, Table 7	Shawnté Greenway
CRESCENT BAR ISLAND WWTF	BT5277	Once	Section 5.3.1, Table 2	Mounia Sassi
CRESTON WWTP	BT8021	Once	Section 5.3.4, Table 7	Mounia Sassi
CRYSTAL MOUNTAIN WWTP	BT5073	Once	Section 5.3.3, Table 5	Eddie Simons
CURLEW JOB CORPS WWTP	BT5396	Once	Section 5.3.4, Table 7	Mounia Sassi
CUSICK WWTP	BT8025	Once	Section 5.3.4, Table 7	Mounia Sassi
DAVENPORT WWTP	BA0045578	Once	Section 5.3.4, Table 7	Mounia Sassi
DAYTON WWTP	BA0020729	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
DCWA SALMON CREEK WWTP	BA0023639	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
DEER PARK WWTP	BT8016	Once	Section 5.3.4, Table 7	Mounia Sassi
DES MOINES CREEK WWTP	BA0020958	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
DIAMOND LAKE WS WWTP	BT8029	Once	Section 5.3.4, Table 7	Mounia Sassi
DOUGLAS CO SD NO 1 WWTP	BA0020621	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
DRYDEN WASTEWATER TREATMENT FACILITY	BT0005562	Once	Section 5.3.3, Table 5	Ruby Irving- Hewey
DUVALL WWTP	BA0029513	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
EASTSOUND SW DIST WWTP	BA0030571	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
EATONVILLE WWTP	BA0037231	Once	Section 5.3.4, Table 7	Eddie Simons
EDMONDS WWTP	BA0024058	Every three months (quarterly)	Section 5.3.2, Table 4	Amber Corfman
ELLENSBURG WWTP	BA0024341	Once	Section 5.3.4, Table 7	Ruby Irving- Hewey
ELMA STP	BA0023132	Once	Section 5.3.4, Table 7	Eddie Simons
ENDICOTT WWTP	BA0023981	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello

ENTIAT WWTP	BA0051276	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
ENUMCLAW WWTP	BA0020575	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
EPHRATA WRP	BT8031	Once	Section 5.3.1, Table 2	Mounia Sassi
EVERETT WPCF	BA0024490	Once	Section 5.3.4, Table 7	Amber Corfman
EVERSON WWTP	BA0020435	Once	Section 5.3.3, Table 5	Amber Corfman
FAIRFIELD WWTP	BA0045489	Once	Section 5.3.4, Table 7	Mounia Sassi
FARMINGTON WWTP	BT5344	Once	Section 5.3.4, Table 7	Terri Costello
FERNDAL WWTP	BA0022454	Once	Section 5.3.4, Table 7	Amber Corfman
FIELDSTONE ROLLING BAY WWTP	BA0023469	Once	Section 5.3.3, Table 5	Amber Corfman
FISHERMAN BAY SD WWTP	BA0030589	Once	Section 5.3.4, Table 7	Amber Corfman
FORKS WWTP	BT6031	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
FREEMAN SCHOOL DIST NO 358 WWTP	BA0045403	Once	Section 5.3.4, Table 7	Mounia Sassi
FRIDAY HARBOR WWTF	BA0023582	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
GARFIELD WWTP	BA0044822	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
GEORGE WWTP	BT8062	Once	Section 5.3.4, Table 7	Mounia Sassi
GIG HARBOR WWTP	BA0023957	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
GOLDENDALE WWTP	BA0021121	Once	Section 5.3.4, Table 7	Ruby Irving- Hewey
GRAND COULEE ELECTRIC CITY WWTP	BA0044857	Once	Section 5.3.1, Table 2	Mounia Sassi
GRANDVIEW WWTP	BA0052205	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
GRANGER WWTP	BA0022691	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
GRANITE FALLS WWTP	BA0021130	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
GRAYS HARBOR CO PACIFIC BEACH WWTP	BA0037095	Once	Section 5.3.3, Table 5	Eddie Simons

HARRINGTON WWTP	BA0045462	Once	Section 5.3.4, Table 7	Mounia Sassi
HARTSTENE POINTE WWTP	BA0038377	Once	Section 5.3.3, Table 5	Eddie Simons
HAYDEN AREA REG SEWER BOARD WWTP	BT0907	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
HOLMES HARBOR SD WWTP	BT7373	Once	Section 5.3.3, Table 5	Amber Corfman
HOQUIAM WWTP	BA0020915	Once	Section 5.3.4, Table 7	Eddie Simons
ILWACO WWTF	BA0023159	Once	Section 5.3.3, Table 5	Shawnté Greenway
IONE WWTP	BA0045373	Once	Section 5.3.4, Table 7	Mounia Sassi
ISLAND CO WWTP	BT9905	Once	Section 5.3.4, Table 7	Amber Corfman
KALAMA WWTP	BA0020320	Once	Section 5.3.3, Table 5	Shawnté Greenway
KENNEWICK WWTP	BA0044784	Once	Section 5.3.1, Table 2	Ruby Irving- Hewey
KETTLE FALLS WWTP	BT5297	Once	Section 5.3.4, Table 7	Mounia Sassi
KING CO BRIGHTWATER WWTP	BT1106	Every three months (quarterly)	Section 5.3.2, Table 4	Amber Corfman
KING CO CARNATION WWTP	BT0804	Once	Section 5.3.3, Table 5	Amber Corfman
KING CO SOUTH WWTP	BA0029581	Every three months (quarterly)	Section 5.3.2, Table 4	Amber Corfman
KING CO VASHON WWTP	BA0022527	Once	Section 5.3.3, Table 5	Amber Corfman
KING CO WEST POINT WWTP	BA0029181	Every three months (quarterly)	Section 5.3.2, Table 4	Amber Corfman
KITSAP CO CENTRAL KITSAP WWTP	BA0030520	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
KITSAP CO KINGSTON WWTP	BA0032077	Once	Section 5.3.3, Table 5	Amber Corfman
KITSAP CO MANCHESTER WWTP	BA0023701	Once	Section 5.3.3, Table 5	Amber Corfman
KITSAP CO SD NO 7 FORT WARD WWTP	BA0030317	Once	Section 5.3.3, Table 5	Amber Corfman
KITTITAS CO WD NO 6 VANTAGE WWTP	BA0050474	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey

KLICKITAT CO DALLESPORT WWTP	BT9226	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
KLICKITAT CO LYLE WWTP	BA0050482	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
KLICKITAT CO WISHRAM WWTP	BA0051292	Once	Section 5.3.4, Table 7	Ruby Irving-Hewey
LA CENTER WWTP	BA0023230	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
LA CONNER WWTP	BA0022446	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
LACROSSE WWTP	BT5345	Once	Section 5.3.4, Table 7	Terri Costello
LAKE STEVENS SD WWTP	BA0020893	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
LAKEHAVEN LAKOTA WWTP	BA0022624	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
LAKEHAVEN REDONDO WWTP	BA0023451	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
LANGLEY WWTP	BA0020702	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
LEAVENWORTH WWTP	BA0020974	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
LEWIS CO WD NO 2 ONALASKA WWTP	BA0024546	Once	Section 5.3.3, Table 5	Shawnté Greenway
LEWIS CO WD NO 6 MOSSYROCK WWTP	BA0037141	Once	Section 5.3.3, Table 5	Shawnté Greenway
LIBERTY LAKE WRF	BA0045144	Once a year (annually)	Section 5.3.2, Table 3	Mounia Sassi
LIBERTY SCHOOL DIST NO 362 WWTP	BT5397	Once	Section 5.3.3, Table 5	Mounia Sassi
LIL JOHN SANITARY SERVICE SMF	BT0531	Once	Section 5.3.3, Table 5	Amber Corfman
LIND WWTP	BA0021237	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
LONG BEACH WWTP	BA0022489	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
LOON LAKE SD NO 4 WWTP	BT8019	Once	Section 5.3.4, Table 7	Mounia Sassi
LOTT CLEAN WATER ALLIANCE BUDD INLET WWTP	BA0037061	Every three months (quarterly)	Section 5.3.2, Table 4	Shawnté Greenway
LYNDEN WWTP	BA0022578	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
LYNNWOOD WWTP	BA0024031	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman

MABTON WWTP	BA0020648	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
MARYSVILLE WWTP	BA0022497	Once	Section 5.3.4, Table 7	Amber Corfman
MASON CO BELFAIR WRF	BT6224	Once	Section 5.3.3, Table 5	Eddie Simons
MASON CO NORTH BAY CASE INLET WWTP	BT6039	Once	Section 5.3.3, Table 5	Eddie Simons
MASON CO RUSTLEWOOD WWTP	BA0038075	Once	Section 5.3.3, Table 5	Eddie Simons
MATTAWA WWTP	BT8066	Once	Section 5.3.4, Table 7	Mounia Sassi
MCCLEARY WWTF	BA0024040	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
MEDICAL LAKE WWTP	BA0021148	Once a year (annually)	Section 5.3.2, Table 3	Mounia Sassi
MESA WWTP	BT5337	Once	Section 5.3.4, Table 7	Terri Costello
METALINE FALLS WWTP	BA0021156	Once	Section 5.3.4, Table 7	Mounia Sassi
METALINE WWTP	BA0020699	Once	Section 5.3.1, Table 2	Mounia Sassi
MONROE WWTP	BA0020486	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
MONTESANO WWTP	BA0024660	Once	Section 5.3.4, Table 7	Eddie Simons
MORTON WWTP	BA0022659	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
MOSES LAKE DUNES WWTP	BT8012	Once	Section 5.3.4, Table 7	Mounia Sassi
MOSES LAKE LARSON WWTP	BT8024	Once	Section 5.3.4, Table 7	Mounia Sassi
MOSSYROCK WWTP	BA0021024	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
MOUNT VERNON WWTP	BA0024074	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
MT RAINIER NP LONGMIRE WWTP	BT9916	Once	Section 5.3.3, Table 5	Eddie Simons
MT RAINIER NP OHANAPECOSH WWTP	BT9915	Once	Section 5.3.3, Table 5	Eddie Simons
MT RAINIER NP PARADISE WWTP	BT9917	Once	Section 5.3.3, Table 5	Eddie Simons
MUKILTEO WATER AND WWD WWTF	BA0023396	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
MULLEN HILLS TERRACE MHP WWTP	BT8041	Once	Section 5.3.3, Table 5	Mounia Sassi

NACHES WWTP	BA0022586	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
NEWHALEM WWTP	BA0029670	Once	Section 5.3.3, Table 5	Amber Corfman
NEWPORT WWTP	BA0022322	Once a year (annually)	Section 5.3.2, Table 3	Mounia Sassi
NORTH BEND WWTP	BA0029351	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
NORTH BONNEVILLE WWTP	BA0023388	Once	Section 5.3.3, Table 5	Shawnté Greenway
NORTHWEST CASCADE PACIFIC FACILITY SMF	BT0504	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
OAK HARBOR WWTP	BA0020567	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
OAKESDALE WWTP	BA0044792	Once	Section 5.3.4, Table 7	Terri Costello
OCEAN SHORES WWTP	BA0023817	Once	Section 5.3.4, Table 7	Eddie Simons
ODESSA WWTP	BA0045560	Once	Section 5.3.1, Table 2	Mounia Sassi
OKANOGAN WWTP	BA0022365	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
OLYMPIC NP BARNES POINT WWTP	BT9920	Once	Section 5.3.3, Table 5	Eddie Simons
OLYMPIC NP KALALOECH WWTP	BT0410	Once	Section 5.3.4, Table 7	Eddie Simons
OLYMPIC WS PORT LUDLOW WWTP	BA0021202	Once	Section 5.3.3, Table 5	Eddie Simons
OMAK WWTP	BA0020904 0	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
OROVILLE WWTP	BA0022390	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
ORTING WWTP	BA0020303	Once	Section 5.3.4, Table 7	Eddie Simons
OTHELLO WWTP	BA0022357	Once	Section 5.3.4, Table 7	Terri Costello
PALOUSE WWTP	BA0044806	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
PASCO WWTP	BA0044962	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
PATEROS WWTP	BA0020559	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
PE ELL WWTP	BA0020192	Once	Section 5.3.1, Table 2	Shawnté Greenway

PENN COVE WS DIST WWTP	BA0029386	Once	Section 5.3.3, Table 5	Amber Corfman
PIERCE CO CHAMBERS CREEK REG WWTP	BA0039624	Every three months (quarterly)	Section 5.3.2, Table 4	Eddie Simons
PIERCE CO TEHALEH CASCADIA WWTP	BT6215	Once	Section 5.3.3, Table 5	Eddie Simons
POMEROY WWTP	BA0021164	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
PORT ANGELES WWTP	BA0023973	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
PORT GAMBLE RESOURCE RECOVERY FACILITY	BA0022292	Once	Section 5.3.3, Table 5	Amber Corfman
PORT HADLOCK WATER RECLAMATION FACILITY	BA0006066	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
PORT TOWNSEND PAPER CORP WWTP	BA0000922	Once	Section 5.3.3, Table 5	Eddie Simons
PORT TOWNSEND WWTP	BA0037052	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
PROSSER WWTP	BA0020800	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
PULLMAN WWTP	BA0044652	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
PUYALLUP WPCP	BA0037168	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
QUINCY WWTP	BT5278	Once	Section 5.3.4, Table 7	Mounia Sassi
REARDAN WWTP	BA0045306	Once	Section 5.3.4, Table 7	Mounia Sassi
REPUBLIC WWTP	BT8020	Once	Section 5.3.4, Table 7	Mounia Sassi
RICHLAND WWTP	BA0020419	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
RIDGEFIELD WWTP	BA0023272	Once	Section 5.3.3, Table 5	Shawnté Greenway
RITZVILLE STP	BT8028	Once	Section 5.3.4, Table 7	Terri Costello
ROCHE HARBOR WWTP	BA0021822	Once	Section 5.3.4, Table 7	Amber Corfman
ROCK ISLAND WWTP	BA0501487	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
ROCKFORD WWTP	BA0044831	Once	Section 5.3.4, Table 7	Mounia Sassi
ROSALIA WWTP	BA0044687	Once	Section 5.3.4, Table 7	Terri Costello

ROSARIO WWTP	BA0029891	Once	Section 5.3.4, Table 7	Amber Corfman
ROYAL CITY WRF	BT5294	Once	Section 5.3.1, Table 2	Mounia Sassi
SACHEEN LAKE LID NO 3 WWTP	BT0501294	Once	Section 5.3.4, Table 7	Mounia Sassi
SATSOP BUSINESS PARK WWTP	BT5046	Once	Section 5.3.3, Table 5	Eddie Simons
SEASHORE VILLA WWTP	BA0037273	Once	Section 5.3.3, Table 5	Shawnté Greenway
SEDRO-WOOLLEY WWTP	BA0023752	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
SEKIU SD POTW	BA0024449	Once	Section 5.3.3, Table 5	Eddie Simons
SELAH WWTP	BA0021032	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
SELKIRK WWTP	BA0044938	Once	Section 5.3.3, Table 5	Mounia Sassi
SEQUIM WRF	BA0022349	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
SHANNON TJOELKER BUF	BT0805	Once	Section 5.3.3, Table 5	Amber Corfman
SHELTON SATELLITE WRF	BT1102	Once	Section 5.3.3, Table 5	Eddie Simons
SHELTON WWTP	BA0023345	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
SKAGIT CO SD NO 2 BIG LAKE WWTP	BA0030597	Once	Section 5.3.3, Table 5	Amber Corfman
SNOHOMISH WWTP	BA0029548	Once	Section 5.3.4, Table 7	Amber Corfman
SNOQUALMIE PASS UD WWTP	BT9005	Once	Section 5.3.4, Table 7	Ruby Irving- Hewey
SNOQUALMIE WWTP AND WRF	BA0022403	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
SNOWBLAZE CONDOS WWTP	BT8039	Once	Section 5.3.3, Table 5	Mounia Sassi
SOAP LAKE WWTP	BT5282	Once	Section 5.3.1, Table 2	Mounia Sassi
SOUTH KITSAP WRF	BA0020346	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
SOUTH PRAIRIE WATER POLN CONTROL PLANT	BA0040479	Once	Section 5.3.3, Table 5	Eddie Simons
SPANGLE WWTP	BA0045471	Once	Section 5.3.4, Table 7	Mounia Sassi

SPOKANE CO LATAH CREEK WWTP	BT8045	Once	Section 5.3.3, Table 5	Mounia Sassi
SPOKANE CO REG WRF	BT1103	Every three months (quarterly)	Section 5.3.2, Table 4	Mounia Sassi
SPOKANE RIVERSIDE PARK WRF	BA0024473	Every three months (quarterly)	Section 5.3.2, Table 4	Mounia Sassi
SPRAGUE WWTP	BT5383	Once	Section 5.3.4, Table 7	Mounia Sassi
SPRINGDALE WWTP	BT5385	Once	Section 5.3.4, Table 7	Mounia Sassi
ST JOHN WWTP	BA0021229	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
STANWOOD WWTP	BA0020290	Once	Section 5.3.4, Table 7	Amber Corfman
STEPTOE SD NO 1 WWTP	BT5394	Once	Section 5.3.4, Table 7	Terri Costello
STEVENS CO ADDY BLUE CREEK WWTP	BT8084	Once	Section 5.3.4, Table 7	Mounia Sassi
STEVENS PASS SD WWTP	BA0029521	Once	Section 5.3.1, Table 2	Ruby Irving-Hewey
STEVENSON WWTP	BA0020672	Once	Section 5.3.3, Table 5	Shawnté Greenway
SULTAN WWTP	BA0023302	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
SUMNER WWTP	BA0023353	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
SUNLAND WD WRF	BT6003	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
SUNNYSIDE WWTF	BA0020991	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
SUNSET MOBILE HOME COURT WWTP	BT1201	Once	Section 5.3.4, Table 7	Terri Costello
SW SUBURBAN MILLER CREEK WWTP	BA0022764	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
SW SUBURBAN SD SALMON CREEK WWTP	BA0022772	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
TACOMA CENTRAL WWTP NO 1	BA0037087	Every three months (quarterly)	Section 5.3.2, Table 4	Eddie Simons
TACOMA NORTHEND PWTP NO 3	BA0037214	Every six months (biannually)	Section 5.3.3, Table 6	Eddie Simons
TAKESA VILLAGE HOMEOWNERS COOP WWTP	BT1301	Once	Section 5.3.3, Table 5	Mounia Sassi

TAYLOR BAY BEACH CLUB WWTP	BA0037656	Once	Section 5.3.3, Table 5	Amber Corfman
TEKOA WWTP	BA0023141	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
TENELCO SMF	BT0101	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
TENINO WRF	BT1001	Once	Section 5.3.4, Table 7	Shawnté Greenway
THREE RIVERS REG WWTP	BA0037799	Every three months (quarterly)	Section 5.3.2, Table 4	Shawnté Greenway
THURSTON CO BOSTON HARBOR WWTF	BA0040291	Once	Section 5.3.3, Table 5	Shawnté Greenway
THURSTON CO GRAND MOUND WWTF	BA0042099	Once	Section 5.3.3, Table 5	Shawnté Greenway
THURSTON CO TAMOSHAN WWTP	BA0037290	Once	Section 5.3.3, Table 5	Shawnté Greenway
TJOELKER ENTERPRISES BUF	BT9911	Once	Section 5.3.3, Table 5	Amber Corfman
TOLEDO WWTP	BA0036986	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
TOPPENISH WWTP	BT0521	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
TWISP WWTP	BA0023370	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
UNIONTOWN WWTF	BT5371	Once	Section 5.3.4, Table 7	Terri Costello
UPPER COLUMBIA ACADEMY WWTP	BT8034	Once	Section 5.3.4, Table 7	Mounia Sassi
VADER WWTF	BA0021083	Once	Section 5.3.4, Table 7	Shawnté Greenway
VANCOUVER MARINE PARK WWTP	BA0024368	Every six months (biannually)	Section 5.3.3, Table 6	Shawnté Greenway
VANCOUVER WESTSIDE WWTF	BA0024350	Every three months (quarterly)	Section 5.3.2, Table 4	Shawnté Greenway
WA DOC CEDAR CREEK WWTP	BA0037737	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
WA DOC CLALLAM BAY WWTP	BA0039845	Once	Section 5.3.4, Table 7	Eddie Simons
WA DOC MCNEIL ISLAND WWTP	BA0040002	Once	Section 5.3.3, Table 5	Eddie Simons
WA DOC MONROE WWTP	BT0517	Once	Section 5.3.4, Table 7	Amber Corfman

WA DOC OLYMPIC WWTP	BA0038938	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
WA SP DOSEWALLIPS WWTP	BT6251	Once	Section 5.3.3, Table 5	Eddie Simons
WA SP FORT FLAGLER WWTP	BA0037282	Once	Section 5.3.3, Table 5	Eddie Simons
WA SP LARRABEE WWTP	BA0023787	Once	Section 5.3.4, Table 7	Amber Corfman
WA SP POTHOLES WWTP	BA0412	Once	Section 5.3.4, Table 7	Mounia Sassi
WA SP STEAMBOAT ROCK WWTP	BA0411	Once	Section 5.3.4, Table 7	Mounia Sassi
WA SP SUN LAKES WWTP	BA0410	Once	Section 5.3.4, Table 7	Mounia Sassi
WAITSBURG WWTP	BA0045551	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
WALLA WALLA WD NO 2 WWTP	BT8040	Once	Section 5.3.4, Table 7	Terri Costello
WALLA WALLA WWTP	BA0024627	Once a year (annually)	Section 5.3.2, Table 3	Terri Costello
WAPATO WWTP	BA0050229	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
WARDEN WRF	BT5380	Once	Section 5.3.1, Table 2	Mounia Sassi
WARM BEACH CAMPGROUND WWTP	BA0029904	Once	Section 5.3.4, Table 7	Amber Corfman
WASHOUGAL WWTP	BA0037427	Once	Section 5.3.4, Table 7	Shawnté Greenway
WASHTUCNA WWTP	BT5361	Once	Section 5.3.4, Table 7	Terri Costello
WATERVILLE WWTP	BT9000	Once	Section 5.3.4, Table 7	Ruby Irving-Hewey
WENATCHEE WWTP	BA0023949	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
WEST RICHLAND NORTH WWTP	BA0051063	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving-Hewey
WESTPORT WWTP	BA0020923	Once a year (annually)	Section 5.3.2, Table 3	Eddie Simons
WHATCOM CO WD NO 13 WWTP	BT7367	Once	Section 5.3.4, Table 7	Amber Corfman
WILBUR WWTP	BA0044920	Once	Section 5.3.4, Table 7	Mounia Sassi
WILKESON WWTP	BA0023281	Once	Section 5.3.4, Table 7	Eddie Simons
WILLAPA REG WWTF	BA0041041	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway

WILLIAMS LAKE SD NO 2	BT0532	Once	Section 5.3.3, Table 5	Mounia Sassi
WINLOCK WWTP	BA0021199	Once	Section 5.3.3, Table 5	Shawnté Greenway
WINTHROP WWTP	BA0020885	Once	Section 5.3.4, Table 7	Ruby Irving- Hewey
WOODLAND WWTP	BA0020401	Once a year (annually)	Section 5.3.2, Table 3	Shawnté Greenway
WSP FIRE TRAINING ACADEMY WWTP	BT0045506	Once a year (annually)	Section 5.3.2, Table 3	Amber Corfman
YAKIMA CO BUENA WWTP	BA0052132	Once	Section 5.3.3, Table 5	Ruby Irving- Hewey
YAKIMA REG WWTF	BA0024023	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
YAKIMA TRAINING CENTER WWTP	BA0021962	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey
YELM WRF	BA0040762	Once	Section 5.3.3, Table 5	Shawnté Greenway
ZILLAH WWTP	BA0020168	Once a year (annually)	Section 5.3.2, Table 3	Ruby Irving- Hewey

Appendix B. Abbreviations and Acronyms

COC	Chain of Custody
EPA	United States Environmental Protection Agency
PFAS	Per- and Polyfluoroalkyl Substances
RCW	Revised Code of Washington
SAP	Sampling and Analysis Plan
SAW	Secure Access Washington
WAC	Washington Administrative Code

Attachment D



OFFICE OF WATER
WASHINGTON, D.C. 20460

June 29, 2026

DRAFT GUIDANCE MEMORANDUM

SUBJECT: Draft Guidance for Reducing Risk from Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS) in Biosolids

FROM: Jessica L. Kramer Jessica
Assistant Administrator Kramer

Digitally signed by Jessica
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Date: 2026.06.29
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This memorandum includes draft guidance that, if finalized, would provide recommendations that may be helpful to operators of wastewater treatment plants (WWTPs) and related facilities, landowners and farmers, state and Tribal water agencies, and the public. It provides voluntary recommendations for potential ways to mitigate risks from perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) involving land application of biosolids.¹ The U.S. Environmental Protection Agency will solicit public comment on this draft guidance for 60 days following publication of a Notice in the Federal Register. The EPA also may use public comments filed to help inform any future agency actions.

Background

The EPA remains committed to addressing per- and polyfluoroalkyl substances (PFAS) in the environment as part of its work ensuring that all Americans can rely on clean air, land, and water. Under the first Trump Administration, the EPA issued the first-ever comprehensive, nationwide PFAS Action Plan.² Addressing PFAS contamination utilizing a science-based, legally defensible, and common-sense approach continues to be a priority for the agency under Administrator Zeldin's leadership. This approach also incorporates a focus on robust communication and ensuring radical transparency in every step, with an ultimate goal of providing the public with the tools and information necessary to make informed decisions related to PFAS. The Administrator has announced a suite of

¹ This guidance does not supersede existing federal law or regulations, nor does it supersede any state, Tribal, or local requirements for PFOA and PFOS in sewage sludge.

² See the [EPA's Per- and Polyfluoroalkyl Substances \(PFAS\) Action Plan](#) (February 2019)

actions to address PFAS, including extending a previous public comment period on the agency's draft biosolids risk assessment and devising a path forward based on comments received by the agency.³

What are Sewage Sludge and Biosolids?

When domestic sewage is transported and conveyed to a WWTP, it is treated to separate the liquids from the solids, which produces a semi-solid, nutrient-rich product known as sewage sludge. In some instances, industrial wastewater is also conveyed to a WWTP and combined with domestic sewage. The terms "biosolids" and "sewage sludge" are often used interchangeably by the public; however, the EPA typically uses the term "biosolids" to mean sewage sludge that is intended to be applied as a soil amendment or fertilizer and that has been treated to meet the requirements in the EPA's Clean Water Act regulations entitled, "Standards for the Use or Disposal of Sewage Sludge," found at [40 CFR Part 503](#) (Part 503).

The Part 503 regulations govern minimum requirements for sewage sludge quality, management practices, and monitoring and reporting applicable to the generation of sewage sludge from a treatment works treating domestic sewage and to the use or disposal of that sewage sludge by any person. These regulations ensure that sewage sludge meets federal requirements when it is: 1) land applied; 2) placed on a surface disposal site (e.g., sewage sludge-only landfills); or 3) fired in a sewage sludge incinerator. Land application is the spraying, spreading, incorporation, or injection of sewage sludge into or onto the land to either condition the soil or fertilize crops or vegetation grown in the soil. Under existing federal regulations, biosolids can be applied to agricultural lands, forests, tree farms, golf courses, turf farms, and other types of land. Biosolids can also be bagged and sold at stores to the public, generally to be used on lawns or in home gardens. Biosolids generally are not used on specialty crops, such as fresh produce, and generally are used on crops where edible parts are not in contact with the soil. Some states, Tribes, or counties also have additional rules around the use of sewage sludge and biosolids.

The EPA has endorsed and encouraged the land application of biosolids for decades.⁴ The continued practice of using biosolids for fertilizer is critical for both WWTPs seeking to manage sewage sludge in a manner that has environmental benefits, and farmers who rely on biosolids for fertilizer. While the EPA estimates that biosolids are applied to less than 1% of America's farmland annually,⁵ the agency recognizes that nearly 60% of sewage sludge is land applied as biosolids. Land application is therefore a crucial and cost-effective management option for our nation's utilities, especially in locations where landfill and incinerator capacity is limited. To be clear, only biosolids, which are treated prior to use,

³ See the EPA press release "[Administrator Zeldin Announces Major EPA Actions to Combat PFAS Contamination](#)"

⁴ See the [EPA's Policy Promoting The Beneficial Use of Sewage Sludge](#) (June 1989)

⁵ The United States Department of Agriculture (USDA) estimated that chemical fertilizers, lime, and other soil conditioners were applied to 237 million acres of US farmland (see [2022 Census of Agriculture, Table 46](#)). The EPA estimates that about 2.3 million dry metric tons (dmt) of sewage sludge is land applied annually (see a summary of the 2024 Biosolids Annual Reports available on the EPA's webpage [Basic Information about Sewage Sludge and Biosolids - Use and Disposal Statistics](#)). If all land applied sewage sludge was applied at just one dmt per acre (median application rate is about 3 dmt/acre) there would still only be enough sewage sludge generated annually to treat 2.3 million acres of agricultural land. If 237 million acres are fertilized using chemical, lime, or other soil conditioners, 2.3 million acres represents less than 1% of the total farmland using fertilizers.

can be land-applied on farm fields under specific circumstances. Untreated sewage sludge may not be land applied under existing federal regulations.

What are PFOA and PFOS?

PFOA and PFOS are two chemicals in the larger class of PFAS. PFOA and PFOS persist in the environment for long periods of time and have been linked to a variety of significant adverse human health effects.⁶ Domestic production and import of PFOA has been phased out in the United States by the companies participating in the 2010/2015 PFOA Stewardship Program. However, quantities of PFOA may be produced, imported, and used by companies not participating in the PFOA Stewardship Program and some uses of PFOS may be ongoing.⁷ While statewide surveys⁸ have found that PFOA and PFOS have been detected at varying levels in sewage sludge, it is important to note that not all sewage sludge has been found to have detectable or elevated levels of PFOA or PFOS.

EPA's 2025 Draft Risk Assessment

In 2019, as part of the PFAS Action Plan, the Trump EPA announced the beginning stages of a risk assessment to evaluate potential harm to humans and the environment posed by sewage sludge contaminated with PFOA and PFOS.⁹ On January 14, 2025, the Biden EPA released a draft risk assessment (Draft Risk Assessment) aimed at understanding *potential* risks (*i.e.*, the chance of harmful effects to humans) posed by PFOA and PFOS in sewage sludge.¹⁰ The current administration then extended that comment period twice to allow interested parties additional time to thoroughly review and analyze the Draft Risk Assessment and provide feedback.¹¹

After careful review of the comments provided by stakeholders, the EPA has determined that the Draft Risk Assessment exhibited a number of serious flaws that have caused confusion among the public and the regulated community. This confusion has resulted in a lack of clarity in how the public should consider and potentially apply the preliminary findings of the Draft Risk Assessment in their daily lives,

⁶ See [Human Health Toxicity Assessment for Perfluorooctanoic Acid \(PFOA\) and Related Salts](#) (April 2024) and [Human Health Toxicity Assessment for Perfluorooctane Sulfonic Acid \(PFOS\) and Related Salts](#) (April 2024)

⁷ There has been no information reported on PFOS uses in recent years to the EPA under the Toxic Substances Control Act (TSCA) Chemical Data Reporting Rule, which is the primary source of information the EPA relies on to ascertain ongoing uses of chemicals. For more information, see the EPA's webpage [Risk Management for Per- and Polyfluoroalkyl Substances \(PFAS\) under TSCA](#).

⁸ As part of the Draft Sewage Sludge Risk Assessment for PFOA and PFOS, the EPA compiled and presented concentration data from published peer-reviewed literature and state reports that were available as of January 2024 (see Footnote 11 – Appendix A). State surveys were available from Maine, Michigan, Minnesota, Vermont, Connecticut, New Hampshire, and California. Since 2024, Hawaii, Delaware, Colorado, Washington, North Carolina, North Dakota, and Massachusetts have also published data on PFAS in sewage sludge.

⁹ See *supra* 2

¹⁰ See EPA-HQ-OW-2024-0504. [DRAFT SEWAGE SLUDGE RISK ASSESSMENT FOR PERFLUOROOCTANOIC ACID \(PFOA\) CASRN 335-67-1 AND PERFLUOROOCTANE SULFONIC ACID \(PFOS\) CASRN 1763-23-1](#) (January 2025)

¹¹ See the notices [Two Actions Published by the Environmental Protection Agency With Comment Periods That Close February 24, 2025 and March 17, 2025](#) and [Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid \(PFOA\) and Perfluorooctane Sulfonic Acid \(PFOS\); Extension of Comment Period](#)

or put another way, in how to determine what the findings of the Draft Risk Assessment might mean for them.

First, the EPA departed from typical agency practice by failing to conduct a national survey to document occurrence of PFOA and PFOS in sewage sludge. National sewage sludge surveys are helpful to determine the range of chemicals, in this case PFOA and PFOS, that are actually in biosolids and therefore the range of potential risks they pose. In the past, the EPA has conducted sewage sludge surveys¹² alongside risk assessments to help contextualize expected risks and inform future actions.

Second, the Draft Risk Assessment only evaluated sewage sludge management practices with higher potential for human health risk in hypothetical scenarios that do not reflect the majority of land application in the U.S. In these higher-risk hypothetical scenarios, the Draft Risk Assessment found that PFOA and PFOS in sewage sludge may contaminate soil, livestock, food crops, fish, and drinking water. However, the agency did not estimate how often these higher-risk scenarios occur in the U.S. Nor did the agency assess risks to the public, as the public often has a diversity of sources for their food and does not live on or near an impacted property.

Finally, the preliminary findings of the Draft Risk Assessment suggested that sometimes risks of adverse health effects were possible when using or disposing of sewage sludge containing 1 part per billion (ppb) of PFOA or PFOS. This concentration was only used as a starting concentration to determine *if* use or disposal would result in *any* unacceptable risk for the hypothetical circumstances presented. The use of 1 ppb was not intended to be interpreted as a “safe level” of PFOA or PFOS in sewage sludge in all circumstances.

Based on the hypothetical biosolids and sewage sludge use and disposal scenarios modeled and presented in the Draft Risk Assessment, a misconception has arisen that *all* biosolids and sewage sludge use and disposal practices will negatively affect the public. This stems from the agency’s focus on higher-risk scenarios, the lack of discussion about risks to the public, and the use of 1 ppb as the modeled concentration. This draft guidance aims to provide clarity to stakeholders about the more common potential risks from PFOA and PFOS and identify some potential practices that can be taken to reduce PFOA and PFOS exposures.

Current Management Practices and Examples

Reuse of sewage sludge (rather than disposal in a landfill or incineration) is a viable option for treatment works and the agricultural community. It is often preferred by treatment works because it tends to be less costly and provides a benefit as a soil amendment. Reuse options include land application on agricultural lands, reclamation sites, home gardens, and other sites like golf courses, often through the sale of bulk or bagged products. Based on recent reports¹³ submitted to the EPA, about 60% of all sewage sludge is land applied: 31.5% is applied to agricultural sites, 20% is sold to the

¹² See the EPA’s webpage [Sewage Sludge Surveys](#)

¹³ See a summary of the 2024 Biosolids Annual Reports available on the webpage [Basic Information about Sewage Sludge and Biosolids - Use and Disposal Statistics](#).

general public, 1% is applied to reclamation sites, and 7% is land applied to some other type of site like silviculture.

Land application of biosolids can take many forms. In some cases, a WWTP will purchase a tract of land for the purpose of regularly using or disposing of sewage sludge at this site. This utility-owned land may not be used to cultivate any crops (for example, a surface disposal site that had no crops grown and was maintained by mowing weed grasses)¹⁴ or the land could be actively engaged in agriculture as rangeland or for growing crops.¹⁵ In other cases, WWTPs will sell or give away sewage sludge to private landowners to use for agricultural or non-agricultural purposes. Examples of agricultural land application include use on fields growing wheat or energy crops. Examples of non-agricultural land application include adding sewage sludge to improve grass quality on a golf course or sports field. About 20% of all sewage sludge is sold directly to the public through soil products that are sold bagged or bulk in garden centers and hardware stores or otherwise distributed. These materials may be applied to homes and gardens, as well as parks, schools, and playgrounds.¹⁶

Existing Practices for Managing PFAS in Biosolids

Several states have implemented or are implementing programs to reduce PFAS in sewage sludge and biosolids, and to support beneficial reuse, where appropriate. Some actions have been initiated by state legislatures, while others are spearheaded by state environmental agencies. Some approaches states have taken include source reduction and pretreatment programs, prohibitions on the land application of sewage sludge in certain areas, and permit monitoring requirements to better understand the extent of PFAS¹⁷ in sewage sludge. These examples are presented to illustrate options that some states have considered and implemented, and they should not be interpreted as the EPA's endorsement of these actions.

Reducing PFAS loading from industrial dischargers:

Some states have taken action to reduce PFAS loading from industrial dischargers. For example, Michigan's Department of Environment, Great Lakes, and Energy (EGLE) has taken action to identify sources of PFAS to a sewershed, requiring reductions in PFAS discharged from industrial dischargers, and implementing additional requirements for some land applied sewage sludge as part of their wastewater permitting program. The state implemented a tiered approach using PFOS as an indicator compound with the goal of identifying and reducing significant sources of PFAS entering wastewater treatment systems. Michigan EGLE developed the concentrations for the tiers in 2018, noting that they were not derived using health-based endpoints (e.g., an acceptable cancer rate in the population).

¹⁴ See [Garza-Rubalcava et al., 2026. Field-scale modeling of PFAS transport and transformation at a biosolids land disposal site, Journal of Hazardous Materials, 507, 141814](#)

¹⁵ Colorado's biosolids land application trends indicates much of the land where biosolids were applied in the state is owned by the WWTP and used for agricultural purposes like rangeland or wheat cultivation. See [The National Biosolids Project, Colorado Summary \(2018\)](#).

¹⁶ DC Water's program to distribute biosolids to community gardens, including community gardens in schools, and small fruit and vegetable farms. See ["Blooming Everywhere: Why You're Seeing More of DC Water's Bloom"](#)

¹⁷ Though most existing state programs for PFAS in sewage sludge use PFOA and PFOS as indicator compounds, many programs require monitoring for more than just PFOA and PFOS, especially those that require the use of EPA Method 1633, which analyzes for dozens of PFAS.

Instead, these levels were designed to allow EGLE to identify the most significant dischargers of PFAS to their utilities and to implement a strategy for reducing loading of PFAS to sewage sludge. As part of their initial strategy, seven WWTPs in Michigan with industrial sources achieved up to a 99% reduction in PFOS sewage sludge concentrations through industrial pretreatment initiatives.¹⁸

Michigan's strategy has included periodically updating their requirements after additional monitoring and lowering the allowable concentrations of PFOS in biosolids. By 2026, land application was prohibited above 100 ppb PFOS, compared to 150 ppb in 2021.¹⁹ Since 2018, several states, including Wisconsin, Minnesota, Colorado, Maryland, and Virginia, have adopted similar approaches utilizing tiered frameworks and implementing industrial pretreatment at some WWTPs to lower PFOA and PFOS in sewage sludge, though not always using the same concentrations or authorities to require action.²⁰ Some states are using the same tiers as Michigan while others are using lower concentrations when establishing tiers. Virginia, for example, recently approved legislation prohibiting land application if the concentration of either PFOA or PFOS exceeds 50 ppb, and after two years from program implementation, prohibits land application if the concentration of PFOA and PFOS combined exceeds 50 ppb.²¹

Monitoring requirements in permits:

To gather more information before requiring actions, several states have PFAS monitoring requirements. States like Washington,²² Oregon,²³ and Florida²⁴ have enacted legislation requiring monitoring programs. These states require monitoring either once or with the frequency of monitoring occurring at set intervals or determined by the amount of sewage sludge generated. The states plan to use the occurrence data to inform future actions.

Prohibitions on land application:

Two states have completely banned the land application of sewage sludge. In Connecticut, the legislature banned the sale and use of sewage sludge containing PFAS²⁵ in 2024,²⁶ though sewage sludge land application generally is not a common practice in the state. Based on available data, about 93% of the sewage sludge managed in Connecticut is incinerated, so removing land application as an

¹⁸ See Michigan Department of Environment, Great Lakes, and Energy's [LAND APPLICATION OF BIOSOLIDS CONTAINING PFAS Interim Strategy March 2021](#) (page 6), and [LAND APPLICATION OF BIOSOLIDS CONTAINING PFAS Interim Strategy Updated April 2022](#)

¹⁹ See Michigan Department of Environment, Great Lakes, and Energy's webpage [PFAS in biosolids](#)

²⁰ Several organizations have collected information on state actions to address PFAS in sewage sludge. From the Environmental Council of States (ECOS), see [PFAS in Biosolids: A Review of State Efforts & Opportunities for Action](#). And from the National Association for Clean Water Agencies (NACWA), see *Biosolids PFAS Legislative Guide With Model Legislation* (October 2025).

²¹ See Senate Bill 386, 164th Gen. Assemb., Reg. Sess. (VA, 2026)

²² See Senate Bill 5033 (WA, 2025-26)

²³ See House Bill 2947 (OR, 2025)

²⁴ See House Bill 1019 (FL, 2026)

²⁵ Connecticut's ban refers to all PFAS defined in their bill as "all members of the class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom."

²⁶ See Senate Bill 292 (CT, 2024)

available sewage sludge management practice was not anticipated to cause widespread disruptions.²⁷ Connecticut has also offered free analysis of PFAS in agricultural soils to better understand the presence and magnitude of potential PFAS contamination across the state.²⁸

Maine's legislature banned the land application of all sewage sludge in 2022, regardless of the concentration of PFAS, in response to concerns over PFAS contamination.²⁹ Land application was a more common management practice in Maine compared to Connecticut, with about 40% of sewage sludge in Maine being land applied annually.³⁰ Maine's ban on land application has led to significant issues and cost increases for utilities in Maine where landfill capacity is limited and there are no in-state sewage sludge incinerators.³¹ Since the ban of land application, Maine has also undertaken investigations to identify sites where sewage sludge was historically applied and sampled soil, groundwater, and agricultural products that may have been contaminated.³²

Recommendations For Bulk Land Appliers of Biosolids

Land application is a cost-effective strategy for adding nutrients and improving soil quality. Biosolids can be used on many types of farms, rangelands, and in forestry. When choosing to use biosolids as a soil amendment, land appliers can consider the following practices:

- Avoiding land application of sewage sludge near fishable waters, lakes or reservoirs that are used as a source of drinking water, or areas that may have higher risks for potential groundwater impacts.
- Avoiding applying sewage sludge in areas where children under the age of 5 have access or may have access in the future. Landowners should also be aware that there are other potential sources of PFAS that could impact or be present on their land.
- Conducting land application on farms with lower risk crops for human exposure, like farms growing grain, fiber crops, or corn for ethanol production.
- Avoiding land application for agricultural practices that have higher risks for human exposures.

Recommendations for the General Public

Currently data does not indicate that there are widespread impacts to the food supply from biosolids containing PFOA and PFOS at the national level, and the general public is not likely to be exposed to sewage sludge-impacted foods, based on the proportion of sewage sludge that is land applied annually and current U.S. Food and Drug Agency (FDA) monitoring data. The EPA estimates that sewage sludge is applied to less than 1% of America's farmland annually.³³ Additionally, most farms land applying

²⁷ See [The National Biosolids Project, Connecticut Summary \(2018\)](#)

²⁸ For more information visit the webpage [Connecticut Agricultural Experiment Station, Monitoring PFAS in CT Agricultural Soils: A pilot program to research soil contamination levels.](#)

²⁹ See Legislative Document 1911, 130th Maine Legislature (ME, 2022)

³⁰ See [The National Biosolids Project, Maine Summary \(2018\)](#)

³¹ See [Analysis of Sludge and State-Owned Landfills as Public Utilities, Pursuant to 2023 Public Law, Chapter 283](#) (January 2024)

³² See Maine Department of Environmental Protection's webpage [PFAS and Maine DEP](#)

³³ See *supra* 5

sewage sludge grow crops for energy generation or other crops that are not meant for human consumption.³⁴ The FDA monitors and very rarely finds PFOA or PFOS in foods available in U.S. grocery stores, with the exception of fish, which an FDA study found frequently has detections of PFOS.³⁵

However, as mentioned previously, approximately 20% of sewage sludge managed each year is sold directly to the public or applied to sites where the public might be exposed.³⁶ Some soil amendment products sold in hardware stores and garden centers contain sewage sludge that may be contaminated with PFOA and PFOS. People using biosolids at home or in their community may choose to consider the following practices:

- Researching the supplier of the sewage sludge.
- Avoiding application of sewage sludge in locations where children may have access to the soil, like playgrounds, schools, parks, or around residential homes.
- Avoiding application to garden beds intended for growing higher risk foods most likely to uptake PFOA and PFOS, such as leafy greens and root vegetables, and where egg-laying hens have foraging access.

Recommendations for Wastewater Treatment Plants and Other Sewage Sludge Generators

All efforts to reduce PFAS exposure can help protect public health. WWTPs and other facilities can consider the following:

Source-identification, pollution prevention and monitoring:

Pollution prevention can be an effective way to reduce PFOA and PFOS concentrations in sewage sludge, especially if there are significant industrial sources of PFOA or PFOS in the sewer system. Monitoring PFAS in sewage sludge can help determine if sources of PFOA and PFOS are present, and the mixture of PFAS present may give an indication as to which sources are likely contributing these chemicals to the sewer system.

Surface disposal of sewage sludge:

Surface disposal is the placement of sewage sludge onto land for final disposal in a sewage sludge unit (*e.g.*, sewage sludge-only landfill or “monofill”). The existing regulatory requirements apply to the owner of the surface disposal unit,³⁷ which is generally the wastewater utility. These requirements for surface disposal in 40 CFR Part 503 include placement restrictions, methane monitoring, and pollutant limits where applicable, among others. When using surface disposal as a management strategy for PFOA or PFOS-containing sewage sludge, WWTPs could consider adding a composite liner to surface

³⁴ See [National Biosolids Data Project, National Summary \(2018\)](#)

³⁵ See [Food and Drug Administration’s Total Diet Study](#), which finds that ~40% of grocery store fish (including cod, tilapia, and catfish) sampled have detectable levels of PFOS; the maximum fish concentration of PFOS detected in this survey was 610 ppt in catfish.

³⁶ See *supra* 13

³⁷ See [40 C.F.R. § 503, Standards for the Use or Disposal of Sewage Sludge, Subpart C – Surface Disposal](#)

disposal units.³⁸ For more information on leachate collection and treatment systems, please refer to the EPA's most recent *Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances*.³⁹

Incineration of sewage sludge:

Sewage sludge incinerators (SSIs) are devices used for the combustion of dewatered sewage sludge. In the U.S., the two main types of SSIs include multi-hearth furnaces and fluidized bed combustors. SSI unit design and operation can vary widely across the nation, and the agency understands that current SSI standard operating conditions may not be effective for the treatment of PFOA, PFOS and other PFAS and may lead to other environmental and human health impacts. To better understand potential risks from incineration of sewage sludge, WWTPs may consider performance testing of incinerators to gain information about potential releases of PFOA, PFOS, and other PFAS that could be generated through incomplete combustion.⁴⁰

Funding Opportunities for implementing draft guidance:

Managing PFAS in sewage sludge can be an expensive undertaking. The EPA supports water systems in reducing PFAS and emerging contaminants in wastewater through a range of funding resources. Federal funding opportunities include the Clean Water State Revolving Fund (CWSRF) program⁴¹ and the Water Infrastructure Finance and Innovation Act (WIFIA) program.⁴²

³⁸ From a groundwater infiltration perspective, wastewater lagoons are not dissimilar from sewage sludge surface disposal sites. Though lagoons are a treatment technology, not a disposal method, the modeling exercises in the draft risk assessment can also be used to qualitatively understand potential infiltration risks at some lagoons.

³⁹ See [Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances— 2026 Version](#) (April 2026)

⁴⁰ For example, a recently released air method, [OTM-50](#), can help test emissions for more volatile products of incomplete combustion, in addition to using [OTM-45](#) to monitor for PFAS emissions. For more information, see *supra* 39.

⁴¹ See the EPA's webpage [Clean Water State Revolving Fund Emerging Contaminants](#)

⁴² See the EPA's webpage [Water Infrastructure Finance and Innovation Act \(WIFIA\)](#)

Attachment E

Advocacy Alert

[Home](#) [Advocacy & Analysis](#) [Advocacy Alerts](#) [Advocacy Alerts Details](#)

EPA Releases New Biosolids Guidance Clarifying Risk of PFAS in Biosolids & Reiterating Critical Role of Land Application

Jul 8, 2026

The U.S. Environmental Protection Agency (EPA) published *Draft Guidance for Reducing Risk from PFOA and PFOS in Biosolids* in the [Federal Register](#) on July 6 as a means to help municipalities, state regulators, farmers, and other stakeholders better understand and interpret the Agency's [January 2025 Draft Risk Assessment](#).

NACWA has actively engaged and encouraged EPA over the last year to address the uncertainties and misconceptions created by the Draft Risk Assessment. The Association applauds EPA for taking this step to address the significant public concern and uncertainty regarding the future of land application that was created by the Draft Risk Assessment. Publication of the Draft Guidance also represents an important achievement for NACWA's advocacy on this critical issue and reflects the credibility and influence that the Association has in working with EPA.

This Advocacy Alert provides NACWA's analysis of the Draft Guidance, including where it is most beneficial for public clean water utilities and where it needs improvement. This Alert also discusses next steps including NACWA's comment plans and how utilities can best engage in the public comment process.

Background

The newly released Draft Guidance, when finalized, is intended to provide non-binding, voluntary recommendations to help clean water utilities mitigate PFAS as well as recommend ways that landowners, farmers, and the public could lessen their potential exposure risks of PFAS when biosolids are applied to land. Critically, EPA, through this Draft Guidance, sends a strong message underscoring its continued endorsement of land application of biosolids and the importance of accurately assessing and communicating public risk as it relates to PFAS and biosolids.

NACWA overall is highly encouraged by the Draft Guidance and the practical lens EPA is now taking with respect to building on the decades of support for land application. In particular, the Draft Guidance reiterates the important link between the clean water utility community and farmers in managing this continually generated fertilizer that has environmental benefits. This is critically important given the limited capacity for landfilling and incinerating municipal biosolids.

The Draft Guidance also highlights the serious misconceptions the Draft Risk Assessment created by using impractical higher-risk hypothetical scenarios that resulted in public perception that *all* biosolids and sewage sludge use and disposal practices will result in *any* unacceptable risk if PFOA and PFOS are found above an unrealistic starting point of 1 part per billion (ppb). EPA's Draft Guidance points to existing practices states are using that support continued beneficial use, like greater industrial source control and tiered approaches to differentiate biosolids that are industrially impacted from those that are not. These are all points NACWA and its members have been urging the Agency to understand and address for more than a year.

At the same time, the Draft Guidance has a few key areas that need to be addressed and improved. Of note, EPA does not make any distinction or mention of 'Exceptional Quality' or 'EQ' Class A biosolids, which NACWA believes warrant special consideration. Clean water utilities have invested significant resources to upgrade their treatment works so that they have the ability to qualify their biosolids as EQ – and therefore qualify for greater site applicability than other classes of regulated biosolids. EPA's Draft Guidance incorrectly makes the assumption that all biosolids are the same and therefore should have the same management practices when they do not. NACWA does not want the Draft Guidance to create more fear or public concern.

NACWA will be submitting comments underscoring the strengths of the Draft Guidance – and where it can be improved – and responding to key questions posed by the Agency by the September 4, 2026, comment deadline. NACWA welcomes any input, observations and data that members would like to submit for NACWA to consider as it drafts its comments – please send any input to [Emily Remmel](#), NACWA's Senior Director of Regulatory Affairs.

NACWA also believes it is important for EPA to hear from as many individual utilities as possible through this public comment period. NACWA plans to develop template draft comments by August for use by members who wish to submit individual comments by the September 4 deadline.

Impact of 2025 Draft Biosolids Risk Assessment

The release of the Draft Guidance follows [widespread questions and concern](#) about the Agency's Draft Risk Assessment that was released late January 2025, at the tail end of the Biden Administration. Over the past year, EPA has focused extensively on better understanding the Draft Risk Assessment and stakeholder concern regarding its scope, assumptions, and intended use, given the complexities of biosolids land application.

Last spring, EPA extended the public comment period on the Draft Risk Assessment to allow greater public engagement. EPA then held a series of productive stakeholder listening sessions in June and July 2025, in which NACWA participated, bringing together perspectives from the agricultural community alongside those of the clean water utility sector, municipalities, and states regulatory authorities to gain insights into the shortcomings of the Draft Risk Assessment.

Notably, NACWA has been engaged on this issue from the very beginning and submitted comments when the risk assessment framework was under consideration from EPA's Science Advisory Board. The Association submitted [public comments](#) on the Draft Risk Assessment last August detailing the significant flaws of the Draft

Risk Assessment, reiterating the issues with its underlying framework, and what could happen (e.g., public alarm; proposals for proposals moratoriums on land application) if it were finalized and implemented – examples of which have already played out in some states.

NACWA's [comments](#) outlined how the Draft Risk Assessment relied on multiple layers of conservative assumptions, resulting in a mischaracterization of risk, and did not reflect actual potential risk to the general public. NACWA's comments also emphasized the lack of comparative risk from biosolids compared to other fertilizers or soil amendments, and other technical concerns with the approaches EPA used.

After submitting public comments, NACWA met several times with EPA [beginning last fall](#), including with senior EPA political staff, urging the Agency to issue a statement providing for greater clarity given how states were incorrectly using the Draft Risk Assessment as a means to establish overly stringent land application limitations given the perception that anything above 1 ppb would pose an unacceptable risk to public health. NACWA further asked EPA to address the underlying framework and provide support for the tiered approach several states are using—which the new Draft Guidance identifies as a reasonable approach to managing PFAS in biosolids.

Key Strengths of the July 2026 Draft Guidance

EPA's new Draft Guidance is designed to provide “non-binding, voluntary recommendations for potential ways to mitigate risks from, and seek feedback on EPA's next steps for managing, PFOA and PFOS in biosolids and sewage sludge.”

Critically, in the Draft Guidance, EPA frames the issue by stating that “the continued practice of using biosolids for fertilizer is critical for both wastewater treatment plants (WWTPs) seeking to manage sewage sludge in a manner that has environmental benefits, and farmers who rely on the biosolids for fertilizer” and that land application is “a crucial and cost-effective management option for our nation's utilities, especially in locations where landfill and incinerator capacity is limited.” The Draft Guidance provides context that biosolids are applied to less than 1 percent of America's farmland annually and that land application only occurs after sewage sludge treatment and in accordance specific requirements – facts that are often misunderstood by the public and the media.

EPA states that the Draft Risk Assessment exhibited critical flaws leading to confusion which has “resulted in a lack of clarity in how the public could apply the preliminary findings of the Draft Risk Assessment in their daily lives, or put another way, in how to determine what the findings of the Draft Risk Assessment might mean for them”, noting the misconception that all biosolids and sewage sludge use and disposal will negatively affect the public.

To make this point, the Agency explains that occurrence data for PFOA and PFOS in biosolids is necessary to fully interpret risk and the potential need for regulatory action. This data is supposed to complement a risk assessment, but did not in the case of the PFAS risk assessment. EPA also states that the hypothetical

scenarios employed in the Draft Risk Assessment do not reflect the reality of most land application in the U.S. This is a key point of concern that both NACWA and the agricultural community have continually emphasized and EPA is now recognizing.

The Agency also clarified that the 1 ppb of PFOA or PFOS referenced in the Draft Risk Assessment as a threshold where adverse health effects could occur should not be construed as a “safe level.” This clarification addresses interpretations made by the media and environmental nonprofit organizations.

After clarifying each of these points, EPA highlights various measures that Michigan and now several other states are taking to reduce PFAS presence in biosolids. The Draft Guidance discusses how Michigan adopted comprehensive approaches to identify upstream industrial dischargers and for these dischargers to reduce their PFAS loadings to the treatment works. In tandem, Michigan set up a robust biosolids monitoring program and set nonhealth-based endpoints to create a tiered concentration structure that separates industrially impacted biosolids from non-industrially impacted biosolids and allows land application to continue. The Michigan approach has become the model for other states. EPA also notes several states that have enacted monitoring requirements that may inform future actions.

Alternatively, the Draft Guidance also mentions the Maine approach and its decision to ban land application regardless of concentration -- noting that the state is now facing significant challenges in finding cost effective disposal outlets and a sustainable path forward for utilities.

EPA's Draft Guidance is clear that these are examples and a way to illustrate options and should not be interpreted as EPA endorsements. However, EPA drawing attention to these approaches is an important recognition and shows how industrial source control is a means to reduce PFAS coming into the system. The Draft Guidance does not discuss residential contributions, a key source of PFAS loading which utilities cannot control.

While the Draft Guidance does not provide a specific numeric level of PFAS in biosolids that can be considered “safe” – nor did NACWA ever anticipate that it would based on detailed conversations with EPA – the specific reference in the Draft Guidance to approaches taken by states like Michigan that use numeric tiers for PFAS monitoring is important and worth noting. Inclusion and recognition by EPA in the Draft Guidance of approaches like that used by Michigan – along with the document's unequivocal criticism of the Draft Risk Assessment – can and should be used by biosolids advocates to push back on any arguments that the risk assessment's 1 ppb number represents a valid regulatory or safety level.

EPA's Draft Guidance also includes recommendations for wastewater treatment plants and other generators of sewage sludge and highlights how monitoring programs coupled with source identification and pollution prevention can help identify PFAS coming into the treatment system. It includes a short mention that there are only two other pathways for biosolids management – surface disposal and sewage sludge incineration. The Draft Guidance references the Agency's recent *Interim Guidance on the Destruction and Disposal of PFAS* and the scientific findings that the fate and transport of PFAS in through landfill disposal may lead to greater PFAS

in the environment and continued uncertainty in PFAS emissions via sewage sludge incineration. NACWA, in comments, will provide some additional information around all three biosolids management options and how if one is eliminated, clean water utilities face a very challenging road ahead in sustainably managing their residuals cost effectively.

Shortcomings of the Guidance

As noted above, in the Draft Guidance, EPA does not make any distinction or mention of 'Exceptional Quality' or 'EQ' Class A biosolids from other biosolids treatment. The guidance notes that in some cases, wastewater treatment plants will sell or give away sewage sludge to private landowners for non-agricultural purposes such as fertilizing sports fields, as well as that about 20 percent of all sewage sludge is sold directly to the public through bagged or bulk soil products that may be applied to homes, gardens, parks, schools, and playgrounds.

Unfortunately, the Draft Guidance does not explain that in such cases, the "sewage sludge" is actually Class A EQ Biosolids. EQ biosolids have been heavily treated to ensure their safety following major investments by the wastewater treatment plant, meaning these biosolids go through rigorous biological, thermal, or chemical stabilization to meet or exceed the most stringent protections under the Clean Water Act's Part 503 regulations. EPA must make this clarification when describing biosolids products and their safety.

Similarly, it is key that EPA make this distinction in its recommendations for land application. The draft guidance notes that bulk land appliers and the general public may want to consider avoiding land application "near" fishable waters or drinking water sources, for example, or applying in areas where children under 5 may have access. The basis for these specific recommendations is not clear, nor is any distinction made between classes of biosolids. Given the unique treatment that bagged or pelletized Class A biosolids sold in garden centers undergo, further distinctions are essential to not raise additional undue alarm or fear.

Finally, similar to the Draft Risk Assessment, the new Draft Guidance raises more questions than answers with respect to comparative risk of other potential sources of PFAS. The Draft Guidance notes that landowners should be aware there are other potential sources of PFAS that could impact or be present on their land—without any further detail that could help a landowner or public make informed decisions regarding their use of biosolids. And it is unclear how the Agency will deal with its Draft Risk Assessment moving forward with the issuance of this Draft Guidance, especially if it is finalized.

Next Steps

As noted, EPA is accepting public comments on the new draft guidance for 60 days. NACWA will continue to review and discuss the guidance with our members prior to submitting comments by September 4. While NACWA will submit comments on behalf of the entire membership, we strongly encourage any interested utilities to submit their own comments as well through the [Federal Register](#)'s rulemaking portal to demonstrate how high profile this issue is for the clean water community. NACWA will provide a template comment letter to members by early August to assist with this effort.

NACWA will also continue to engage EPA as the Agency evaluates input and considers potential future next steps related to PFAS and biosolids. NACWA understands that EPA intends to review comments and finalize this Draft Guidance as its next step. Beyond that, the ultimate fate of the Draft Risk Assessment or efforts to set Clean Water Act standards for PFAS in biosolids remains to be determined.

If members have questions, please contact [Emily Rummel](#), NACWA's Senior Director of Regulatory Affairs.



Discovery Clean
Water Alliance

Staff Report

Board Meeting of September 18, 2026

6e. General Sewer Plan Update

STAFF CONTACTS	PHONE	EMAIL
John M. Peterson, P.E., Alliance Executive Director	360-993-8819	jpeterson@crwwd.com

PURPOSE: This report provides a quarterly update for the Board of Directors on Administrative Lead (AL) activities related to preparation of the Alliance General Sewer Plan.

Please see the attached presentations covering the following:

- Alliance General Sewer Plan
 - SCTP Basis of Planning
 - Population Projections
 - Flow/Load and Biosolids Projections
 - Battle Ground Wastewater Transmission System Evaluation – Overview of Alternatives for 20-Year Planning Period
 - Current System & Future Needs
 - Alternatives Evaluated
 - Basis of Evaluation
 - Review of Alternatives
 - Alternatives Comparison
 - Alternatives – Possible Recommendation
 - SCTP Transmission System – Overview of Recommendations for 20-Year Planning Period (updates included from June 18 presentation)
 - Current System & Future Needs
 - System Capacity Assessment
 - Recommendations
 - SCTP Liquid Stream Evaluation and Recommendations
 - Liquids Process Analysis
 - Recommended Improvements

ACTION REQUESTED: No specific action required. Please provide policy-level guidance for the various activities described in this report.

Alliance General Sewer Plan

Salmon Creek Treatment Plant
Basis of Planning

Discovery Clean Water Alliance
Board Meeting
September 18, 2026



AGENDA

- Introduction
- Population Projections
- Flow/Load and Biosolids Projections

INTRODUCTION

Introduction

- Alliance is Developing its First General Sewer Plan (GSP)
- Alliance GSP will be Aligned with Overall Clark County Comprehensive Planning Framework
 - Consistent with County/Cities' Comprehensive Plans
 - Planning period through 2045
 - Population allocations throughout service area
- Alliance GSP will Follow Ecology Requirements for Wastewater Infrastructure (WAC 173-240)

Secondary
Effluent

Introduction

Steps	General Sewer Plan	Engineering Report	Plans & Specifications
Engineering Definition	Conceptual (2-5% Design)	Predesign (10-30% Design)	Complete Design (100% Design)
Cost Contingency Applied	Higher	Medium	Lower

- Currently at GSP Stage
 - Goal is to establish an overall direction, which is then further developed

Introduction

Terminology

- Flow = Two flow parameters are important in the planning process:
 - Maximum Month Flow (mgd) = The highest monthly average flow in a year is the "max month" flow and is how Ecology rates the treatment plant.
 - Peak Hour Flow (mgd) = The highest one-hour flow, typically during winter storm events, is what controls the transmission system sizing and some elements of the treatment processes.



Introduction

Terminology Continued

- Wasteload or "Loading" = The amount of organic waste carried into the plant, typically measured in pounds per day (ppd). Ecology rates the plant capacity on two loading parameters, also on a maximum monthly basis:
 - Biochemical oxygen demand (BOD) = Measure of organic waste strength.
 - Total suspended solids (TSS) = Measure of suspended particulate matter.



POPULATION PROJECTIONS

County Comprehensive Plan

Countywide Population Estimates and Allocation:

Urban Growth Area (UGA)	April 1, 2023 Population Estimate	2045 Population Estimate
Battle Ground	24,444	37,217
Camas	29,352	37,080
La Center	4,462	8,346
Ridgefield	16,574	27,230
Vancouver (City)	199,600	266,455
Vancouver (UGA)	163,752	235,762
Washougal	18,026	24,874
Woodland	145	330
Yacolt	1,762	2,039
UGA Subtotal	458,116	639,332
Rural	69,284	78,822
County Total	527,400	718,154

*Source: Draft Issue Paper 5: Population, Housing, and Employment Allocation 2025 Comprehensive Plan
Periodic Update (April 15, 2024)*

Alliance Service Area

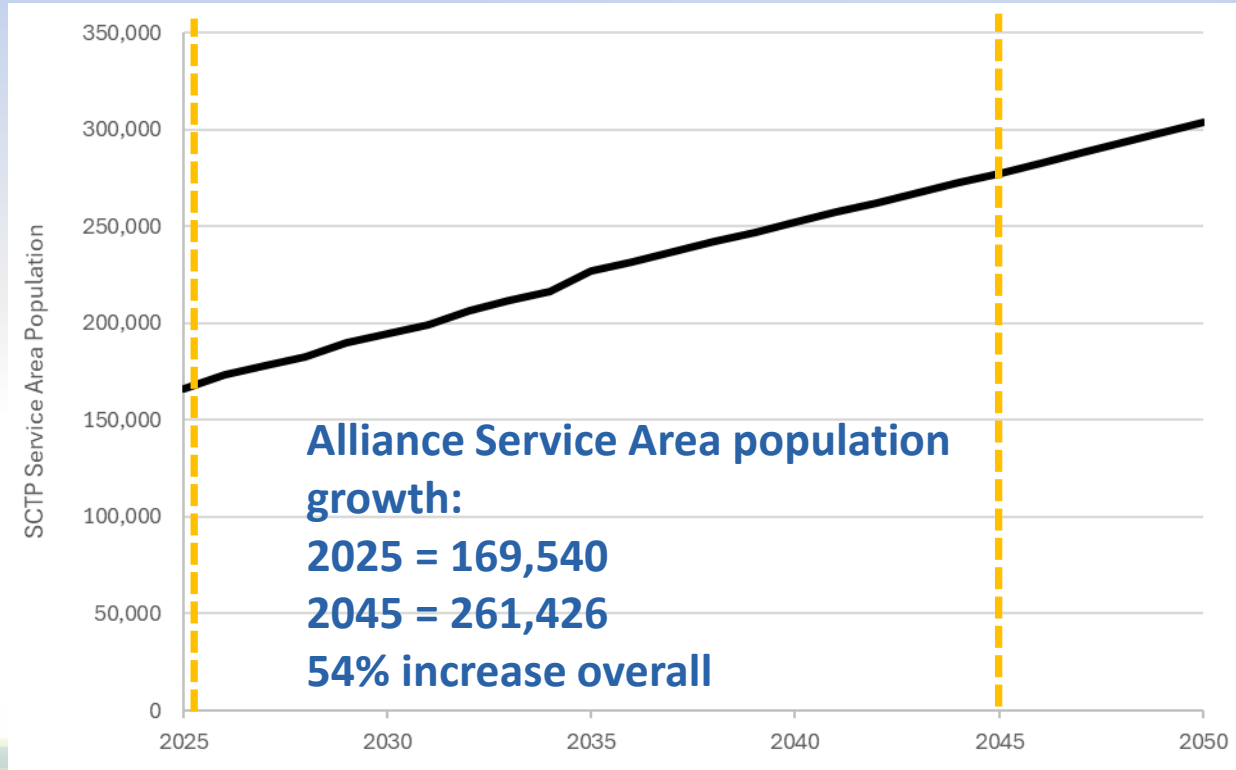
Service Area	2025 Population	2045 Population	Treatment Plant
Battle Ground	24,444	37,217	SCTP
Ridgefield	18,774	35,090	SCTP/RTP*
Meadow Glade	2,816	5,985	SCTP
Hockinson	442	503	SCTP
Unincorporated Clark County	118,192	175,254	SCTP
Incorporated Vancouver**	4,872	7,377	SCTP
Total Alliance	169,540	261,426	SCTP
Unincorporated Clark County	12,686	15,128	Vancouver – Westside
Total Flows	182,226	276,554	All Plants

* RTP will be decommissioned and all Ridgefield flows sent to SCTP by 2034.

** Approximation as the basins containing area within the COV corporate boundaries are not 100% within the relevant sewer boundaries.

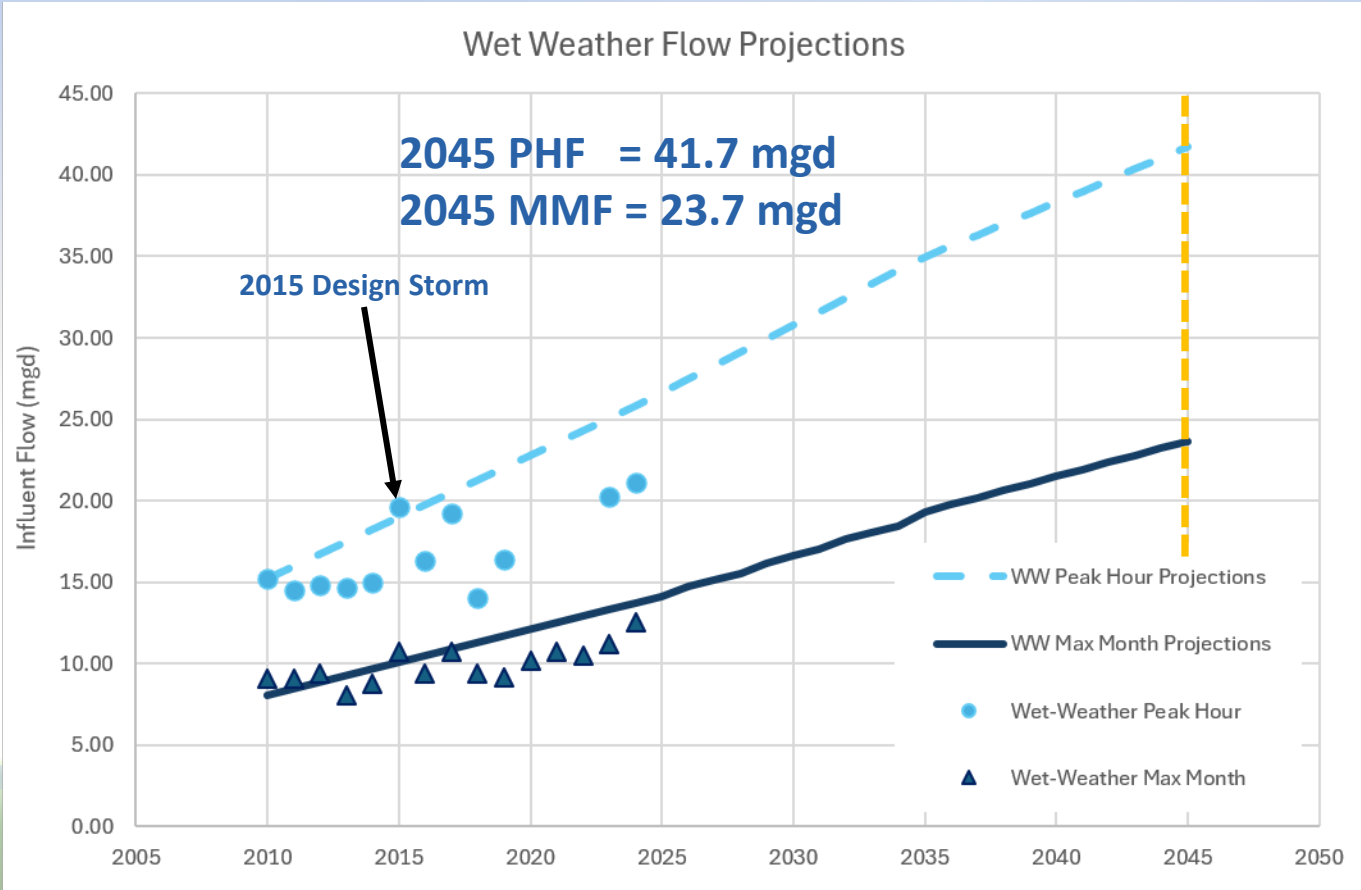
Population of Alliance service area estimated using County GIS data, compared to Comprehensive Plan projections to validate.

Population Projections

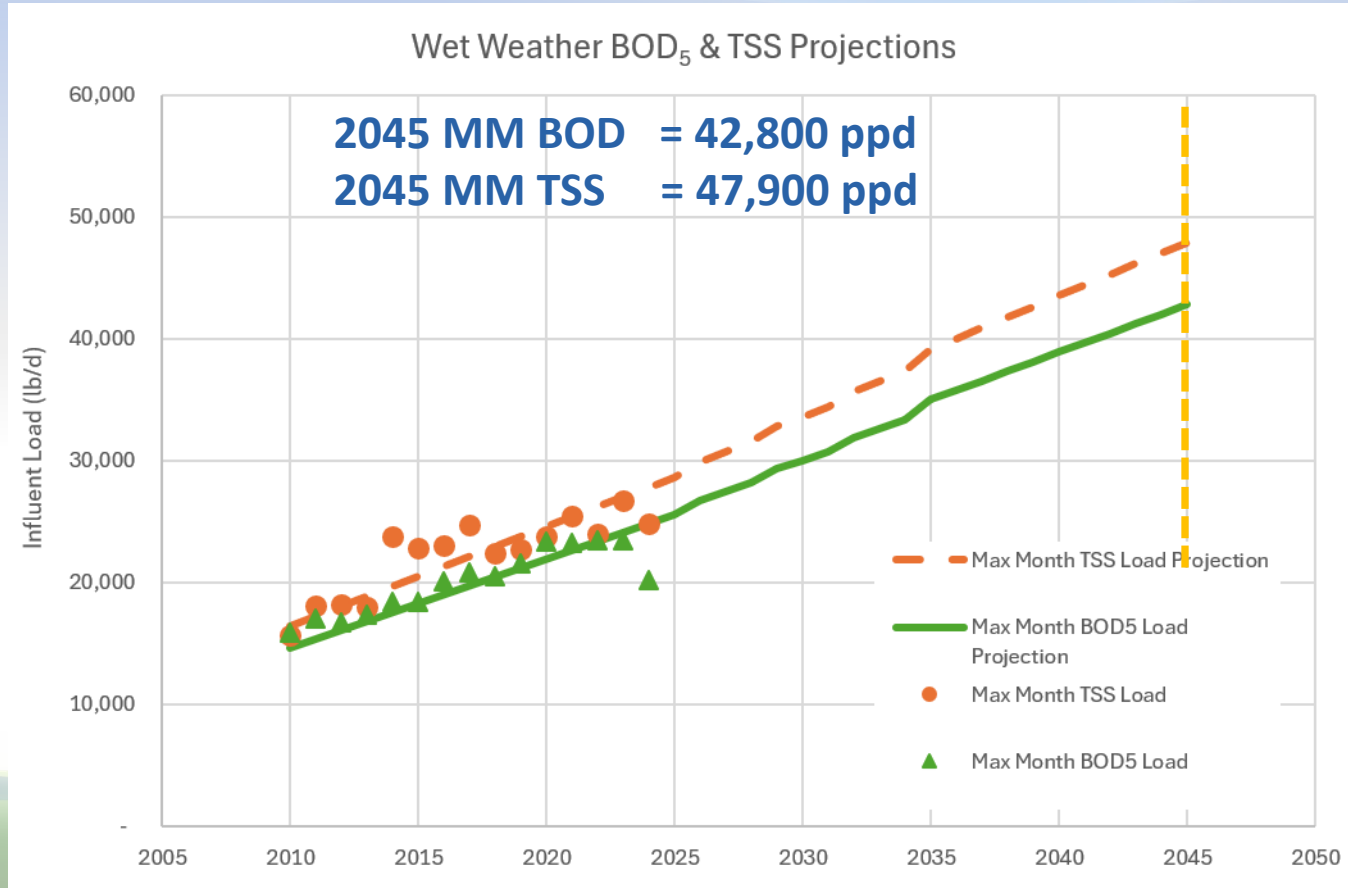


FLOW/LOAD AND BIOSOLIDS PROJECTIONS

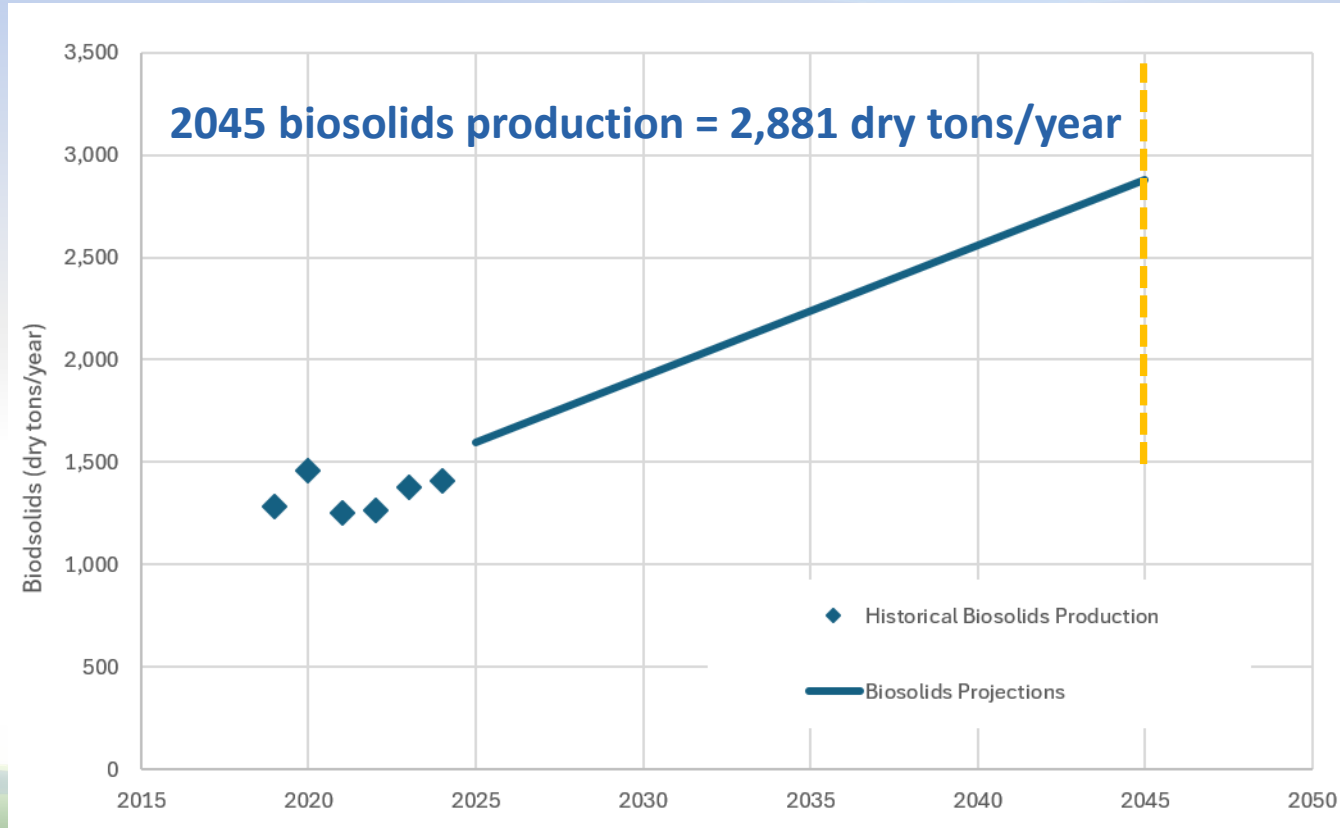
Flow Projections



Load Projections



Biosolids Projections



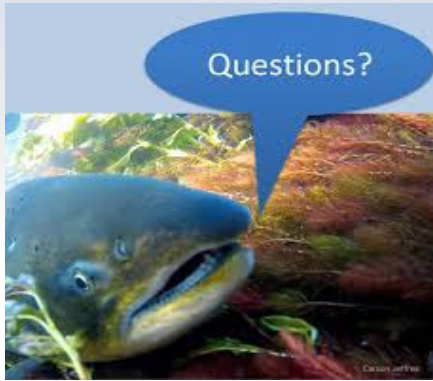
Source of Biosolids Projections: Salmon Creek Treatment Plant Dewatering Equipment Replacement Engineering Report, (Brown & Caldwell, April 2024)

Summary and Findings

- Significant population growth with resulting flow and load increases.
- Loadings, in turn, produce more biosolids.
- GSP will arrange for infrastructure investments in multiple phases that can be adjusted to align with actual economic trends.
 - Can accelerate or delay investments as needed
 - Currently developing concepts for Phase 6-7-8 Expansion Projects



Discussion



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Alliance General Sewer Plan

Battle Ground Wastewater
Transmission System Evaluation
Overview of Alternatives for 20-Year Planning Period

Discovery Clean Water Alliance
Board Meeting
September 18, 2026



AGENDA

- Introduction
- Current System & Future Needs
- Alternatives Evaluated
- Basis of Evaluation
- Review of Alternatives
- Alternatives Comparison
- Alternatives – Possible Recommendation

INTRODUCTION

Introduction

- Alliance is Developing its First General Sewer Plan (GSP)
- Alliance GSP will be Aligned with Overall Clark County Comprehensive Planning Framework
 - Consistent with County/Cities' Comprehensive Plans
 - Planning period through 2045
 - Population allocations throughout service area
- Alliance GSP will Follow Ecology Requirements for Wastewater Infrastructure (WAC 173-240)

Secondary
Effluent

Introduction

Steps	General Sewer Plan	Engineering Report	Plans & Specifications
Engineering Definition	Conceptual (2-5% Design)	Predesign (10-30% Design)	Complete Design (100% Design)
Cost Contingency Applied	Higher	Medium	Lower

- Currently at GSP Stage
 - Goal is to establish an overall direction, which is then further developed

Introduction

Terminology

- MG = Million Gallons (Volume)
- MGD = Million Gallons Per Day (Flow Rate)
- PHF = Peak Hour Flow (Highest Estimated Flow During a One-Hour Peak Wet Weather Event)

Secondary
Effluent

Survey

- Alliance Completed Statistically Valid Customer Values Survey as Part of Planning Process
 - Survey completed June 2025
 - Results aligned with service area demographics
 - Summary of results on following slides

Alliance Customer Survey Results

SAMPLE OVERVIEW



50% Women
49% Men
1% Neither of these



86% White
4% Hispanic or Latino/a
2% Asian / Pacific Islander
1% Black or African American
6% Other



16% 18-34
35% 35-49
26% 50-64
23% 65+



14% <\$50k
15% \$50-75k
14% \$75-100k
23% \$100-150k
25% >\$150k



79% Pay for wastewater services
18% On a septic system
3% Not sure



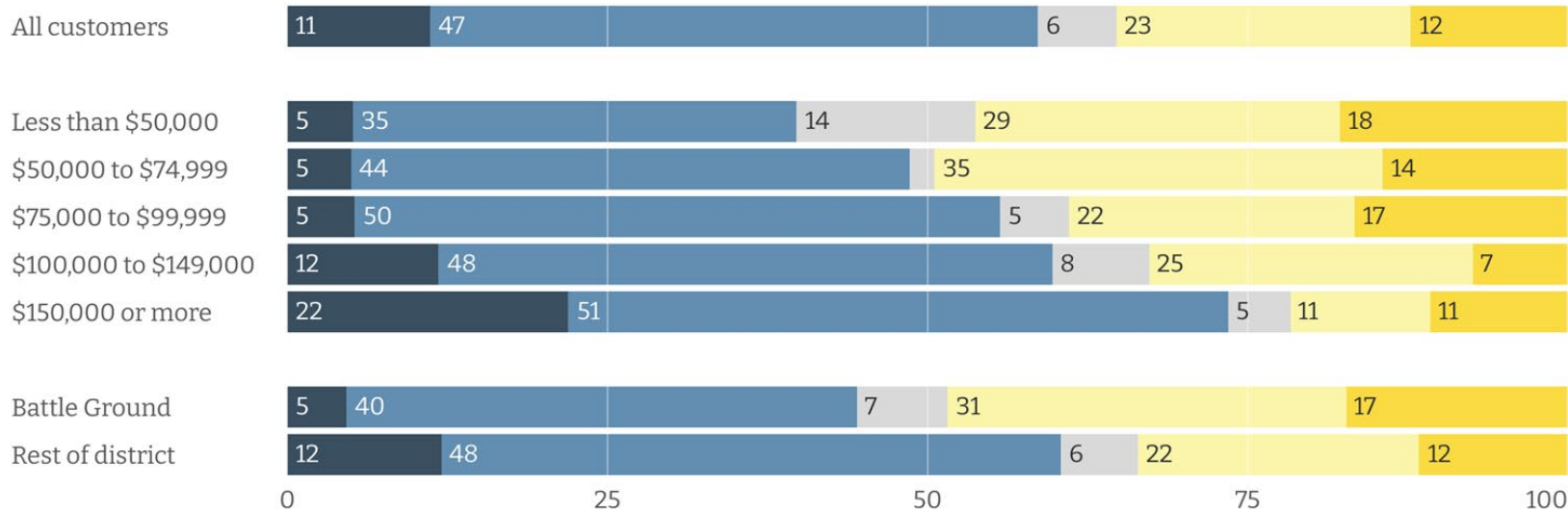
15% Battle Ground
85% Rest of district

Alliance Customer Survey Results

Nearly 60% of all customers describe their monthly rate as affordable, but nearly half of customers in Battle Ground and those earning less than \$75k describe it as unaffordable.

Affordability of Wastewater Services

● Very affordable ● Somewhat affordable ● Not sure ● Somewhat unaffordable ● Very unaffordable



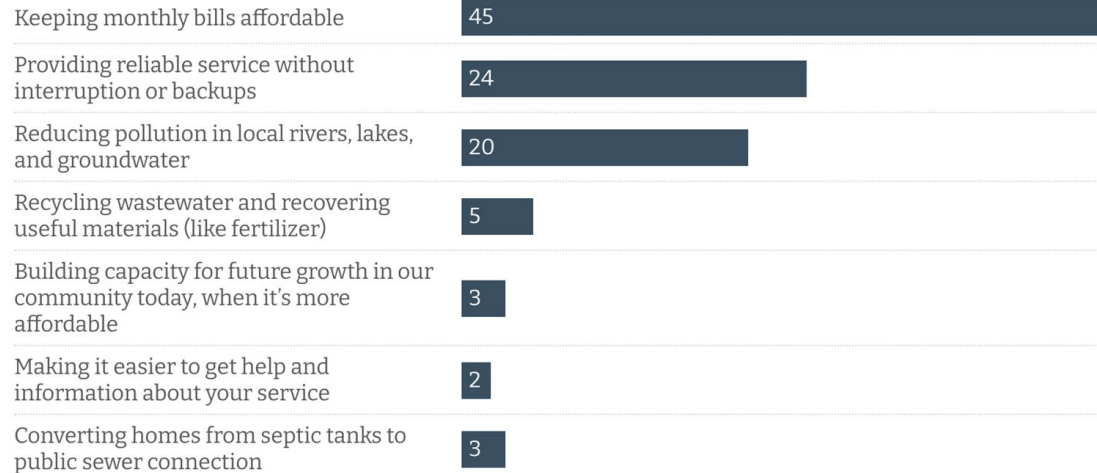
Q: [If pays for wastewater services] How would you describe the sewer utility's monthly rates?

Alliance Customer Survey Results

Across all demographics, one priority rises clearly above the rest – keeping wastewater services affordable.

Top Wastewater Priorities

% Most Important



Q: Please rank the following wastewater service priorities, with 1 being the most important to you and 7 being the least important.

CURRENT SYSTEM AND FUTURE NEEDS

Current System and Future Needs

Current System – Flow In

- Equalization Basin
 - Buffers flows during heavy rain events
 - Capacity
 - 3.50 MG (primary basin)
 - 0.65 MG (secondary basin)
 - 4.15 MG TOTAL
- Flow Into System
 - Most flow from Battle Ground
 - Smaller flows from District system (Meadow Glade/Hockinson)



Current System and Future Needs

Current System – Flow Out

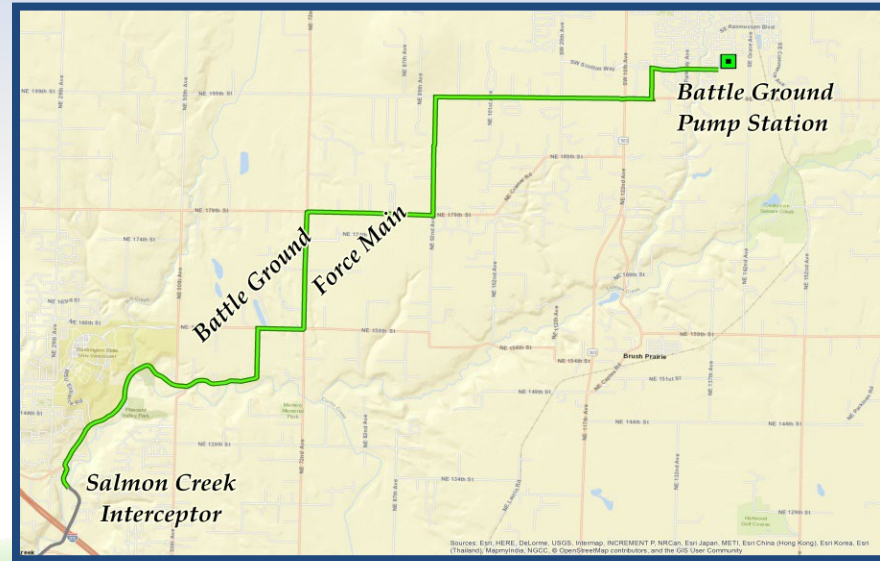
- Pump Station
 - Sends flow to Salmon Creek Treatment Plant
 - Pumping capacity: Up to 5.0 MGD



Current System and Future Needs

Current System – Transmission to Regional System

- Battle Ground Force Main
 - Constructed in early 1990s
 - 9 miles long
 - 16-inch diameter
 - Capacity: 5.5-6.0 MGD
 - Velocity and pressure limited above this amount



Current System and Future Needs

Future Needs – Planning Period

- 20-Year Comprehensive Planning Period (2045)
- Peak Hour Flows (PHF) Into Equalization Basin
 - Battle Ground flows 12.3 MGD
 - District flows (MG/H) 1.3 MGD
 - Total flows 13.6 MGD
 - Note: Values estimated by Jacobs and confirmed by Consor

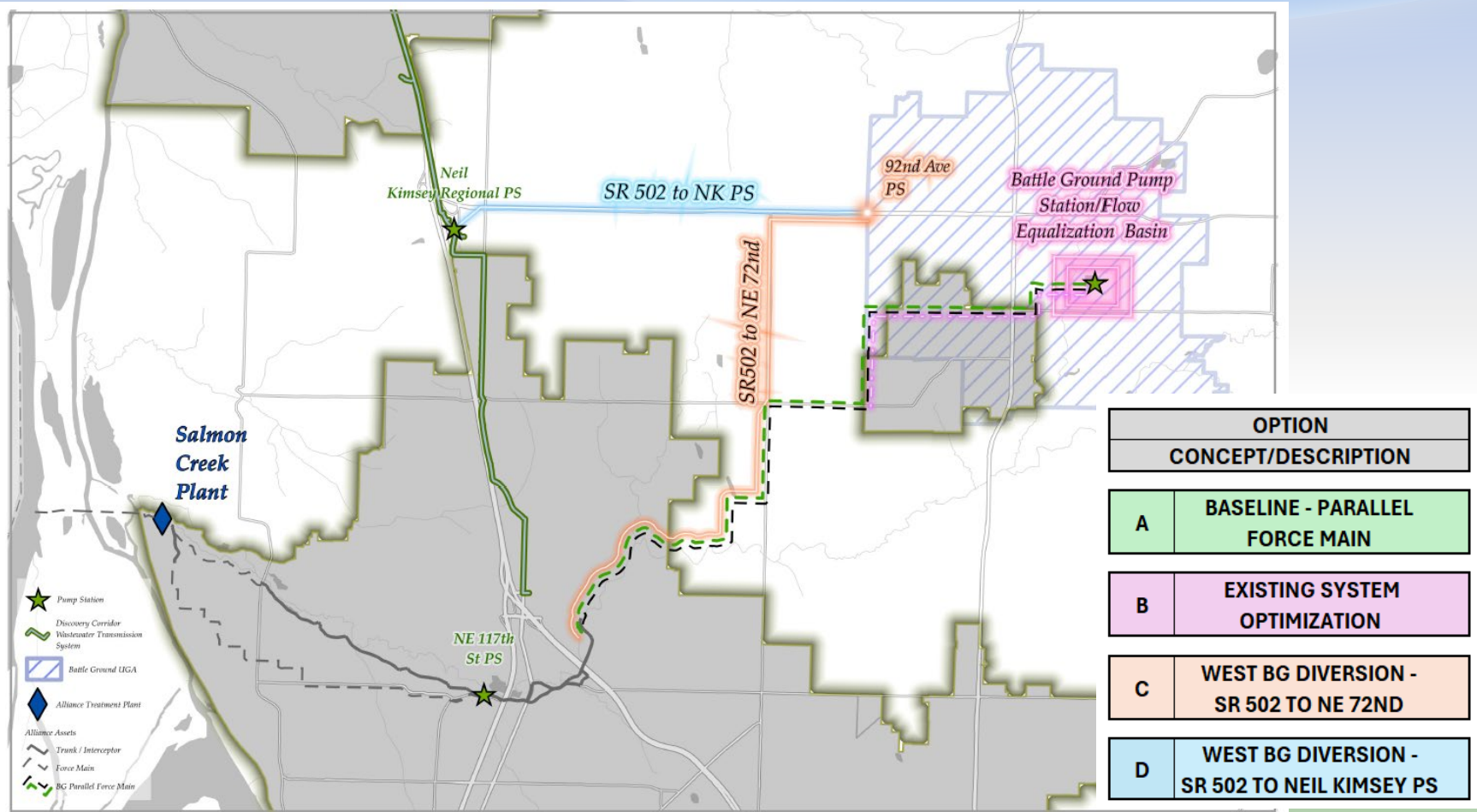
Current System and Future Needs

Future Needs – Additional Context: 50-Year Horizon

- Salmon Creek Treatment Plant
 - With conventional processes and current regulatory framework - current capacity can be approximately doubled on existing site
 - Equates to 40+ years of growth
 - Options beyond this period
 - Implement advanced processes (intensification)
 - Identify site for new regional treatment facility

ALTERNATIVES EVALUATED

Alternatives Evaluated



BASIS OF EVALUATION

Basis of Evaluation – Cost Criteria

- Capital Costs – Planning Level Total Project Costs Include:
 - Planning level contingencies
 - Project delivery allocation (engineering/survey/design/permitting/ROW acquisition, construction management/inspection, etc.)

Basis of Evaluation – Non-Cost Criteria

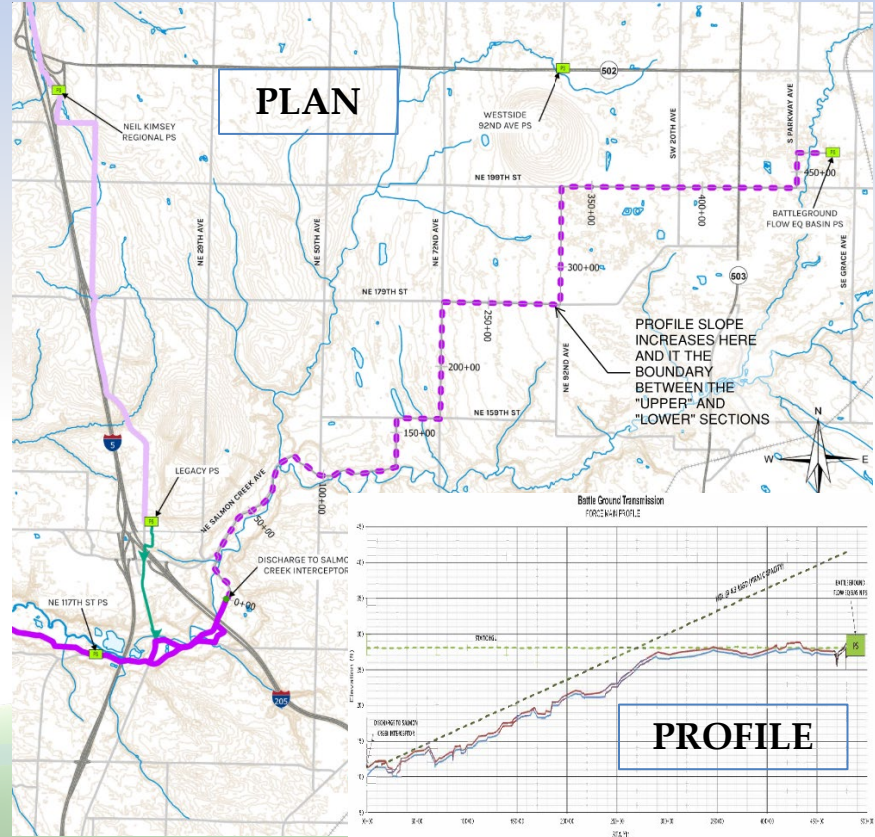
- Non-Cost Criteria Elements
 - Operations and maintenance
 - Environmental impact
 - Public impacts
 - Construction risk
 - Land use permitting, easements and property acquisition
 - Phasing and sequencing opportunities (20-year planning period)
 - Adaptability to 50-year needs
 - Overall system resiliency

REVIEW OF ALTERNATIVES

Alternative A Defined

Parallel BG Force Main

- New parallel pipe follows existing force main
- Baseline option from previous General Sewer Plans
- Could be completed in phases



Alternative A Engineering Findings

Parallel BG Force Main

20-Year Needs

- Assumes existing 16-inch pipe is in service
- Parallel pipe also 16-inch
 - Includes pump upgrades

Phasing Possible?

- Phasing possible
 - 4-mile upper section needed first
 - 5-mile lower section could occur 10-15 years later

Alternative A Engineering Findings

Parallel BG Force Main

Optimization Concepts

- Upgrading new pipe to 20/24-inch would allow eventual decommissioning of existing 33-year-old pipe

Other Factors

- Requires significant coordination with WSDOT, CPU, Clark County
- City internal system improvements also needed
 - Convey all City flows to Equalization Basin
 - To be reflected in Battle Ground General Sewer Plan

Alternative A Cost Estimates

Parallel BG Force Main

- Planning Level Total Project Costs:
 - Parallel 16-inch force main \$55.7M
 - Includes pump upgrades
 - Phased approach
 - 4 miles \$26.5M
 - 5 miles (10-15 years later) \$29.2M

Alternative B Defined

Optimize Existing System

- Increase storage capacity in Equalization Basin
 - Facility was designed to be expandable



Alternative B Engineering Findings

Optimize Existing System

20-Year Needs

- Expand Equalization Basin to 6.7 MG
 - Approximately an additional 60% storage volume
 - Meets 20-year needs

Phasing Possible?

- Can upgrade flushing capability in future as use of facility increases (current concept is for manual cleaning to minimize near-term costs)

Alternative B Engineering Findings

Optimize Existing System

Optimization Concepts

- Further consider pump upgrades or larger basin volume
 - May further optimize costs for 20-year planning period
 - May provide capacity beyond 20-year planning period

Other Factors

- Provides downstream regional benefits to City & Alliance
 - Extends capacity at 117th St Pump Station and several SCTP components
- City internal system improvements also needed
 - Convey all City flows to Equalization Basin
 - To be reflected in Battle Ground General Sewer Plan

Alternative B Cost Estimates

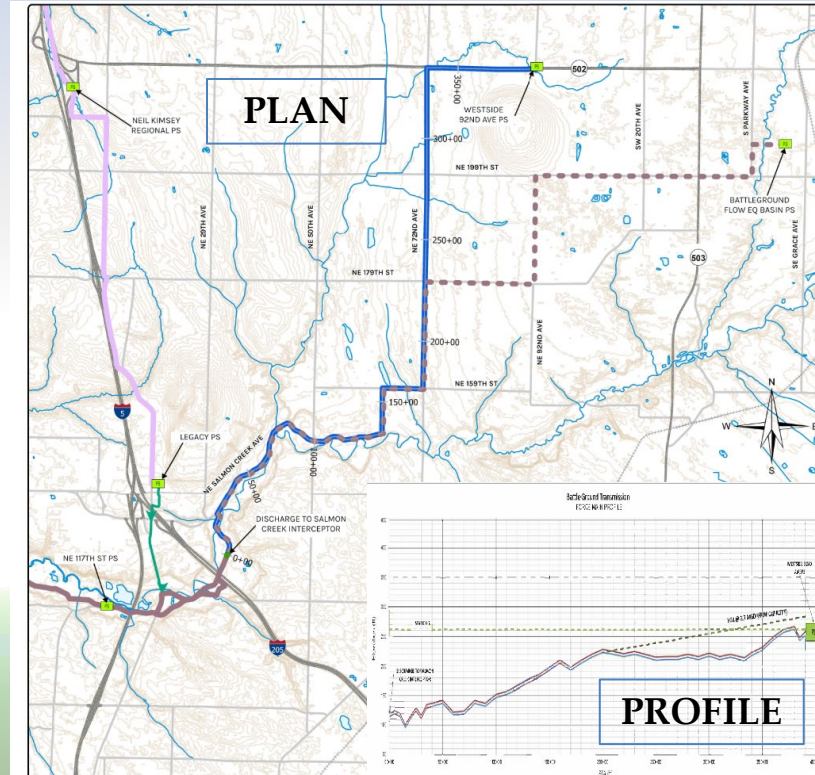
Optimize Existing System

- Planning Level Total Project Costs:
 - Equalization Basin expansion \$25.8M

Alternative C Defined

NE 92nd Ave Pump Station (W to 72nd Ave then S to Existing Connection Point)

- New force main from recently constructed pump station
- Force main route to same connection point
- Requires some internal redirection of collection system



Alternative C Engineering Findings

NE 92nd Ave Pump Station (W to 72nd Ave then S to Existing Connection Point)

20-Year Needs

- New 18-inch force main; 7.5-mile route to Alliance system
- Pump upgrades at 92nd Ave Pump Station

Phasing Possible?

- Limited phasing options
 - Could tie into existing Battle Ground Force Main
 - Defers second phase only a few years

Alternative C Engineering Findings

NE 92nd Ave Pump Station (W to 72nd Ave then S to Existing Connection Point)

Optimization Concepts

- Meets 20-year capacity
 - May benefit future western expansion of Urban Growth Area

Other Factors

- Requires significant coordination with WSDOT, CPU, Clark County
- Internal redirection of Lewisville sub-area (City GSP)
 - City pump stations 8-10-11 redirected to 92nd Ave
- No upgrades required for Equalization Basin system

Alternative C Cost Estimates

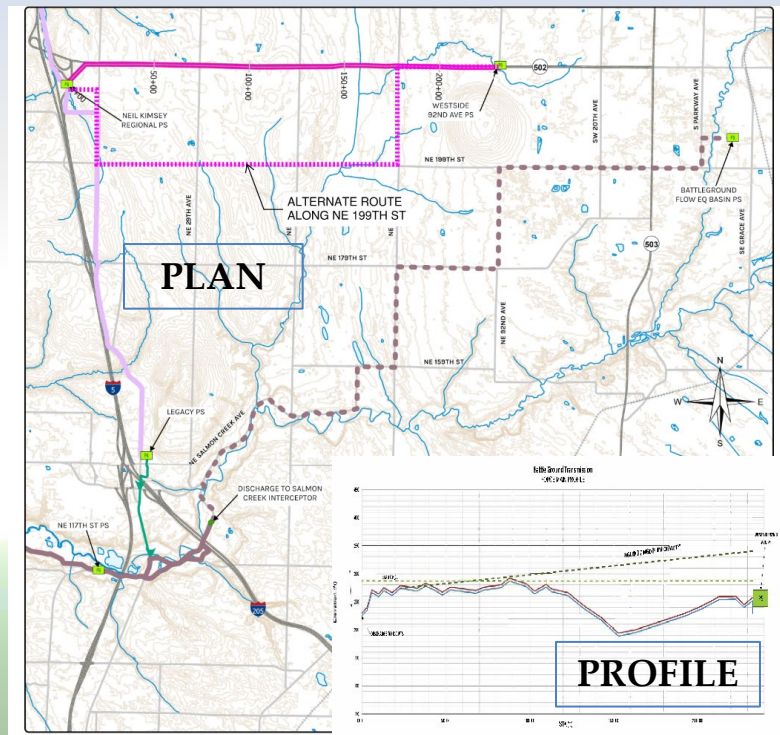
NE 92nd Ave Pump Station (W to 72nd Ave then S to Existing Connection Point)

- Planning Level Total Project Costs:
 - New 18-inch force main \$50.9M
 - Includes pump station upgrades

Alternative D Defined

NE 92nd Ave Pump Station (W to 72nd Ave to Neil Kimsey Pump Station (Discovery Corridor Wastewater Transmission System)

- New force main from recently constructed pump station
- Pump upgrades at new pumpstation
- Connects to Neil Kimsey Regional Pump Station (Gee Creek Rest Area)
- BG would have to buy District capacity within DCWTS over time



Alternative D Engineering Findings

NE 92nd Ave Pump Station (W to 72nd Ave to Neil Kimsey Pump Station (Discovery Corridor Wastewater Transmission System)

20-Year Needs

- New 18-inch force main
- 4.5-mile route to Neil Kimsey Pump Station
- Pump upgrades at 92nd Ave Pump Station

Phasing Possible?

- Yes – Buy-in and future Discovery Corridor Wastewater Transmission System investments

Alternative D Engineering Findings

NE 92nd Ave Pump Station (W to 72nd Ave to Neil Kimsey Pump Station (Discovery Corridor Wastewater Transmission System)

Optimization Concepts

- Meets 20-year capacity

Other Factors

- Requires significant coordination with WSDOT, CPU, Clark County
 - Crossing of Mill Creek drainage west of 72nd Ave especially challenging
- Internal redirection of Lewisville sub-area (City GSP)
 - City pump stations 8-10-11 redirected to 92nd Ave
- No upgrades required for Equalization Basin system

Alternative D Cost Estimates

NE 92nd Ave Pump Station (W to 72nd Ave to Neil Kimsey Pump Station (Discovery Corridor Wastewater Transmission System)

- Planning Level Total Project Costs:
 - New 18-inch force main \$ 39.7M
 - Includes pump station upgrades
 - DCWTS buy-in* \$ 13.1M
 - TOTAL \$ 52.8M

*Buy-in to DCWTS system would be over 20 years

ALTERNATIVES COMPARISON

Alternative Comparison

Total Project Costs

- 20-Year Planning Period

Alternative	Battle Ground Costs		
	New Regional Infrastructure	DCWTS Buy-In	Total Cost
A	\$55.7M	N/A	\$55.7M
B	\$25.8M	N/A	\$25.8M
C	\$50.9M	N/A	\$50.9M
D	\$39.7M	\$13.1M	\$52.8M

Alternative Comparison

Non-Cost Criteria – Definitions

- Operations & Maintenance: Ease of use and cleaning, routine and emergency access, design life and frequency of operations. Trade-off of long-term complication in operations vs difficult temporary design/construction issues.
- Environmental Impact: Challenging mitigation for endangered species, vulnerable habitat, regulated lands. Environmental permitting and mitigation requirements.
- Public Impacts: Construction challenges or benefits to commercial or residential areas. Business disruption or improved access through roadways.
- Construction Risk: Constructability, creek construction, erosion, landslides. Opportunity to improve seismic resiliency.

Alternative Comparison

Non-Cost Criteria – Definitions

- Land Use Permitting, Easements, & Property Acquisition: Landowners, number of parties, existing assets. Land use permitting (outside vs inside UGA).
- Phasing & Sequencing Opportunities (20-Year): Consider flexibility for project phasing and sequencing, consider up front vs. delayed investment.
- Adaptability to 50-Year Needs: Provides capacity beyond 20-year planning period with nominal incremental upfront investment, and supports future growth patterns, anticipated regulatory changes, and long-term investment.
- System Resiliency: Provides increased reliability and resiliency from natural hazards and or avoids known risk areas. Provides redundancy options or reduces overall system operating impacts from a seismic event or natural disaster.

Alternative Comparison

Non-Cost Criteria - Scores

Score of 1 (worst) to 5 (best)

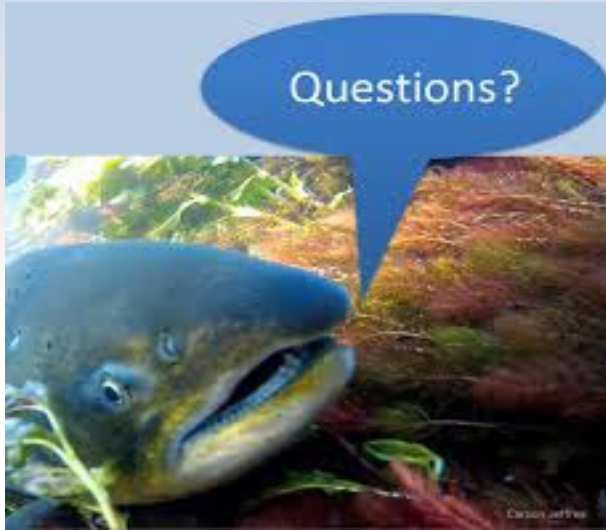
Alternative	Operations & Maintenance	Environmental Impact	Public Impacts	Construction Risk	Land Use Permitting, Easements, & Property Acquisition	Phasing & Sequencing Opportunities (20-Year)	Adaptability to 50-Year Needs	System Resiliency	Total Points
A	3	3	1	3	2	3	2	3	20
B	2	5	5	4	5	1	1	1	24
C	3	3	1	3	3	2	4	4	23
D	2	2	2	2	2	1	3	5	19

- Scores Vary for Specific Criteria Among Various Alternatives
- Overall Non-Cost Scores are Generally Similar (only 5 point range from high to low)

ALTERNATIVES – POSSIBLE RECOMMENDATION

Alternatives – Possible Recommendation

- Lowest Cost to Meet 20-Year Needs is Alternative B
 - Also supported by non-cost score
 - Consistent with customer values survey
 - Can explore further optimizations
 - Recommend further evaluation of pipeline age/condition (existing force main will be 52 years old at end of planning period); Develop appropriate asset management strategies
- Consider Identifying Another Alternative for 50-Year Planning Period
 - Second pipeline likely needed beyond 20-year planning period



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Alliance General Sewer Plan

Salmon Creek Wastewater Treatment Plant
Transmission System

Overview of Recommendations for 20-Year Planning
Period

Discovery Clean Water Alliance
Board Meeting
June 18, 2026



AGENDA

- Introduction
- Current System & Future Needs
- System Capacity Assessment
- Recommendations

INTRODUCTION

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 - Population allocations throughout service area
- Alliance GSP will Follow Ecology Requirements for Wastewater Infrastructure (WAC 173-240)

Secondary
Effluent

Introduction

Steps	General Sewer Plan	Engineering Report	Plans & Specifications
Engineering Definition	Conceptual (2-5% Design)	Predesign (10-30% Design)	Complete Design (100% Design)
Cost Contingency Applied	Higher	Medium	Lower

- Currently at GSP Stage
 - Goal is to establish an overall direction, which is then further developed

Introduction

Terminology

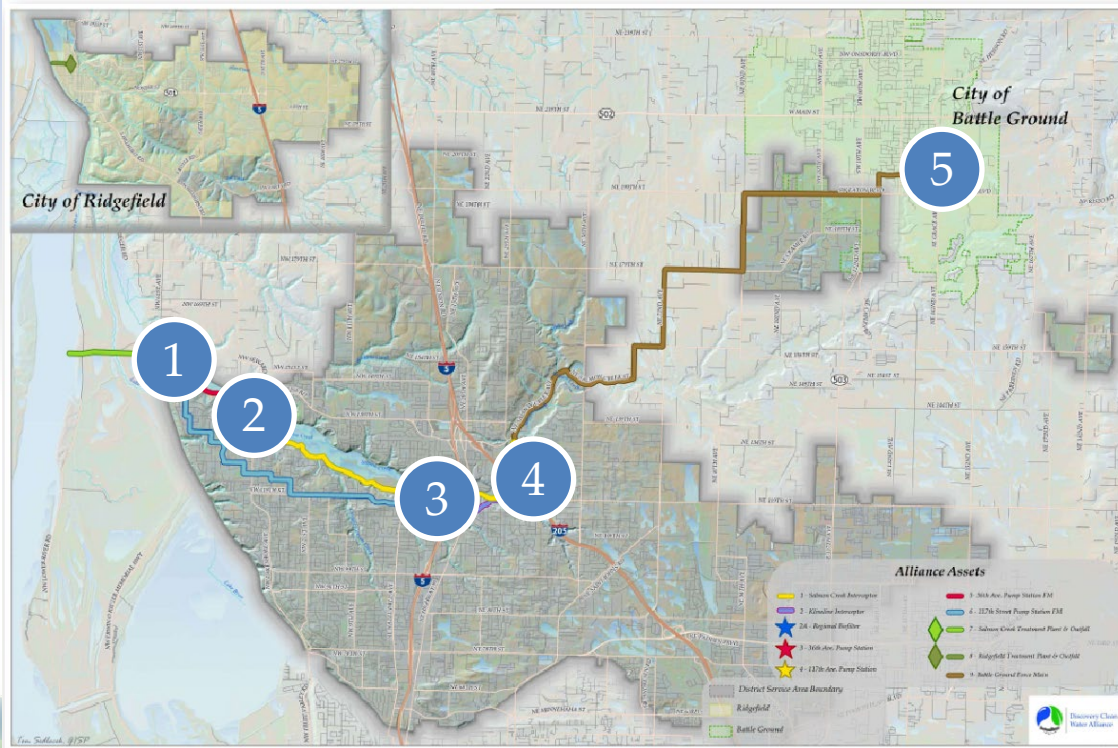
- Regional Transmission System = Network of large pipelines and regional pumping stations that deliver flow to the Salmon Creek Treatment Plant
- PHF = Peak Hour Flow (mgd), highest one hour flow anticipated during planning period
- MGD = Millions of Gallons per Day
- Firm Capacity = Flow capacity with largest pumping unit out of service

Secondary



CURRENT SYSTEM & FUTURE NEEDS

Current System



- 1 Salmon Creek Treatment Plant
- 2 36th Avenue Pump Station
- 3 117th Street Pump Station
- 4 Regional Biofilter
- 5 Battle Ground EQ Basin and Pump Station (owned by City of Battle Ground)

Current System



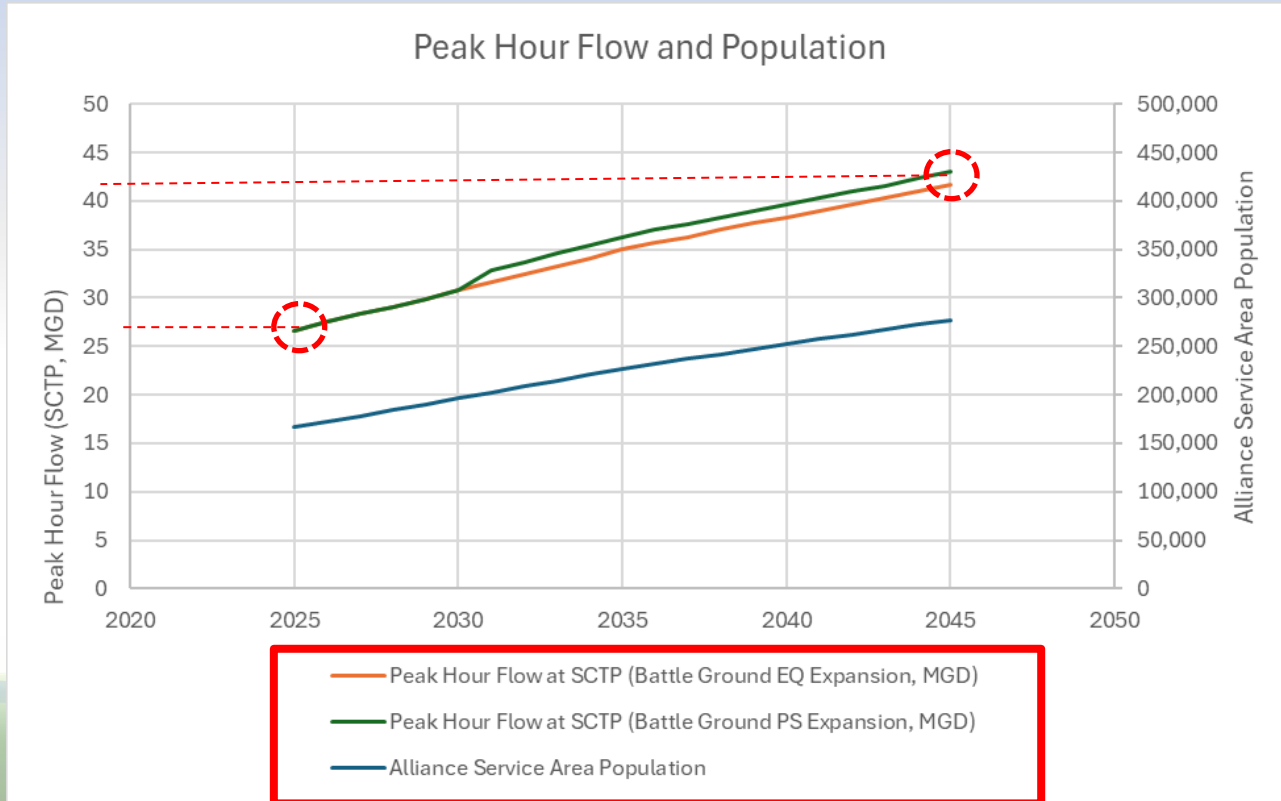
36th Avenue Pump Station



117th Street Pump Station

Future Needs

Flow Projections at SCTP (with attenuation through pump stations)



SYSTEM CAPACITY ASSESSMENT

System Capacity Assessment

- Coordinated with District and City of Battle Ground GSPs
- Peak Hour Flow = 42 mgd at SCTP in 2045
- Pipeline and Pump Station Capacity Evaluations
 - Performed for each component in system

System Capacity Assessment: Results

Interceptor System

- Klineline Interceptor – adequate capacity during planning period
- Salmon Creek Interceptor – adequate capacity during planning period
- Regional Biofilter – adequate capacity during planning period

Pump Station System – 36th Ave Pump Station

- Pump Station / Force Main is at capacity
 - Constrained by hydraulic limits of 50+ year old structure
 - Last expansion put in largest pumps possible (confirmed)
 - Current capacity = 16.3 mgd PHF
 - 14.4 mgd from permanent Flygt pumps
 - 1.9 mgd from temporary diesel “Flow Augmentation Pumps” (FAPs)



Permanent



Temporary

Pump Station System – 117th St Pump Station

- Pump Station designed for expansion
 - Currently has five 250hp pumps
 - Expansion pumps will be 500-600hp
 - Current capacity = 13.0 mgd after retrofit with cutter style pumps
 - Assumes use of both 30" force mains



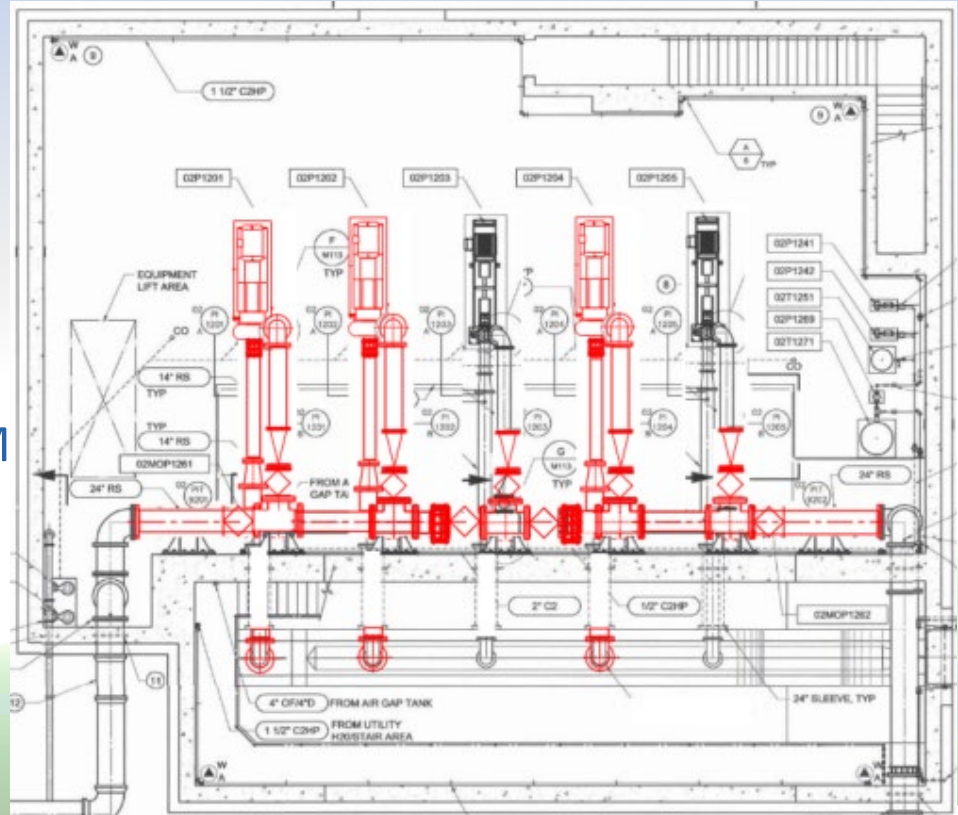
RECOMMENDATIONS

Recommendations

- Gravity Interceptors and Regional Biofilter – no improvements
- 36th Avenue Pump Station
 - No improvements in GSP
 - Retain Flow Augmentation Pumps until Phase 6 is constructed, then continued use is Operations decision
- 117th Street Pump Station
 - Implement 3 step expansion in Phase 6, 7, and 8 eras. Phased expansion recommendation for two reasons:
 - Better distribution of cash flow over planning period as growth occurs
 - Retain enough smaller (existing) pumps for practical operational needs

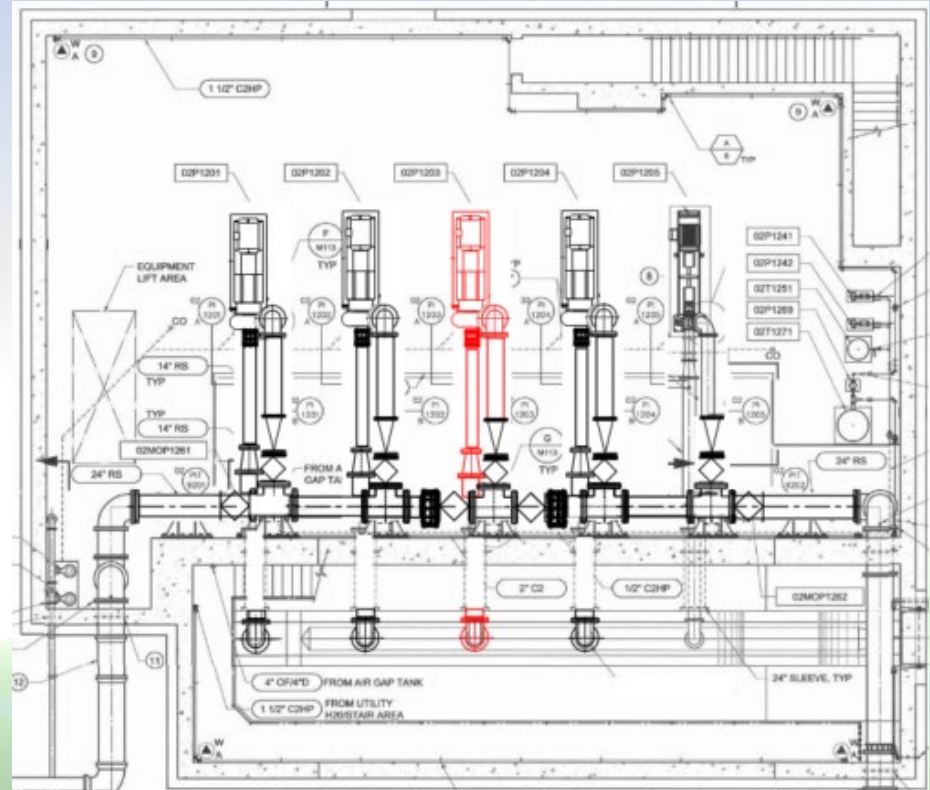
Phase 6 Era Improvements

- Upsize 3 pumps and piping
- Electrical/Controls upgrades
- HVAC upgrades to meet Energy Code
- Firm Capacity: 23.0 MGD
- Planning level capital cost: \$10.8M
- Capacity target date – 2031



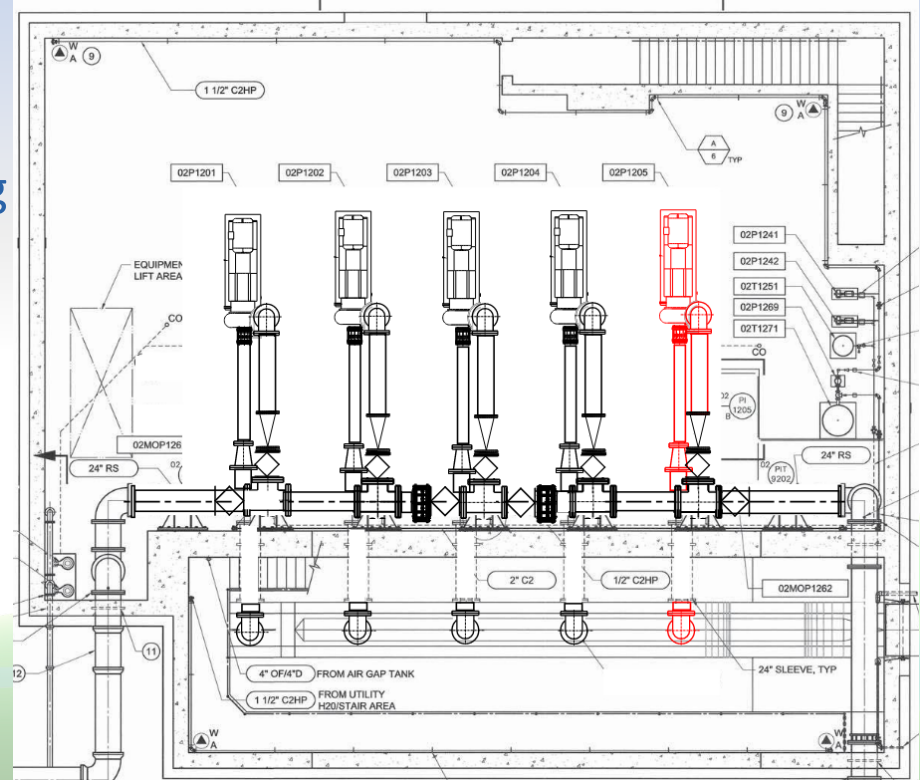
Phase 7 Era Improvements

- Upsize 1 additional pump and piping
- Electrical/Controls upgrades
- No HVAC improvements
- Firm Capacity: 28.3 MGD
- Planning level capital cost: \$2.3M
- Capacity target date – 2038

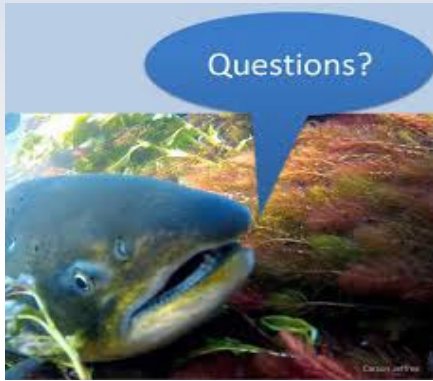


Phase 8 Era Improvements

- Required beyond 2045 planning period
- Upsize 1 additional pump and piping
- Electrical/Controls upgrades
- No HVAC improvements
- Firm Capacity: 33.6 MGD
- Planning level capital cost: \$2.1M
- Capacity target date – 2046



Discussion



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Alliance General Sewer Plan

Salmon Creek Treatment Plant
Liquid Stream Evaluation and Recommendations

Discovery Clean Water Alliance
Board Meeting
September 18, 2026



AGENDA

- Introduction
- Liquids Process Analysis
- Recommended Improvements

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Terminology

- Liquids Treatment Process = Process required to treat raw sewage to achieve effluent quality that can discharge to Columbia River under applicable permit.
- MCRT = Mean Cell Residence Time (biological treatment design criterion)
 - Higher MCRT means larger biomass population carried in the secondary process.
- ML = Mixed Liquor. Secondary process liquid containing biomass for treatment.



Introduction

Additional Context for the Alliance GSP

- Continues planning from prior efforts, refining long term SCTP site plan.
- Adapting to new National Pollutant Discharge Elimination System (NPDES) Permit requirements, in the post Phase 5 environment.
- “Site build out” is important consideration for facility handling 50% of planned growth in Clark County.
- Ridgefield Treatment Plant (RTP) decommissioning is expected during planning period.



LIQUIDS PROCESS ANALYSIS

Preliminary and Primary Treatment

- Influent Screening
 - Confirmed need for Screen 3 and conveyor, as anticipated.
 - Will also replace older Screen 1 and 2 and conveyors at end of useful life.
- Grit Removal
 - Minor work in channels as flows increase.
 - Minor process improvements to enhance performance.
- Primary Clarifiers
 - Phased sequencing with new PC in Phase 7, as anticipated.
 - Provide primary scum collection and treatment system.
 - System was removed by previous operator.
 - New work (and cost) not listed in previous plans.
- Odor Control System
 - Adequate capacity through planning period, as anticipated.

Secondary Treatment

- Aeration Basins and Blowers
 - Process change from prior planning efforts – tied to new outfall and improved Columbia River mixing.
 - Ammonia limit removed from permit (effective 01/01/2025).
 - Ammonia removal requires more aeration basin and blower capacity to support larger biomass.
 - MCRT refined from 7 days to 5 days.
 - Still a conservative design but aligned with new permit requirements.
 - Additional AB needed in Phase 7.
 - No new blower capacity needed in planning period.
- Secondary Clarifiers
 - Additional SC needed in Phase 8.

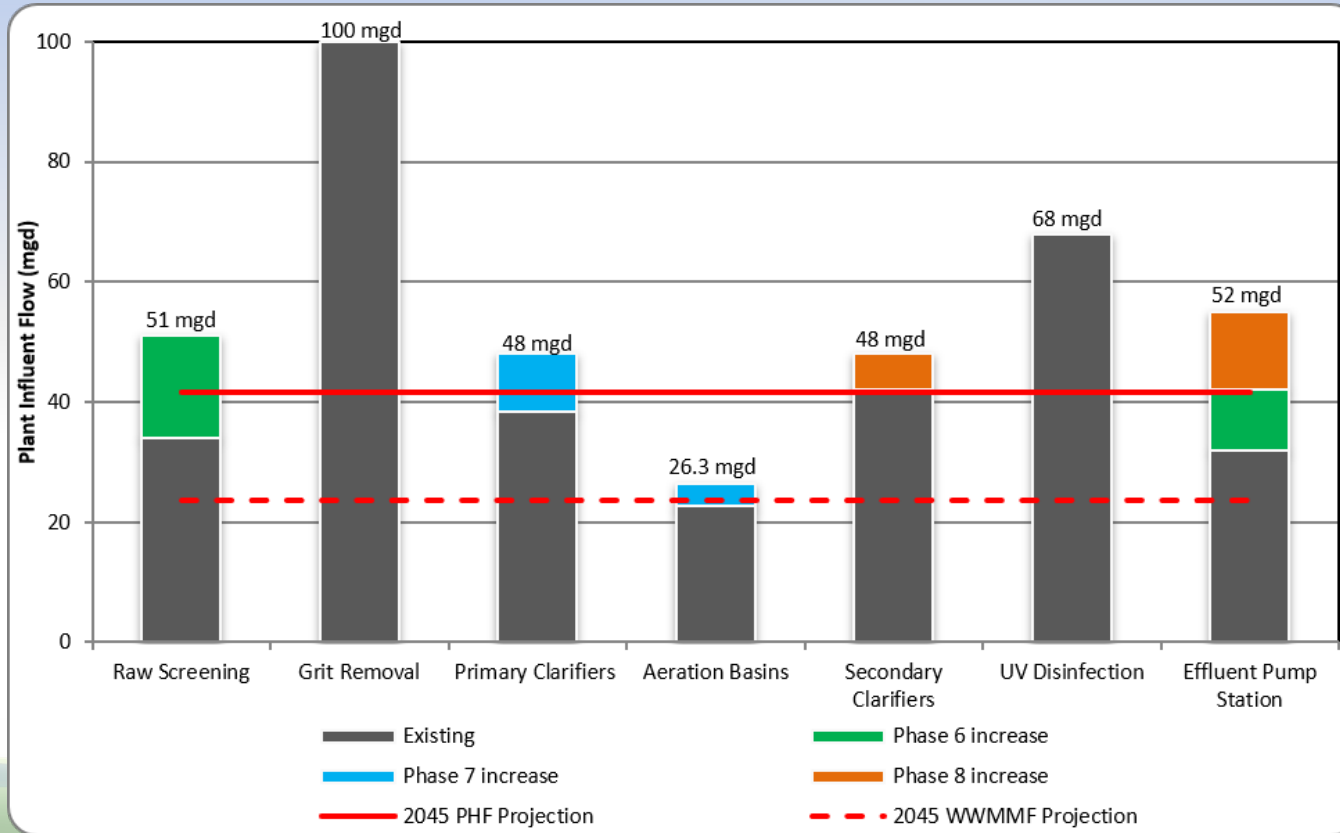


UV Disinfection, Effluent Pumping, Effluent Cooling



- UV Disinfection
 - UV capacity currently under construction (combined capacity and R&R project).
- Effluent Pumping
 - New Effluent Pumps needed in Phase 6.
 - Additional Effluent Pump Station needed in Phase 8.
- Effluent Cooling
 - Not triggered in 20-year planning period but needed for site buildout.

Unit Process Capacity



RECOMMENDED LIQUIDS IMPROVEMENTS

Recommended Liquids Improvements



Capital Cost Estimates (\$M)

	Phase 6	Phase 7	Phase 8
Year Capacity Needed	2032	2040	2046
PHF/MMF Flow (MGD) Capacity	38.0/21.5	42.0/23.7	45.7/26.3
MM BOD (ppd) Capacity	38,900	42,800	47,600
MM TSS (ppd) Capacity	43,500	47,900	53,300
Influent Screening	\$3.8		
Grit Removal	\$0.5		
Primary Clarification (PC 5)		\$13.0	
Primary Scum Handling System	\$5.1		
Preliminary/Primary Odor Control*			
Aeration Basins (AB 8)		\$14.7	
Secondary Clarifier 6 / ML Splitter Box			\$14.8
RAS/WAS Pump Station			\$3.5
Blowers*			
UV Disinfection (under construction)*			
Effluent Pump Station (existing and future)	\$4.1		\$15.8
Total Cost (\$M)	\$13.5	\$27.7	\$34.1

*capacity adequate for planning period

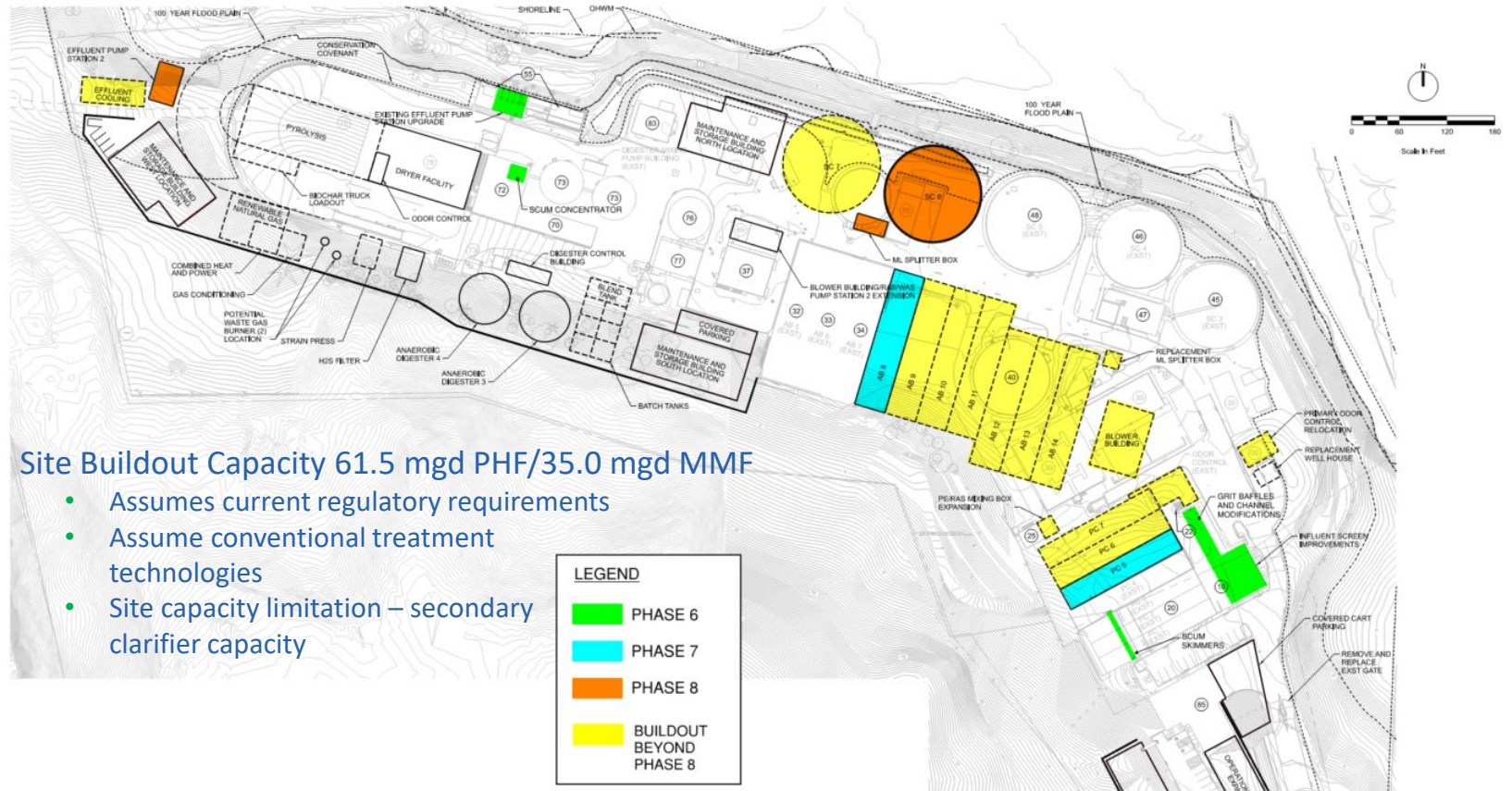
Site Buildout – Liquids

- Site Buildout – Process Approach
 - Conventional processes assumed.
 - Intensification options becoming more common in the industry.
 - Will be further considered in next GSP.
- Effluent Cooling
 - Required to meet future heat load limits.
 - Mechanical chillers, cooling towers are technical options for SCTP constrained site.
 - Locate near Effluent Pump Station 2.
 - Potential \$20-30M cost.



Effluent cooling tower example:
Wilsonville, OR WWTP

Site Buildout – Facilities Beyond Phase 8

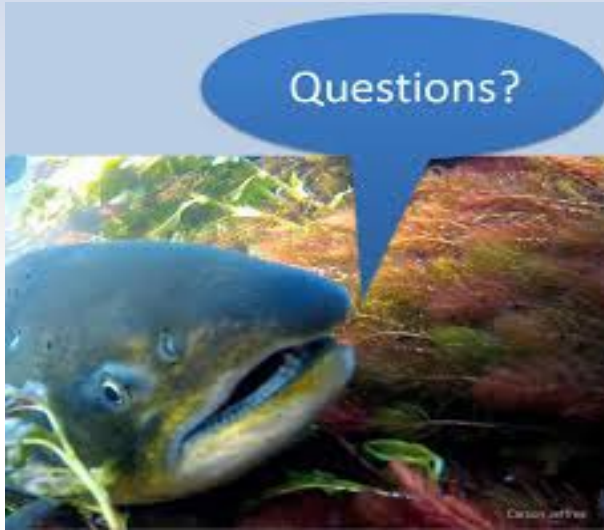


RTP Decommissioning

- District's Ridgefield Sewer Redirection project will allow RTP decommissioning by 2034.
- City of Ridgefield will determine disposition of property, after facility decommissioning.
- Alliance decommissioning scope:
 - Demolish above ground structures
 - Demolish concrete structures 3ft below grade
 - Plug deep yard piping/outfall
 - Regrade surface with clean fill
 - Remove exposed outfall in Lake River
- Capital Cost: \$6.6M (final cost anticipated 4Q 2026)



Discussion



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