Black Lake Special District

Black Lake Special District Meeting
Monday, March 23, 2026 • 6:15 pm
7514 Cattail LN SW, Olympia, WA 98512
Attendance via Zoom audio is preferred. Contact info@blacklakespecialdistrict for instructions.

Participants from the public will be muted by the Zoom host. Participants will be unmuted during the agenda item titled "Public Communication".

AGENDA:

1. Call to Order

2. Roll Call
   a. Present
      i. Lake Stintzi
      ii. Kirk Vanlandeghen
      iii. Cory Freeborn

3. Approval of Agenda

4. Approval of Consent Agenda
   a. February 23, 2026 Minutes
   b. February 26, 2026 Minutes
   c. March 4, 2026 Minutes
   d. March 9, 2026 Minutes
   e. Financials
   f. Payment Transmittal and Invoices

(Funds) Voucher (Warrant)	**Total**
Invoice #1	2500.00

5. Old Business

6. New Business
   a. Aquatic Insight IAVMP Contract Review
   b. Public Disclosure Request for IAVMP bids

7. Items from the Floor

8. Public Communication – *Limit of 3 minutes per person. Zoom host will provide warning when 30 seconds remain. Meeting minutes will only reflect the name of the person speaking.

9. Adjournment of Public Meeting

Next Meeting: April 20, 2026

Black Lake Special District

Black Lake Special District Meeting
Monday, February 23, 2026 • 6:15 pm

ACTION ITEMS:

- Lake will speak with NW Aquatic for a quote repeating the herbicide treatment timing from last year.
- Board will review proposals individually and score.

MINUTES:

1. Call to Order – **Chair Stintzi called the meeting to order at 6:16 pm.**

2. Roll Call
    a. Present
        i. Lake Stintzi
        ii. Kirk Vanlandeghen
        iii. Cory Freeborn

3. Approval of Agenda – **It was moved, seconded, and unanimously passed to approve the agenda as presented.**

4. Approval of Consent Agenda – **It was moved, seconded, and unanimously passed to approve the consent agenda as presented.**
5.
    a. January 20, 2026 Minutes
    b. Financials
    c. Payment Transmittal and Invoices

(Funds) Voucher (Warrant)	**Total**
Invoice #1	$2305.50
Invoice #2	$5578.13
Invoice #3	$2500.00
Compensation Request – Lake	$805.00
Compensation Request – Cory	$2415.00

6. Old Business
    a. Adoption of 2026 Budget – **It was moved, seconded and unanimously approved to adopt the 2026 budget, subject to amendments.**
        i. Beginning year balance modified to agree with "Financial Position Previous Year Comparison" document.
        ii. Reorganized items into groups: Income, Expenses – Administration, Expenses – Lake Management.
        iii. Bond Guaranty Fund item deleted since no further activity after reaching required $100k balance.

7. New Business
    a. Herbicide contractor needed.
        i. IAVMP contractor could provide assistance.
        ii. Consideration to apply for change in herbicide timing window from 7/15-10/15 to 6/1-10/15.

iii. Earlier treatments may be more effective and use less chemicals. Lake's research found that it was best to apply herbicides in the spring and not late summer, however Fish and Wildlife use a "timing window" which doesn't allow applications of herbicides until July 15th to avoid any interruption to the reproductive cycles of native animals. There may be a way to ask for an exemption.
iv. Application process is at least 90 days and requires notices to shoreline owners, ads in newspaper, involvement with Ecology and WDFW.
v. More treatment applicators may be available with an earlier window.

b. Review of IAVMP Proposals
   i. Kirk doesn't feel public meetings are the place for discussion of the proposals just yet.
   ii. The first step will be individual reviewing and scoring, and then schedule another meeting, in person, to collaborate. There are two weeks before the vendor that is chosen needs to be notified.

8. Items from the Floor – No items

9. Public Communication – *Limit of 3 minutes per person. Zoom host will provide warning when 30 seconds remain. Meeting minutes will only reflect the name of the person speaking.
   a. None.

10. Adjournment of Public Meeting – **With no further business, Chair Lake Stintzi adjourned the meeting at 6:59 pm.**

Next Meeting: March 16, 2026

Black Lake Special District

Black Lake Special District Meeting
Thursday, February 26, 2026 • 6:15 pm

MINUTES:

1. Call to Order – **Chair Stintzi called the meeting to order at 6:21PM.**

2. Roll Call
    a. Present
        i. Lake Stintzi
        ii. Kirk Vanlandeghen
        iii. Cory Freeborn

3. New Business
    a. RFP Evaluation and Scoring Proposal Criteria Review
        i. Qualifications and experience – Business items, interprets overall.
            - The Board discussed the evaluation criteria for scoring proposals received for the 2026 herbicide treatment project. Commissioners reviewed the draft scoring spreadsheet and discussed how the criteria should be weighted and applied.
        ii. Key Personnel – Dives into the individuals.
        iii. Key discussion points included:
            - Clarifying the distinction between company qualifications and experience versus evaluation of key personnel.
            - Removing a duplicated line item related to team member experience so that personnel qualifications would be evaluated in a single section.
            - Increasing the weight assigned to recent experience within the last five years.
            - Adjusting the scoring for herbicide application experience.
            - Redistributing points that were removed from the duplicated category to maintain the total scoring scale.
        iv. The Board confirmed that proposal scoring would total 100 possible points and that each commissioner would independently review and score the proposals before further discussion.
        v. Commissioners emphasized the importance of differentiating proposals during scoring rather than assigning identical scores across categories, so that meaningful comparison could occur during final evaluation.

4. Items from the Floor – None.

5. Public Communication – *Limit of 3 minutes per person. Zoom host will provide warning when 30 seconds remain. Meeting minutes will only reflect the name of the person speaking.

6. Adjournment of Public Meeting – **With no further business, Chair Stintzi adjourned the meeting at 8:00 PM.**

Next Meeting: March 4th, 2026

Black Lake Special District

Black Lake Special District Meeting
Wednesday, March 4, 2026 • 6:15 pm

ACTION ITEMS:

- Kirk will prepare a PDF of the main scoring sheet for the public.

MINUTES:

1. Call to Order – **Chair Lake Stinzti called the meeting to order at 6:15 pm.**

2. Roll Call
   a. Present
      i. Lake Stintzi - Present
      ii. Kirk Vanlandeghen - Present
      iii. Cory Freeborn - Present

3. Approval of Agenda - **It was moved, seconded, and was unanimously accepted to approve the agenda.**

4. New Business
   a. RFP Evaluation and Scoring – Each board member independently scored the three submitted proposals, and the board compared their results. References for the vendors have not yet been contacted.
      i. Lake Stintzi reported scoring Herrera higher based on their experience and approach, noting there may be some bias due to Herrera's past work on Black Lake. Lake also noted that Aquatechnix did not include a total project cost in its proposal.
      ii. Kirk Vanlandeghen explained that he gave Aquatechnix higher marks for its use of technology. Kirk also noted that Aquatic Insight indicated they would prepare an RFP for treatment services.
      iii. Cory Freeborn commented that it was encouraging to see several qualified vendors operating in the region and emphasized the importance of recognizing the effort each company put into preparing its proposal.
   b. The board reviewed the initial scoring totals excluding cost considerations. Aquatechnix received 51.3 points, Aquatic Insight received 64.3 points, and Herrera received 61 points.
   c. Cory moved to narrow the selection to Herrera and Aquatic Insight. Kirk asked whether cost should be incorporated into the scoring, noting it could influence the rankings. Kirk amended the motion to narrow discussion to Aquatic Insight and Herrera without considering cost. Cory then suggested tabling the motion to allow additional discussion regarding cost considerations. After reviewing the scoring with cost included, Aquatic Insight remained in the lead.
   d. **Lake Stintzi moved to use the raw scores, excluding referral points, as the criteria for selecting the winning proposal. Cory Freeborn seconded the motion, and the motion was unanimously approved..**

5. Items from the Floor – No items from the floor.

6. Public Communication – *Limit of 3 minutes per person. Zoom host will provide warning when 30 seconds remain. Meeting minutes will only reflect the name of the person speaking.
   a. No public communication.

7. Adjournment of Public Meeting – **Chair Lake Stintzi adjourned the meeting at 7:07 pm.**

Next Meeting: March 9th, 2026

Black Lake Special District

Black Lake Special District Meeting
Monday, March 9, 2026 • 6:15 pm

ACTION ITEMS:

- Lake will contact Herrera to let them know that Aquatic Insight has the winning bid.
- Lake will respond to the email from Aqua Technix

MINUTES:

1. Call to Order **– Chair Stintzi called the meeting to order at 6:17 pm.**

2. Roll Call
    a. Present
        i. Lake Stintzi - Present
        ii. Kirk Van Landeghen - Present
        iii. Cory Freeborn - Present

3. Approval of Agenda **– It was moved, seconded and unanimously approved to accept the meeting agenda. It was moved, seconded and unanimously approved to accept the consent agenda for February 23rd and March 4th meeting minutes.** *OrgSupport will send the February 26th meeting minutes for approval.*

4. New Business
    a. RFP Evaluation and Scoring – The board confirmed that Aquatic Insight has been selected as the winning bidder following the RFP evaluation process. The next step is to obtain a contract outlining deliverables, timeline, and payment schedule. If the proposed contract does not align with the board's expectations, the board may consider moving forward with the second-ranked proposal.
        i. The board discussed announcing Aquatic Insight as the winning bidder and requesting that they submit a draft contract by March 23. Kirk moved to have one of the board chairs work directly with Aquatic Insight on the contract. **Cory moved to designate Kirk as the board chair responsible for coordinating the contract, Lake seconded the motion, and the motion was approved.**
        ii. Aquatic Insight also indicated they would be willing to prepare an RFP for treatment services in the future. Kirk noted that this would likely occur in 2027, as Northwest Aquatic is currently responsible for treatments this year.
        iii. A special meeting on March 23 will be held to review the Aquatic Insight contract.
    b. Aquatic Insight proposed holding monthly coordination meetings beginning this month. Cory suggested keeping those meetings separate from the regular BLSD meetings. Lake suggested incorporating them into existing meetings by dedicating the first portion of the meeting to BLSD business and the remaining time to Aquatic Insight updates. The board discussed using the March 23 meeting as a kickoff meeting.
    c. Herbicide treatment proposal for 2026 – Lake reported that Northwest Aquatic was asked whether treatment could occur after July 15, but the company has not yet provided a date. This suggests treatment may occur later in the summer than expected. Cory suggested considering the new vendor if they are able to perform treatment earlier. Kirk recommended including scheduling expectations in future RFPs for treatment services.

5. Items from the Floor
    a. Cory asked about the reimbursement rate for board members this year. Lake indicated that the reimbursement rate remains the same as last year.
    b. WALPA membership - The board also discussed WAPA membership, which should be renewed annually. Lake paid the membership last year and requested reimbursement. One membership covers the entire board.
    c. The board agreed to move the next meeting from March 16 to March 23.

6. Public Communication – *Limit of 3 minutes per person. Zoom host will provide warning when 30 seconds remain. Meeting minutes will only reflect the name of the person speaking.
    a. No Public Communication

7. Adjournment of Public Meeting – **Chair Stintzi adjourned the meeting at 6:42 pm.**

Next Meeting: March 23rd, 2026

Black Lake Special District
Statement of Income and Expense
Cash Basis — **January through February 2026**

	Jan - Feb 26	
Ordinary Income/Expense		
Income		
Rates & Charges		3,308.36
Total Income		3,308.36
Gross Profit		3,308.36
Expense		
Contract Services		
Non-recurring Contract Services	4,508.00	
Recurring Contract Services	5,000.00	
Total Contract Services		9,508.00
Operations		
Technology & Online Services	171.02	
Total Operations		171.02
Other Types of Expenses		
Other Expenses	1,070.13	
Total Other Types of Expenses		1,070.13
Total Expense		10,749.15
Net Ordinary Income		-7,440.79
Other Income/Expense		
Other Income		
Interest Income		970.65
Total Other Income		970.65
Net Other Income		970.65
Net Income		**-6,470.14**

Black Lake Special District
Financial Position Prev Year Comparison
Cash Basis — **As of February 28, 2026**

	Feb 28, 26	Feb 28, 25	$ Change	% Change
ASSETS				
Current Assets				
Checking/Savings				
Black Lake Guarantee #6355	100,000.00	80,000.00	20,000.00	25.0%
OlyFed Checking	-1,578.09	11,295.06	-12,873.15	-114.0%
Thurston County Treasurer	240,461.63	188,385.75	52,075.88	27.6%
Total Checking/Savings	338,883.54	279,680.81	59,202.73	21.2%
Total Current Assets	338,883.54	279,680.81	59,202.73	21.2%
TOTAL ASSETS	**338,883.54**	**279,680.81**	**59,202.73**	**21.2%**
LIABILITIES & EQUITY				
Liabilities				
Current Liabilities				
Other Current Liabilities				
Current Portion of Loans	56,506.37	27,414.20	29,092.17	106.1%
Total Other Current Liabilities	56,506.37	27,414.20	29,092.17	106.1%
Total Current Liabilities	56,506.37	27,414.20	29,092.17	106.1%
Long Term Liabilities				
Kitsap Bank Loan	1,067,964.03	1,152,432.88	-84,468.85	-7.3%
Total Long Term Liabilities	1,067,964.03	1,152,432.88	-84,468.85	-7.3%
Total Liabilities	1,124,470.40	1,179,847.08	-55,376.68	-4.7%
Equity				
Unrestricted Net Assets	-779,116.72	-902,522.49	123,405.77	13.7%
Net Income	-6,470.14	2,356.22	-8,826.36	-374.6%
Total Equity	-785,586.86	-900,166.27	114,579.41	12.7%
TOTAL LIABILITIES & EQUITY	**338,883.54**	**279,680.81**	**59,202.73**	**21.2%**

Invoice

OrgSupport
120 State Avenue NE, #303
Olympia, WA 98501

Date	Invoice #
4/1/2026	5837

Bill To

Black Lake Special District
120 State Avenue NE, #303
Olympia, WA 98501

Description	Qty	Rate	Amount
Contract Services	1	2,500.00	2,500.00

Total $2,500.00

ORIGINAL DOCUMENT PRINTED WITH MICROPRINTED BORDER ON FRONT AND SECURE DOCUMENT WATERMARKS ON BACK - HOLD AT ANGLE TO VIEW.

BLACK LAKE SPECIAL DISTRICT
120 STATE AVENUE NE, #303
OLYMPIA, WA 98501
INFO@BLACKLAKESPECIALDISTRICT.ORG

OLYMPIA FEDERAL SAVINGS
421 CAPITOL WAY S
OLYMPIA, WA 98501
1-7082/3251

1101018

DATE 4/1/2026

PAY TO THE ORDER OF OrgSupport

$ **2,500.00

Two Thousand Five Hundred and 00/100********** **DOLLARS**

OrgSupport
Craig Ottavelli
120 State Ave NE #303
Olympia, WA 98501

MEMO

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CLIENT SERVICE AGREEMENT

This Client Service Agreement (the "Agreement") is made by and between Aquatic Insight LLC, an Oregon limited liability company ("Consultant") and **Black Lake Special District** ("Client") (each a "Party" and collectively, the "Parties"). The Effective Date of this Agreement is ____, 2026.

Client Name:	Black Lake Special District
Client Representative:	Kirk Van Landeghem
Client Representative Email:	kirk@blacklakespecialdistrict.org
Client Representative Phone:	203-999-0994

1. Services. Consultant offers lake and watershed management consulting services to improve and maintain healthy aquatic environments (the "Services"). Specific details regarding the Services to be provided by Consultant to the Client are set forth in attached Exhibit 1 and may be amended from time to time by the Parties by mutual, written agreement.

2. Fees and Invoicing. Consultant charges for the Services as set forth in attached Exhibit 2 (the "Fees and Payment Terms").

3. Accepted Forms of Payment. Consultant accepts payments via checks, money orders, and electronic bank transfers.

4. Status of Parties. Nothing in this Agreement shall be construed as creating a joint venture, partnership, franchise, agency, employer/employee, or similar relationship between the Parties. Consultant is and will remain an independent contractor in its relationship with the Client and shall not be considered or deemed to be an employee of the Client for any purpose. The Client shall not be responsible for withholding taxes with respect to any compensation paid to Consultant, nor shall Consultant have any right under this Agreement to any form or type of benefits, including, without limitation, vacation pay, sick leave, retirement benefits, disability, social security, worker's compensation, or unemployment insurance benefits.

5. Performance of Work; Right to Engage Independent Contractors. Consultant reserves the right to engage independent contractors to perform the Services described in Exhibit 1.

6. Confidential Information; Exception for Consultant's Business Development. Consultant acknowledges that during the course of providing Services hereunder, it may receive or have access to confidential or sensitive personal or business information of the Client (collectively "Confidential Information"). Consultant agrees not to disclose Confidential Information or any part thereof to any third party or use Confidential Information for any purpose other than the furtherance of the Client's interests without the prior written consent of the Client. Notwithstanding the foregoing restrictions, Consultant

may generally reference its work for Client, including a description of the nature of the waterbody or watershed as part of its marketing and business development efforts.

7. Consultant Responsibilities. Consultant shall:

a. Perform services in accordance with generally accepted limnological and scientific standards
b. Use reasonable professional judgment in data collection and interpretation
c. Communicate progress and findings in a timely manner
d. Maintain appropriate field and analytical records

8. Client Responsibilities. Client shall:

a. Provide access to sampling sites, permits, and relevant historical data
b. Ensure safe access to field locations
c. Designate a point of contact for project coordination
d. Review and respond to deliverables in a timely manner

9. Deliverables and Ownership of Work Product.

a. Deliverables. Deliverables may include technical reports, data summaries and spreadsheets, maps, figures, and tables, and management recommendations. All deliverables will be provided in electronic format unless otherwise specified.

b. **Ownership of Work Product.** Consultant retains ownership of underlying data, methodologies, and analytical tools, and may use anonymized data for academic, research, or portfolio purposes unless otherwise restricted in writing. Upon full payment, Client shall have a **non-exclusive license** to use the final deliverables for their intended purpose.

10. Limitation and Disclaimer of Liability. Consultant's founder is a Limnologist with over 20 years' experience studying and managing lakes in Oregon who holds a master's degree in environmental management and is experienced in all aspects of waterbody management including dredging, aeration, phosphorus reduction techniques, and ongoing monitoring. Notwithstanding the foregoing, Consultant cannot guarantee any particular result and cannot be held responsible for Client's failure to implement Consultant's recommendations.

IN NO EVENT WILL CONSULTANT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING LOSS OF PROFITS OR LOSS OF USE. CONSULTANT'S MAXIMUM LIABILITY TO CLIENT IS THE AMOUNT OF FEES ACTUALLY PAID TO CONSULTANT BY CLIENT.

11. Termination; Effect of Termination. Either Party may terminate this Agreement for cause by delivering three (3) days advance written notice. The term "for cause" includes but is not limited to, any failure by Client to make a payment when due, and any

failure by either Party to perform its obligations under this Agreement. Upon termination, Consultant will be entitled to payment for all Services performed, and for all out-of-pocket expenses reasonably incurred to perform the Services up to, and including, the date of termination.

12. Notices. Any notices required by this Agreement will be sent to the following addresses:

If to Consultant:	If to Client:
Aquatic Insight LLC 4207 SE Woodstock Blvd #535 Portland, OR 97206	Black Lake Special District 7514 Cattail LN SW Olympia WA 98512

13. Counterparts; Facsimile and Digital Signatures. This Agreement may be executed in counterparts. Counterpart and digitally or facsimile transmitted signatures, including electronic signatures via DocuSign or other verified electronic signature software programs, will be treated as original signatures as if each party signed one and the same original document. At the request of any Party, the Parties will confirm fax and digitally transmitted signatures by signing an original document.

14. Alternative Dispute Resolution; Attorney's Fees. In the event of any dispute arising from or relating to this Agreement, the Parties will first attempt to resolve the dispute through mediation with a neutral mediator, the cost of which shall be shared equally by the Parties. If the Parties cannot agree upon a neutral mediator, or if mediation is unsuccessful, then the Parties agree to submit the dispute to binding arbitration using a single arbitrator following the arbitration rules of the Arbitration Service of Portland, Inc. Any arbitration award may be confirmed in any Oregon court with jurisdiction. If the dispute is resolved by arbitration, the prevailing party may recover its reasonable attorney fees and costs incurred therein from the nonprevailing party.

15. Governing Law and Venue. This Agreement will be governed by and interpreted according to the laws of the state of Oregon, without regard to any conflicts-of-law principles. Any mediation or arbitration proceeding pursuant to Section 14 will occur in Portland, Oregon, or any other mutually agreeable location.

16. Force Majeure. Neither Party shall be held liable for failure of or delay in performing its obligations under this Agreement, other than Client's obligation to pay for the Services, if such failure or delay is the result of an act of God, such as earthquake, hurricane, tornado, flooding, pandemic, or other natural disaster, or in the case of war, action of foreign enemies, terrorist activities, labor dispute or strike, government sanction, blockage, embargo, or failure of electrical service. The non-performing party must make every reasonable attempt to minimize delay of performance.

17. Attorney Fees. In any proceeding to interpret or enforce this Agreement other than mediation, the prevailing party may recover its reasonable attorney fees from the nonprevailing party.

18. Entire Agreement. This Agreement, together with the Exhibits attached hereto, constitutes the entire agreement and understanding of the Parties as to the subject matter of this Agreement and replaces all prior understandings and agreements, whether written or oral, among the Parties with respect to the applicable subject matter.

CONSULTANT	**CLIENT**
_____	_____
Mark Rosenkranz	By: Name _____
	Its: _____
Date: _____	Date: _____

EXHIBIT 1

SERVICES

1. **Description of Services.** Consultant will provide services as referenced in the attached proposal:

EXHIBIT 2

FEES AND PAYMENT TERMS

Fees:
Consultant bills at hourly rates based upon the skills and expertise of the individuals performing work as set forth in the attached proposal. Subcontractor fees, if any, are billed at cost with no markup. Consultant will submit monthly invoices to Client.

Late Fee and NSF Charges
If payment is not made within thirty (30) days after the invoice date, a late payment fee of 1.5% per month of the unpaid balance may be added to the statement balance until paid.

NSF checks are subject to an additional $35.00 fee.

Aquatic Insight
holistic water management

ANNEAR WATER RESOURCES

ESA

Proposal for

Black Lake IAVMP

Integrated Aquatic Vegetation Management Plan

February 18, 2026

Prepared for: Black Lake Special District

Black Lake Special District

RE: Request for Proposals for Black Lake Special District Integrated Aquatic Vegetation Management Plan (IAVMP) Development.

Dear Commissioners,

Since its formation in 2013, Black Lake Special District (District) has demonstrated long-standing commitment to environmental stewardship and proactive, science-based management, including the development of a phosphorus and algae control plan, watershed pollutant monitoring, alum treatment implementation, and sustained efforts to manage non-native aquatic vegetation. The proposed Integrated Aquatic Vegetation Management Plan (IAVMP) builds directly on this foundation and on prior work performed by members of our team who developed the 2012 IAVMP.

One of the District's most notable successes has been the successful management of Eurasian watermilfoil (*Myriophyllum spicatum*) following years of targeted hand-pulling and bottom barrier placement. Given the aggressive nature of this species, this represents a significant achievement for Black Lake. A key objective of the proposed work will be to confirm Eurasian watermilfoil status while also quantifying the extent and distribution of other aquatic vegetation that may not have been present or detected during earlier surveys.

Aquatic Insight LLC, in partnership with Annear Water Resources LLC (AWR) and Environmental Science Associates (ESA), shares the District's dedication for protecting and enhancing Black Lake. In response to the Request for Proposals, we are pleased to submit our qualifications and proposal to prepare an updated IAVMP. Our team brings extensive experience in successful lake and aquatic vegetation management established throughout Washington and Oregon, with a strong record of delivering technically sound, implementation-ready plans. As a local team with regional and national recognition, we combine technical expertise with a practical understanding of local lake conditions, regulatory expectations, and stakeholder priorities.

The Aquatic Insight team has substantial experience developing Lake and Aquatic Vegetation Management Plans, conducting field surveys, preparing monitoring and quality assurance project plans, analyzing complex datasets, and supporting plan implementation through stakeholder engagement across the Pacific Northwest. Aquatic Insight is a licensed aquatic pesticide applicator in both Washington and Oregon, providing practical familiarity with a full range of management tools and treatment strategies. In addition, Lizbeth Seebacher of Aquatic Insight brings direct experience developing IAVMP specifications and managing grant funding programs while at the Washington Department of Ecology. ESA staff were directly involved in the 2012 Black Lake IAVMP and bring continuity and institutional knowledge for this effort. Their depth of experience conducting long-term vegetation monitoring programs at other regional lakes and reservoirs provides an informed perspective on emerging vegetation management issues relevant to Black Lake. AWR staff bring decades of experience delivering technically rigorous, actionable water resources and lake management projects, supported by hydraulic and water quality modeling, data analysis, regulatory permitting and compliance strategies, and stakeholder engagement.

Together, our team offers a comprehensive, science-based approach grounded in local expertise, responsiveness, and collaboration. We are confident this combination uniquely positions us to deliver an effective, implementable IAVMP that supports the District's long-term management goals.

For questions regarding this proposal, please contact our primary point of contact, Mark Rosenkranz, at 503-515-7864 or mark@aquaticinsight.com.

Sincerely,

Mark Rosenkranz
Aquatic Insight LLC

Aquatic Insight

Introduction

Aquatic Insight is pleased to submit this proposal in response to the RFP for an IAVMP for Black Lake. With our extensive experience in vegetation surveys, lake management plans, and lake restoration, we are confident in our ability to develop a comprehensive vegetation management plan that aligns with your goals for maintaining the health of the Black Lake ecosystem while promoting the long-term sustainability of Black Lake's water quality and recreational opportunities.

Project Definition

Black Lake Special District is a special purpose local government district formed under Washington state law (RCW 85.38) with the mission of protecting and enhancing water quality and aquatic habitat in Black Lake. The District is seeking a qualified lake management contractor to develop an IAVMP specific to the needs of Black Lake. At 570 acres Black Lake is one of the largest lakes in Thurston County. It has seasonal and year-round homes on its six miles of shoreline where residents enjoy the recreational activities provided by the lake. Vegetation growth has increased over the years, potentially impeding recreational enjoyment of the lake. While the vegetation has been treated with herbicide in the past, the District is seeking a contractor to develop a long-term plan for controlling excessive aquatic plant growth and providing technical advice and oversight in the implementation of the plan.

Eurasian watermilfoil (*Myriophyllum spicatum*), a Class B Noxious Weed, has been aggressively managed in Black Lake since 2006, and while not observed in a 2022 survey, there has not been a comprehensive vegetation survey to confirm its eradication. In addition, curlyleaf pondweed (Potamogeton crispus), a Class C noxious weed in Washington, was not present in the County surveys leading to the 2012 IAVMP; however, it has been reported by Ecology since that time. Furthermore, fragrant waterlily (*Nymphaea odorata*), another Class C noxious weed, continues to be a problem in Black Lake. Other noxious weeds of concern, but not reported from Black Lake, include slender arrowhead (*Sagittaria graminea*) (Class B), known to occur in nearby Lake Roesiger; variable-leaf milfoil (*M. heterophyllum*) (Class A), found in Blue and Clear Lakes in Thurston County; and yellow floating heart (*Nymphoides peltata*) (Class B) found in Lake Spokane and smaller lakes in Whatcom, King, and Yakima Counties. The survey and mapping effort will identify submersed and shoreline vegetation to support development of the IAVMP and assist with targeted control efforts.

The Black Lake IAVMP will provide a comprehensive, long-term framework to guide aquatic plant management decisions in a manner that reflects community priorities. The Plan will promote a coordinated, science-based approach to vegetation management that supports protection of water quality, aesthetic values, wildlife habitat, and recreational uses. Through this effort, the IAVMP will help ensure that both residents and visitors can continue to enjoy the lake's diverse benefits well into the future.

Aquatic Insight takes a holistic approach to lake management, with an emphasis on understanding underlying drivers of vegetation growth, protecting beneficial uses, and aligning management actions with community priorities. We have assembled an experienced team with a proven history of working on similar lake management projects and are well positioned to support the District through both Plan development and implementation.

Project Scope and Approach

Aquatic Insight's approach combines rigorous field data collection, defensible technical analysis, and structured public engagement to ensure the resulting IAVMP is scientifically sound, transparent, and implementable. The scope of work is designed to build directly on prior planning and management efforts at Black Lake while addressing current and emerging vegetation issues. The IAVMP will be developed by applying best available science and following the *Washington State Department of Ecology's Citizen's Manual for Developing Integrated Aquatic Vegetation Management Plans* (Citizen's Manual), using a stepwise and phased approach that integrates technical findings with stakeholder input at key decision points.

The primary objectives of this project are to:

- Develop a current, lake-wide understanding of aquatic vegetation distribution, species composition, and density.

- Provide scientifically defensible mapping and characterization of emergent, floating-leaved, and submerged vegetation.
- Evaluate integrated management strategies that balance ecological function, recreational use, regulatory requirements, and cost effectiveness.
- Engage the community in a structured and meaningful way to support education, transparency, and long-term support for the Plan.
- Produce a clear, actionable IAVMP that supports permitting, funding, and adaptive management.
- Provide technical support for vegetation management, Plan implementation, and grant application development.

To meet these objectives, Aquatic Insight will implement the tasks described below.

Task 1: Project Management

Mark Rosenkranz of Aquatic Insight will serve as Project Manager, leading coordination with the District and team to keep work on schedule and aligned with project goals. He will be supported by Zoe Rodriguez del Rey, Assistant Project Manager, who will assist with project administration, including communication, schedule tracking, budget and expenditure monitoring, quality control and assurance, and record keeping.

Project management will focus on clear communication, timely decision making, and delivery of high-quality work. The project will begin with a kickoff meeting to confirm objectives, roles, schedule, data needs, and communication protocols. Monthly coordination meetings will be held with the District to promote active collaboration, review progress, refine upcoming activities, and address items requiring coordination or decision. Preliminary work products, such as vegetation survey results, will be presented at the monthly meetings to provide the District with an opportunity for review and feedback and to ensure continued alignment with project objectives. Additional ad hoc meetings may be convened as needed to discuss grant opportunities, coordinate treatment timing, or address evolving project needs.

Quality assurance and quality control will be integrated throughout all phases of the project. The project team will maintain comprehensive records of all field activities, including aquatic vegetation sampling and collection, bathymetric surveying, sediment characterization, and associated metadata. Draft deliverables will undergo senior review and will be provided to the District for review with sufficient time incorporated for District input and revision prior to finalization.

Deliverables:

- Monthly progress meetings
- Meeting presentations and notes
- Monthly invoices

Assumptions:

- The kick-off meeting will be virtual.
- Monthly progress meetings will be virtual.
- Invoices will include a budget summary with budget per task, budget expended, and budget remaining.

Task 2: Aquatic Plant Survey and Mapping

The Black Lake aquatic plant community and bathymetry will be characterized using an integrated, lake wide survey approach that combines hydroacoustic data collection, aerial imagery analysis, and point intercept grab sampling. Together, these complementary methods will provide a comprehensive assessment of aquatic vegetation distribution, density, species composition, bathymetry, and substrate characteristics across the lake. The vegetation survey will take place in mid-June with preliminary survey data available to inform 2026 herbicide applications.

Hydroacoustics

Hydroacoustic data will be collected using a scientific grade Biosonics DT-X echosounder paired with a sub meter accuracy GPS unit. Transects will be conducted throughout all lake areas deeper than approximately 0.5 meters, with transect spacing

adjusted based on bathymetric complexity. Transects will be spaced approximately 20 meters apart in shallow or topographically complex areas and up to 40 meters apart in deeper or more uniform areas to ensure adequate spatial resolution while maintaining survey efficiency.

Hydroacoustic data will be processed using Biosonics Visual Analyzer software to generate georeferenced point datasets containing sediment surface depth, plant canopy height, and calculated aquatic plant biovolume, derived as the vertical difference between canopy height and sediment depth. In areas with sparse or absent vegetation, Biosonics substrate classification algorithms will be used to estimate sediment hardness. Sediment hardness will not be evaluated in areas of dense vegetation where acoustic signal attenuation limits classification reliability.

During transect acquisition, visible submerged vegetation, surface reaching vegetation, and areas of high plant density will be documented using a field tablet linked to a sub meter GPS. Hydroacoustic outputs will be interpolated to produce lake wide bathymetric surfaces and aquatic plant biovolume maps. Interpolated accuracy will be evaluated in relation to transect density and bottom complexity. Unlike commonly used methods that rely on cloud processing, our method allows full access to the hydroacoustic signal to make sure the output matches conditions seen in the field.

Hydroacoustic mapping results will be validated through comparison with point intercept sampling to confirm vegetation density and distribution across the waterbody.

Aerial Imagery

Floating-leaved and emergent vegetation will be mapped using recent high-resolution summer aerial imagery provided by NearMaps. Vegetation polygons will be delineated based on spectral and textural characteristics, with particular attention to shoreline and surface canopy forming species, including invasive taxa such as yellow floating heart. Ground truthing will be conducted by visiting representative locations within mapped polygons to confirm species composition and refine classification accuracy. Resulting polygons will be integrated into the project GIS database.

Grab Sampling

Aquatic plant species composition will be assessed using the point-intercept thatch-rake method, following the *Washington State Department of Ecology Aquatic Plant Sampling Protocols* (Ecology Publication 01-03-017). Sampling points will be established across the littoral zone using a systematic grid design to ensure representative coverage across depths and habitat types. At each point, a weighted double-headed thatch rake will be lowered to the sediment surface and dragged upward through the water column to collect plant material. Consistent handling and retrieval speed will be maintained to standardize sample collection.

We will record both presence/absence and relative abundance of each species captured in the rake toss. Abundance will be scored following Ecology's recommended semi-quantitative ranking (e.g., rake fullness categories). All vegetation retrieved will be transferred to a sorting tray, where species will be identified to the lowest feasible taxonomic level. Samples of all aquatic plant species recovered will be photographed, geotagged, and bagged for future reference. Vegetation that cannot be field identified will be preserved for later identification in the lab. Vegetation identification and analysis will be independently verified by two aquatic plant specialists.

To ensure methodological consistency, the following elements from Ecology's guidelines will be implemented:

- Depth recording at every point to support plant-depth distribution analyses
- Standardized rake-toss technique, including drop-to-bottom, drag, and retrieval
- Recording non-vegetated points
- Documenting environmental conditions (e.g., turbidity, substrate type if visible, presence of filamentous algae)

Data Integration, Analysis, and Reporting

Hydroacoustic, grab sampling, and aerial imagery datasets will be integrated within a GIS framework to develop a comprehensive characterization of aquatic plant communities. Field data will be compiled into a plant-frequency dataset,

which will be used to calculate species occurrence, richness, and distribution patterns throughout the lake. These results will also be integrated with hydroacoustic datasets to support a whole-lake understanding of plant community structure.

GPS data for bathymetric and vegetation surveys will be converted to GIS files. GIS analysis will be used to generate bathymetric contours, vegetation community maps, shoreline vegetation maps, and species distribution and abundance summaries. A technical memorandum summarizing survey methods, data analysis, results, and key findings will be prepared and submitted to the District for review and inclusion in the IAVMP. Field collection data including shapefiles, photographs, and hydroacoustic files will be compiled and delivered to the District with the technical memorandum.

Deliverables:

- Raw and processed hydroacoustic data, including water depth, plant canopy depth, and sediment characteristics
- GIS polygons delineating emergent and floating leaved plant community coverage derived from aerial imagery
- GIS files and maps of bathymetric contours, aquatic vegetation distributions, and sediment characteristics
- Vegetation species list
- Draft and final technical report summarizing survey methods, data analysis, and results

Assumptions:

- The technical report will undergo one round of review by the District.

Task 3: Assist with submitting grant application to Department of Ecology

Consistent with the RFP, Aquatic Insight will assist with preparing a grant application for WA Ecology aquatic invasive plant management grants to be submitted by early December 2026 for the 2027 funding cycle. This task will include early coordination with Ecology staff to discuss the Black Lake IAVMP, applicable grant programs, eligibility criteria, and timing for upcoming funding cycles.

Eligible activities under prior funding cycles for the aquatic invasive plant management grants program have included:

- IAVMP development
- Plant control activities
- Education and information projects
- Aquatic plant mapping and inventory
- Pilot and demonstration projects, evaluation of implementation effectiveness, and follow-up monitoring

Because reimbursement of costs for work already completed is typically not eligible under Ecology grant programs, it is anticipated that the grant application will focus on an implementation oriented project rather than retrospective plan development. Aquatic Insight will work with the District to identify the most appropriate project for submission to the aquatic invasive plants management grants program and will assist in developing a grant ready scope of work, schedule, and budget that aligns with Ecology program guidelines and evaluation criteria. A complete grant application will be prepared and submitted to Ecology in coordination with the District.

In addition to supporting preparation of a single grant application, Aquatic Insight will assist the District in identifying and evaluating other relevant grant opportunities as they arise during the project period. Potential funding programs will be assessed based on project eligibility, funding level and required cost-share, schedule alignment, and overall fit with the District's management priorities. Aquatic Insight can provide recommendations on the most appropriate funding programs.

Deliverables:

- Notes from meeting with Ecology
- List of potential grant opportunities, including eligibility, schedule, and funding level
- Scope, schedule, and budget for selected project
- Draft and final grant application

Assumptions:

- One grant application to the Ecology aquatic invasive plants management grants program will be submitted in 2026.
- If the District elects to pursue additional grant applications or funding programs, Aquatic Insight can provide support; however, additional applications would be scoped and budgeted separately.

Task 4: Technical Assistance for the 2026 Herbicide Applications

The District anticipates conducting an aquatic herbicide application in 2026 prior to completion of the Black Lake IAVMP. Vegetation surveys are anticipated to take place in mid-June with preliminary analysis completed by the end of the month. Based on historical treatment records, this would mean that the vegetation surveys can be used to inform treatment options and methods prior to the first application which typically takes place in mid to late July. The survey will be instrumental in identifying the extent of curlyleaf pondweed and any incipient occurrences of other noxious weeds. This will provide a clear roadmap for future management activities that may require species-specific timing.

Aquatic Insight is a full-service lake management firm licensed to apply aquatic herbicides in both Washington and Oregon, so we are uniquely qualified to provide technical assistance on herbicide application. Depending on the District's preference, Aquatic Insight can either perform the herbicide application directly under a separate contract or provide independent technical support to assist the District in selecting and overseeing a qualified third-party applicator. In either case, Aquatic Insight can provide the required technical assistance to support the District in identifying and evaluating treatment priorities, control alternatives and control intensities, and recommending integrated treatment scenarios that consider effectiveness, timing, cost, and potential impacts.

Technical assistance provided under this task will be guided by the needs of the District, and may include developing treatment scenarios, preparing treatment maps, assisting with preparation of technical specifications for requests for bids, reviewing herbicide applicator proposals, reviewing applicator's treatment plan including proposed chemicals, application rates, treatment areas, and schedule, and conducting a post-treatment visual survey of treatment areas. This approach provides the District flexibility while ensuring that management decisions are supported by technical expertise and lake specific knowledge.

Deliverables:

- Draft treatment scenarios based on preliminary vegetation survey results
- Treatment maps and technical specifications for bid requests
- Review of third-party proposals (summary notes or scoring of proposals depending on District's preference)
- Draft and final technical memo summarizing herbicide application, post-treatment survey, and recommendations

Assumptions:

- The draft treatment scenarios will be provided in PowerPoint format.
- The treatment maps and technical specifications will undergo one round of review by the District.
- The technical memo will undergo one round of review by the District.
- Permits and required reporting will be provided by others unless otherwise agreed upon by Aquatic Insight and the District.

Task 5: Develop the Black Lake Integrated Aquatic Vegetation Management Plan

Aquatic Insight will develop the Black Lake IAVMP using the stepwise framework outlined in Ecology's Citizen's Manual. To efficiently implement the Citizen's Manual framework and ensure that technical findings and community input inform decisions at appropriate points, the steps will be organized into a series of logical phases. Individual steps from the Citizen's Manual will be grouped based on their purpose in the decision-making process, allowing information to be developed, reviewed, and refined before advancing to the next phase. Public engagement is a key step of the Citizen's Manual approach and will be incorporated at key points between planning phases to ensure that management priorities and recommended actions are informed by both sound technical analysis and community input.

Phase 1 - Develop Problem Statement, Identify Management Goals, and Document Beneficial Uses

Phase 1 will be completed early in the planning process in preparation for the first public workshop. Aquatic Insight will review existing studies, the prior IAVMP and related planning documents, available monitoring and aquatic vegetation survey data, and relevant watershed information to develop a clear, well documented understanding of existing information related to lake conditions. Waterbody and watershed characteristics will be summarized to provide system context, and beneficial use areas will be identified and compiled into a waterbody use map. This effort will focus on synthesizing and organizing available data and information into a technical summary that reflects the current understanding of Black Lake conditions and provides a foundation for the development of management goals and subsequent evaluation of alternatives.

Based on this review, Aquatic Insight will develop a realistic problem statement, identify any limitations on beneficial uses, and develop preliminary management goals that are clearly defined, technically defensible, achievable, and informed by District and stakeholder input. These materials will be presented at the first public workshop as part of the early planning process to support development of a shared understanding of existing lake conditions and solicit community input on goals and priorities.

Phase 2 - Technical Evaluation and Management Strategy Development

Phase 2 will focus on developing the technical foundation for aquatic vegetation management in Black Lake. This phase includes mapping and characterizing aquatic plant communities under Task 2, evaluating control options, and defining appropriate control strategies consistent with the goals established in Phase 1.

Results of the comprehensive aquatic plant survey will be used to map the distribution of aquatic vegetation, characterize aquatic plant community composition, delineate areas supporting beneficial vegetation and areas where nuisance or invasive species are present, and identify priority species and locations for management consideration. Based on these findings, available control options, including chemical, physical, and mechanical methods, will be evaluated with consideration of required intensity, effectiveness, advantages, limitations, costs, permitting requirements, and site-specific factors. This evaluation will be informed by best available science and applicable guidance, recognizing that multiple management approaches may be effective in improving lake conditions and that each option carries distinct benefits, limitations, and tradeoffs that must be considered in the context of Black Lake.

The evaluation of control options will be used to develop vegetation control alternatives and a recommended management approach that can be further evaluated with community input. At the conclusion of Phase 2, a second public workshop will be held to present the aquatic plant survey results, plant community characterization, and a range of potential vegetation management approaches, including associated costs, benefits, and limitations. The workshop will provide an opportunity for community members and stakeholders to understand the available options, ask questions, and provide input to inform subsequent refinement of the management approach.

Phase 3 - Action Program Development and Plan Finalization

Phase 3 will focus on translating the technical findings and management approach from phase 2 into a clear, long-term action plan for aquatic vegetation management in Black Lake. Building on the selected integrated treatment scenario, Aquatic Insight will develop an action plan that outlines management actions, implementation sequencing, monitoring needs, permitting considerations, anticipated costs, and potential funding opportunities.

Information developed across all three phases of the task will be synthesized into an Integrated Aquatic Vegetation Management Plan that provides a clear, actionable framework to guide aquatic vegetation management decisions for Black Lake. A final public workshop will be held to present the draft IAVMP and provide an opportunity for stakeholders to review the proposed Plan, ask questions, and provide final input prior to completion of the IAVMP. Feedback received during this workshop will be documented and incorporated, as appropriate, into the final IAVMP that will be presented to the District.

Public Engagement Approach

Effective aquatic vegetation management depends not only on sound technical analysis, but also on a transparent and inclusive public process. Our approach to public engagement is grounded in the belief that successful IAVMPs are built through

education, development of a shared, science-based understanding of lake conditions, and clear communication about management options and their tradeoffs. Public engagement is not intended to force consensus, but to clearly identify areas of agreement and disagreement and ensure that decisions are informed by community values, practical considerations, and available science.

This philosophy places emphasis on transparency, continuity, and respect for different perspectives. Engagement is structured to clearly communicate technical information, acknowledge uncertainty where it exists, and openly discuss the benefits, limitations, and tradeoffs associated with different management approaches. Rather than treating engagement as a single event, the process is designed to provide ongoing opportunities for input and dialogue, helping ensure that stakeholders understand how information is being used and how their input informs plan development.

This approach is implemented through a combination of structured and informal engagement methods intended to reach a broad range of stakeholders and accommodate different levels of participation. Key engagement tools will include public workshops aligned with planning milestones, monthly project updates posted on the District's website, and designation of a consistent point of contact for questions or for submitting comments throughout the planning process. A steering committee with community representation has been successfully used in other IAVMP efforts supported by members of our team, including the Lake Roesiger IAVMP, to help guide plan development and review technical information. This approach could also be considered for the Black Lake IAVMP if it is compatible with the objectives and schedule of the project.

Recognizing that management decisions involve tradeoffs, our approach also emphasizes documenting community perspectives in a clear and transparent manner. Structured tools, such as surveys, comment forms, dedicated public comment periods during workshops, and a public review period for the IAVMP, will be used to capture preferences related to management goals and alternatives, including input on perceived benefits, costs, and other considerations. Input gathered through these mediums will be documented to inform plan development and address community concerns.

During the project kickoff meeting, Aquatic Insight will work with the District to identify existing stakeholder contact lists, active community and stewardship groups associated with Black Lake, businesses, and governmental or regulatory agencies that should be engaged during plan development. This discussion will also be used to refine the public engagement approach based on the District's prior experience, including outreach methods and forms of contact that have been most effective, available communication platforms such as District communication channels, social media outlets, and groups that can help amplify outreach.

Deliverables:

- Three in-person public workshops
- Public workshop presentations
- Meeting notes from public workshop
- Project description and monthly updates for District website
- List of outreach activities and comments received during plan development
- Draft and final IAVMP

Assumptions:

- Deliverables will undergo one round of review by the District.
- The District will post monthly project updates to its website.

Task 6: On-call Technical Assistance for Plan Implementation

The Aquatic Insight Team will provide ongoing on-call technical assistance to support implementation of the Black Lake IAVMP. This task is intended to provide the District with flexible, as needed support for a range of lake management activities as priorities evolve and implementation proceeds.

As a full-service lake management consulting firm, Aquatic Insight and the team can provide a broad range of on-call technical support services including, but not limited to:

- Design and implementation of sampling plans for water quality or vegetation monitoring
- Aquatic and shoreline vegetation monitoring, mapping, and control support
- Development and refinement of nutrient budgets and nutrient source evaluations
- Evaluation of nutrient reduction methods and other management strategies
- Aquatic Plant and Algae Management (APAM) permit support
- Lake and watershed water quality monitoring
- HAB management support and monitoring
- Phosphorus control planning and technical guidance
- Hydraulic and water quality modeling
- Selection and oversite of plan contactors

On call services will be conducted at the direction of District and scoped as needed to support implementation of the IAVMP and related lake management objectives.

Deliverables:

- Deliverables will be agreed on when on-call technical assistance tasks are requested and scoped.

Assumptions:

- Up to $6,000 in technical assistance in 2026 is assumed for budgeting purposes.

Team Organization

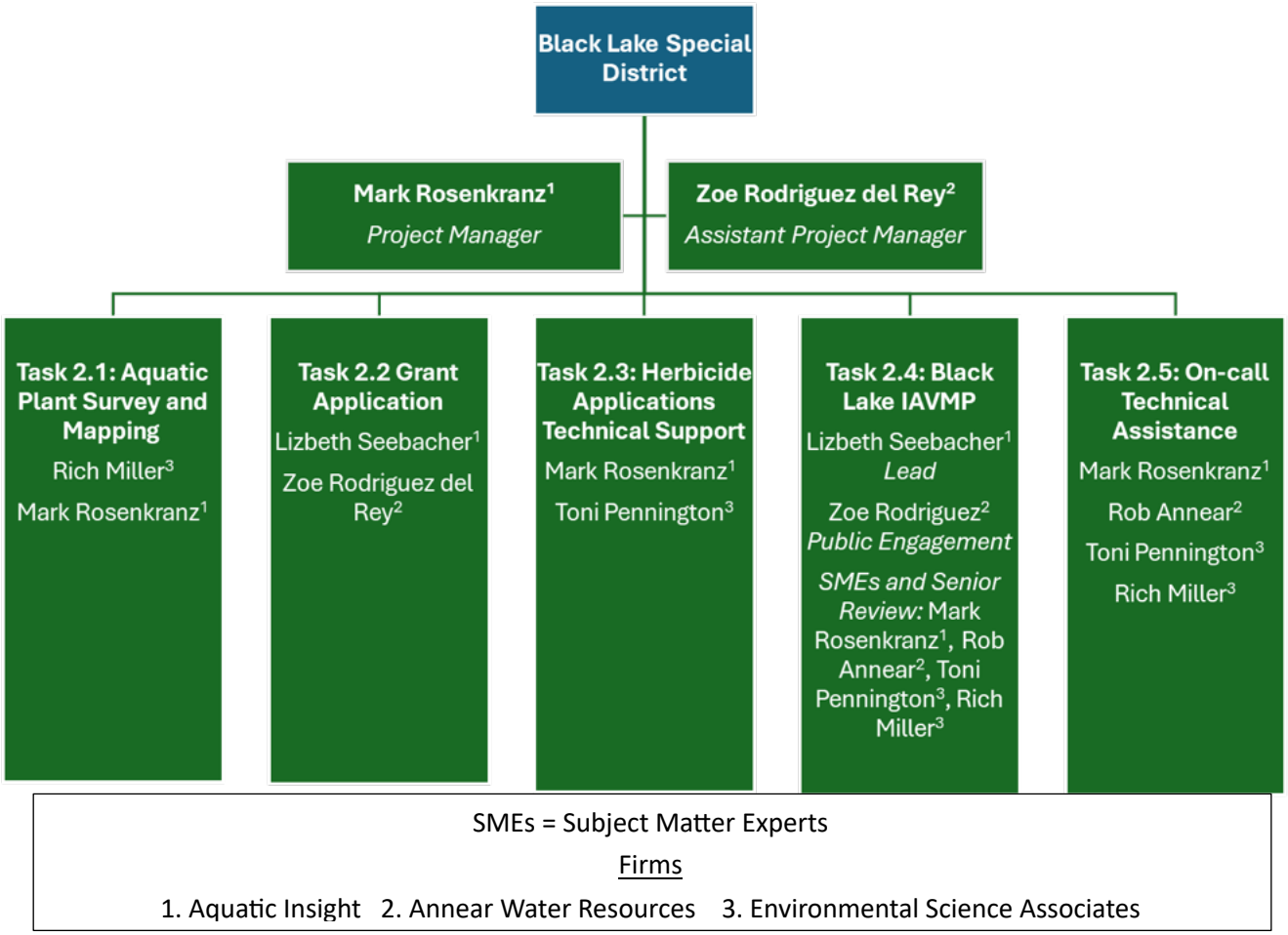
Aquatic Insight has partnered with Annear Water Resources and Environmental Science Associates to support the District in its mission to protect the water quality, wildlife habitat, aesthetic value, and recreational features of Black Lake. Our team is fully committed to providing the technical expertise, resources, and continuity needed to support both development and long-term implementation of the IAVMP, and we view this effort as the foundation for an ongoing partnership focused on effective lake management and improvement.

Together, the team brings specialized expertise in limnology, aquatic plant surveying and control, regulatory permitting, monitoring design, public engagement, and plan development. The team includes certified lake managers, licensed professional engineers, certified professional wetland scientists, and former regulatory experts, ensuring that the Black Lake IAVMP is developed with a high level of technical rigor, regulatory awareness, and professionalism. We have a strong track record of working collaboratively with local agencies, stakeholders, and regulatory partners to deliver technically sound and implementable solutions.

The Aquatic Insight team is structured to provide focused, hands-on support without the overhead typically associated with larger firms. This streamlined approach allows project resources to be directed toward technical work and client support rather than administrative layers. Each team member is highly experienced and directly engaged in project execution, enabling efficient communication, rapid responsiveness, and flexibility to adapt to changing conditions while maintaining a high standard of technical rigor and cost effectiveness.

Organizational Chart

The organizational chart below illustrates the project team structure and lines of responsibility for the Black Lake IAVMP. It shows key roles, reporting relationships, and coordination pathways to support effective communication, decision making, and project delivery. The project team is introduced below, with full resumes for each team member provided in Appendix A. Given the depth and breadth of experience across the team, additional technical support can be drawn from other team members on specific subjects, for senior review, or as needed to respond to project demands or emerging issues.



Aquatic Insight

Aquatic Insight is an Oregon COBID (Certification Office for Business Inclusion and Diversity) certified (ESB, emerging small business) full-service lake management firm specializing in nutrient analysis and phosphorus reduction techniques. We emphasize the importance of treating the lake and watershed as a system, realizing it may be necessary to provide short term relief from the consequences of eutrophication, while establishing long-term strategies for reducing inputs. Our experience includes planning and implementing field monitoring programs, vegetation management plans, dredge projects, alum applications, herbicide applications, and data analysis. Our work with public and private sector clients is highly collaborative with extensive communication to ensure the concerns of all users are recognized. We emphasize listening and giving space for multiple viewpoints during a project so we are not working in a vacuum. That will be key with a project as important to the District and community as Black Lake.

Mark Rosenkranz (Project Manager)

Mark Rosenkranz, MS Environmental Management and a Certified Lake Manager through the North American Lake Management Society, will serve as Project Manager for the Black Lake IAVMP Project. He has more than 25 years of experience as an applied limnologist leading lake and watershed management projects. His work has focused on aquatic vegetation mapping and control, nutrient source tracking and management, lake and watershed sampling and analysis, and development of comprehensive lake management plans. This expertise will be directly applicable to the Black Lake IAVMP, particularly in selection of appropriate field methods, survey design, and evaluation of management strategies. Mark holds aquatic pesticide applicator licenses in both Oregon and Washington.

Mark spent 22 years as the staff limnologist for a 400-acre private lake, where he was responsible for development and implementation of aquatic vegetation and algae management programs. In this role, he successfully applied a wide range of

control methods to address invasive and nuisance species, including aquatic weed harvesting, suction dredging, bottom barriers, herbicide treatments, and hand removal. This long-term, hands-on management experience provides a practical foundation for developing effective, site specific, and adaptive management strategies for Black Lake. Mark's ability to effectively communicate aquatic ecology concepts with HOA members and lake management organizations, either in a group setting or one-on-one, has been effective at fostering trust and transparency in the management process.

Lizbeth Seebacher

Lizbeth Seebacher, MS Wetland Biology and Restoration Ecology, PhD Invasive Species Biology and Wetland Restoration, and a Certified Professional Wetland Scientist, brings more than 25 years of experience addressing invasive aquatic plant management, lake restoration, and water quality protection across Washington State. Lizbeth spent over 12 years with the Washington State Department of Ecology, where she served as Program Manager for the Aquatic Invasive Plant and Freshwater Algae Control Programs. In this role, she managed the same funding programs that support IAVMP development and implementation statewide and oversaw hundreds of projects led by public agencies. Her work included review and approval of IAVMPs, oversight of aquatic vegetation surveys and mapping, and evaluation of control strategies to ensure technical soundness and regulatory compliance.

In addition to her work at Ecology, Lizbeth has served as a Wetland Biologist with the U.S. Army Corps of Engineers supporting wetland mitigation compliance and as Executive Director of the Pacific Northwest Invasive Plant Council, where she led early detection and rapid response initiatives through citizen science. In addition to her work with Aquatic Insight, she is currently a Senior Research Scientist at the University of Washington conducting applied research on floating treatment wetlands and biomedia systems to reduce stormwater contaminants. Her combined regulatory, technical, and research experience provides valuable perspective to support development of a defensible and implementable IAVMP for Black Lake.

Annear Water Resources (AWR)

AWR is an Oregon COBID certified (ESB, emerging small business) firm that focuses on water resources solutions to balance the competing demands between the built and natural environments. We help clients with environmental permitting; lake management, planning and plan implementation; field monitoring program development and implementation; nutrient management; pollutant load modeling; hydraulic modeling; and hydrodynamic and water quality modeling to support design alternative analyses. We have assisted clients with the development of Quality Assurance Project Plans (QAPPs) for field monitoring, conducting field monitoring, and data analysis and interpretation.

Rob Annear

Rob Annear, PhD and PE, is a licensed environmental engineer in Oregon, Washington, Idaho, Utah, Florida, and North Carolina with more than 20 years of experience supporting lake, reservoir, and watershed management projects across the United States. His work includes hydrodynamic and water quality modeling, field investigations, sampling plan development, and preparation and implementation of lake management plans addressing nutrient management and pollutant loading. He has worked on more than 40 lakes and reservoirs and has extensive experience in the development, calibration, and application of water quality models for lakes, reservoirs, and river systems.

Rob's expertise extends to watershed and in lake management strategies focused on understanding watershed processes, reducing nutrient and contaminant loads, and improving water quality through stormwater and source control measures. He has substantial experience leading multidisciplinary teams and overseeing project management, budgets, workflows, and quality assurance and quality control. His project experience includes lake and cyanobacteria management planning, quality assurance project plan development, and large scale hydrodynamic and temperature modeling efforts for regulated river systems, providing strong senior technical review to support the Black Lake IAVMP.

Zoe Rodriguez del Rey

Zoe Rodriguez del Rey is a water resources professional with 20 years of experience working with public utilities and municipalities. She has a strong technical background in water quality science, lake ecology, and integrated water resources management. Her experience includes development of basin-wide water resources management plan, monitoring programs,

contaminant analyses, and synthesis of complex technical information to support public engagement in water resources planning decisions. As a water resources manager in California, Zoe led the development of the Integrated Water Resources and Stormwater Management Plan and the Coachella Valley Water Management Plan, both multi-agency planning documents with robust public involvement from NGOs, farmers, community groups and regulatory agencies, as well as consultation with five federally recognized tribal governments. Zoe also participated as a technical expert in a successful multi-year mediation between the Agua Caliente Band of Cahuilla Indians, Coachella Valley Water District, and Desert Water Agency that resolved longstanding litigation over groundwater rights and management.

Zoe will serve as Assistant Project Manager for the Black Lake IAVMP and will lead public outreach. She will support Mark Rosenkranz with task coordination, schedule and budget tracking, internal and external communications, quality assurance, and on-time, cost-effective delivery. Zoe is experienced in designing and facilitating stakeholder engagement processes, developing outreach materials, and guiding public discussions at key decision points. Her ability to translate technical work into clear, accessible information will support a transparent, well-coordinated IAVMP process that is responsive to District and community priorities.

Environmental Science Associates (ESA)

ESA is an employee-owned environmental and engineering consulting firm with 22 offices and over 700 employees. Since 1969, ESA has supported creative solutions to environmental, regulatory, and permitting challenges. They offer specialized expertise across the full spectrum of environmental disciplines. With over 160 employee-owners working locally in the Pacific Northwest, including Seattle, Portland and Bend, ESA provides deep expertise and capacity in a variety of services that include, among others, aquatic plant management & research, water quality, wetland, fisheries, wildlife biology, watershed planning, floodplain management, permitting and regulatory compliance, SEPA/NEPA documentation, public outreach, and geospatial analyses. Our Senior Aquatic Biologists bring decades of experience in the management, identification, mapping, and research of freshwater plants across the western U.S. We support lakefront property owners, city and county municipalities, federal agencies, and nonprofit and private sector organizations to identify and help solve nuisance aquatic plant issues.

Toni Pennington

Toni Pennington, PhD, is a Senior Aquatic Biologist with nearly 30 years of experience in aquatic plant research, management, and development of IAVMPs across the western United States. Her expertise includes aquatic plant physiology, nutrient ecology, and herbicide efficacy, with a strong emphasis on applying best available science to achieve effective control of nonnative and nuisance species while protecting water quality and beneficial uses.

Toni has led or supported numerous IAVMP efforts for lakes and reservoirs in Washington, including Lake Tapps, Lake Roesiger, Lake Serene, and Black Lake. Her experience includes aquatic plant surveys and mapping, development of long-term management strategies consistent with Ecology's *Citizen's Manual*, and technical recommendations for a range of control methods such as diver assisted hand pulling, benthic barriers, and aquatic herbicides. Toni has also supported clients in preparing bid specifications and implementing adaptive management programs that emphasize monitoring, community involvement, and long-term stewardship. **Her prior involvement with the Black Lake IAVMP provides valuable continuity and lake specific knowledge to support development of an updated plan.**

Rich Miller

is a Senior Biologist with more than 30 years of experience specializing in aquatic vegetation mapping, hydroacoustic surveying, and invasive aquatic plant management throughout the Pacific Northwest. His expertise includes aquatic plant identification, geospatial analysis, vegetation modeling, and design of long-term monitoring programs. Rich has extensive experience leading field operations, ensuring data quality, and producing technical reports that support regulatory compliance, restoration planning, and adaptive management decisions.

Rich has over two decades of experience conducting bathymetric and aquatic plant mapping for lakes, reservoirs, and river systems using hydroacoustic and point intercept methods. His project experience includes lake wide vegetation surveys, pre and post treatment monitoring, and effectiveness evaluations for invasive species management programs. He has supported

large scale projects for public agencies and utilities, including Seattle City Light, the U.S. Army Corps of Engineers, and state agencies, and has played lead roles in hydroacoustic mapping, QAPP development, and technical reporting. This combination of field-based expertise and analytical rigor will directly support high quality data collection and interpretation for the Black Lake IAVMP.

Why select our team?

Comprehensive Sustainable Solutions: We deliver a holistic approach to lake management, prioritizing long-term sustainability by treating the watershed and lake as a system. While this project focuses on aquatic vegetation, we are here to be long-term partners in improving and maintaining lake health for lake users and aquatic life. Our expertise extends beyond the lake to the broader watershed, where we excel in implementing nature-based infrastructure solutions.

More Options for Your Budget. Our team is purpose built for this work. The specialized experience of our staff allows us to efficiently meet the full scope of work while also offering optional, value-added elements that support long-term lake management. Because we operate with low overhead, a greater share of the project budget can be directed toward on the ground implementation and monitoring rather than administrative costs.

Integrated Expertise: Projects like this involve multiple interconnected tasks and decisions. Our team brings together complementary expertise that allows us to efficiently manage complexity, coordinate next steps, and deliver practical outcomes. Having the right specialists involved from the start supports smoother implementation, clearer decision making, and stronger results. Our regional experience also provides awareness of emerging issues, allowing the District to anticipate future challenges and plan proactively.

Qualifications and Experience

Our team brings extensive experience delivering limnological and aquatic vegetation management projects throughout the Pacific Northwest, with a focus on developing practical, science-based plans that support informed decision making and long-term lake stewardship. We have assembled an efficient, regionally experienced team with a long track record of successfully completing comparable projects for special districts, local governments, and community-based organizations.

Collectively, our team offers decades of experience conducting aquatic plant surveys and lake monitoring, developing monitoring plans and quality assurance project plans, performing data analysis and synthesis, and preparing comprehensive lake and aquatic vegetation management plans. This technical expertise is paired with a strong understanding of regulatory frameworks and permitting considerations relevant to aquatic vegetation management in Washington, as well as demonstrated experience supporting transparent and effective stakeholder engagement processes.

Our experience spans urban, suburban, and rural lake settings and includes projects addressing invasive aquatic plants, nuisance vegetation, water quality concerns, and integrated management strategies that balance ecological function with recreational and community uses. We routinely work in settings where multiple interests and constraints must be considered, and we emphasize clear communication of technical information, costs, benefits, and tradeoffs to support informed planning.

A selection of representative projects that closely align with the Black Lake Integrated Aquatic Vegetation Management Plan is provided below, with selected full project descriptions included in Appendix B. These examples demonstrate our ability to apply best available science, manage complex planning efforts, and deliver actionable plans tailored to local conditions and community priorities.

	Relevance									
Project|Client	**Firm**	**IAVMP Development**	**Surveying and Mapping Aquatic Vegetation**	**Invasive Aquatic Vegetation Management**	**Aquatic Vegetation Control**	**Lake Management**	**Monitoring Plan Development**	**Water Quality Monitoring**	**Grant Application**	**Public Engagement**
Aquatic Plant Surveys in Boundary Hydropower Project | Seattle City Lights, WA	ESA		✓	✓	✓					
Black Lake 2912 IAVMP | Thurston County, WA	Pennington[1]	✓								✓
Beaver Lake Ongoing Water Quality Management | Beaver Lake Owners Association, OR	AI		✓	✓	✓	✓		✓		
Blue Lake Aquatic Vegetation and Water Quality | Interlochen HOA, OR	AI		✓	✓	✓	✓		✓		✓
Clackamette Cove Water Quality and Alternatives Analysis | City of Oregon City, OR	AI, AWR		✓			✓	✓	✓		✓
Lacamas, Fallen Leaf + Round Lake Monitoring Plan Update | City of Camas, WA	AWR, AI					✓	✓			✓
Lacamas, Fallen Leaf and Round Lakes Management Plan Implementation | City of Camas, WA	AWR, AI					✓		✓	✓	
Lake Roesinger IAVMP | Snohomish County, WA	ESA	✓								✓
Lake Serene IAVMP | Snohomish County, WA	Pennington[2]	✓								
Lake Tapps Integrated Aquatic Plant Management | Cascade Water Alliance, WA	ESA	✓	✓	✓	✓					
Oswego Lake Management Program | Lake Oswego Corporation, OR	AI	✓	✓	✓	✓	✓	✓	✓		✓
Wiser Lake Cyanobacteria Management Plan | Whatcom County, WA	AI, AWR					✓				✓

[1]*Work completed while Toni Pennington was at a previous firm.*

[2]*Toni Pennington served as senior reviewer.*

Schedule and Cost

Cost Summary

The proposed project budget totals $90,800 and is summarized by task in the table below. Appendix C provides an itemized cost estimate with individual hours, hourly cost and materials costs, as well as the 2026 rate schedules for Aquatic Insight, AWR, and ESA. There will be no mark-up applied to subconsultant costs.

Task	Description	Cost
1	Project Management	$ 14,000
2	Aquatic Plant Survey and Mapping	$ 17,000
3	Assist with submitting grant application to Department of Ecology	$ 7,800
4	Technical Assistance for the 2026 Herbicide Applications	$ 4,700
5	Develop the Black Lake Integrated Aquatic Vegetation Management Plan (IAVMP)	$ 41,300
	Total for IAVMP, grant application assistance, and 2026 herbicide assistance	**$84,800**
6	On-call Technical Assistance for Plan Implementation	$ 6,000
	Grand Total	**$90,800**

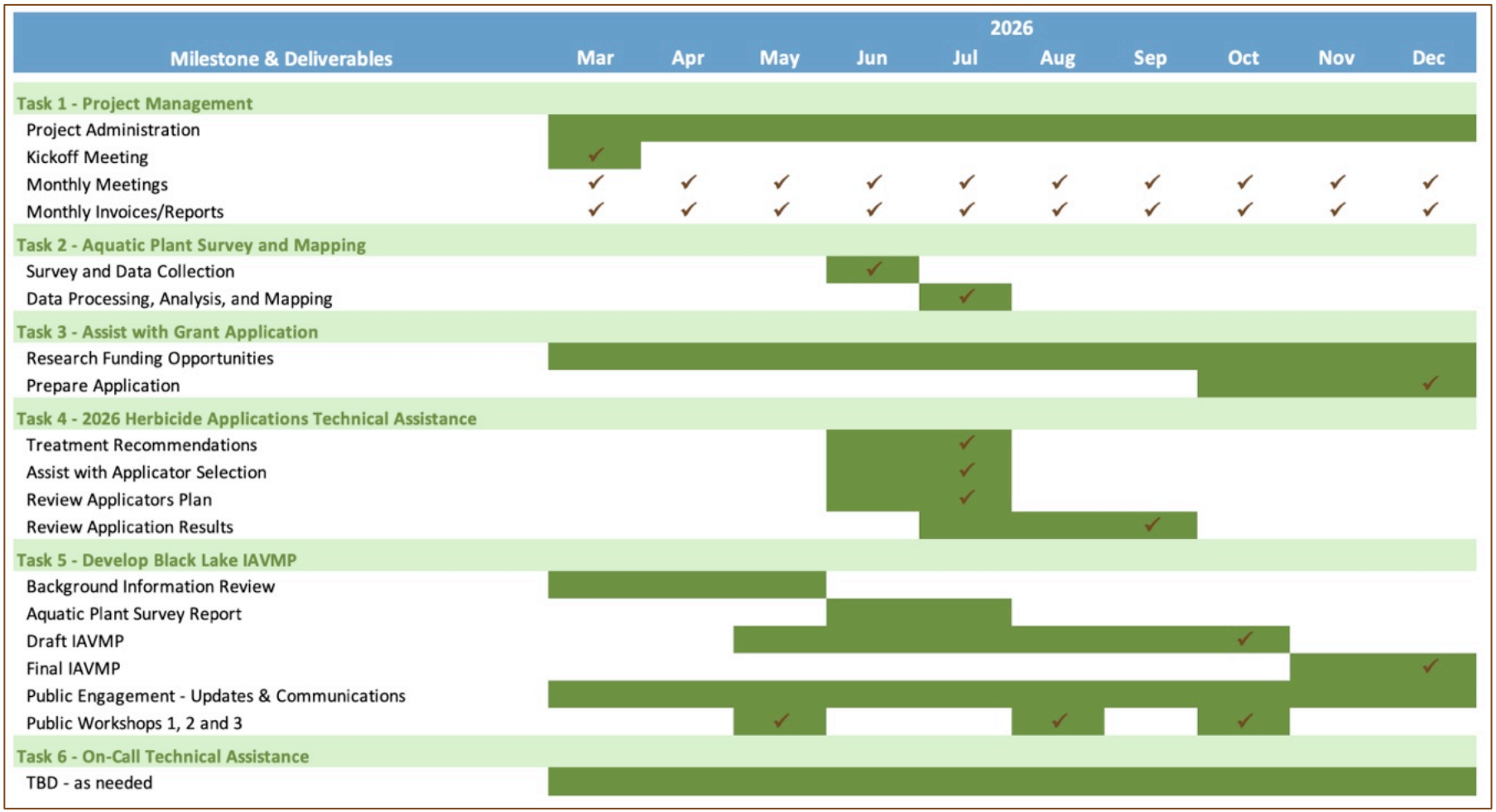
Schedule

The project will start with a kickoff meeting in March and monthly meetings through the end of the year. The aquatic vegetation and bathymetric surveys will take place in June with preliminary data available before the first herbicide application of the year, which historically has taken place in July. IAVMP development will start in March, with a draft document available in October. We will assist with grant application options throughout the project duration with a goal of having an Ecology application ready well before the December 15 deadline. Detailed timing of specific tasks are included in the project schedule on page 15.

References

Project	Contact	Title	Organization	Phone and email
Lacamas, Fallen Leaf and Round Lakes Management Plan Implementation and Monitoring Plan Update	Brian Monnin	Engineering Project Manager	City of Camas	(360) 817-7388 BMonnin@cityofcamas.us
Wiser Lake Cyanobacteria Management Plan	Anna Mostovetsky	Environmental Health Specialist II	Whatcom County	(360) 778-6065 AMostove@co.whatcom.wa.us
Beaver Lake Ongoing Water Quality Management	Dan Sweeney	Water Quality Committee Member	Beaver Lake Owners Association	(503) 631-2015 sweeneydh@gmail.com

Detailed Schedule



Aquatic Insight

Appendix A – Resumes

Mark Rosenkranz, MS, CLM

Limnologist and Water Quality Specialist

Mark Rosenkranz is a professional limnologist and certified lake manager with 25 years of experience studying and managing lakes. He specializes in working with stakeholders to address concerns about impaired water quality and finding solutions that lead towards establishing long-term improvement. This includes in-lake and watershed testing and analysis, BMP recommendations, phosphorus remediation, aquatic plant mapping and treatment, cyanobacteria monitoring and toxin testing, and dredge permitting and planning.

EXPERIENCE

25 years

EDUCATION

Masters in Environmental Management Portland State University

BS in Aeronautical Technology, Purdue University

ACCREDITATION

Certified Lake Manager from North American Lake Management Society

PROFESSIONAL

Past President and current member of Oregon Lakes Association

Past board member of North American Lake Management Society

Member of Washington Lakes Protection Association

SPECIALTIES

Nutrient management

Lake management

Water quality specialist

RELEVANT EXPERIENCE

Oswego Lake Phosphorus Reduction Program and Vegetation Management Programs, Lake Oswego Corporation, Lake Oswego, Oregon. Oswego Lake is a 415-acre urban waterbody surrounded by the city of Lake Oswego. It is an important resource for lakeside residents and provides significant ecosystem services for the surrounding community. The lake has a history of summer cyanobacteria blooms and a large population of non-native aquatic plants. Using nutrient sampling data, sonde profiles, and vegetation surveys Mark developed a comprehensive phosphorus and aquatic vegetation management program. This led to implementing several vegetation management options depending on plant species and location, and a phosphorus reduction strategy that resulted in a healthy lake with no persistent cyanobacteria blooms and a balanced native aquatic plant community.

Beaver Lake Nutrient Monitoring and Cyanobacteria Testing, Beaver Lake Owners Assn. Clackamas County, OR. Mark was brought on to evaluate current management practices and suggest modifications that would improve conditions to a lake with a history of cyanobacteria blooms and non-native vegetation. This involved creating a nutrient sampling and vegetation monitoring plan to track seasonal nutrient and phytoplankton dynamics, and quantify the vegetation population. A combination of alum injection and a milfoil-specific herbicide application was recommended. Ongoing monitoring is used to track the efficacy of these efforts as part of an adaptive management strategy, while continuing to provide healthy recreational opportunities for residents.

Wiser Lake Lake Cyanobacteria Management Plan (LCMP), Whatcom County, Washington. Wiser Lake is a shallow (max depth 10 ft) lake in Whatcom County north of Bellingham Washington. For years they have experienced cyanobacteria blooms and other water quality conditions that limit the recreational value of this important resource. The County collected data to support an LCMP and Mark assembled a team including Annear Water Resources and Lizbeth Seebacher to analyze the data and complete the project. This resulted in recommendations for water quality improvements that included in-lake and watershed based approaches to reduce nutrient inputs.

Clackamette Cove Water Quality and Alternatives Evaluation Program, Oregon City Urban Renewal Agency, Oregon City, OR. Clackamette Cove is located adjacent the Clackamas River in the heart of the City of Oregon City. The Oregon City Urban Renewal Agency is considering additional development opportunities for the area around the Cove but wanted to asses water quality conditions to make sure the Cove was safe for recreational use. Mark put together a team that including Annear Water Resources and others to monitor the cove, model options for increasing flow from the Clackamette River, and provide recommendations for managing the cove as a lake during summer when it is mostly disconnected from the river. Now in year two of the project the final result will be a stepwise plan for improving conditions in the Cove so its potential as a valuable resource can be realized.

Lizbeth Seebacher, PhD, PWS

Senior Aquatic Biologist

Dr. Lizbeth Seebacher is an environmental consultant specializing in lake management, aquatic vegetation management, and water-quality improvement. She brings more than 20 years of experience working on invasive aquatic plant control, lake restoration, stormwater treatment, and wetland ecology across Washington State and the Pacific Northwest.

EXPERIENCE

25 years

EDUCATION

Ph.D. and M.S. - Invasive Species Biology/Wetland Biology/Restoration Ecology from the University of Washington

ACCREDITATION

Professional Wetland Scientist

PROFESSIONAL

Past President – PNW Society for Wetland Scientist

Executive Director – PNW Invasive Species Council

Washington Invasive Species Council (WISC) Executive committee

SPECIALTIES

Aquatic, wetland, and riparian restoration project implementation, monitoring, and adaptive management

Project management for aquatic ecosystem restoration

Regulatory-informed restoration design and compliance-driven project delivery

Advanced knowledge of Pacific Northwest flora and native plant communities

RELEVANT EXPERIENCE

Washington State Department of Ecology Aquatic Invasive Plant & Freshwater Algae Program Project Manager. Program management of the Aquatic Invasive Plant Program and Freshwater Algae/Cyanobacteria Programs. Determine efficacy of proposed projects for funding, including accurate experimental design, research methods and analysis. Oversee, manage and coordinate project managers for each project funded, assuring each project met performance standards. Work within Ecology and other agencies on defining special research and restoration projects for aquatic, riparian and wetland systems. Assist in developing experimental design and data analysis for said research projects. Researched watersheds of impacted lakes, coordinated with project managers to include watershed planning and BMPs into funded projects. Survey, monitor and assist with control of invasive species in lakes and wetlands within the state and gather invasive plant and water quality data from aquatic and wetland sites. Provide technical and logistical support for aquatic, wetland and riparian restoration activities.

University of Washington Research Scientist. Research efficacy of the use of floating treatment wetlands (FTWs)/biomedia modules for insitu treatment of stormwater, specifically to curb mortality of coho from 6PPD quinone. Research stormwater chemistry, salmonid biology, green stormwater infrastructure, phytoremediation and biomedia. Ascertain metals, suspended solids, nutrient load and other water quality parameters of stormwater before and after exposure to FTW/biomedia modules. Design new modules to test efficacy at field sites throughout Puget Sound.

Pacific NW Invasive Plant Council Executive Director. Managed the re-establishment and revision of the council, report to the Board of Directors. Responsible for the organization's consistent achievement of our mission and objectives. Provided leadership in developing the Council's programs. Developed partnerships with agencies and other non-profit organizations. Train and supervise employees for Early Detection and Rapid Response program (EDRR). Prepared and submitted grant proposals for public and private granting agencies. Carried out all plans and policies authorized by the board. Developed website, educational materials and public education campaign. Developed scopes, schedules and prepared cost and time estimates of projects, negotiated contracts with funders and provided status briefings for projects.

U.S Army Corps of Engineers Wetland Biologist. Regulatory specialist and project manager with extensive experience evaluating Department of the Army permit applications and overseeing wetland mitigation compliance for projects impacting waters of the United States. Led permitting, compliance, and enforcement efforts under Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and related federal and state regulations, including the Endangered Species Act and State Environmental Policy Act. Managed multiple complex water-resource projects, ranging from navigable waters and shoreline protection to ecosystem restoration and flood control, while coordinating interdisciplinary teams across federal, state, local agencies, and project applicants. Provided technical expertise in wetland delineation and rating, mitigation planning, habitat restoration, invasive species biology, and risk-based project planning to achieve regulatory compliance and successful project outcomes.

Cher Prazak (They/them)

Water Resource Specialist

Cher Prazak is an early career water resource specialist with over 3 years of experience working with freshwater water systems. Cher obtained their BS in Watershed Science at Colorado State University in 2022 where they worked in the Natural Resource Ecology lab to characterize wildfire impacts on snowpack. They specialize in holistic water quality management and large algal bloom monitoring to mitigate environmental concerns.

RELEVANT EXPERIENCE

Tualatin River Farms Nutrient Monitoring, CleanWater Services, Hillsboro, OR. Tualatin River Farms has a small 1-acre irrigation pond fed by the adjacent Tualatin River. The pond has experienced many years of algal and cyanobacteria blooms from high nutrient levels that reduce the farm's efficiency. A consistent sampling plan was created to monitor nutrient levels, phytoplankton, and sonde profiles to determine water quality conditions related to nutrient loading. Cher helped to identify nutrient inputs and develop a phosphorus and aquatic vegetation management program. Ongoing monitoring will discern whether the use of Effective Microorganisms has an impact on aquatic plant growth in a freshwater system.

Beaver Lake Nutrient Monitoring and Cyanobacteria Testing, Beaver Lake Owners Assn. Clackamas County, OR. Beaver Lake has a history of algal and cyanobacteria blooms that limit recreational use. Suggested modifications were made to current management practices for improving conditions of the lake. This involved creating a sampling plan and using the data to track seasonal nutrient and phytoplankton dynamics. Cher assists with ongoing monitoring and data analysis that is used to track the efficacy of management activities in the lake and watershed.

Clackamette Cove Water Quality and Alternatives Evaluation Program, Oregon City Urban Renewal Agency, Oregon City, OR. Clackamette Cove is located adjacent the Clackamas River in the heart of the City of Oregon City. The Oregon City Urban Renewal Agency is considering additional development opportunities for the area around the Cove but wanted to asses water quality conditions to make sure the Cove was safe for recreational use. Now in year two of the project, Cher assists with ongoing monitoring of sonde profiles, nutrient levels, phytoplankton, and aquatic vegetation for continued analysis to improve water quality conditions.

Environmental Professional Program, Portland State University, Portland, OR. Portland State University's Environmental Professional Program encourages students and professionals to excel in their field through various skill trainings. Cher volunteered in Dr. Pat Edward's lab to enhance their professional lab experience and build connections with fellow water scientist. This involved preparation and organization of samples and identifying macroinvertebrates and diatoms by species following Quality Assurance and Quality Control practices. Cher also participates weekly in lab meetings to deepen their freshwater knowledge and strengthen scientific communication and discussion.

Natural Resource Ecology Lab, Colorado State University, Fort Collins, CO.

While attending Colorado State University, Cher worked with Dr. Stephanie Kampf to investigate how wildfires impact snowpack and freshwater stream hydrology in the Rocky Mountains. Data was collected for two years downstream the Cache la Poudre River to characterize burn severity, snowpack levels (depth, SWE, albedo) in the winter, and stream morphology (discharge, erosion, soil permeability) in the summer. This included installing two weather stations, setting up field cameras, and utilizing LIDAR. Cher also attended monthly meetings to analyze the data and brainstorm ecosystem resiliency strategies.

EXPERIENCE

3 years

EDUCATION

BS in Watershed Science, Colorado State University (2022)

PROFESSIONAL

Member of PSU EPP Water Lab

Member of Society of Freshwater Sciences

Past President of CSU Watershed Science Club

SPECIALTIES

Field Sampling

Data Analysis

Data Organization

Robert Annear, PhD, PE

Lake Water Quality and Management

Dr. Robert Annear (Rob) is an environmental engineer with 25 years specializing in hydrodynamic and water quality modeling. Rob supports clients with regulatory permits and requirements; lake studies, including nutrient management and load reductions; surface water system assessments; climate change studies; receiving water modeling and analyses; Total Maximum Daily Loads (TMDL) development, implementation and compliance; Endangered Species Act (ESA) compliance; and water quality management for multiple uses (supply, salmon, recreation etc.). He has in-depth experience in the development, calibration, and use of hydrodynamic and water quality models (1-D, 2-D, and 3-D) throughout the US in rivers, lakes, reservoirs, estuaries, and coastal and ocean environments. Rob has also served as Expert Witness in cases involving hydrology, water rights; and hydrodynamic, sediment transport and chemical fate and transport. He has successfully led multidisciplinary teams of professionals, including managing projects, budgets, workflow processes, and quality control and assurance.

EXPERIENCE

29 years

EDUCATION

PhD, Civil and Environmental Engineering, Portland State University (PSU)

MS, Civil Engineering, PSU

BS, Aerospace Engineering, Boston University

ACCREDITATION

Professional Engineer, Environmental: OR #53757; ID #14190; WA #46812; FL #71806; NC #049422; UT #12485900-2202

Graduate Certificate in Hydrology, PSU

SPECIALTIES

Hydrodynamic and water quality modeling

Water resources engineering

Lake Management

Source water protection studies and planning

Strategic consulting and peer review

Litigation support and expert witness

RELEVANT EXPERIENCE

Wiser Lake, Cyanobacteria Lake Management Plan, Whatcom County Health and Community Services, Washington. Wiser Lake is an approximate 116-acre eutrophic lake fed by Cougar Creek. In recent years water quality problems have persisted in the lake with algal blooms impacting recreation. Cougar Creek is classified as Category 5 for dissolved oxygen (DO) impairment and Category 4a for bacterial contamination. Whatcom County, through its prime contractor, hired Rob and his team to utilize existing data to develop a Cyanobacteria Lake Management Plan for the lake, including developing water and nutrient budgets, applying analytical models to the lake, analyzing waterfowl data, and supporting the public engagement process, including virtual and in-person open house events.

Lake Monitoring Plan Update, City of Camas (Washington), Project Manager. The Lacamas Lake system consists of three variably linked water bodies: Lacamas, Round, and Fallen Leaf Lakes. Lacamas Lake is an approximate 300-acre eutrophic lake fed by Lacamas Creek and directly connected to Round Lake located immediately downstream. Fallen Leaf Lake, at approximately 20 acres, lies near and seasonally discharges into Lacamas Lake. Annual algal blooms have plagued the Lake system for decades, leading to the development of a Lake Cyanobacteria Management Plan (LCMP) in 2024. The City has tasked AWR with developing an updated monitoring plan to be used for 1) ongoing data collection, 2) identifying when to conduct lake treatments, and 3) responding to cyanobacteria harmful algal blooms (cHAB). Rob is leading the technical team to review the LCMP in developing an updated conceptual model of the lake and seasonal water and nutrient budgets and then leading the development of an updated Lake Management Plan.

Clackamette Cove Water Quality & Alternatives Evaluation, City of Oregon City, Project Manager. Clackamette Cove is a popular area for recreation in the City of Oregon City providing public access to the Clackamas River. Harmful algal blooms (HABs) in the Cove during peak summer use hinder recreational use and limit opportunities to continue developing the area on behalf of the community. The City has tasked AWR and its partners with collecting and analyzing field data and then developing a water quality model to assess strategies for improving the Cove's summer water quality. Rob is leading the AWR team in developing a CE-QUAL-W2 model of the Cove and lowest reaches of the Clackamas River.

The Future of Water Quality in Coeur d'Alene Lake, The National Academies of Science, Engineering and Medicine, Coeur D'Alene, Idaho. Rob participated in the National Academies multidisciplinary committee for the consensus study over three years and was responsible for reviewing the lake hydrodynamics, sediment transport and past modeling studies of the lake.

The study resulted in a consensus study report in November 2022 which included a review of past work, consensus understanding of lake processes and recommendations for future work

Lacamas, Fallen Leaf and Round Lakes, Cyanobacteria Lake Management Plan, City of Camas, Washington. Lacamas Lake is an approximate 300-acre eutrophic lake fed by Lacamas Creek and directly connected to Round Lake immediately downstream. Fallen Leaf Lake, at approximately 20 acres, is near and discharges into Lacamas Lake. In recent years water quality problems persist in the lakes with algal blooms impacting recreation in 2020 and 2021. The City is working with a team of scientists and engineers to collect data, develop water and nutrient budgets and develop a long-term lake management plan for the lakes, including stakeholder input. Rob from AWR supported this project by providing expert technical advice, senior review, engagement with the client and stakeholders, interpreting field data, and assisting with developing the lake management plan.

Lacamas, Fallen Leaf and Round Lakes, Lake Cyanobacteria Lake Management Plan Implementation, City of Camas, Washington. AWR's Rob Annear is currently under contract with the City of Camas, WA to help implementation the Lake Management Plan.

Moses Lake Quality Assurance Project Plan (QAPP), Grant County Conservation District, Moses Lake, Washington. The Client is working with stakeholders on a long-term effort to develop a Moses Lake Comprehensive Management Plan to improve lake quality. Rob from AWR lead the team to develop specific section of the QAPP to conduct field sampling in Moses Lake for use in develop lake water and nutrients budgets to inform development of lake management plan. The QAPP development including submitting the document to the WA Department of Ecology for review and updated based on their feedback.

Oswego Lake Physical and Geologic History, Stoel Rives LLP on behalf of the Lake Oswego Corporation, Lake Oswego, Oregon, Project Director, and Expert Witness. Stoel Rives, on behalf of their client, the Lake Oswego Corporation retained Rob and his team to study the physical and geologic history of Oswego Lake and Lakewood Bay as part of a litigation case on public access to the lake.

Lake Conway Stormwater Quality Management Master Plan, Orange County, Florida, Technical Advisor. The middle and south lobes of Lake Conway are in a highly urbanized area of Orange County. All runoff in the approximately 2,150-acre watershed flows to the lake. The lake is highly developed with residences almost completely lining the shore of both lobes of the lake. The objectives of the project included developing a hydrologic budget for the lake, developing a nutrient budget for the lake, making BMP recommendations to improve the quality of water in the lake, and presenting the results to the lake advisory board. Dr. Annear served as a technical advisor on water quality field sampling, data analysis and lake management.

Spanaway Lake Management Plan, Pierce County Public Works and Utilities, Washington. Following observations of harmful algae blooms and beach closures at Spanaway Lake, a legislative directive was established to improve the water quality management of the lake through a long-term management plan. Rob from AWR lead a team serving as a subconsultant to a civil engineering firm tasked by Pierce County to develop the lake management plan and assist in implementing projects. Rob and his team supported the project by developing a QAPP, sampling plan, reviewing and analyzing the field data, developing a phosphorous budget and Vollenweider and Nürnberg models to better understand the lake trophic status and inform lake management scenarios. Meanwhile the technical team supported the County efforts to keep lake stakeholders informed and engage them in developing management measures.

Laurence Lake Temperature Model, Middle Fork (Hood River) Irrigation District, Oregon, Modeler. Conducted field work collecting temperature and water quality data in Laurance Lake and the two inflow tributaries to support development of a 2-D hydrodynamic and water quality model (CE-QUAL-W2). Conducted data analysis of meteorological data investigating erroneous data. Collected and analyzed bathymetry data for developing a computational model grid.

Waldo Lake, U.S. Forest Service, Willamette National Forest, Oregon, Lead Modeler. Participated in interdisciplinary research team to discuss short-term and long-term monitoring of Waldo Lake to support a 2-D hydrodynamic and water quality model (CE-QUAL-W2). Developed GIS database for the watershed in coordination with research staff in the Center for Lakes and Reservoirs at Portland State University. Developed Waldo Lake bathymetry using field data to be used in developing the 2-D model grid and calibrated the hydrodynamic and temperature model.

Zoe Rodriguez del Rey

Principal

Zoe Rodriguez del Rey is a water resources professional with experience in integrated water resources planning and management. She has led multi-stakeholder regional efforts to support sustainable water management, including oversight of surface and groundwater monitoring programs and the development of long-term planning documents. Zoe has a strong background in water quality science, with experience in both surface and groundwater system, overseeing the development, implementation, and application of monitoring programs to support decision-making. Since joining Annear Water Resources, LLC (AWR), she has supported lake management, monitoring plan development, modeling, and source water protection projects for clients in Oregon and Washington. With 20 years of experience spanning public utilities, consulting, and academic research, Zoe combines deep technical expertise with a practical, solution-oriented mindset to deliver collaborative and effective water resources solutions.

EXPERIENCE

20 years

EDUCATION

MS, Environmental Sciences, Portland State University

BS, Biology, University of New Orleans

SPECIALTIES

Integrated Water Resources Planning & Management

Source Water Protection

Water Quality

Multi-Partner Collaboration & Stakeholder Engagement

Project Management

RELEVANT EXPERIENCE

Clackamette Cove Water Quality and Alternatives Evaluation, Oregon City Urban Renewal Agency. Oregon City is evaluating water quality conditions and management strategies for Clackamette Cove, a 38-acre off-channel waterbody adjacent to the Clackamas River. The project integrates lake monitoring, CE-QUAL-W2 modeling, and alternatives analysis to understand internal nutrient dynamics, hydrodynamics, and cyanobacteria bloom risk, and to identify feasible strategies for improving water quality and supporting future use of the Cove. Zoe serves as Deputy Project Manager, and contributes to technical tasks, including the preparation of water quality reports, monitoring plans, and public engagement through the Urban Renewal Commission.

Source Water Protection and Stakeholder Engagement, Tualatin Valley Watershed District (TVWD). The Willamette Intake Facilities Commission oversees the operation of the Willamette Intake Facilities, which provide drinking water to TVWD and the Cities of Wilsonville, Sherwood, Hillsboro, Tigard, and Beaverton. The WIF Commission developed the Watershed Protection, Monitoring, and Outreach Plan to protect source water quality through targeted strategies addressing contamination risks in the Willamette River Basin. AWR was contracted to identify and prioritize next steps for implementation. Zoe's role in the technical team is conducting extensive research across three priority areas (water quality monitoring, emergency response, and stakeholder engagement) and developing materials to guide discussions with WIF Commission members.

Source Water Assessment Plan, Joint Water Commission (JWC), Oregon. The JWC received a grant from the US Department of Agriculture, Natural Resources Conservation Service) to develop a source water assessment for its Drinking Water Source Area in the Tualatin and Trask River watershed, where land use is primarily forestry and agriculture. The Source Water Protection Plan (SWPP) characterizes watershed conditions, identifies contaminants of concern, assesses BMPs and conservation strategies to protect source water, and outlines outreach approaches for collaborating with agricultural producers. Zoe contributed to the preparation of the SWPP and integrated client feedback to strengthen the final plan.

Lacamas, Round, and Fallen Leaf Lake Monitoring Plan Update, City of Camas. The Lacamas Lake system includes three connected lakes: Lacamas, Round, and Fallen Leaf. Seasonal cyanobacteria blooms have affected the system for decades, prompting development of a Lake Cyanobacteria Management Plan (LCMP) in 2024. The City engaged AWR to develop an updated monitoring plan to guide ongoing data collection, guide treatment approach and timing, and support response to harmful algal blooms (HABs). Zoe led the preparation of the monitoring

plan, managing its development and integrating technical input from the project team. Other services provided under the contract included preparation of a multi-year lake data analysis report, preparation of an application for the Ecology Freshwater Algae Control Grant Program, and lake treatment planning support.

Tualatin River ASR Thermal Modeling Evaluation, Clean Water Services, Oregon. Clean Water Services (CWS), through David Evans and Associates, engaged AWR to evaluate an Aquifer Storage and Recovery strategy to reduce summer stream temperatures and support thermal trading in the Tualatin River. The project applied an existing CE-QUAL-W2 model to assess baseline and ASR operational scenarios and quantify instream thermal benefits and their spatial and temporal extent. Modeling results were used to compare operational performance and inform feasibility and regulatory considerations. The analysis supported coordination with CWS on the evaluation of implementation pathways. Zoe served as modeler at AWR, responsible for running CE-QUAL-W2 scenarios, post-processing results, and preparing the final technical report used to inform next phase planning.

Canby Utilities Water Supply and Thermal Impacts Evaluation, Canby, Oregon. Canby Utilities is evaluating a new water supply strategy that shifts municipal withdrawals from the Molalla River to a new intake on the Willamette River to improve supply reliability and system redundancy. Because the Willamette River is governed by a water temperature TMDL, evaluation of potential thermal impacts and mitigation requirements is required in coordination with Oregon DEQ. David Evans and Associates engaged Annear Water Resources to support thermal impact analysis using an existing CE-QUAL-W2 hydrodynamic and water temperature model of the Middle Willamette River. Zoe led the modeling effort, including scenario development, model execution, and post processing to assess baseline and project withdrawal conditions. The project is ongoing and results are informing regulatory review

Coachella Valley Groundwater Management Plan Updates – Indio and Mission Creek Subbasins. Zoe led the preparation of the 2022 Water Management Plan (WMP) Updates for the Indio and Mission Creek Subbasins on behalf of the Coachella Valley Groundwater Sustainability Agencies. The WMPs support compliance with California's Sustainable Groundwater Management Act (SGMA) and ensure long-term, reliable water supplies for groundwater-dependent communities. Zoe coordinated both efforts, overseeing technical analyses, aligning requirements with local priorities, and facilitating engagement with tribes, NGOs, and other stakeholders. Her work included the integration of groundwater replenishment and recycled water projects, imported water supply strategies, demand management actions, and locally relevant management objectives and thresholds tailored to each basin's sustainability challenges. Both Plans received approval from the Department of Water Resources (DWR). Zoe will provide technical guidance for the upcoming five-year WMP updates required by DWR.

Coachella Valley Integrated Water Resources Management Plan and Stormwater Resources Plan. The Coachella Valley Integrated Regional Water Management Plan (IRWMP) and Stormwater Resources Plan (SWRP) are collaborative planning efforts led by the Coachella Valley Regional Water Management Group, focused on advancing sustainable water and stormwater management across the region. These plans identify and prioritize multi-benefit projects that enhance water supply reliability, water quality, flood protection, and ecosystem health. Zoe participated in the development of the combined plans, contributing technical input, identifying project opportunities, and supporting alignment with regional water management goals. She represented Coachella Valley Water District in coordination meetings and helped ensure that District priorities and projects were reflected in the planning process.

Tribal Groundwater Rights Mediation. Zoe served as a technical expert in a successful multi-year mediation between the Agua Caliente Band of Cahuilla Indians, Coachella Valley Water District, and Desert Water Agency. The mediation resolved longstanding litigation over groundwater rights and management. Zoe's role included analyzing hydrologic data, evaluating current and future projections of water demand, and assessing the feasibility of proposed technical and management strategies. Working closely with the Agua Caliente Tribe and Desert Water Agency technical leads, she helped facilitate a collaborative, science-based approach to support a durable, equitable settlement respecting tribal water rights, regional water needs, and sustainable groundwater management.

Toni Pennington

Senior Aquatic Biologist

Toni has extensive experience in the research and management of aquatic plants across the western U.S. Her research on aquatic plants has included physiological studies to improve management of nonnative species, ecological studies on nutrient requirements, and herbicide efficacy studies to determine lowest dose requirements for management. Her management experience includes numerous multi-year projects in reservoirs and rivers developing integrated aquatic vegetation management plans, providing treatment recommendations, and supporting clients in developing bid specifications for a variety of controls including diver-assisted hand-pulling, benthic barriers, and aquatic herbicides.

Experience

29 years

EDUCATION

PhD, Environmental Science and Resources, Portland State University

MS, Aquatic Biology, Texas State University

BS, Biology, Fort Lewis College

PROFESSIONAL AFFILIATIONS

Oregon Lakes Association (President)

Western Aquatic Plant Management Society

Aquatic Plant Management Society

North American Lake Management Society

Washington State Lake Protection Association

North American Invasive Species Management Association

Women of Aquatics

Relevant Experience

Lake Tapps Integrated Aquatic Vegetation Management Plan (IAVMP) and Implementation, Bellevue, WA. *Project Manager & Lead Aquatic Plant Biologist*. Toni has provided numerous services to Cascade Water Alliance related to nuisance aquatic plants. In 2010, she led the development of the Lake Tapps IAVMP based on Ecology's *A Citizens' Manual for Developing IAVMPs* and subsequently led updates in 2015 and 2025. The IAVMP provides a long-term strategy to control nuisance milfoil while preserving high water quality for this future drinking water source.

Lake Roesiger IAVMP, Snohomish County, WA. *Project Manager & Lead Aquatic Plant Biologist.* ESA supported the prime consultant in developing the IAVMP following the *Citizen's Manual for Developing IAVMPs*. The plan provides a long-term strategy to reduce the distribution and density of invasive aquatic and shoreline plants in Lake Roesiger, namely Eurasian watermilfoil, fragrant waterlily, narrow-leaved arrowhead, yellow flag iris, purple loosestrife, and Japanese knotweed, and to support beneficial uses.

Lake Serene Integrated Aquatic Vegetation Management Plan (IAVMP), Snohomish County, WA. *Project Manager & Lead Aquatic Plant Biologist*. ESA supported the prime consultant in developing the IAVMP following the *Citizen's Manual for Developing IAVMPs*. This largely included senior technical reviews and management recommendations.

Black Lake Integrated Aquatic Vegetation Management Plan, Thurston County, WA. *Lead Aquatic Plant Biologist.* With a previous firm, Toni supported the development of the Black Lake IAVMP to provide a long-term strategy to manage milfoil, fragrant waterlily, and yellow flag iris. The plan was developed with close collaboration with Thurston County and citizens of the Save Black Lake Coalition and was designed to serve as a guide for improving existing beneficial uses and ensuring that future water quality demands are met. Recommendations included a multi-year and dedicated management strategy with community buy-in and ownership of the management goals; aggressive treatment protocols in Year 1 with follow-up action in subsequent years as needed; diligent monitoring and hand removal of satellite populations; establishment of a community-led management program in cooperation with the county; regular reviews and adaptive changes to management approaches; and continuing to identify, evaluate, and apply the best available science.

Rich Miller

Senior Biologist

Aquatic biologist with 30+ years of experience specializing in aquatic vegetation mapping, hydroacoustic survey, and invasive aquatic plant management. Expertise includes aquatic plant identification, geospatial analysis, vegetation modeling, and design of long-term monitoring programs. Skilled in leading field operations, ensuring rigorous data quality, and delivering technical reports that support regulatory compliance, restoration planning, and adaptive management. Rich has over two decades of experience in bathymetric and aquatic plant mapping throughout the northwest.

EXPERIENCE

30 years

EDUCATION

B.S., Interdisciplinary Studies: Aquatic Systems Analysis, California State University, Arcata

PROFESSIONAL AFFILIATIONS

Washington State Lake Protection Association

Oregon Lakes Association

Western Aquatic Plant Management Society

Aquatic Plant Management Society

North American Lake Management Society

American Society for Limnology and Oceanography

Relevant Experience

Lake Tapps Aquatic Plant Management, Cascade Water Alliance, Bellevue, WA. *Senior Biologist*. Conducts field surveys and evaluates aerial imagery to guide herbicide applications targeting Eurasian watermilfoil. Conducted a lake-wide hydroacoustic and point-intercept vegetation survey to evaluate effectiveness.

Boundary Hydroelectric Project AIS Program, Seattle City Light, WA. *Senior Biologist*. Conducts targeted aquatic vegetation and AIS surveillance in Boundary Reservoir including periodic reservoir-wide aquatic plant mapping using hydroacoustic and point intercept sampling methods. Oversees field operations, designs data collection systems, and authors annual reports.

US Army Corps of Engineers, Flowering Rush Control Demonstrations, OR and WA. *Senior Biologist*. Surveyed and mapped aquatic plant communities to support U.S. Army Corps of Engineers invasive species treatment evaluations. Conducted pre- and post-treatment vegetation monitoring, analyzed plant response patterns, and authored technical reports to inform regional aquatic plant control strategies.

Siltcoos Lake Water Quality, Nutrient Loading, and Aquatic Vegetation Assessment, Lane County, Oregon. *Lead Research Assistant*, Portland State University (PSU). Led hydroacoustic vegetation mapping, bathymetric modeling, and aquatic plant distribution modeling for a 303(d) impaired lake. Developed QAPPs and provided recommendations for future restoration and nutrient reduction strategies.

OR Dept. of Agriculture, Aquatic Weed Surveys, Monitoring, & Technical Assistance. *Lead Research Assistant*, PSU. Designed early detection surveys, led aquatic vegetation mapping, and evaluated treatment-effectiveness for high-priority noxious weeds.

Spirit Lake Hydroacoustic Mapping, Mount St. Helens, WA. *Lead Research Assistant*, PSU. Conducted detailed hydroacoustic mapping of Spirit Lake's bathymetry and submerged vegetation to evaluate ecological trajectories 35 years after the eruption.

Clackamas Reservoirs Invasive Aquatic Plant Surveys & Management Plan. *Lead Research Assistant*, PSU. Conducted aquatic invasive plant surveys in Clackamas Reservoirs as part of PGE's hydroelectric project relicensing. Responsible for project design, budgets, field surveys, reporting and development of an aquatic plant management plan.

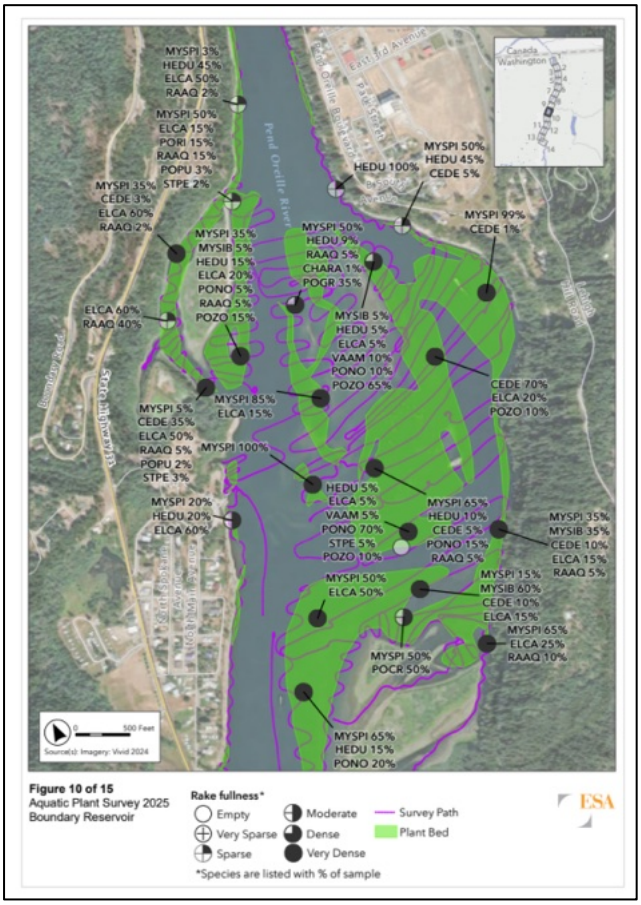
Appendix B – Project Descriptions

Aquatic Plant Surveys in Boundary Hydroelectric Project | Metaline, Washington

Client: Seattle City Light

In support of Seattle City Light's Aquatic Invasive Species Control and Prevention Plan for their Boundary Hydroelectric Project, our team (ESA and PSU) has implemented a multi-year program to assess and manage invasive aquatic vegetation in Boundary Reservoir. Work includes guiding diver-assisted suction harvesting (DASH) to maintain recreational access and confirming treatment effectiveness using drone and hydroacoustic data. Periodic reservoir-wide vegetation mapping surveys combine rake samples with high-resolution hydroacoustic transects to document distributions of more than 20 aquatic plant species and identify priority areas with dense Eurasian watermilfoil. Additional targeted surveys are conducted annually in high priority locations within the reservoir.

This work builds on our 2022 Boundary Reservoir Water Exchange Study, which used Rhodamine WT dye to quantify water-exchange half-lives and evaluate whether sufficient herbicide concentration-exposure times could be achieved under site-specific hydrologic conditions. Together, these efforts provide a robust technical basis for adaptive management, inform feasibility of future control tools, including mechanical harvesting and herbicide applications, and support long-term suppression of invasive aquatic macrophytes in Boundary Reservoir.



Client Reference:

Leska Fore
Aquatic Resources Strategic Advisor

(206) 708-5048
leska.fore@seattle.gov

Seattle City Light

Relevant Services:

- Surveying and Mapping Aquatic Vegetation
- Invasive Aquatic Vegetation Management
- Aquatic Vegetation Control
- Aquatic Invasive Species Survey

Aquatic Insight

Beaver Lake Ongoing Water Quality Management | Damascus, Oregon

Client: Beaver Lake Owners Association

Beaver Lake is a 50-acre impounded creek that experiences cyanobacteria blooms and excessive plant growth during summer. Aquatic Insight monitors nutrient, phytoplankton, and aquatic vegetation populations and makes recommendations for management activities, which includes treatment and capital projects. Monitoring data is used to adjust management activities to maximize their effectiveness to offer continued water quality improvements.

Specific projects have included lake-wide vegetation surveys which identified the presence of Eurasian watermilfoil (*Myriophyllum spicatum*) and curlyleaf pondweed (*Potamogeton crispus*) as non-native and highly invasive plants. A treatment plan was initiated using ProcellaCOR for milfoil, which was successfully applied in 2025.

Beaver Lake also experiences cyanobacteria blooms every summer. Aeration has been installed and improved conditions, but external phosphorus loading from Abernethy Creek provides a constant source of phosphorus during the summer growing season. An alum injection system to sequester phosphorus will be installed in 2026 to reduce this nutrient source, while ongoing monitoring will quantify the effect of the treatment.

The Beaver Lake Owners have the foresight and passion to continually improve the resource, realizing it takes ongoing monitoring to ensure management activities are bearing fruit. Aquatic Insight has worked side by side with the community during the process.

Client Reference:

Dan Sweeny
Water Quality Committee Member

(503) 631-2015
sweeneydh@gmail.com

Beaver Lake Owners Association

Relevant Services:

- Surveying and Mapping Aquatic Vegetation
- Invasive Aquatic Vegetation Management
- Aquatic Vegetation Control
- Lake Management
- Water Quality Monitoring

Aquatic Insight

Blue Lake Aquatic Vegetation and Water Quality | Fairview, Oregon

Client: Interlochen Homeowners Association

Blue Lake is a 64-acre natural lake that supports a popular public park on the north shoreline. The park hosts multiple events and an ongoing renovation will bring more opportunities to interact with the water. In addition, homeowners on the southern shoreline enjoy boating, skiing, and fishing throughout the summer. The lake is very popular for recreational opportunities in the region due to its water clarity and public access.

But, due to the good water clarity there is a large aquatic vegetation population dominated by curlyleaf pondweed (*Potamogeton crispus*) and Eurasian watermilfoil (*Myriophyllum spicatum*). The extensive weed growth impedes swimming, paddling and boating activity, limiting recreational and wildlife value. Aquatic Insight has been managing aquatic vegetation for homeowners with a focus on selectively treating non-native vegetation while allowing native plants to remain to provide vital wildlife habitat.

Aquatic Insight provides ongoing technical guidance to the Interlochen homeowners and the regional park agency to discuss long-term plans for lake improvement. This is necessary because jurisdictional responsibilities bisect the lake so any management needs to be coordinated if non-native vegetation is going to be effectively controlled.

As with other lakes, in addition to non-native aquatic vegetation, Blue Lake suffers from cyanobacteria growth during summer. Aquatic Insight has done strategic sampling to determine nutrient sources, worked with the homeowner group to provide education about cyanobacteria, and worked with the regional agency to formulate a long-term vision for improving lake health.

Client Reference:

Michael Vest

(281) 384-4463
Michaelvest123@gmail.com

Interlochen Homeowners Association

Relevant Services:

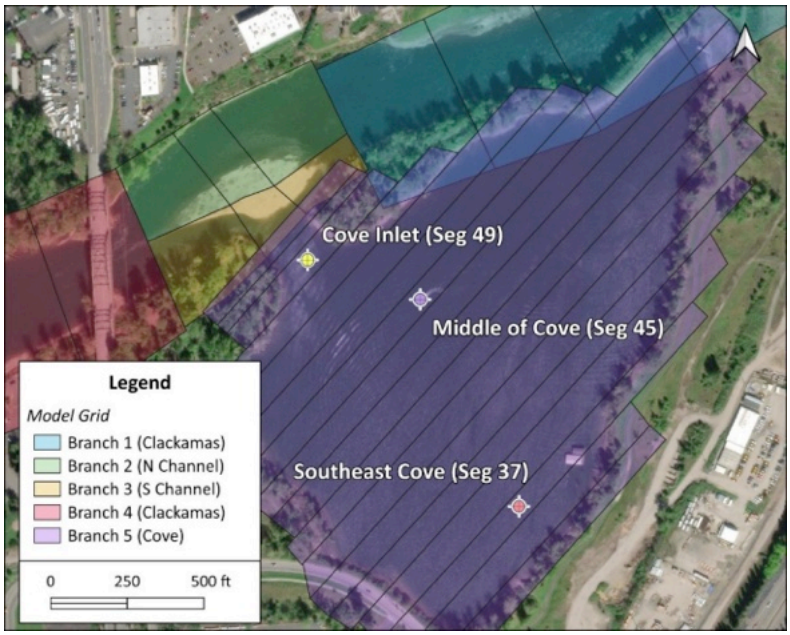
- Surveying and Mapping Aquatic Vegetation
- Invasive Aquatic Vegetation Management
- Aquatic Vegetation Control
- Lake Management
- Water Quality Monitoring
- Public Engagement

Aquatic Insight

Clackamette Cove Water Quality and Alternatives Analysis | Oregon City, Oregon

Client: Urban Renewal Commission

Aquatic Insight, in partnership with Annear Water Resources and Lichen Land and Water, is conducting a multi-year investigation of Clackamette Cove, a 38-acre former gravel quarry located in the urban core of Oregon City and hydraulically connected to the Clackamas River. Phase 1 of the project focused on characterizing physical, chemical, and biological conditions and evaluating the extent to which internal lake processes versus riverine exchange control water quality during summer low-flow conditions. Monitoring conducted in 2024 and 2025 demonstrated that, despite its connection to the river, the Cove functions as a stratified, low-flushing lake during summer months, with internal dynamics dominating water quality conditions.



Project activities included installation of continuous water level loggers in both the Clackamas River and Clackamette Cove to evaluate hydraulic connectivity and seasonal exchange, along with a comprehensive monitoring program consisting of water column profiling, nutrient and chlorophyll sampling, phytoplankton analysis, sediment coring, and dissolved oxygen measurements. Bathymetric mapping and aquatic vegetation surveys were completed to define physical structure and habitat conditions. These data were used to develop and calibrate a site-specific CE-QUAL-W2 hydrodynamic model, which is being applied to evaluate alternative management scenarios. Based on integrated monitoring and modeling results, the project team selected preliminary management alternatives that are being further developed and will be shared with the Urban Renewal Commission and the public as part of ongoing stakeholder and community engagement.

Client Reference:

Marcos Kubow
Water Quality Coordinator

(503) 730-4710
mkubow@orcity.org

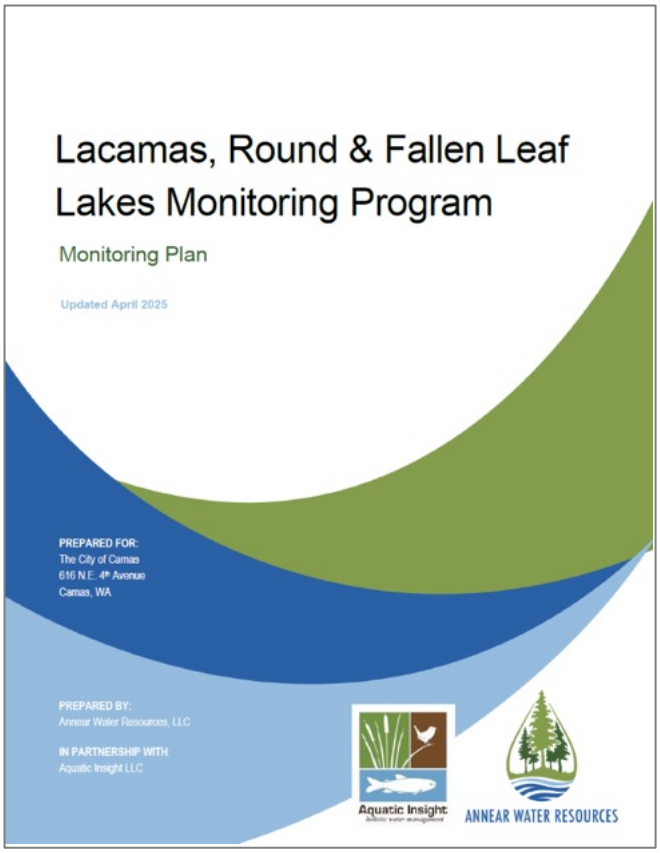
Oregon City Public Works

Relevant Services:

- Surveying and Mapping Aquatic Vegetation
- Lake Management
- Monitoring Plan Development
- Water Quality Monitoring
- Public Engagement
- Hydrodynamic Modeling

Lacamas, Fallen Leaf, and Round Lakes Monitoring Plan Update | Camas, Washington

Client: City of Camas



Annear Water Resources, in partnership with Aquatic Insight, supported the City of Camas in developing an updated, targeted monitoring plan for Lacamas Lake and its connected water bodies in Camas, Washington. The lake system has experienced frequent cyanobacteria harmful algal blooms driven by both internal and external nutrient dynamics, with recurring impacts to recreation and public health. A primary driver for updating the monitoring approach was the need to support implementation of the Lake Cyanobacteria Management Plan (LCMP) with a more streamlined, decision-focused, and cost-effective monitoring program for Lacamas, Round, and Fallen Leaf Lakes.

The updated Monitoring Plan, which was implemented in early summer 2025, includes four core components: baseline monitoring of lakes and tributaries; targeted cyanobacteria surveillance; storm event sampling to evaluate phosphorus inputs and mixing processes; and pre and post treatment monitoring. The program emphasizes actionable, high frequency summer sampling and focused monitoring in potential high-risk areas like the Cove, a shallow embayment of Lacamas Lake where microcystin concentrations have historically exceeded Washington State recreational thresholds. Data collected under this framework directly inform adaptive lake management decisions, including the timing and approach to lake phosphorus treatment strategies, ensuring efficient use of resources while supporting effective bloom management.

Client Reference:

Brian Monnin
Engineering Project Manager

(360) 817-7388
BMonnin@cityofcamas.us

City of Camas Public Works

Relevant Services:

- Lake Management
- Monitoring
- Grant Application

Lacamas, Fallen Leaf and Round Lakes Management Plan Implementation | Camas, Washington

Client: City of Camas

Under an on-call contract, Annear Water Resources (AWR), in partnership with Aquatic Insight, is supporting the City of Camas with implementation of the Lake Cyanobacteria Management Plan (LCMP) for Lacamas, Fallen Leaf, and Round Lakes. This effort builds on prior planning and monitoring work and focuses on providing flexible, as needed technical support to advance effective lake management actions. Services include technical assistance with data analysis and interpretation, evaluation and support of treatment strategies, and coordination with City staff to support implementation decisions.

As part of implementation, the AWR team has conducted specialized field and technical tasks, including installation of a new staff gauge on Lacamas Creek, calibration of a HOBO water level logger to the staff gauge, and collection of sediment cores to evaluate the potential for phosphorus release from lake sediments. Additional services are provided as needed to address emerging management questions. AWR also prepared and assisted the City with submission of a State Fiscal Year 2027 Freshwater Algae Control Grant Program application in December 2026 to support continued implementation of lake management and cyanobacteria control actions.

Client Reference:

Brian Monnin
Engineering Project Manager

(360) 817-7388
BMonnin@cityofcamas.us

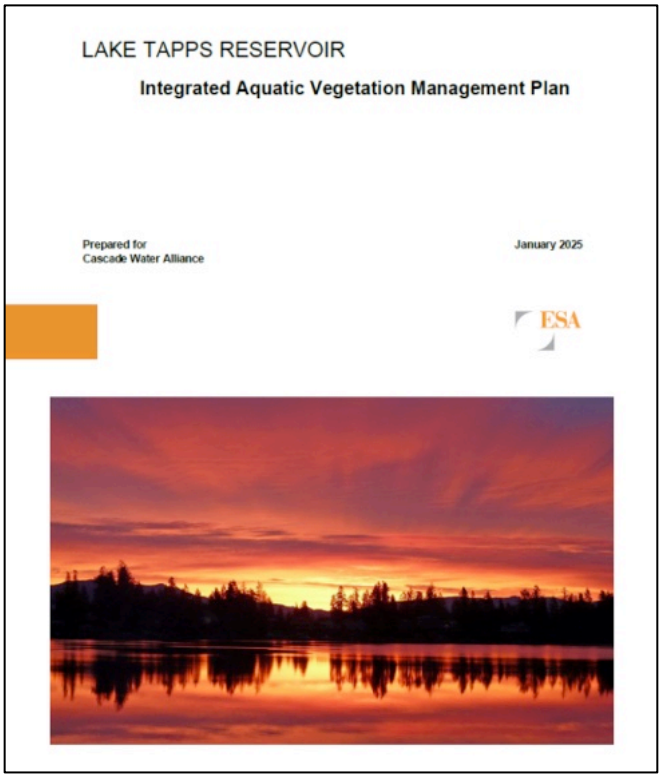
City of Camas Public Works

Relevant Services:

- Lake Management
- Monitoring Plan Development
- Public Engagement

Lake Tapps Integrated Aquatic Plant Management | Pierce County, Washington

Client: Cascade Water Alliance



The Lake Tapps Reservoir is operated by Cascade Water Alliance and is intended as a source of future drinking water supply for Cascade's member agencies. Data from 2004 to 2021 indicates that the trophic status of the Lake Tapps Reservoir has been oligotrophic to mesotrophic, indicating that the reservoir is currently in a healthy state. Although the reservoir is unlikely to be used as a drinking water source for several decades, it is critical to protect the water quality today to avoid having to restore it in the future. Maintaining reservoir health will help lower capital and operating costs of removing contaminants, including taste and odor compounds, at the future treatment plant and reduce the risk of service disruptions.

Invasive milfoil (*Myriophyllum* sp.) has been an ongoing issue in the Lake Tapps Reservoir for many years. An IAVMP was developed in 2010 and subsequently updated in 2015 and 2025. The purpose of the plan is to provide a long-term strategy for Cascade to control invasive milfoil from Lake Tapps while preserving high water quality for this future drinking water source. ESA has implemented several key elements of the IAVMP including annual surveys to identify and delineate priority areas for management. Since 2010, these activities have included diver-hand pulling, bottom barriers, and the application of aquatic herbicides (fluridone, triclopyr, and most recently florpyrauxifen-benzyl [tradename ProcellaCOR]). From this information, ESA makes recommendations and assists in developing bid specifications.

In 2023-2024, ESA conducted a lakewide aquatic plant survey to better understand the broader distribution of invasive milfoil, but more importantly identify new species not otherwise known to occur. Our aquatic biologists work closely with the GIS staff to 1) incorporate high resolution aerial maps (NearMaps) to improve survey efficiency and 2) build user-friendly maps that are consumable by the public, and 3) calculate volume and surface area information needed for bid specifications.

Client Reference:

Paula Anderson
Director of Land Use

(425) 241-7370
panderson@cascadewater.org

Cascade Water Alliance

Relevant Services:

- IAVMP Development
- Surveying and Mapping Aquatic Vegetation
- Invasive Aquatic Vegetation Management

Aquatic Insight

Oswego Lake Management Program | Lake Oswego, Oregon

Client: Lake Oswego Corporation

Oswego Lake is a 415-acre urban waterbody surrounded by the city of Lake Oswego. There are 715 lakeside homes and the lake is an important resource for residents and provides significant ecosystem services for the surrounding community. The lake has a history of summer cyanobacteria blooms and historically these were treated with copper sulfate, which was only a temporary fix and did not solve the underlying problem that led to blooms.

Mark Rosenkranz was hired to develop a plan for lake improvement, which over the years has led to significantly better water quality. Using a holistic approach, the watershed and lake were studied to determine phosphorus sources, and plans were developed for long-term phosphorus reduction. In conjunction with phosphorus reduction, a vegetation management plan was implemented using a variety of location and species-specific approaches. These ranged from using mechanical harvesters, suction dredges, bottom barriers, hand pulling during drawdowns, and chemical controls.

In order to successfully implement these plans a long-term monitoring program was maintained that tracked nutrient concentrations and the vegetation population. This informed ongoing adjustments to management activities to increase phosphorous reduction and adjust vegetation management, as necessary. The result has been a dramatic decrease in cyanobacteria blooms and near elimination of non-native invasive vegetation, allowing residents and the community to enjoy the namesake waterbody in the center of their city.

Client Reference:

Jeff Ward
Lake Manager (retired)

(503) 686-5909
jeff.ward@lakecorp.com

Lake Oswego Corporation

Relevant Services:

- IAVMP Development
- Surveying and Mapping Aquatic Vegetation
- Invasive Aquatic Vegetation Management
- Aquatic Vegetation Control
- Monitoring Plan Development
- Water Quality Monitoring
- Public Engagement
- Lake Management

Aquatic Insight

Wiser Lake Cyanobacteria Management Plan | Whatcom County, Washington

Client: Whatcom County Health and Community Services (WCHCS)

Whatcom County Health and Community Services developed a sustainable, long-term management plan to reduce cyanobacteria harmful algal blooms (HABs) in Wiser Lake. The agency received grants from the Washington State Department of Ecology to conduct lake sampling in 2023 and 2024 and to prepare a Lake Cyanobacteria Management Plan (LCMP). Data collection occurred from May 2023 through April 2024 and included phosphorus and nitrogen, temperature, pH, conductivity, and dissolved oxygen profiles, as well as phytoplankton and zooplankton sampling. Sediment cores were collected from both lake basins and analyzed for phosphorus fractions, and weekly waterfowl surveys were conducted. Analytical modeling was performed to develop lake water, phosphorus, and nitrogen budgets.

Aquatic Insight's Mark Rosenkranz and Lizbeth Seebacher worked in collaboration with Annear Water Resources to develop the LCMP using the collected data. The analyses supported development of a conceptual model of lake limnology and simple analytical models to evaluate nutrient dynamics and management options. The LCMP identified short-term and long-term management strategies to cost-effectively reduce nutrient concentrations and shift lake conditions from eutrophic toward mesotrophic or oligotrophic status to reduce algal blooms. The plan was reviewed with Whatcom County, and the project was completed in April 2025.

Client Reference:

Anna Mostovetsky
Environmental Health Specialist II

(360) 778-6065
AMostove@co.whatcom.wa.us

Whatcom County Health and Community Services

Relevant Services:

- Conceptual Site Model Development
- Public and Stakeholder Involvement
- Data Analysis
- Lake Management Plan Development

Aquatic Insight

Appendix C – Detailed Cost Table and Rate Schedules

Cost Table

				Aquatic Insight LLC										*Annear Water Resources LLC*			*ESA*				
				Mark PM	Mark Tech	Mark Field	Mark Travel	Lizbeth Review	Lizbeth Tech	Cher Tech	Cher Field	Cher Travel	Invoicing	Zoe Rodriguez del Rey	Rob Annear	Noah Benitez-Nelson	Rich Miller	Toni Pennington	Expenses		
				$195	$175	$140	$90	$180	$165	$90	$75	$60	$70	$205.80	$224.70	$125.90	$205	$222		Cost	Round
Task	**Description**	**Start Date**	**End Date**																		
1	**Project Management**	**Mar-26**	**Dec-26**	**$2,925**	**$2,975**	**$0**	**$0**	**$0**	**$330**	**$0**	**$0**	**$0**	**$700**	**$5,145**	**$225**	**$0**	**$0**	**$1,693**	**$0**	**$13,993**	**$14,000**
	Project Administration	Mar-26	Dec-26	10														$1,693		$3,643	
	Kickoff meeting	Mar-26	Mar-26		3				2					4	1					$1,903	
	Monthly Meetings	Apr-26	Dec-26		14									18						$6,154	
	Monthly Reports and Invoices	Mar-26	Dec-26	5									10	3						$2,292	
2	**Aquatic Plant Survey and Mapping**	**Jun-26**	**Jul-26**	**$780**	**$1,225**	**$0**	**$0**	**$0**	**$0**	**$270**	**$1,200**	**$360**	**$0**	**$0**	**$0**	**$0**	**$10,434**	**$0**	**$2,737**	**$17,006**	**$17,000**
	Survey and Data Collection	Jun-26	Jun-26	2	2					3	16	6					$ 6,242		$2,627	$11,439	
	Data Processing, Analysis, and Mapping	Jun-26	Jul-26	2	5												$ 4,192		$110	$5,567	
3	**Assist with Grant Application**	**Jun-26**	**Sep-26**	**$390**	**$1,225**	**$0**	**$0**	**$0**	**$5,610**	**$0**	**$0**	**$0**	**$0**	**$412**	**$0**	**$126**	**$0**	**$0**	**$0**	**$7,763**	**$7,800**
	Research Funding Opportunities	Jun-26	Nov-26	1	5				10											$2,720	
	Prepare Application	Oct-26	Nov-26	1	2				24					2		1				$5,043	
4	**2026 Herbicide Applications Technical Assistance**			**$0**	**$2,975**	**$840**	**$450**	**$0**	**$0**	**$0**	**$450**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$4,715**	**$4,700**
	Treatment Recommendations	Jun-26	Jul-26		5															$875	
	Assist with Applicator Selection	Jun-26	Jul-26		5															$875	
	Review Applicators Plan	Jun-26	Jul-26		4															$700	
	Review Application Results	Jul-26	Sep-26		3	6	5				6									$2,265	
5	**Develop Black Lake IAVMP**	**Mar-26**	**Dec-26**	**$780**	**$6,825**	**$0**	**$1,350**	**$540**	**$10,890**	**$1,350**	**$0**	**$0**	**$0**	**$10,907**	**$899**	**$755**	**$0**	**$7,038**	**$0**	**$41,335**	**$41,300**
	Background Information Review	Mar-26	May-26	1	8				15	15				5						$6,449	
	Aquatic Plant Survey Report	Jul-26	Aug-26	1	4													$2,531		$3,426	
	Draft IAVMP	May-26	Oct-26	1	8				45					4	2	4		$4,507		$15,303	
	Final IAVMP	Nov-26	Dec-26	1	4				6					2		2				$2,548	
	Public Engagement - Updates	Mar-26	Dec-26		6									6						$2,285	
	Public Workshops 1, 2 and 3	May-26	Oct-26		9		15	3						36	2					$11,323	
6	**On-Call Technical Assistance**			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$6,000**	**$6,000**
	TBD - As Needed*	Mar-26	Dec-26																	$0	
Total				**$4,875**	**$15,225**	**$840**	**$1,800**	**$540**	**$16,830**	**$1,620**	**$1,650**	**$360**	**$700**	**$16,464**	**$1,124**	**$881**	**$10,434**	**$8,731**	**$2,737**	**$90,811**	**$90,800**

Aquatic Insight

Rate Schedule

AQUATIC INSIGHT, LLC

Mark Rosenkranz

- Senior Review, QA/QC, Meetings - $195/hr.
- Study design, client meetings, technical writing - $175/hr.
- Field work, background research and data management - $140/hr.
- Travel - $90/hr.
- Invoicing - $70/hr.

Lizbeth Seebacher

- Senior Review, QA/QC, Meetings - $180/hr.
- Study design, client meetings, technical writing, - $165/hr.
- Field work, background research and data management - $150/hr.
- Travel - $90/hr.

Cher Prazak

- Background research, technical writing - $90/hr.
- Field work, data management - $75/hr.
- Travel $60/hr

ANNEAR WATER RESOURCES, LLC

- Rob Annear, Senior Principal: $224.70/hr.
- Zoe Rodriguez del Rey, Principal: $205.80/hr.
- Senior Professional: $180.70/hr.
- Project Management Assistant: $142.40/hr.
- Senior Staff Professional: $125.90/hr.
- Staff Professional: $110.00/hr.

ESA

- Rich Miller, Senior Aquatic Botanist: $205/hr.
- Toni Pennington, Senior Aquatic Biologist: $222/hr.
- Andrew Holstad, GIS Technician: $189/hr.

AQUAINS-01 JKENDRICK

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
3/12/2026

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Hub International Northwest LLC PO Box 3018 Bothell, WA 98041	PHONE (A/C, No, Ext): (425) 368-1232	FAX (A/C, No): (425) 485-8489
	E-MAIL ADDRESS: now.info@hubinternational.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Scottsdale Insurance Company	41297
INSURED	INSURER B :	
Aquatic Insight LLC 4207 SE Woodstock Blvd #535 Portland, OR 97026	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	[ ] CLAIMS-MADE [X] OCCUR	X		CPS8297199	10/9/2025	10/9/2026	DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	X POLICY [ ] PRO-JECT [ ] LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	[ ] OTHER:							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	[ ] ANY AUTO						BODILY INJURY (Per person)	$
	[ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	[ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	[ ] UMBRELLA LIAB [ ] OCCUR						EACH OCCURRENCE	$
	[ ] EXCESS LIAB [ ] CLAIMS-MADE						AGGREGATE	$
	[ ] DED [ ] RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						[ ] PER STATUTE [ ] OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] (Mandatory in NH)	N / A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Listed as Additonal Insured when required by written agreement per form GLS-150s (7-06)

Black Lake Special District, Lake Stintzi, Kirk Van Landeghan, and Cory Freeborn.

CERTIFICATE HOLDER

Black Lake Special District
7514 Cattail Ln SW
Olympia, WA 98512

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Eric Schaub

SCOTTSDALE INSURANCE COMPANY®

ENDORSEMENT NO. _____

ATTACHED TO AND FORMING A PART OF POLICY NUMBER	ENDORSEMENT EFFECTIVE DATE (12:01 A.M. STANDARD TIME)	NAMED INSURED	AGENT NO.
CPS7870056	10/09/2023	AQUATIC INSIGHT LLC	46006

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED ENDORSEMENT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

With respect to this endorsement, **SECTION II—WHO IS AN INSURED** is amended to include as an additional insured any person or organization whom you are required to add as an additional insured on this policy under a written contract, written agreement or written permit which must be:

a. Currently in effect or becoming effective during the term of the policy; and

b. Executed prior to the "bodily injury," "property damage," or "personal and advertising injury."

The insurance provided to these additional insureds is limited as follows:

1. That person or organization is an additional insured only with respect to liability for "bodily injury," "property damage" or "personal and advertising injury" caused, in whole or in part, by:

a. Your acts or omissions; or

b. The acts or omissions of those acting on your behalf.

A person's or organization's status as an additional insured under this endorsement ends when your operations for that additional insured are completed.

2. With respect to the insurance afforded to these additional insureds, the following exclusions are added to item **2. Exclusions** of **SECTION I—COVERAGES:**

This insurance does not apply to "bodily injury," "property damage" or "personal and advertising injury" occurring after:

a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or

b. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

3. The limits of insurance applicable to the additional insured are those specified in the written contract, written agreement or written permit or in the Declarations for this policy, whichever is less. These limits of insurance are inclusive of, and not in addition to, the Limits of Insurance shown in the Declarations for this policy.

4. Coverage is not provided for "bodily injury," "property damage," or "personal and advertising injury" arising out of the sole negligence of the additional insured.

5. The insurance provided to the additional insured does not apply to "bodily injury," "property damage," or "personal and advertising injury" arising out of an architect's, engineer's or surveyor's rendering of or failure to render any professional services including:

a. The preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; and

b. Supervisory, inspection, architectural or engineering activities.

6. Any coverage provided hereunder will be excess over any other valid and collectible insurance available to the additional insured whether primary, excess, contingent or on any other basis unless a written contract specifically requires that this insurance be primary.

When this insurance is excess, we will have no duty under **SECTION I—COVERAGES** to defend the additional insured against any "suit" if any other insurer has a duty to defend the additional insured against that "suit." If no other insurer defends, we will undertake to do so, but we will be entitled to the additional insured's rights against all those other insurers.

AUTHORIZED REPRESENTATIVE DATE

STATE OF WASHINGTON

BUSINESS LICENSE

Issue Date: Jul 11, 2025

Limited Liability Company

Unified Business ID #: 604946982
Business ID #: 001
Location: 0001
Expires: Jul 31, 2026

AQUATIC INSIGHT LLC
535
4207 SE WOODSTOCK BLVD
PORTLAND OR 97206-6267

UNEMPLOYMENT INSURANCE - ACTIVE

INDUSTRIAL INSURANCE - ACTIVE

TAX REGISTRATION - ACTIVE

CITY/COUNTY ENDORSEMENTS:

STEVENSON GENERAL BUSINESS - NON-RESIDENT - ACTIVE

LICENSING RESTRICTIONS:

Not licensed to hire minors without a Minor Work Permit.

REGISTERED TRADE NAMES:

AQUATIC INSIGHT

This document lists the registrations, endorsements, and licenses authorized for the business named above. By accepting this document, the licensee certifies the information on the application was complete, true, and accurate to the best of his or her knowledge, and that business will be conducted in compliance with all applicable Washington state, county, and city regulations.

Director, Department of Revenue

STATE OF WASHINGTON

UBI: 604946982 001 0001

Expires: Jul 31, 2026

AQUATIC INSIGHT LLC
535
4207 SE WOODSTOCK BLVD
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UNEMPLOYMENT INSURANCE - ACTIVE
INDUSTRIAL INSURANCE - ACTIVE
TAX REGISTRATION - ACTIVE
STEVENSON GENERAL BUSINESS - NON-RESIDENT - ACTIVE

Director, Department of Revenue

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

► **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See **Specific Instructions** on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Aquatic Insight LLC

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☑ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► S

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

4207 SE Woodstock Blvd #535

Requester's name and address (optional)

6 City, state, and ZIP code

Portland OR 97206

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN,* later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–			–				

or

Employer identification number

8	2	–	3	7	1	1	2	5	3

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here **Signature of U.S. person** ► Mark Rall **Date** ► 2/10/2026

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9.*

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*