

# Lake Whatcom Water & Sewer District Board Meeting Access Information

Meeting

6:30 pm - 2nd Wed of each month

Schedule

8:00 am - Last Wed of each month



# Meeting Access

Meetings are held in person at our Administrative offices at 1220 Lakeway Drive in Bellingham. If you prefer to attend remotely, access information is below.

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**Call**: <u>+1 (224) 501-3412</u> **Access Code:** 596-307-141 *Press* \*6 *to mute/unmute your microphone* 

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# Attending a Meeting

Lake Whatcom Water & Sewer District's regular Board meetings take place on the second Wednesday of each month at 6:30 pm and the last Wednesday of each month at 8:00 am.

Meetings are open to the public per the Open Public Meetings Act.

All meetings are hybrid, available in person or online. If you wish to observe a meeting, but do not plan to actively participate, you may attend anonymously. Turn off your mic & camera, and change your display name to "Observation Only."

# **Public Comment Periods**

Public comment periods are built in to the agenda, one near the beginning of the meeting and one near the end. Commissioners will listen, but will not respond or engage in dialogue during the comment period. Direct questions or requests are noted by staff for follow-up. For the sake of time, and to leave plenty of time for scheduled agenda items, public comments are limited to 3 minutes per person and 45 minutes per comment period.

Comments may be submitted at any time through mail, email, our online contact form, or by phone.

For more information about communicating with the Board of Commissioners, please visit our website!



# **Questions?**

If you have questions about attending an upcoming meeting, please contact Administrative Assistant Rachael Hope at rachael.hope@lwwsd.org.or 360-734-9224.



# LAKE WHATCOM WATER AND SEWER DISTRICT

1220 Lakeway Drive Bellingham, WA 98229

# REGULAR MEETING OF THE BOARD OF COMMISSIONERS

# **AGENDA**

October 29, 2025 8:00 a.m. – Regular Session

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. PUBLIC COMMENT OPPORTUNITY

At this time, members of the public may address the Board of Commissioners. Please state your name and address prior to making comments and limit your comments to three minutes. For the sake of time, each public comment period will be limited to 45 minutes.

- 4. ADDITIONS, DELETIONS, OR CHANGES TO THE AGENDA
- 5. CONSENT AGENDA
- 6. SPECIFIC ITEMS OF BUSINESS
  - A. Resolution No. 903—Lake Whatcom Management Program Invasive Freshwater Mussels Rapid and Extended Response Plan Adoption
  - B. Washington State Drinking Water State Revolving Fund Construction Loan Application Authorization—Sudden Valley Water Treatment Plant Chlorine Contact Basin Replacement Project
  - C. Washington State Drinking Water State Revolving Fund Construction Loan Application Authorization—Geneva Reservoir Recoating Project
- 7. OTHER BUSINESS
- 8. STAFF REPORTS
  - A. General Manager
  - B. Engineering Department
  - C. Finance Department
  - D. Operations Department
- 9. PUBLIC COMMENT OPPORTUNITY

# 10. EXECUTIVE SESSION

Executive Session per RCW 42.30.110(1)(g): To review the performance of a public employee (General Manager performance evaluation) – 30 minutes

# 11. ADJOURNMENT

whatcom 5	ENDA BILL em 5	Consent Ag	genda		
DATE SUBMITTED:	October 22, 2025	MEETING DATE:	October 29,	2025	
TO: BOARD OF COMM	IISSIONERS	FROM: Rachael Hope			
GENERAL MANAGER	APPROVAL	Solday			
ATTACHED DOCUME	NTS	1. See below			
TYPE OF ACTION REQ	UESTED	RESOLUTION	FORMAL ACTION/ MOTION	INFORMATIONAL/ OTHER	

# **BACKGROUND / EXPLANATION OF IMPACT**

- Minutes for the 10.08.2025 Regular Board Meeting
- Payroll for Pay Period #21 (09.27.2025 through 10.10.2025) totaling \$53,143.26
- Benefits for Pay Period #20 totaling \$59,385.94
- Payroll Taxes for 3rd Quarter totaling \$12,043.78
- Accounts Payable Vouchers total to be added

## **FISCAL IMPACT**

Fiscal impact is as indicated in the payroll/benefits/accounts payable quantities defined above. All costs are within the Board-approved 2025-2026 Budget.

# **RECOMMENDED BOARD ACTION**

Staff recommends the Board approve the Consent Agenda.

## **PROPOSED MOTION**

A recommended motion is:

"I move to approve the Consent Agenda as presented."

<sup>\*\*</sup>TO BE UPDATED 10.28.2025\*\*

## REGULAR SESSION OF THE BOARD OF COMMISSIONERS

# Minutes

# October 8, 2025

Board President Todd Citron called the Regular Session to order at 6:30 p.m.

Attendees: Commissioner Todd Citron General Manager Justin Clary (v)

Commissioner John Carter Engineering Manager Greg Nicoll
Commissioner Bruce Ford Operations Manager Jason Dahlstrom
Commissioner Jeff Knakal Recording Secretary Rachael Hope
Commissioner David Holland Legal Counsel Bob Carmichael

No public were in attendance. Attendees noted with a (v) attended the meeting virtually.

## **Consent Agenda**

### **Action Taken**

Holland moved, Knakal seconded, approval of:

- Minutes for the 08.27.2025 Regular Board Meeting
- Payroll for Pay Period #20 (09.13.2025 through 09.26.2025) totaling \$51,451.99
- Benefits for Pay Period #20 totaling \$56,563.74
- Accounts Payable Vouchers totaling \$960,491.00

Motion passed.

### **Appointment of Agent Receive Claims Against the District**

Clary explained that the District is a Washington State local government authorized under Title 57 Revised Code of Washington (RCW), and that RCW 4.96.020(2) requires that the governing body of a local government appoint an agent to receive any claim for damages made under Chapter 4.96 RCW. During a regularly scheduled meeting on October 10, 2001, the Board appointed the District general manager as the claims agent of the District. The appointment was subsequently recorded with Whatcom County in accordance with statute. Since 2001 both the District's legal name and primary address that were defined on the appointment document have changed. Recognizing these changes, District legal counsel has recommended Board reappointment of the general manager as the District claims agent, with these corrections reflected in the appointment document. The District will record the updated document with Whatcom County following Board action and document execution.

### **Action Taken**

Ford moved, Knakal seconded, to appoint the general manager as the claims agent for the District, as presented. Motion passed.

### **General Manager's Report**

Clary updated the Board on several topics, including the Washington State Public Works Board's award to the District of a low-interest loan for the Division 22-1 reservoir replacement project and an upcoming presentation by District Finance Manager Jenny Signs at the Washington Association of Sewer and Water Districts' monthly section meeting to highlight the District's implementation of the Waterworth software.

# Executive Session Per RCW 42.30.110(1)(g)

Citron recessed the Regular Session to Executive Session at 6:44 p.m. It was estimated that the

Executive Session and reconvened the Regular Meeting at 6:55 p.m.

With no further business, Citron adjourned the regular session at 6:55 p.m.

Attest:

Board President, Todd Citron

Attest:

Recording Secretary, Rachael Hope

Minutes approved by motion at Regular Special Board Meeting on \_\_\_\_\_\_\_

Executive Session would take 10 minutes and end at 6:55 p.m. The purpose of the Executive Session was to review the performance of a public employee (General Manager performance evaluation). Citron recessed the

Lake Whatcom W-S District

Time: 13:08:06 Date: 10/13/2025

10/16/2025 To: 10/16/2025 Page:

Trans	Date	Type	Acct #	Chk#	Claimant	Amount Memo PAYROLL
3018	10/16/2025	Payroll	5	EFT		978.50 09/27/2025 - 10/10/2025 PR 21
3019	10/16/2025	Payroll	5	EFT		439.47 09/27/2025 - 10/10/2025 PR 21
3020	10/16/2025	Payroll	5	EFT		4,062.76 09/27/2025 - 10/10/2025 PR 21
3021	10/16/2025	Payroll	5	EFT		208.65 09/27/2025 - 10/10/2025 PR 21
3022	10/16/2025	Payroll	5	EFT		4,043.38 09/27/2025 - 10/10/2025 PR 21
3024	10/16/2025	Payroll	5	EFT		2,176.08 09/27/2025 - 10/10/2025 PR 21
3026	10/16/2025	Payroll	5	EFT		2,165.18 09/27/2025 - 10/10/2025 PR 21
3027	10/16/2025	Payroll	5	EFT		3,480.28 09/27/2025 - 10/10/2025 PR 21
3028	10/16/2025	Payroll	5	<b>EFT</b>		294.85 09/27/2025 - 10/10/2025 PR 21
3029	10/16/2025	Payroll	5	EFT		2,715.16 09/27/2025 - 10/10/2025 PR 21
3030	10/16/2025	Payroll	5	EFT		4,169.68 09/27/2025 - 10/10/2025 PR 21
3031	10/16/2025	Payroll	5	EFT		585.95 09/27/2025 - 10/10/2025 PR 21
3032	10/16/2025	Payroll	5	EFT		3,046.35 09/27/2025 - 10/10/2025 PR 21
3033	10/16/2025	Payroll	5	EFT		661.47 09/27/2025 - 10/10/2025 PR 21
3034	10/16/2025	Payroll	5	EFT		2,933.14 09/27/2025 - 10/10/2025 PR 21
3035	10/16/2025	Payroll	5	EFT		3,180.25 09/27/2025 - 10/10/2025 PR 21
3036	10/16/2025	Payroll	5	EFT		2,218.21 09/27/2025 - 10/10/2025 PR 21
3037	10/16/2025	Payroll	5	EFT		2,564.39 09/27/2025 - 10/10/2025 PR 21
3038	10/16/2025	Payroll	5	EFT		09/27/2025 - 10/10/2025 PR 21
3039	10/16/2025	Payroll	5	EFT		5,007.35 09/27/2025 - 10/10/2025 PR 21
3040	10/16/2025	Payroll	5	EFT		2,785.28 09/27/2025 - 10/10/2025 PR 21
3041	10/16/2025	Payroll	5	EFT		3,118.36 09/27/2025 - 10/10/2025 PR 21
3023	10/16/2025	Payroll	5	16872		439.47 9.3.25-9.10.25-9.24.25
3025	10/16/2025	Payroll	5	16873		1,869.05 09/27/2025 - 10/10/2025 PR 21
		401 Wate 402 Sewe		AP,		12,716.08 40,427.18
						53,143.26 Payroll: 53,143.26

I do hereby certify, under penalty of perjury, that the above is an unpaid, just, and due obligation as described herein, and that I am authorized to certify this claim.

**Date Approved** 

Sign General Manager, Justin Clary	Date/0/13/2025
Board Authorization - The duly elected board for payment by motion at the meeting listed below:	or this district has reviewed the claims listed and approved the :
Board President, Todd Citron	
Attest :Recording Secretary, Rachael Hope	_
Approved by motion at Pagular Sn	poolal Roard Mosting on

Lake Whatcom W-S District

10/01/2025 To: 10/31/2025

Time: 13:34:53 Date: 10/13/2025

Page:

Trans	Date	Туре	Acct #	Chk#	Claimant	Amount	Memo	BENEEIT
3042	10/16/2025	Payroll	5	EFT	DEPARTMENT OF RETIREMENT SYSTEMS	7,617.50	10/16/202	c(s) 10/16/2025 To 55 - DCP; Pay Cycle(s) 55 To 10/16/2025 - CP
3043	10/16/2025	Payroll	5	EFT	UNITED STATES TREASURY	19,160.55		sit for Pay Cycle(s) 25 - 10/16/2025
3044	10/16/2025	Payroll	5	EFT	WA ST PUBLIC EMP RET PLAN 2	6,336.67	Pay Cycle	(s) 10/16/2025 To 25 - PERS 2
3045	10/16/2025	Payroll	5	EFT	WA ST PUBLIC EMP RET PLAN 3	3,002.45		e(s) 10/16/2025 To 25 - PERS 3
3046	10/16/2025	Payroll	5	EFT	WA ST SUPPORT ENFORCEMENT REGISTERY	911.85		e(s) 10/16/2025 To 25 - SUP ENF
3047	10/16/2025	Payroll	5	16874	AFLAC	300.31	10/16/202 Pay Cycle	e(s) 10/16/2025 To 55 - AFLAC PRE-TAX; e(s) 10/16/2025 To 55 - AFLAC POST-TAX
3048	10/16/2025	Payroll	5	16875	AFSCME LOCAL	382.80	Pay Cycle 10/16/202 Cycle(s) 1	(s) 10/16/2025 To 15 - UNION DUES; Pay 0/16/2025 To 15 - UNION FUND
3049	10/16/2025	Payroll	5	16876	EMPLOYMENT SECURITY DEPARTMENT	978.67	3rd Quart	er Unemployment: 25 - 09/30/2025
3050	10/16/2025	Payroll	5	16877	HRA VEBA TRUST (PAYEE)	590.00		e(s) 10/16/2025 To
3051	10/16/2025	Payroll	5	16878	EMPLOYMENT SECURITY DEPT PAID FAMILY & MEDICAL LEAVE		Created in	
3052	10/16/2025	Payroll	5	16879	EMPLOYMENT SECURITY DEPT. WA CARES FUND		Created in	error
3053	10/16/2025	Payroll	5	16880	WA ST HEALTH CARE AUTHORITY	20,105.14	10/16/202 Pay Cycle 10/16/202 Pay Cycle	(s) 10/16/2025 To 15 - PEBB MEDICAL; (s) 10/16/2025 To 15 - PEBB ADD LTD; (s) 10/16/2025 To 15 - PEBB SMK
		401 Water F 402 Sewer F				44,020.83 15,365.11		
						59,385.94	Payroll:	59,385.94

Lake Whatcom W-S District Time: 13:34:53 Date: 10/13/2025 10/01/2025 To: 10/31/2025 Page: Trans Date Type Acct # Chk# Claimant Amount Memo I do hereby certify, under penalty of perjury, that the above is an unpaid, just, and due obligation as described herein, and that I am authorized to certify this claim. Sign General Manager, Justin C Board Authorization - The duly elected board for this district has reviewed the claims listed and approved the payment by motion at the meeting listed below: **Board President, Todd Citron** Attest: Recording Secretary, Rachael Hope

**Date Approved** 

Approved by motion at \_\_\_\_\_ Regular \_\_\_\_ Special Board Meeting on

3rd Quarter Payrol 1 Take

Lake Whatcom W-S District

10/16/2025 To: 10/16/2025

Time: 09:43:25 Date: Page:

ge: 1

10/16/2025

				1	0/16/2025 10: 10/16/2025		Page:	1
Trans	Date	Type A	Acct #	Chk#	Claimant	Amount	Memo	
3083	10/16/2025	Payroll	5	16881	EMPLOYMENT SECURITY DEPT PAID FAMILY & MEDICAL LEAVE	3,451.16	Pay Cycle(s) 07/ 07/10/2025 - PF Cycle(s) 07/24/2 07/24/2025 - PF Cycle(s) 08/07/2 08/07/2025 - PF Cycle(s) 08/21/2 08/21/2025 - PF Cycle(s)	MLA; Pay 2025 To MLA; Pay 2025 To MLA; Pay 2025 To
3084	10/16/2025	Payroll	5	16882	EMPLOYMENT SECURITY DEPT. WA CARES FUND	2,720.55	Pay Cycle(s) 07/ 07/10/2025 - LT 07/24/2025 To 0 LTC; Pay Cycle( 08/07/2025 - LT 08/21/2025 To 0 LTC; Pay Cycle(	C; Pay Cycle(s) 17/24/2025 - (s) 08/07/2025 To C; Pay Cycle(s) 18/21/2025 -
3085	10/16/2025	Payroll	5	16883	WA ST DEPT OF LABOR AND IND	5,872.07	3RD Quarter L& 09/30/2025	zI: 07/01/2025 -
		401 Water Fu 402 Sewer Fu				9,907.99 2,135.79		
					•	12,043.78	'	12,043.78

# Jake whatcom by whatcom by

# AGENDA Resolution No. 903 BILL Lake Whatcom Invasive Mussel Item 6.A Rapid Response Plan Adoption

DATE SUBMITTED:	October 13, 2025	MEETING DATE	E: Octo	ober 29	9, 2025	
TO: BOARD OF COM	1MISSIONERS	FROM: Greg Nicoll, District Engineer				
GENERAL MANAGE	R APPROVAL	Sotol Clay				
ATTACHED DOCUM	ENTS	1. Resolutio	n No. 903			
TYPE OF ACTION RE	QUESTED	RESOLUTION	FORMAL AC		INFORMATIONAL/ OTHER	

### **BACKGROUND / EXPLANATION OF IMPACT**

Due to observed deterioration of the water quality in Lake Whatcom, the Lake Whatcom Water and Sewer District, City of Bellingham, and Whatcom County entered into an interlocal agreement in 1998 that formally created the Lake Whatcom Management Program (LWMP). The LWMP's primary goal is to improve lake water quality by jointly implementing programs affecting the Lake Whatcom watershed.

Since its creation, LWMP partners have developed and implemented six (6) five-year work plans focused on the following program areas: land preservation; stormwater; land use; monitoring and data; hazardous materials; recreation; aquatic invasive species (AIS); utilities and transportation; education and engagement; and administration (based upon feedback during implementation of the 2020-24 work plan, two more program areas were added to the 2025-29 work plan: climate action and forest management).

Actions implemented by the LWMP under the AIS program area have historically been led by the City, with support provided by the County and District via an interlocal agreement. Within the 2025-29 work plan, Action 7.3.1 is to develop an AIS rapid response plan. The City has led this effort, with support by the County, District and Washington State Department of Fish and Wildlife (WDFW is the state agency assigned statutory authority for administration of statewide AIS programs). Consistent with the LWMP partners' adoption of each five-year work plan, a joint resolution has been developed for LWMP adoption of the Lake Whatcom Invasive Freshwater Mussel Rapid and Extended Response Plan.

## **FISCAL IMPACT**

No fiscal impact is anticipated associated with adoption of the resolution. Should the plan require implementation due to a mussel detection, WDFW has indicated that it will lead the response with State AIS response emergency funding.

# **APPLICABLE EFFECTIVE UTILITY MANAGEMENT ATTRIBUTE(S)**

Community Sustainability
Water Resource Sustainability
Stakeholder Understanding & Support

# **RECOMMENDED BOARD ACTION**

Staff recommends approval of the response plan via adoption of Resolution No. 903.

# **PROPOSED MOTION**

A recommended motion is:

"I move to adopt Resolution No. 903 as presented."

# LAKE WHATCOM WATER AND SEWER DISTRICT RESOLUTION NO. 903

A Joint Resolution of the Bellingham City Council, Whatcom County Council, and Lake Whatcom Water and Sewer District Board of Commissioners Adopting the Lake Whatcom Invasive Freshwater Mussel Rapid and Extended Response Plan

**WHEREAS**, Lake Whatcom is the source of drinking water for more than 120,000 people, valuable habitat for plants and animals unique to our region, a recreational destination for outdoor enthusiasts, and its watershed is home to more than 19,000 people; and

**WHEREAS,** in 1992 and again in 1998 the City of Bellingham (the "City"), Whatcom County (the "County"), and the precursor to the Lake Whatcom Water and Sewer District (the "District") formed the Lake Whatcom Management Program and thereby declared their intention to work together to protect and manage Lake Whatcom; and

**WHEREAS**, the Washington State Legislature has designated the Washington State Department of Fish and Wildlife (the "Department") as the lead agency for managing invasive species in the animal kingdom statewide in Chapter 77.135 Revised Code of Washington; and

**WHERAS,** quagga (*Dreissena rostriformis bugensis*), zebra (*Dreissena polymorpha*), and golden (*Limnoperna fortunei*) mussels ("Invasive Mussels") pose an imminent and serious threat to the water supply infrastructure, ecology, recreational use, and water quality of Lake Whatcom, and

**WHEREAS**, should Invasive Mussels become established, significant resources must be expended to control the damage to water supply infrastructure, habitat, property, watercraft, recreation activities, and water quality with potentially severe economic impacts; and

**WHEREAS,** if any Invasive Mussels are detected in Lake Whatcom, a prompt, coordinated, efficient, and effective response is necessary to defend against these threats and impacts; and

**WHEREAS,** the City funded development of the Lake Whatcom Invasive Freshwater Mussel Rapid and Extended Response Plan with input from the Department, County, District, partners and stakeholders; and.

**WHEREAS**, the Lake Whatcom Management Program partners desire to jointly adopt and, if necessary, implement the Plan.

Resolution No. 903 Page 1 of 2 Adopted October 29, 2025

# NOW, THEREFORE, BE IT RESOLVED THAT:

The Board of Commissioners of the Lake Whatcom Water and Sewer District hereby adopt the Lake Whatcom Invasive Freshwater Mussel Rapid and Extended Response Plan, attached hereto as Exhibit A.

**ADOPTED** by the Board of Commissioners of Lake Whatcom Water and Sewer District, Whatcom County, Washington, at a regular meeting thereof, on the 29<sup>th</sup> day of October, 2025.

Todd Citron, President, Board of Commissioners
Attest:
Rachael Hope, Recording Secretary
Approved as to form:
Robert Carmichael, Attorney for the District

Resolution No. 903 Page 2 of 2 Adopted October 29, 2025



# **EXHIBIT A**

# LAKE WHATCOM INVASIVE FRESHWATER MUSSEL RAPID AND EXTENDED RESPONSE PLAN

October 2025

# Prepared for

City of Bellingham 2221 Pacific Street Bellingham, Washington 98229

# Prepared by

Four Peaks Environmental Science & Data Solutions 338 South Mission Street Wenatchee, Washington 98801

Cover Photo Credit: Katheryn Moran (2014)

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# **Abbreviations**

Abbreviation	Definition
μS/cm	micro-Siemen per centimeter
AIS	aquatic invasive species
Ecology	Washington Department of Ecology
eDNA	environmental DNA (environmental deoxyribonucleic acid)
ESA	Endangered Species Act
FIFRA	Federal Insecticide Fungicide Rodenticide Act
ICS	Incident Command System
IPaC	Information for Planning and Consultation
LWMP	Lake Whatcom Management Program
LWWSD	Lake Whatcom Water and Sewer District
MAC Group	Multi-Agency Coordination Group
mg/L	milligram per liter
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
PCR	polymerase chain reaction
Plan	Lake Whatcom Invasive Freshwater Mussel Rapid and Extended Response Plan
POC	point of contact
ppt	part per thousand
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
Statewide Plan	State of Washington Interagency Zebra and Quagga Mussel Rapid Response Plan
TMDL	Total Maximum Daily Load
USFWS	U.S. Fish and Wildlife Service
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WSDA	Washington State Department of Agriculture

# **Executive Summary**

This plan outlines the strategies and actions required for efficient and effective response to the detection of quagga, zebra, or golden mussels in Lake Whatcom. These invasive freshwater mussels have been detected in nearby states and pose a significant threat to drinking water infrastructure, water quality, the aquatic ecosystem, and recreational activities in Lake Whatcom. The plan assumes that early detection and verification protocols from the *State of Washington Interagency Zebra and Quagga Mussel Rapid Response Plan* have been followed. It is designed to be implemented immediately upon the detection of quagga, zebra, or golden mussels in any waters within the Lake Whatcom Plan Area.

The purpose of the Plan is to support rapid, coordinated decisions to eradicate invasive freshwater mussels if they are detected in Lake Whatcom, thereby protecting the community's ability to deliver clean, safe, and high-quality drinking water at a responsible cost and safeguarding Lake Whatcom's ecological integrity. To fulfill this purpose, the plan includes guidance on establishing incident command and multi-agency coordination groups within 48 hours of a positive detection, rapidly delimiting the range of the detected mussel, gathering information to support the selection of extended response options, and using structured decision-making to determine an extended response strategy. The plan also outlines funding and regulatory considerations for response activities and potential long-term management options.

# 1 Introduction

This site-specific rapid and extended response plan for Lake Whatcom (Plan) is a coordination document and technical resource intended to enhance the efficiency and effectiveness of response activities within the Plan Area (Section 1.3) for three species of invasive freshwater mussels—quagga *Dreissena rostriformis bugensis*, zebra *D. polymorpha*), and golden mussel *Limnoperna fortunei* (Section 1.4). The Plan is part of the Whatcom Aquatic Invasive Species (AIS) Program, a comprehensive program designed to guide AIS prevention, monitoring, and response efforts in Lake Whatcom. The Whatcom AIS Program implements a robust AIS prevention framework, including watercraft inspection, public education, enforcement, and monitoring functions. This Plan supplements the AIS Program's prevention and monitoring efforts by establishing a coordinated plan for rapidly responding to a positive detection of invasive freshwater mussels in Lake Whatcom.

Accordingly, this Plan is intended to be implemented as soon as any waters within the Plan Area are classified as positive<sup>1</sup> for quagga, zebra, or golden mussels. It assumes that early detection and verification protocols described in the *State of Washington Interagency Zebra and Quagga Mussel Rapid Response Plan* (Statewide Plan; Four Peaks 2024) were followed leading up to the positive water body classification<sup>2</sup>.

Like the Statewide Plan, this site-specific Plan was informed by the Pacific State's Marine Fisheries Commission's Western Basin Invasive Mussel Incident Response Toolkit (<a href="https://www.westernqzrr.com/">https://www.westernqzrr.com/</a>) and the Western AIS Resource Center (<a href="https://www.westernais.org/">https://www.westernais.org/</a>). These resources provide information on regional and state organizational infrastructure that facilitate rapid response, whereas this Plan focuses specifically on information relevant to the Plan Area (Section 1.1).

# 1.1 Plan Purpose

The City of Bellingham, Whatcom County, the Lake Whatcom Water and Sewer District (LWWSD), and the Washington Department of Fish and Wildlife (WDFW) must be prepared to make rapid, coordinated decisions in the event of a quagga, zebra, or golden mussel detection in Lake Whatcom. The purpose in such a scenario is to eradicate the invasive mussels, thereby protecting the community's ability to deliver clean, safe, and high-quality drinking water at a responsible cost and safeguarding the ecological integrity of the lake. Given the severe economic and ecological consequences associated with the establishment of these invasive species, any response must be timely, effective, and informed by a clear understanding of the response action. The response also must consider potential impacts on municipal and private drinking water infrastructure, natural resources, recreational users, tribal communities, and drinking water customers.

<sup>&</sup>lt;sup>1</sup> A positive water body classification is defined as multiple (two or more) subsequent sampling events that meet the minimum criteria for detection. Other water body classifications can be found in the Statewide Plan (Four Peaks 2024).

<sup>&</sup>lt;sup>2</sup> It is assumed that detection, verification, and water body classification protocols will be the same for golden mussels as for quagga and zebra mussels.

# 1.2 Plan Goals and Objectives

## 1.2.1 Plan Goals

- 1. Minimize the probability of quagga, zebra, or golden mussel establishment.
- 2. Minimize the impact of quagga, zebra, or golden mussels on drinking water quality, aquatic resources, outdoor recreational resources, critical infrastructure, and cultural resources after an initial detection.
- 3. Maximize response effectiveness by defining site-specific rapid response activities and an efficient framework for assessing, selecting, and implementing extended response activities.

# 1.2.2 Plan Objectives

- 1. Set clear communication and reporting guidance to trigger the initiation of an Incident Command System (ICS) and the Multi-Agency Coordination (MAC) Group<sup>3</sup> within 48 hours of any portion of the Plan Area being classified as positive for quagga, zebra, or golden mussels.
- 2. Provide specific guidance for range delimitation efforts within the Plan Area.
- 3. Identify available extended response activities and specify information required to assess tradeoffs to support decision-making efforts once range delimitation efforts conclude (i.e., no later than 6 weeks after a positive water body classification).
- 4. Provide guidance for implementing extended response activities within 2 weeks of a decision-making workshop.

# 1.3 Plan Area

The Plan Area includes the waters of Lake Whatcom, continuing downstream to the control dam at the head of Whatcom Creek, inclusive of dam infrastructure (Figure 1). It does not include the tributaries of Lake Whatcom or Lake Louise.

Lake Whatcom is a large (36,000 acre) lake in Whatcom County that holds approximately 250 billion gallons of water and provides drinking water for the City of Bellingham, LWWSD, several smaller water districts and associations, and homes on the lake. The lake supports a variety of fishes, amphibians, reptiles, birds, and mammals and drains into Whatcom Creek and Bellingham Bay, which support endangered and threatened runs of Coho Salmon *Oncorhynchus kisutch*, Chum Salmon *O. keta*, Chinook Salmon *O. tshawytscha*, and steelhead *O. mykiss*. The lake level is managed by the City of Bellingham using a control dam at the head of Whatcom Creek.

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<sup>&</sup>lt;sup>3</sup> See Statewide Plan (Four Peaks 2024) for definitions.

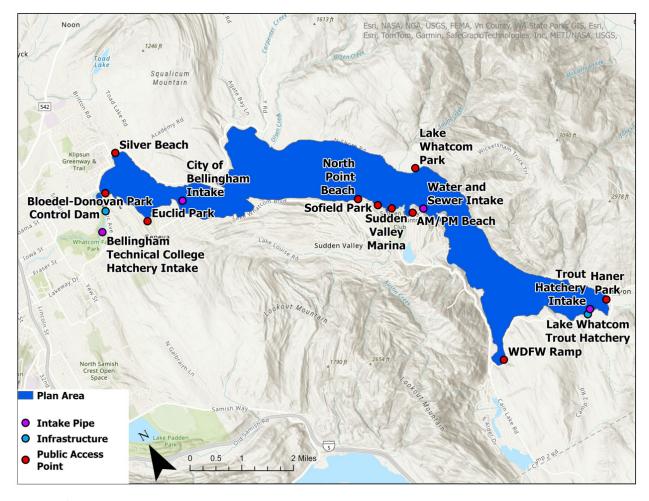


Figure 1. Plan Area

# 1.3.1 Lake Whatcom Management

The Lake Whatcom Management Program (LWMP) was developed in 1998 by the City of Bellingham, Whatcom County, and the LWWSD to facilitate coordination and develop a shared management strategy. The LWMP includes legislative bodies, a management team, an interjurisdictional coordinating team, agency staff, and advisory committees. This program guides actions to protect Lake Whatcom as a long-term supply of drinking water and meet federal Clean Water Act requirements.

# 1.3.2 Lake Whatcom Water Quality

In 1998, the Washington Department of Ecology (Ecology) placed Lake Whatcom on Washington's 303(d) list for polluted water bodies because it failed to meet state water quality standards for dissolved oxygen and fecal coliform bacteria. Ecology, the City of Bellingham, and Whatcom County staff worked together to develop a watershed management strategy to enable Lake Whatcom to meet state water quality standards in the future. Ecology continues to work with the City of Bellingham and Whatcom County to implement plans developed through a Total Maximum Daily Load (TMDL) process to meet

state water quality standards for dissolved oxygen and fecal coliform bacteria. <sup>4</sup> The City of Bellingham works closely with the Western Washington University Institute for Watershed Studies to monitor water quality trends in Lake Whatcom. Currently the lake is sampled in five locations with 12 tributaries monitored throughout the year. Detailed annual reports are available at <a href="https://cedar.wwu.edu/lakewhat\_annualreps/">https://cedar.wwu.edu/lakewhat\_annualreps/</a>.

The water chemistry of Lake Whatcom is relevant to the probability of invasive mussel establishment (Section 1.4). The water chemistry of Lake Whatcom has been sampled regularly by both the WDFW and Institute for Watershed Studies (Table 1).

Table 1. Water Quality Parameters in Lake Whatcom

Parameter	Mean Value	Range of Observed Values
Dissolved Calcium (mg/L) <sup>1</sup>	5.8	5.5-6.4
Salinity (ppt) <sup>1</sup>	0.03	0-0.07
Temperature (°C) <sup>2</sup>	11.4	3.8-24.2
pH <sup>2</sup>	7.4	6-9.5
Dissolved Oxygen (mg/L) <sup>2</sup>	9.5	0-13
Conductivity (μS/cm) <sup>2</sup>	58.6	54.4-100

### Notes:

- 1. Summary values calculated from data collected by WDFW from 2017-2024.
- 2. Summary values calculated from data collected by the Institute for Watershed Studies from 2017 and 2019-2024.

### 1.3.3 Lake Whatcom Infrastructure

Critical infrastructure on Lake Whatcom includes the following (Figure 1):

- City of Bellingham control dam
- City of Bellingham drinking water intake
- Bellingham Technical College Hatchery and hatchery intake
- WDFW Lake Whatcom Trout Hatchery and hatchery intake
- LWWSD drinking water intake
- Private drinking water intakes
- Various private and public boat launches, ramps, and docks

Public access locations include the following, where locations that include public access for motorized boats are indicated by an asterisk (Figure 1):

- AM/PM Beach
- Bloedel Donovan Park\*
- Euclid Park
- Haner Park
- Lake Whatcom Park

<sup>&</sup>lt;sup>4</sup> https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process/Directory-of-improvement-projects/Lake-Whatcom-Watershed-multi-parameter-TMDL

- Lake Whatcom Southerly Boat Launch (WDFW launch)\*
- North Point Beach
- Silver Beach
- Sofield Park
- Sudden Valley Marina\*

Three public access locations accept motorized boats (i.e., Bloedel Donovan Park, WDFW launch, and Sudden Valley Marina). Consequently, these locations are at a higher risk of mussel introduction than other access locations. These three public access locations are currently the only locations regularly monitored for invasive mussels (Section 1.5.2).

# 1.4 Species Background

# 1.4.1 Quagga and Zebra Mussels

Quagga and zebra mussels are freshwater mollusks native to Ukraine and Russia that have a long history of invasion and successful establishment outside their native range. Quagga mussels prefer deep, oligotrophic, cold-water, whereas zebra mussels prefer warm, eutrophic, shallow waters (MacIsaac 1994; PSMFC 2025). Both species tolerate a wide range of temperatures and water chemistry but require 10 mg per liter (mg/L) of calcium ions to initiate shell growth (Table 2). While adult quagga and zebra mussels may not readily establish in waters with low dissolved calcium, it is unknown how long veligers may survive in the water column, thus continuing to pose a risk of further spread.

Once established, quagga and zebra mussels can cause catastrophic ecosystem impacts, outcompeting native mussels and other filter feeding invertebrates, altering habitat complexity, changing food web dynamics, and reducing water quality. They can also have direct economic and safety impacts, clogging water intake structures, fish screens, and boat engines; overtaking docks, buoys, boat hulls, anchors, and beaches; and contributing to disease outbreaks in species that consume them. (Herbert et al. 2014; PSMFC 2025).

Quagga and zebra mussels were first discovered in the United States in the Great Lakes region in the 1980s and are thought to have been transported in ballast waters of trans-oceanic ships. Since the late 2000s, they have been spreading throughout the western United States (Nevada [2007], California [2008], and Montana<sup>5</sup> [2016]), with the most recent detection in the Snake River in Idaho in 2023. While a comprehensive eradication effort continues in the Snake River, the presence of invasive mussels in the Columbia River Basin presents an imminent threat. Washington classifies quagga and zebra mussels as prohibited level 1 AIS (Washington Administrative Code [WAC] 220-640-030(1)).

Table 2. Environmental parameters for quagga, zebra, and golden mussels

Parameter	Quagga/Zebra Mussels	Golden Mussels	References
Calcium	10-25 mg/L	1-50 mg/L	PSMFC 2025; Darrigran 2008
Salinity	≤ 4 ppt (Zebra mussels), 30 (Quagga mussels)	0-2 ppt; up to 23 ppt w/ freshwater pulses	Spidle et al. 1995; Sylvester et al. 2013

<sup>&</sup>lt;sup>5</sup> Quagga and zebra mussels did not ultimately establish in Montana despite having positive veliger detections.

Parameter	Quagga/Zebra Mussels	Golden Mussels	References
Temperature (adult survival)	0-30°C (32-86°F)	8-35°C (46-95°F)	Darrigran 2008; PSMFC 2025
Temperature (spawning)	>12°C (54°F) (Zebra mussels), >5°C (41°F) (Quagga mussels)	16-28°C (61-82°F)	Darrigran 2008; Yang et al. 2024; PSMFC 2025
рН	7.4-8.4	5-10	Yang et al. 2024; PSMFC 2025
Dissolved Oxygen	>2 mg/L	3.7-11.2 mg/L	Mackie and Brinsmead 2017; McMahon 1996
Depth	≤ 50 m (164 ft)	0.5-40 m (1.5-131 ft), 10 m* (33 ft)	Darrigran 2008; Benson et al. 2023; Benson et al. 2025
Sexual Maturity (shell size)	5-12 mm (~1/4-1/2 in)	6-8 mm (~1/4-1/3 in)	Delmott and Edds 2014; Darrigran 2008

### Note:

### 1.4.2 Golden Mussels

The Golden mussel is an invasive, fresh/brackish water bivalve native to the Pearl basin in China and Southeastern Asia. They prefer shallow (< 10 m) aquatic environments, although they have been shown to survive in depths up to 40 m (Table 2). Golden mussels are similar in appearance, biology, and impacts to quagga and zebra mussels. Like quagga and zebra mussels, golden mussels also tolerate wide ranges of water quality parameters but have higher water temperature and lower calcium level tolerances (PSMFC 2025; Table 2).

The first documented appearance of golden mussels in North America occurred in the Sacramento-San Joaquin Delta in October 2024, posing a new threat to aquatic ecosystems in the United States. Given that they are newly introduced to the United States, golden mussels are not currently listed as a prohibited AIS in Washington State, which is an important consideration for rapid response actions. It is assumed that if golden mussels are not classified as prohibited level 1 AIS and are detected in Lake Whatcom, the City of Bellingham on behalf of the LWMP will immediately request that WDFW initiate an emergency rule prohibiting the species and request that the WDFW Director take emergency measures and rapid response actions (Revised Code of Washington [RCW] 34.05.350). The remainder of the Plan assumes that this request is successful and that golden mussels will be treated as a prohibited level 1 AIS.

# 1.5 Site-Specific Plan Context

This section addresses site-specific considerations for rapid and extended response actions in the Lake Whatcom Plan Area. This site-specific Plan assumes that early detection and verification protocols delineated in the Statewide Plan were followed leading up to a positive classification for quagga, zebra, or golden mussels. The Plan also assumes that, if quagga, zebra, or golden mussels are detected in Lake Whatcom, the City of Bellingham on behalf of the LWMP will immediately request that the WDFW Director take emergency measures and rapid response actions (RCW 77.135.090).

### 1.5.1 Species Context in Plan Area

The Plan Area has many factors that put it at risk of quagga, zebra, or golden mussel introduction and establishment, including the extent and types of usage (e.g., total day use, presence of boat ramps and marinas, usage by sea planes, motorized boating, and fishing), the number of private residences with

6

<sup>\*</sup> Optimum depth

boat docks, its proximity to a waterbody with a recent quagga mussel introduction (upper Snake River, Idaho), and its proximity to the Port of Bellingham, which may receive shipping vessels from mussel infested waters. Calcium concentrations in Lake Whatcom are on average less than 6 mg/L and are thus assessed to be too low to support the widespread establishment of quagga or zebra mussels (Table 2). However, it is not known how long veligers survive in the water column, thus even if permanent establishment probability is low, there remains a risk of additional spread. By contrast, golden mussels are not limited by calcium concentrations and pose a higher risk of invasion, particularly in shallow habitat (Figure 2).

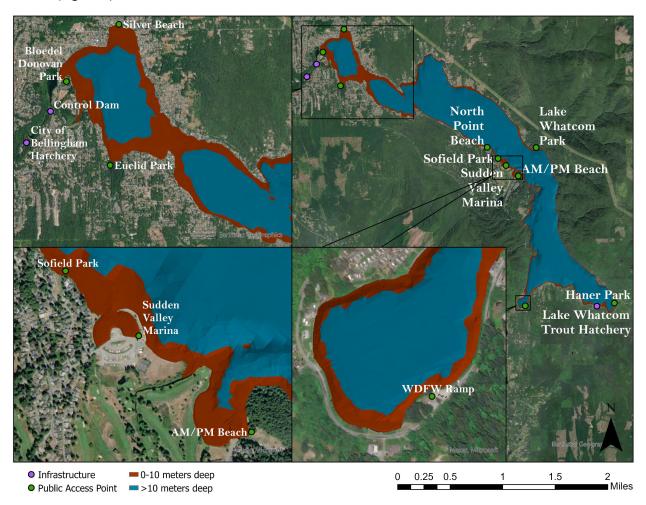


Figure 2. A depiction of the habitat most at risk of a golden mussel invasion in Lake Whatcom based on water depth

# 1.5.2 Prevention and Routine Monitoring

The LWMP has established a comprehensive AIS prevention and monitoring program, combining watercraft inspections, public education, enforcement, and monitoring (LWICT 2024). Watercraft inspection and decontamination stations exist at Bloedel Donovan Park, Sudden Valley Marina, and the WDFW launch. Inspections are required for all watercraft operating on Lake Whatcom, including non-motorized craft such as canoes and kayaks. The program's public education and outreach includes providing educational resources at local events, maintaining a regularly updated website with

information relevant to boaters, and offering an online AIS awareness course. The Whatcom County Sheriff's Office supplements these efforts with on-water enforcement to ensure compliance with inspection requirements.

Monitoring is conducted by WDFW, the City of Bellingham, and other state and local entities. WDFW monitors Bloedel Donovan Park, Sudden Valley Marina, and the WDFW launch three times per year at a frequency of once every 2 months. The City of Bellingham supplements these monitoring efforts by monitoring three times per year at alternating months from WDFW such that monitoring occurs monthly from April through October. Additional prevention and routine monitoring efforts by the LWMP are documented at https://www.lakewhatcom.whatcomcounty.org.

# 1.5.3 Invasive Freshwater Mussel Vulnerability Assessments

Facility managers that manage raw water infrastructure, such as water systems for drinking and agriculture or industrial facilities, may wish to conduct vulnerability assessments of their infrastructure. A vulnerability assessment guide is now available (Claudi and Littley 2024). Vulnerability assessments provide advanced insight into the risks and costs of invasive mussels to help plan and prepare for anticipated increases in costs and maintenance. Additionally, preventative treatment measures may be available to mitigate risks and adapt systems to minimize impact.

# 1.6 Plan Overview

The Plan is divided into two general activity classifications: 1) rapid response activities, and 2) extended response activities. It is organized sequentially to address the following topics (Figure 3):

- Rapid Response Activities (Section 4)
  - Requesting ICS (Section 4.1)
  - ICS Staff and MAC Group Establishment (Section 4.2)
  - Notification (Section 4.3)
  - Range Delimitation (Section 4.4)
  - Minimize Additional Spread (Section 4.5)
  - Data Collation (Section 4.6)
  - MAC Group Decision-Making Workshop Preparation (Section 4.6.1)
- Extended Response Activities (Section 5)
  - MAC Group Decision-Making Workshop (Section 5.1)
  - Extended Response Activity Options (Section 5.2)
  - Decision-Making Support (Section 5.3)
  - Extended Response Activity Implementation (Section 5.4)
- Long-Term Management (Section 6)

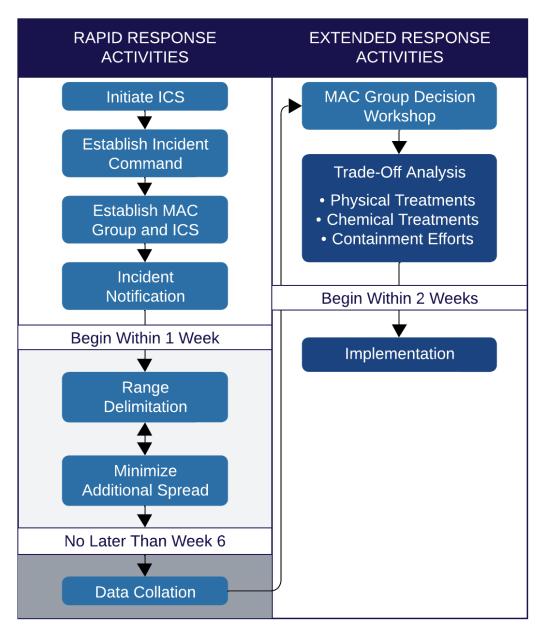


Figure 3. Overview of the Lake Whatcom quagga, zebra, and golden mussel rapid response plan process

# 2 Rapid Response Oversight

If any portion of the Plan Area becomes classified as positive for quagga, zebra, or golden mussels (assuming a rule to prohibit golden mussels has been made), an ICS<sup>6</sup> will be established by WDFW. The ICS will remain in place for all rapid and extended response activities until the Unified Command terminates ICS. The decision to terminate ICS generally occurs once no further management actions are required (e.g., successful eradication) or long-term monitoring and suppression activities are established. For additional information on ICS, reference the Statewide Plan (Four Peaks 2024).

The advanced establishment of agreements between entities that are likely to be involved in a response is highly encouraged to expedite response efforts. Agreements that are being considered, negotiated, or currently exist include those between the WDFW AIS Division and the WDFW Lake and Stream Rehabilitation Program to support chemical and bacterial treatments, between the WDFW AIS Division and chemical application contractors to support chemical treatments, between WDFW and vendors to support containment system deployment, and between WDFW and laboratories to process samples associated with a rapid response. In addition, agreements with specific dive teams are recommended to facilitate rapid response measures.

## 2.1 Unified Command

For ICS in the Plan Area, Unified Command will be comprised of designated leaders from WDFW and the City of Bellingham, Whatcom County, and LWWSD to facilitate fast decision-making for response activities. WDFW will be the primary implementer of rapid response and extended rapid response activities. The primary role of the City of Bellingham, Whatcom County, and LWWSD will be to support WDFW and ensure access to sites within the Plan Area for rapid and extended response activities. However, if quagga, zebra, or golden mussels are detected on the control dam at the head of Whatcom Creek, the City of Bellingham will be the primary implementer of rapid response and extended rapid response activities for the dam infrastructure.

# 2.2 Multi-Agency Coordination Group

Per the Statewide Plan (Four Peaks 2024), a non-field-based MAC Group will be convened by the Unified Command to implement ICS protocols together. The MAC Group acts as a policy-level body supporting the Unified Command with resource prioritization and allocation while enabling decision-making among elected and appointed officials with the Unified Command. Specifically, a MAC Group allows for input from other local, state, tribal, regional, and federal agencies that have legal responsibility to establish priorities among multiple competing incidents, provide coordinated decision-making for resource allocation, harmonize agency policies, and offer strategic guidance and direction to support rapid response and extended response activities. The MAC Group should consist of administrators or executives, or their designee, who are authorized to commit agency resources and funds.

<sup>&</sup>lt;sup>6</sup> Incident Command System is a standardized approach to incident management developed by the Federal Emergency Management Agency Emergency Management Institute. It is assumed ICS will be established for golden mussels even though it is not currently on Washington's prohibited species list.

MAC Group membership is by invitation, and participants must meet one or more of the following requirements:

- Legal jurisdiction
- Available tangible resources to support incident response
- Ability to provide critical intangible resources such as species biological and management expertise (can be regional)
- Representation of people, cultures, or industries directly affected by quagga, zebra, or golden mussels in Washington State

Membership often evolves through rapid and extended response activities as new information becomes available and as available response options evolve. Currently, identified potential MAC Group members include the following in alphabetical order:

- City of Bellingham Mayor's Office
- City of Bellingham Parks and Recreation
- City of Bellingham Public Works, Natural Resources
- Confederated Tribes of the Colville Reservation
- Ecology
- Institute for Watershed Studies
- Lummi Nation
- LWWSD
- National Oceanographic and Atmospheric Administration National Marine Fisheries Service (NMFS)
- Nooksack Indian Tribe
- Office of the Governor
- Pacific Northwest Waterways Association
- Pacific States Marine Fisheries Commission
- Port of Bellingham
- Samish Indian Nation
- Sauk-Suiattle Indian Tribe
- Snoqualmie Indian Tribe
- Sudden Valley Property Manager
- Swinomish Indian Tribe
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Geological Survey
- Upper Skagit Indian Tribe
- Washington Department of Natural Resources
- Washington Invasive Species Council
- Washington State Department of Agriculture (WSDA)
- Washington State Department of Archaeology and Historic Preservation
- WDFW
- Whatcom County
- Whatcom County Executive's Office
- Whatcom County Health and Community Services Department

Whatcom County Public Works Department, Natural Resources Division

Specific roles or organizations within these entities will be determined based on the specific detection scenario.

# 2.3 Incident Command System Staff

Once ICS has been approved and Unified Command established, other staff will be activated as needed (Figure 4). Only one person should be designated to lead each Staff position except for Unified Command, which will have four Incident Commanders. Other positions may be filled by qualified persons from any agency or jurisdiction, and a recommended list of personnel to staff these positions is provided in Table 3. Additional information about specific tasks associated with each Staff position can be found in the ICS Review Document (FEMA 2019).

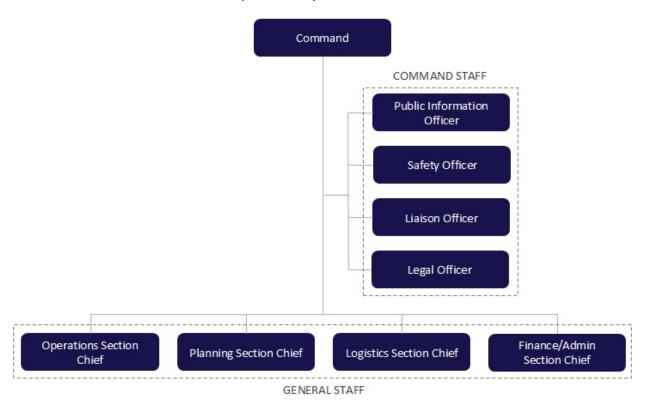


Figure 4. Incident Command System staff organizational structure

Table 3. Recommended personnel for Incident Command System staff assignments and role descriptions

ICS Role	Role Description	WDFW	Other Entities
Incident Command	Sets the incident objectives, strategies, and priorities and has overall responsibility for the incident	AIS Division Manager or AIS Management Coordinator	City of Bellingham Natural Resource Superintendent, Whatcom County Natural Resources Program Manager, LWWSD General Manager
Deputy Incident Command	Sets the incident objectives, strategies, and priorities and has overall responsibility for the incident	AIS Management Coordinator or Region 4 Director	
Operations Section Chief	Develops tactical organization and directs all resources to carry out the rapid response activities	AIS Prevention Unit Leader	
Deputy Operations Section Chief	Develops tactical organization and directs all resources to carry out the rapid response activities	Watercraft Inspection and Decontamination Unit Leader	
Local Operations POCs	Develops tactical organization and directs all resources to carry out the rapid response activities		City of Bellingham Natural Resource Superintendent, Whatcom County Natural Resources Program Manager
Planning Section Chief	Supports the incident action planning process by tracking resources, collecting/ analyzing information, and maintaining documentation	AIS Research Scientist	
Deputy Planning Chief	Supports the incident action planning process by tracking resources, collecting/ analyzing information, and maintaining documentation		City of Bellingham Water Quality Technical Supervisor
Logistics Section Chief	Arranges for resources (e.g., personnel, equipment, teams, supplies, and facilities) and needed services to support the achievement of the incident objectives	Region 4 Administrative Assistant	
Deputy Logistics Section Chief	Arranges for resources (e.g., personnel, equipment, teams, supplies, and facilities) and needed services to support the achievement of the incident objectives	AIS Administrative Assistant	
Local Logistics POCs	Arranges for resources (e.g., personnel, equipment, teams, supplies, and facilities) and needed services to support the achievement of the incident objectives		City of Bellingham AIS Coordinator or Whatcom County Natural Resources Program Manager
Finance/Administration Section Chief	Monitors costs related to the incident and provides accounting, procurement, time recording, and cost analyses	Fish Program Budget Manager	

ICS Role	Role Description	WDFW	Other Entities
Deputy Finance/ Administration Section Chief	Monitors costs related to the incident and provides accounting, procurement, time recording, and cost analyses	Fish Program Deputy Budget Manager	-
Local Finance/ Administration POCs	Monitors costs related to the incident and provides accounting, procurement, time recording, and cost analyses		City of Bellingham Public Works Financial Manager
Public Information Officer	Releases information to the community and the media	AIS Communications Specialist	
Deputy Public Information Officer	Releases information to the community and the media	Enforcement Program Communications Manager	Whatcom County Public Information Officer
Local Public Information Officer POCs	Releases information to the community and the media		City of Bellingham Public Works Outreach and Communications Manager and Whatcom County Public Information Officer
Safety Officer	Manages safety by identifying and mitigating hazards	Region 4 Safety Officer	
Local Safety Officer POCs	Manages safety by identifying and mitigating hazards		City of Bellingham Safety Officer, Whatcom County Safety Officer
Liaison Officer	Acts as a point of contact for agency representatives and assists in setting up and coordinating interagency contacts	AIS Division Manager or Region 4 Director	
Deputy Liaison Officer	Acts as a point of contact for agency representatives and assists in setting up and coordinating interagency contacts	Washington Invasive Species Council Executive Coordinator	-
Local Liaison POCs	Acts as a point of contact for agency representatives and assists in setting up and coordinating interagency contacts		City of Bellingham Natural Resource Superintendent
Legal Officer	Provides legal advice to the Unified Command related to emergency response actions	Liaison Officer or Region 4 Enforcement Captain	
Deputy Legal Officer	Provides legal advice to the Unified Command related to emergency response actions	Assistant Attorney General, Public Lands & Conservation Division	-
Local Legal Officers	Provides legal advice to the Unified Command related to emergency response actions		City of Bellingham Assistant City Attorney

### Note:

The Unified Command will designate one person for each role using this list for guidance.

# 2.4 Responding Entities

Responding entities report to the Operations Sections Chief and are tasked with implementing all tactical operations for rapid and extended response including oversight of all staging areas. During the rapid response activities (Section 4), this will include conducting the delimitation sampling (Section 4.4), watercraft decontamination (Section 4.5), and other field related tasks. During extended response activities (Section 5.2), additional entities may be assigned to activities such as containment and treatment of the water body. Responding entities must have a combination of one or more of the following attributes:

- Fisheries management authority<sup>7</sup>
- Proximity to the affected water body
- Capability to provide staff, equipment, and other resources to support rapid response activities

The WDFW and City of Bellingham are designated responding entities for all detection scenarios within the Plan Area. Additional responding entities able to provide field support may be requested by Unified Command based on potential detection locations and planned extended response activities (Table 4).

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<sup>&</sup>lt;sup>7</sup> A fisheries management authority is an entity given the mandate by the WDFW to manage the fisheries of a water body. The Statewide Plan includes a full list of authorities for water bodies throughout Washington State.

Table 4. Responding entities based on detection scenario, associated point of contact, and support entities may provide

Responding Entity	Scenario	Responsible Position and Point of Contact <sup>1</sup>	Support
WDFW	All	Region 4 Fish Program Manager (Edward Eleazer), Region 4 Assistant Regional Wildlife Program Manager (Robert Wingard), and AIS Prevention Unit Lead (Jesse Schultz)	Boat, sampling gear, containment curtains, decontamination equipment, chemical or bacterial treatment equipment
City of Bellingham	All	Natural Resource Superintendent (Mike Parelskin)	Boat, sampling gear, decontamination equipment
City of Bellingham	Bloedel Donovan Park adult detection	Park Operations Manager (Steve Janiszewski)	Boat
LWWSD	Detection involving Sudden Valley water treatment plant and associated infrastructure	LWWSD General Manager (Justin Clary)	Dive team point of contact
Sheriff's Office	Boat ramps	Whatcom County Sheriff's Office (Deputy M. King)	Enforcement of closures
Sudden Valley	Detection at Sudden Valley marina or boat ramp, AM/PM beach, North Point Beach, Sofield Park	Sudden Valley Community Association General Manager (Michael Bennett)	Provide access
Whatcom County Natural Resources	Detections outside City of Bellingham limits (e.g., Euclid Park, Lake Whatcom Park)	Noxious Weed Coordinator (Laurel Baldwin)	Boat, some sampling gear
Dive Team Contractor	Physical removal treatment options	To be determined	Scuba equipment

### Note:

<sup>1.</sup> This table lists the individuals serving in the responsible positions as of October 2025.

# 3 Response Operations

# 3.1 Funding Considerations

Resources to support rapid response activities (initial 6 weeks of response) in the Plan Area will be drawn from dedicated and general state funds. Additionally, governor-ordered emergency measures to prevent or abate the prohibited species under RCW <u>77.135.090</u> may make available associated emergency funding to support these efforts.

Extended response activities (i.e., containment, treatments, additional monitoring, and mitigation and recovery) are expected to require additional funding, including funds through grants and agreements. ICS staff should lead the funding request process with the MAC Group and other participating partners reviewing and supporting the requests.

# 3.2 Regulatory Compliance Considerations

Steps must be taken to ensure that extended response activities in the Plan Area meet applicable regulatory compliance requirements, including permits, environmental compliance processes, and other approvals associated with a potential response option. The Unified Command should consult with the ICS Legal Officer and regulatory agencies early in the response process to identify required permits, authorizations, and process steps. To avoid delay and streamline this aspect of a response, it is also recommended that responding entities engage with their legal counsel before a detection to develop a regulatory compliance strategy for likely response activities in the Plan Area. Such a strategy could include identifying necessary permitting and environmental compliance processes, exploring options for expediting those processes, and developing information necessary to complete necessary applications and documentation.

# 3.2.1 Permitting Considerations

The federal Clean Water Act and state laws regulate placement of material and the application of chemical or bacterial treatments in or adjacent to waterbodies. Permits are typically required before such activities may begin, and the activities must be conducted in compliance with the permit. In addition, the State of Washington regulates the handling of AIS. Additional details about these regulatory requirements are presented in Sections 3.2.1.1 through 3.2.1.3.

#### 3.2.1.1 Placement of Material

Response actions that involve placement of materials in or adjacent to Lake Whatcom, such as benthic mats and containment curtains, may require state and federal permits. These permitting processes are administered by the U.S. Army Corps of Engineers, Ecology, WDFW, and Washington Department of Natural Resources. Early coordination with these agencies will facilitate identification of the necessary permits and the appropriate application processes. For example, the Joint Aquatic Resource Permit Application (JARPA) may offer a streamlined way to apply for permits from each of these agencies through a single application.

## 3.2.1.2 Chemical or Bacterial Treatments

Response actions that employ chemical or bacterial treatments in Lake Whatcom would require authorization under state and federal law. Ecology administers both the waste discharge permit and federal National Pollutant Discharge Elimination System permitting programs in Washington and offers a

variety of permits for activities involving application of pesticides to surface water. For example, Ecology offers a general permit for AIS control activities using pesticides or other products. When selecting a chemical or bacterial treatment, the Unified Command should consult with Ecology to determine the appropriate permit and applicable requirements for the proposed treatment. Treatments with potential to negatively impact water quality parameters addressed by the Lake Whatcom TMDL—i.e., dissolved oxygen, phosphorus, or fecal coliform—may have stricter permit requirements to prevent further impairment.

In addition to limitations imposed by the permit, chemical or bacterial treatments implicate the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). FIFRA directs the U.S. Environmental Protection Agency to regulate the distribution, sale, and use of pesticides. Under FIFRA, most pesticides distributed or sold in the United States must be registered by the U.S. Environmental Protection Agency and used in accordance with instructions on the pesticide's label. If a "New Use" of a currently registered pesticide is necessary, permitting would be required. For new uses of currently registered pesticides, a registrant must apply to WSDA for a FIFRA Section 24(c) Special Local Need pesticide registration. Alternatively, if it is determined that a currently unregistered pesticide is needed to address the incident, an application for a FIFRA Section 18 emergency exemption from federal registration may be submitted to WSDA.

# 3.2.1.3 Aquatic Invasive Species Handling Authorization

Washington law prohibits certain activities involving prohibited or regulated AIS without authorization from WDFW (RCW 77.135.040). For example, there are criminal penalties for possession of a prohibited level 1 species, such as quagga or zebra mussels, without WDFW authorization, a permit, or as otherwise provided by rule (RCW 77.15.809). WDFW has a process for authorizing the capture, possession, and destruction of prohibited level 1, 2, or 3 species by persons working within the scope of an invasive species control program (WAC 220-640-100) and with an AIS Permit issued by WDFW. The Unified Command should consult with WDFW to determine and obtain necessary authorizations before initiating response actions that would require handling regulated AIS.

# 3.2.2 Environmental Compliance Processes

Additional environmental compliance processes may apply to an AIS response in Lake Whatcom. The necessary processes will depend on the circumstances and entities involved in the response action. For example, the federal compliance processes (Section 3.2.2.2) may or may not apply, depending on whether the response involves a federal action agency, requires a federal permit or other authorization, is federally funded, or involves a federally-listed species or designated critical habitat. The Unified

<sup>&</sup>lt;sup>8</sup> https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits

<sup>&</sup>lt;sup>9</sup> https://ecology.wa.gov/regulations-permits/permits-certifications/aquatic-pesticide-permits/aquatic-invasive-species-control

<sup>&</sup>lt;sup>10</sup> As of October 2025, Potassium Chloride ("Potash") is undergoing review to become labeled for use as a molluscicide.

<sup>&</sup>lt;sup>11</sup> https://agr.wa.gov/services/licenses-permits-and-certificates/summary-descriptions/special-local-need; https://www.epa.gov/pesticide-registration/guidance-fifra-24c-registrations

<sup>&</sup>lt;sup>12</sup> https://agr.wa.gov/departments/pesticides-and-fertilizers/pesticides/pesticide-registration/product-registration/special-registrations/section-18-emergency-exemption

Command should consult with the ICS Legal Officer and any federal agencies participating in the response to determine applicable requirements.

# 3.2.2.1 State Environmental Policy Act

Washington's State Environmental Policy Act (SEPA) establishes a process for identifying and analyzing environmental impacts associated with state and local government actions that are not categorically exempt (RCW 43.21C). SEPA requires state and local agencies to use all practicable means to improve and coordinate plans, functions, programs, and resources to preserve historic, cultural, and natural resources and contribute to the preservation and enhancement of the environment. Ecology is empowered to create categorical exceptions by rule under RCW 43.21C. Categorical exceptions include actions that must be taken immediately or within a time too short to allow full compliance, to avoid an imminent threat to public health or safety, to prevent an imminent danger to the public or private property, or to prevent an immediate threat of serious environmental degradation (WAC 197-11-880). During invasive species emergency measures, response actions would be exempt from SEPA (WAC 197-11-880). SEPA compliance may be necessary for non-emergency actions such as response and contingency planning or long-term management. Because several state and local government agencies may be involved in an AIS response at Lake Whatcom, it will be important to determine the lead agency for any aspects of the response that require SEPA compliance.

### 3.2.2.2 Federal Environmental Compliance Processes

Federal environmental compliance requirements may apply if, for example, an AIS response includes a federal agency action, requires a federal permit or other authorization, uses federal funding, or affects federally listed species or critical habitat. Any federal agency partners or permitting authorities involved in the response should be consulted to determine the applicability and scope of federal environmental compliance processes.

#### 3.2.2.2.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA) is a federal law that requires federal agencies to consider the environmental effects of proposed federal actions. In general, NEPA applies to major federal actions, <sup>13</sup> such as actions performed, significantly funded, or authorized by a federal agency. When NEPA applies, required level of review depends on whether the proposed action will significantly affect the quality of the human environment. NEPA review may be limited or streamlined when the proposed action is covered by an existing NEPA review or qualifies for a categorical exclusion. Emergency NEPA review procedures may also be available. As noted above, consultation with federal agencies involved in the response action will be essential for determining necessary steps for NEPA compliance.

<sup>&</sup>lt;sup>13</sup> NEPA defines "major Federal action" as "an action that the agency carrying out such action determines is subject to substantial Federal control and responsibility." 42 U.S.C. § 4336e(10)(A). NEPA excludes several types of actions from the definition of "major Federal action"—for example, "a non-Federal action… with no or minimal Federal funding; or… with no or minimal Federal involvement where a Federal agency cannot control the outcome of the project." 42 U.S.C. § 4336e(10)(B).

### 3.2.2.2.2 Endangered Species Act

The federal Endangered Species Act (ESA) protects threatened and endangered species and the habitats critical to their survival. The ESA prohibits the take<sup>14</sup> of listed species and establishes processes to ensure that federal and non-federal actions protect listed species. ESA Section 7 requires federal agencies to consult with the USFWS or NMFS to ensure their actions do not jeopardize listed species or adversely modify their critical habitat. Non-federal entities may obtain permits for take incidental to otherwise lawful activities under ESA Section 10.

At the time of writing this plan, no ESA-listed species or designated critical habitat were present in Lake Whatcom. However, once an ICS is established, the Unified Command should obtain current information on the presence or absence of listed species and critical habitat from both USFWS and NMFS. Online tools such as the USFWS's Information for Planning and Consultation (IPaC)<sup>15</sup> tool and NMFS Species and Habitat App<sup>16</sup> are available to assist planning for ESA compliance.

# 3.2.2.2.3 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) governs marine fisheries management in United States federal waters. The designation and protection of essential fish habitat is one element of the management program under the MSA. Lake Whatcom and Whatcom Creek are included in the designated essential fish habitat for Chinook Salmon, Coho Salmon, and Puget Sound Pink Salmon *Oncorhynchus gorbuscha*. <sup>17</sup> The MSA requires federal agencies to consult with NMFS regarding federal actions authorized, funded, undertaken, or proposed to be authorized, funded, or undertaken that may adversely affect essential fish habitat. It is recommended that the Unified Command consult with the ICS Legal Officer and any federal agencies involved in a response to determine essential fish habitat consultation requirements.

#### 3.2.2.2.4 National Historic Preservation Act

The National Historic Preservation Act (NHPA) requires federal agencies to determine if a proposed federal undertaking could affect historic properties, archeological sites, and cultural resources. The NHPA would not apply to an AIS response in Lake Whatcom unless the response involved a federal undertaking. If proposed activities to facilitate response action require NHPA review, it would be necessary to consult with the Washington State Department of Archaeology & Historic Preservation or appropriate Tribal Historic Preservation Officers to identify and avoid or mitigate impacts.

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<sup>&</sup>lt;sup>14</sup> "Take" means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 U.S.C. § 1532(19).

<sup>15</sup> https://ipac.ecosphere.fws.gov/

<sup>&</sup>lt;sup>16</sup> https://www.fisheries.noaa.gov/resource/map/species-and-habitat-app

<sup>&</sup>lt;sup>17</sup> 50 C.F.R. § 660.412; 50 C.F.R. Part 660, Subpart H Table 1 (Strait of Georgia, HUC 17110002). An interactive map of essential fish habitat in the Pacific Fishery Management Council's jurisdiction is available at: https://www.habitat.noaa.gov/apps/efhmapper/?page=Pacific-Map

# 4 Rapid Response Activities

Rapid response activities include initiating ICS, delimiting the quagga, zebra, or golden mussel colonization event, and providing the ICS Staff and MAC Group with the data required to inform decisions about extended response activities. The Rapid Response phase should be initiated within 48 hours of any portion of the Plan Area being classified as positive for quagga, zebra, or golden mussels. Rapid response activities should be completed within 6 weeks of a positive waterbody classification. It is expected that daily MAC Group briefings will occur via email throughout the Rapid Response phase.

The 6-week rapid response activities include the following steps:

- 1. Week 1
  - a. Initiate ICS and Establish Unified Command (Section 4.1)
  - b. Establish ICS Staff and MAC Group (Section 4.2)
  - c. Begin ICS Staff Initial Actions (Section 4.2.1)
  - d. Send a Notification of Rapid Response (Section 4.3)
- 2. Begin Within 1 Week
  - a. Delimit Range While Minimizing Additional Spread (Sections 4.4, 4.5)
- 3. No Later Than Week 6 (or as soon as laboratory results are available)
  - a. Data Collation (Section 4.6)
  - b. MAC Group Decision Making Workshop Preparation (Section 4.6.1)

# 4.1 Requesting Incident Command System and Designating Rapid Response Leadership

If waters within the Plan Area are designated as positive for quagga, zebra, or golden mussels<sup>18</sup>, the WDFW AIS Coordinator will request ICS via the WDFW Fish Program Director and WDFW Director. If ICS is approved by the WDFW Director, a Unified Command (Section 2.1) will be established. Additionally, the WDFW Director will, in accordance with RCW 77.135.090, request that the governor order "emergency measures to prevent or abate the prohibited species" under RCW 43.06.010(14). In response, a declaration of emergency<sup>19</sup> may be issued by the Governor's office and WDFW may consult the Washington Invasive Species Council to advise the governor regarding necessary emergency measures.

<sup>&</sup>lt;sup>18</sup> This assumes that golden mussels receive an emergency classification as a prohibited AIS.

<sup>&</sup>lt;sup>19</sup> A sample Declaration of Emergency is available at <a href="https://www.westernqzrr.com/potential-response-steps">https://www.westernqzrr.com/potential-response-steps</a> under step 5. Notifications and Communication: <a href="mailto:Sample Declaration of Emergency">Sample Declaration of Emergency</a>.

# 4.2 Incident Command System Staff and Multi-Agency Coordination Group Establishment

Once ICS has been approved and Unified Command established, Unified Command will notify ICS staff and MAC Group entities of a Rapid Response, at which time ICS staff will be designated and appropriate entities invited to join the MAC Group (Sections 2.2 and 2.3).

# 4.2.1 Incident Command System Staff Initial Actions

The specific tasks associated with each ICS staff role will continue to evolve with the event. However, Table 5 provides an overview of immediate focus areas for key staff members.

Table 5. Incident Command System staff initial tasks

ICS Staff Role	Task	
Unified Command	Host MAC Group decision-making workshop (Section 5.1).	
Operations Section Chief	Oversee implementation of range delimitation efforts (Section 4.4).	
Planning Section Chief	Collect the required information for the MAC Group decision-making workshop (Section 4.6).	
Logistics Section Chief	• Coordinate personnel, equipment, teams, supplies, and facilities required for range delimitation (Section 4.4) and minimize additional spread efforts (Section 4.5).	
Finance/Administration Section Chief	Develop accounting framework, including available funding, planned equipment and procurement costs, and planned labor costs.	
Public Information Officer	• Send out Rapid Response media release and other public outreach messaging (Section 4.3).	
Safety Officer	• Identify hazards, ensure personal protective equipment is available, and provide safety briefings and trainings.	
Liaison Officer	Set up and lead daily briefings with the MAC Group.	
Legal Officer	Ensure all applicable laws are known and followed during the response.	

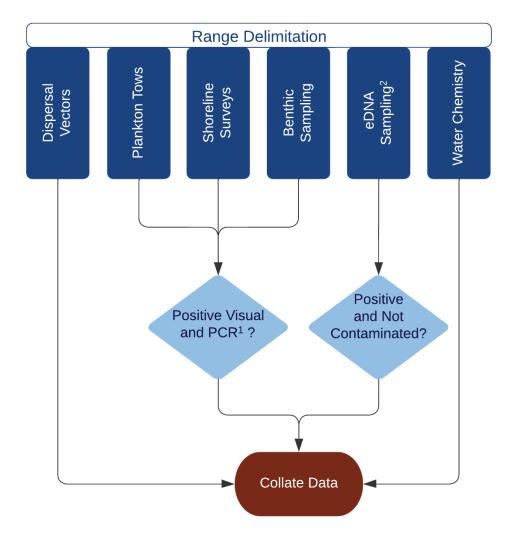
# 4.3 Public Notification of Rapid Response

Once ICS staff and the MAC Group are established but prior to delimitation efforts beginning, the ICS Public Information Officers will implement a strategic communications plan to notify all entities and the public of quagga, zebra, or golden mussel presence, the initiation of rapid response activities, and other associated information (APPENDIX A). It is assumed that the WDFW will provide statewide messaging whereas local Public Information Officers will provide media content tailored to their constituents. The following includes typical information provided to the public regarding the nature and status of a new invasion:

- Information about quagga, zebra, or golden mussels
- Current understanding of the distribution
- Time of first detection in the affected water body
- Likely origin, if known
- Risks it poses to local industries or services, including drinking water treatment
- Overview of planned rapid response activities
- Potential interruptions to public access and local recreation or fisheries

# 4.4 Range Delimitation

The Unified Command will be responsible for designating ICS staff to determine the range of the infestation. This effort should begin immediately upon ICS initiation and continue, as necessary, through Week 6, for a maximum of 5 weeks of sampling (Figure 5). This timeline was developed to garner a general understanding of the geographic limits of the invasion and relative abundance (i.e., new introduction versus established population with confirmed reproduction) while minimizing the cost and burden to the entities involved prior to implementing extended response activities. Efforts to delimit the range may be discontinued sooner than Week 6 if the limits of the invasion are determined earlier.



#### Notes:

- 1. PCR stands for polymerase chain reaction and represents the process by which a laboratory amplifies DNA sequences of physical specimens collected during delimitation sampling efforts to identify quagga, zebra, or golden mussels.
- 2. The results of eDNA samples do not provide definitive confirmation of quagga, zebra, or golden mussel presence or absence but can be used as additional information to aid the decision-making process.

Figure 5. Process flow for defining the extent of an invasion

Sampling should occur as early as feasible by the responding entities to allow for laboratory processing time. In the event of a Rapid Response, physical samples will be processed by Aquaticus LLC, Civil &

Environmental Consultants Inc., or KASF Consulting LLC with additional laboratory processing support requested from the U.S. Bureau of Reclamation Ecologic Research Laboratory. By contrast, eDNA samples will be processed by the WDFW Molecular Genetics Laboratory. The WDFW may request additional laboratory processing support from qualified laboratories (<a href="https://www.westernais.org/mussel-labs">https://www.westernais.org/mussel-labs</a>), if they are contracted for such purposes. All results will be provided to ICS General Staff (Section 2.3). Sampling activities include the following (Figure 5):

- Conduct plankton tow sampling, collecting a minimum of two (i.e., duplicate) samples per site
- Conduct shoreline surveys, including:
  - Rocks, wood, vegetation, and other debris
  - Exposed infrastructure (e.g., moored boats, piers, docks, buoys)
  - Employ canine survey teams
- Conduct benthic sampling, including:
  - Petite Ponar grab
  - Plant rake
  - Remotely operated vehicle video samples
  - SCUBA or snorkeler surveys of hard substrate
  - Existing substrate samplers in region
- Conduct eDNA sampling, collecting a minimum of two (i.e., duplicate) samples per site
- Conduct water chemistry sampling

The sampling associated with delimitation efforts will be the same whether the initial detection involves adult mussels or veligers, but may be adapted, if required, at the discretion of the Unified Command. Sampling sites have been determined based on public access locations, which include Bloedel-Donovan Park, Sudden Valley Marina, the WDFW Ramp, Silver Beach, Euclid Park, North Point Beach, Sofield Park, AM/PM Beach, Lake Whatcom Park, and Haner Park (Figure 6). If a detection occurs at a different location, additional sampling sites should be added. The delimitation area should be expanded with each positive detection until there is a clear understanding of the invasion extent or the 6-week Rapid Response Activity window is reached. The Operations Section Chief will provide additional direction to responding entities regarding sampling locations. Further guidance on recommended sampling protocols is provided in WRP 2020, and sample processing should follow the same protocols as discussed in the Statewide Plan. Recommended equipment and example data collection sheets are available in APPENDIX B.

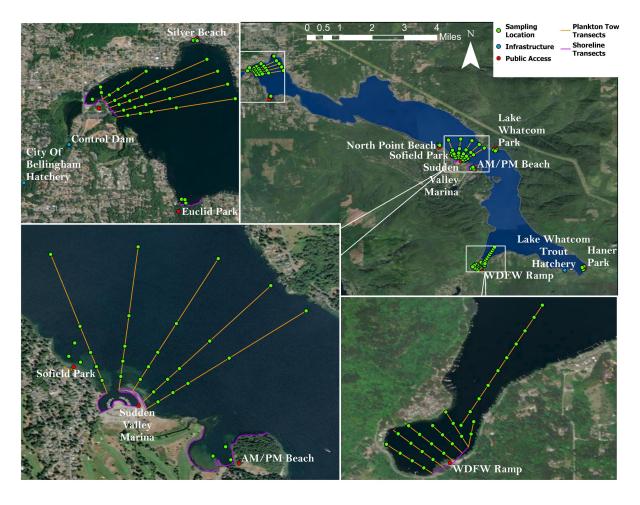


Figure 6. Conceptual delimitation sampling plan based on public access locations on Lake Whatcom

# 4.4.1 Plankton Tow Sampling Locations

At Silver Beach, Euclid Park, North Point Beach, Sofield Park, AM/PM Beach, Lake Whatcom Park, and Haner Park, there will be a minimum of three sampling sites at each location that represent both open water and near shore habitats. At Bloedel-Donovan Park, Sudden Valley Marina, and the WDFW Ramp, sampling will be conducted along transects perpendicular to the shore spaced approximately 50 m apart. Along those transects, samples will be collected at 100 m, 200 m, 300 m, 500 m, and 1,000 m from shore, as applicable (Figure 6). At the Bloedel-Donovan Park, there will be six transects comprising 27 sites. At the Sudden Valley Marina, there will be five transects comprising 25 sites. At WDFW Ramp, there will be seven transects comprising 30 sites. At least two samples (i.e., duplicates) should be collected at each site, resulting in a total of 206 samples. The number of plankton tows required for each sample depends on the plankton tow net diameter and the depth of each tow, with the goal of a minimum total volume of 1,000 liters per site filtered through the net (WRP 2020).

# 4.4.2 Benthic and Shoreline Sampling Locations

The habitat at each veliger sampling site should be assessed to determine if it is suitable for a benthic sample, aquatic plant rakes, remotely operated vehicles, or diver surveys. All sites with water depths < 6 meters and a substrate of gravel, small cobble, sand, and/or mud should be sampled with a Ponar grab (WRP 2020). The control dam and all boat docks, boat launch ramps, swim docks, and underwater debris fields within the delimitation area should be inspected for adults by either remotely operated vehicle or divers. In addition, shoreline surveys should be conducted at all ten public access locations (Figure 6). Finally, Bellingham Hatchery and Lake Whatcom Trout Hatchery infrastructure should be inspected for adults.

# 4.4.3 Water Chemistry and eDNA Sampling Location Guidance

Water chemistry and eDNA sampling should be conducted at every third sample of all 10 public access points for a total of 34 samples (Figure 6).

# 4.5 Minimize Additional Spread

During delimitation efforts, it is critical to minimize additional spread from affected waterbodies. Specific actions planned to be taken should there be a detection of quagga, zebra, or golden mussels in Lake Whatcom include:

- 1. Alert waterbody users of the presence of quagga, zebra, or golden mussels
- Close the detection location access point (likely one of the public boat ramps, including Bloedel-Donovan Park, Sudden Valley Marina, or the WDFW Ramp), and consider other access point closures to support response actions
- 3. Consider removing and decontaminating watercraft and infrastructure including docks, swimming structures, or sunken objects
- 4. Deploy a containment curtain around detection location access point
- 5. Establish additional mandatory check stations
- 6. Deploy mobile decontamination units to the public boat ramps not closed
- 7. Consider alternative containment strategies (e.g., filtration, chlorination) to be implemented at the Lake Whatcom control dam and all intake structures to prevent spread
- 8. Consider issuing a quarantine on the hatcheries if detection location is near hatchery intakes
- 9. Collect data on Lake Whatcom boater origin and destination

Table 6 provides actions that require close coordination among entities with management authority, which should be overseen by the Liaison Officer.

Table 6. Actions taken to minimize additional spread.

ICS Staff Responsible	Action
Unified Command	<ul> <li>Initiate closure<sup>[1]</sup> at the detection location and other access point, as feasible.</li> <li>Initiate mandatory inspections and decontaminations at Bloedel-Donovan Park, Sudden Valley Marina, and the WDFW Ramp (if not closed ).</li> <li>Remove and decontaminate watercraft and infrastructure including docks, swimming structures, or sunken objects, as feasible.</li> </ul>
Operations Section Chief	<ul> <li>Oversee mobile decontamination teams.</li> <li>Close area access points to non-ICS personnel.</li> <li>Establish staging areas at area access point.</li> </ul>

ICS Staff Responsible	Action	
Operations Section Chief (cont.)	<ul> <li>Decontaminate<sup>[2]</sup> all watercraft, equipment, tools, and gear used in sampling Plan Area waters during delimitation efforts prior to sampling other waterbodies.</li> <li>Deploy containment curtain.</li> <li>Deploy quagga, zebra, or golden mussel alert signs.</li> </ul>	
Logistics Section Chief	Mobilize mobile decontamination response team and unit to the identified locations and coordinate with WDFW Enforcement Officers and the Whatcom County Sheriff's Office to establish public compliance with watercraft decontamination procedures.	
Planning Section Chief	<ul> <li>Identify dispersal vectors other than water flow such as movement by humans, fish and wildlife, hatchery or aquaculture operations, water traffic, and other processes and determine whether containment strategies are available to minimize spread.</li> <li>Identify dispersal vectors via water supply infrastructure and determine whether alternative containment strategies (e.g., filtration, chlorination) can be implemented at the discharge point to prevent spread.</li> </ul>	
	Coordinate logistics for containment curtain deployment.	
Public Information Officer	<ul> <li>Inform water body users of the presence of quagga, zebra, or golden mussels.</li> <li>Develop quagga, zebra, or golden mussel alert signs.</li> <li>Alert prior users of the affected waterbodies of the risks their boats and equipment create for other waterbodies.</li> </ul>	

#### Notes:

# 4.6 Data Collation

As results from Rapid Response delimitation sampling become available, data collection worksheets and laboratory reports should be provided to the General Staff. The Operations Section Chief will make recommendations for additional sampling, whereas the Planning Section Chief should evaluate the results and prepare for the MAC Group decision-making workshop.

# 4.6.1 Decision Making Workshop Preparation

Prior to the MAC Group decision-making workshop, relevant documentation should be collected or updated and distributed to the MAC Group by the ICS Planning Section Chief. The following items should be accomplished prior to the workshop:

- Define the Action Area in IPaC (ipac.ecosphere.fws.gov/) based on the detection scenario
- Obtain an Official Species List from IPaC and the NMFS Species and Habitat App (<a href="https://www.fisheries.noaa.gov/resource/map/species-and-habitat-app">https://www.fisheries.noaa.gov/resource/map/species-and-habitat-app</a>)
- Check for Programmatic Biological Opinions and Determination Keys within the delimitation area
- Obtain available bathymetry, hydrology, turbidity, water temperature, water chemistry (i.e., calcium, pH, salinity, dissolved oxygen), and detailed species (animal and vegetation) distribution and density data for the delimitation area
- Obtain a list of cultural resource locations
- Obtain a list of entities (e.g., water users, businesses, parks) in the delimitation area, their
  potential role in extended response activities, and known concerns quagga, zebra, or golden
  mussels pose to their operations

<sup>1.</sup> Under RCW 77.135.050, WDFW is authorized to implement a quarantine against a water body, property, or region within the state. Hatcheries and aquaculture may be considered for quarantine as well.

<sup>2. &</sup>lt;a href="https://wdfw.wa.gov/sites/default/files/publications/01490/wdfw01490.pdf">https://wdfw.wa.gov/sites/default/files/publications/01490/wdfw01490.pdf</a>
<a href="https://www.fws.gov/course/hazard-analysis-and-critical-control-point-planning-prevent-spread-invasive-species">https://www.fws.gov/course/hazard-analysis-and-critical-control-point-planning-prevent-spread-invasive-species</a>

- Obtain a list of public access points within the delimitation area
- Obtain a list of water extraction infrastructure (e.g., irrigation infrastructure, hatchery intakes) and where the water goes outside the Plan Area
- Investigate opportunities to conduct species salvage operations to aid in post-treatment recovery
- Compile a summary of initial detection and verification activities and all sampling conducted during range delimitation with associated detection results
  - Initial detection date
  - Dates, gear, and effort of each sampling event
  - Results of each sampling event, including which life histories were discovered
- Develop a map depicting sampling and detection information, public access points, connected waterbodies or hatcheries, and critical infrastructure
- Obtain information on decontamination units and associated staff available
- Obtain the status of the Emergency Declaration Request
- Obtain information on available containment gear<sup>20</sup>
- Obtain information on chemical or bacterial suppliers' availability and current costs<sup>21</sup>
- Investigate regulatory and permitting requirements within the delimitation area, including working through the SEPA Checklist<sup>22</sup>

If key information is missing, the Planning Section Chief should inform the Unified Command immediately who will investigate whether the data gap can be filled.

impacts. The checklist and related guidance are available from Ecology: https://ecology.wa.gov/Regulations-

Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance

<sup>&</sup>lt;sup>20</sup> WDFW currently owns a heavy-duty Type II containment curtain with a reefing system that is 550-feet long and 15 feet deep (one 100-foot section plus nine 50-feet sections).

<sup>&</sup>lt;sup>21</sup> https://www.westerngzrr.com/response-resources

<sup>&</sup>lt;sup>22</sup> The SEPA Environmental Checklist will help determine if the environmental impacts of the selected response option are significant, and may also help identify measures to avoid, minimize, or mitigate any probable significant

# 5 Extended Response Activities

Extended response activities are initiated by the MAC Group decision-making workshop and include the implementation of response options. The Unified Command should determine the appropriate response and designate ICS staff to implement it within 2 weeks of the MAC Group decision-making workshop.

# 5.1 Multi-Agency Coordination Group Decision-Making Workshop

A facilitated MAC Group decision-making workshop should be convened and hosted by Unified Command no later than 6 weeks after the initiation of rapid response activities or as soon as laboratory results are available and workshop preparation is completed. The workshop should be designed to guide decision-makers through a structured, collaborative process to determine the most effective response option for addressing the detection scenario. This meeting will serve three key purposes: 1) to provide an overview of the problem to the MAC Group, 2) to evaluate response options using a consequences and tradeoffs analysis resulting in a decision of the optimal response plan, and 3) to coordinate next steps for extended response activities, specifically identifying roles and responsibilities moving forward. Of note, the Unified Command holds the ultimate decision authority should consensus on a response option not be achieved during the workshop.

# 5.1.1 Agenda

- 1. **Problem Overview and Context Setting:** The MAC Group will receive a high-level overview of the problem, including a summary of the detection, its current and projected extent, and potential impacts on aquatic, economic, ecological, and social systems. This phase will establish a shared understanding of the situation and set the stage for informed decision-making.
- 2. Trade-offs Analysis for Response Options: The Unified Command will walk participants through an evaluation of potential response options against a set of pre-defined desired outcomes. A workshop was held in June 2025 to decide on priorities for response actions, which were defined as follows, with high-level outcomes and underlying metrics:
  - Maximize the ability to provide reliable, clean, and safe drinking water
    - Maximize flow to users (cfs)
    - · Minimize taste and odor complaints (number of complaints)
    - Minimize the number of days use is curtailed (number of days curtailed)
    - Minimize ongoing maintenance cost to infrastructure (\$)
    - Minimize the cost of a treatment (\$)
    - · Minimize the need for capital improvements (\$)
  - Maximize the ecological integrity of Lake Whatcom
    - · Maximize native species presence (number of species)
    - Maximize water quality (appropriate dissolved oxygen levels)
    - · Minimize harmful algal blooms (number of harmful algal blooms)
    - Minimize impacts to hatchery operations (number of kokanee produced)
  - Maximize recreational opportunities for the public
    - Minimize the number of days a boat launch or beach is closed (number of days)

- · Minimize the cost of removing mussels from recreational areas (\$)
- Minimize the spread of invasive mussels to other water bodies
  - · Minimize the number of nearby water bodies invaded (number of water bodies)
  - Minimize the cost of inspections and decontaminations (\$)

These desired outcomes should be revisited in the decision-making workshop and can be adjusted to ensure they are current and reflect the values of the decision-makers (see Section 5.3.1). The MAC Group will consider the consequences of each response option; trade-offs among the various options, uncertainties, and risks; and will ultimately work toward an optimal response option that balances multiple competing priorities while addressing the need to respond to detections.

3. **Coordination of Extended Response Activities:** Once a response option is decided upon, the group will begin planning the next steps for extended response activities. This will include the applicable regulatory compliance steps, and identifying key roles, responsibilities, funding resources, available gear and procurement requirements, timelines, and coordination needs to ensure timely and efficient implementation of the chosen response option.

# 5.1.2 Workshop Follow-Up

Following the meeting, the Unified Command will provide a detailed report that outlines the decision-making process. The report will include the following information:

- Meeting notes, including attendance
- Consequences and tradeoffs analysis
- Decisions
- Identified funders
- Roles and responsibilities

# 5.2 Overview of Extended Response Activity Options

Potential treatments for the Plan Area may include physical treatments, chemical or bacterial treatments, <sup>23</sup> and/or containment measures, which are described in more detail at Pacific States Marine Fisheries Commission's Western Basin Invasive Mussel Incident Response Toolkit (https://www.westerngzrr.com/control-methods) and APPENDIX C.

- Physical treatments include removing mussels by hand and/or the deployment of physical structures such as benthic mats that deprive mussels of oxygen and nutrients.
- Chemical or bacterial treatments entail application of molluscicides directly to the water in controlled concentrations.

<sup>&</sup>lt;sup>23</sup> Products or formulations for quagga or zebra mussel control currently include Potash (KCl, KH<sub>2</sub>PO<sub>4</sub>, KOH), EarthTec® QZ, Natrix®, and Zequanox®. Note, Zequanox® is a biopesticide, but is grouped with chemical treatments because it is applied similarly to chemicals. It was determined in the June 2025 decision-making workshop that copper-based products would be considered last after Potash or Zequanox due to its long-term non-target species and water quality impacts.

 Containment efforts can be accomplished through installing physical barriers (e.g., containment curtain or benthic mat) or implementing alternative outflow management strategies at water intake infrastructure (e.g., filtration, chlorination) to prevent spread.

# 5.3 Decision Support for Extended Response Activities

The detection scenario will dictate which response options are available for consideration. Table 7 provides an overview of which response options may be available given specific information about the detection scenario. In the June 2025 decision-making workshop, it was decided that all invasive mussel species would be treated the same even though the risk of establishment for quagga or zebra mussels is lower based on Lake Whatcom's dissolved calcium levels. Additionally, it was decided that containment curtains would be installed, if feasible, as part of minimizing additional spread (Section 4.5). This step is retained in this section for completeness. Table 8 summarizes the feasibility requirements for each of the additional response options.

Table 7. Response options for a quagga, zebra, or golden mussel detection to consider in tradeoff analysis, in addition to minimize additional spread options, according to detection and containment scenarios

Detection	Containment	Response Options	
Scenarios	Scenario		
Adults only	Either	Check containment curtain feasibility	
		If feasible, deploy containment curtain	
		Evaluate whether preventative treatment options should be considered for	
		infrastructure	
		Check physical treatment feasibility	
		If feasible, consider diver removal  If feasible, consider heathir met	
		- If feasible, consider benthic mat - Charles be arrived by the storied treatment feasibility.	
		Check chemical or bacterial treatment feasibility	
		<ul> <li>If feasible, consider containment curtain or benthic mat with chemical treatment option</li> </ul>	
Veligers only	Cannot be	Evaluate whether preventative treatment options should be considered for	
	contained with	infrastructure	
	containment	Deploy divers to search for adults	
	curtain	Check chemical or bacterial treatment feasibility	
		<ul> <li>If feasible, conduct immediate veliger sampling to ensure detection</li> </ul>	
		scenario has not changed and consider chemical or bacterial treatment	
Veligers only	Can be	Deploy containment curtain	
	contained with containment	<ul> <li>Evaluate whether preventative treatment options should be considered for infrastructure</li> </ul>	
	curtain	Deploy divers to search for adults	
		Check chemical or bacterial treatment feasibility	
		<ul> <li>If feasible, consider containment curtain with chemical or bacterial</li> </ul>	
		treatment	
Veligers and	Cannot be	Evaluate whether preventative treatment options should be considered for infrastructure	
adults	contained with	Deploy divers to search for adults	
	containment	Check physical treatment feasibility	
	curtain	<ul> <li>If feasible, consider diver removal</li> </ul>	
		<ul> <li>If feasible, consider benthic mat</li> </ul>	
		Check chemical or bacterial treatment feasibility	
		<ul> <li>If feasible, conduct immediate veliger sampling to ensure detection</li> </ul>	
		scenario has not changed and consider chemical or bacterial treatment	

Detection Scenarios	Containment Scenario	Response Options
Veligers and adults	Can be contained with containment curtain	<ul> <li>Deploy containment curtain</li> <li>Evaluate whether preventative treatment options should be considered for infrastructure</li> <li>Deploy divers to search for adults</li> <li>Check physical treatment feasibility         <ul> <li>If feasible, consider diver removal</li> <li>If feasible, consider benthic mat</li> </ul> </li> <li>Check chemical or bacterial treatment feasibility         <ul> <li>If feasible, consider containment curtain or benthic mat with chemical treatment option</li> </ul> </li> </ul>

Table 8. Feasibility requirements for response options

Treatment	Requirements
Containment curtain <sup>1</sup>	<ul> <li>Quagga, zebra, or golden mussel distribution is restricted to habitat that is conducive to deploying a containment curtain that will prevent water exchange with the rest of the water body</li> <li>Curtain of correct length and depth is available for deployment</li> <li>Water depth, substrate, water velocity is amenable for curtain deployment</li> <li>Permits<sup>2</sup> are obtained</li> </ul>
Chemical or bacterial treatment <sup>3</sup>	<ul> <li>Product, applicators, and equipment are available<sup>2</sup></li> <li>Permits<sup>2</sup> are obtained</li> </ul>
Diver removal <sup>1</sup>	<ul> <li>Water depth, water velocity, visibility, and habitat complexity are conducive to dive operations</li> <li>Dive team is available</li> <li>Permits<sup>2</sup> are obtained</li> </ul>
Benthic mat <sup>1</sup>	<ul> <li>Water depth, water velocity, visibility, substrate, and habitat complexity are conducive to installation of benthic mat</li> <li>Dive team is available</li> <li>Equipment is available</li> <li>Permits<sup>2</sup> are obtained</li> </ul>

#### Notes:

- 1. Eradication success of physical treatments is contingent upon being able to map and target the entire distribution of adults plus having no successful reproduction during treatment period.
- 2. Permitting considerations include impacts to non-target species and cultural resources.
- 3. Eradication success of chemical or bacterial treatments is contingent upon maintenance of sufficient product concentrations throughout the treatment area for the necessary period for the current environmental conditions to result in 100% mortality of the target organism.

# 5.3.1 Treatment Effectiveness Considerations

Eradication success of physical treatments is contingent upon being able to map and target the entire distribution of adults plus having no successful reproduction during the treatment period. Specifically, the treatment area must have visibility, water depth, and water velocity to allow dive operations and sufficiently simple habitat to confidently find and remove or contain all mussels. Physical treatments may be considered to augment chemical or bacterial treatment plans when adults are also present or in developing long-term suppression strategies.

Eradication success of chemical or bacterial treatments is contingent upon maintenance of sufficient product concentrations throughout the treatment area for the necessary period for the current

environmental conditions to result in 100% mortality of the target organism. Because the volume of Lake Whatcom is so large and because of the primary objective to provide reliable, clean, and safe drinking water, chemical or bacterial treatments must be conducted in concert with containment curtains or benthic mats. These will ensure requisite product concentrations are maintained and minimize impact to drinking water customers.

If eradication is not feasible, alternative outflow management and efforts to minimize additional spread (Section 4.5) should be pursued while long-term management strategies are developed.

# 5.3.2 Known Factors that Influence Response Option Decisions

The following factors were identified as key elements that will influence decisions. These factors were derived from conversations had while developing this plan but should be revisited during the MAC Group decision-making workshop to ensure they accurately reflect what is most important to the entities when deciding on a response plan. Factors are divided into treatment-specific factors and long-term factors should quagga, zebra, or golden mussels not get eradicated.

# Treatment-specific factors:

- **Protection of Water Quality**: The likelihood that the treatment efforts will impact drinking water for consumers.
- **Effectiveness of Treatment**: The likelihood that the treatment efforts will eradicate or minimize the long-term impact of quagga, zebra, or golden mussels in the affected area or limit the spread of quagga, zebra, or golden mussels to other waterbodies.
- Response Impacts on Non-Target Species: The likelihood of negative ecological impacts of treatment efforts, including impacts on non-target mussel species, non-target fish species, and the broader aquatic ecosystem.
- Response Impacts on Cultural Resources: The likelihood that the treatment will destroy or degrade first foods or important historical and cultural information tied to a specific place or community.
- **Operational Feasibility**: The number of days required to implement the option when considering regulatory permitting, interested party engagement, product labeling, contact time required to conduct treatment, and resource availability (e.g., personnel, funding, equipment, product).
- Response Economic and Social Impact: The number of days that the water body closure and treatment efforts cause disruption to public access, local economies (e.g., recreation, fisheries, agriculture), and compliance with water service agreements.
- Cost: The comparative cost among treatment options including product, equipment, labor, permits, and maintenance per treatment acre, which includes considerations for the time a treatment takes.

Long-term factors if quagga, zebra, or golden mussels are not eradicated:

- **Impacts on Water Quality**: The likelihood of degraded water quality in response to mussel establishment.
- Impacts on Non-Target Species: The likelihood of negative ecological impacts on non-target mussel species, non-target fish species, and the broader aquatic ecosystem.

- **Impacts on Cultural Resources**: The likelihood of losing or degrading first foods or important historical and cultural information tied to a specific place or community.
- **Economic Impact:** Lost revenue to recreational or fisheries industries.
- **Social Impact**: The likelihood of human health risk or disruption to public access, local economies (e.g., recreation or fisheries), and water service agreements.
- Management Cost: Cost of monitoring, decontamination, and suppression efforts.

Each of these values should be captured in the set of desired outcomes.

# 5.3.3 Description of Tradeoff Analysis Process

Once the desired outcomes and available response options are determined, the Unified Command should develop and use a consequences table to assist with the MAC Group decision-making workshop process. A consequences table can be built by listing the desired outcomes on one axis of a table and the potential response options on the other (APPENDIX D). Within each cell of the table, the consequences (positive or negative) that each response option would have on each outcome should be evaluated either qualitatively or quantitatively to clearly illustrate the trade-offs among options. When conducting the trade-off analysis, qualitative consequences should be translated into quantitative terms and weights may be assigned to outcomes to reflect their relative importance in the decision-making process. Using this tool, participants will consider the consequences of each response option, trade-offs among the various response options, uncertainties, and risks, ultimately working toward a decision that balances multiple competing priorities while addressing the need to eradicate or reduce the spread.

# 5.4 Extended Response Activity Implementation

Table 9 describes the general procedures to follow when employing any response option(s).

Table 9. Extended response activity procedures for any response option

ICS Staff Role	Responsibility
Unified Command	<ul> <li>Convene an expert panel for consultation on physical treatment, chemical or bacterial treatment, and containment options.</li> <li>Make the final response determination.</li> </ul>
Operations Section Chief	<ul> <li>Manage operations groups to implement decided-upon response option plans properly and safely.</li> </ul>
Planning Section Chief	<ul> <li>Compile data required to evaluate which response options may be viable (Sections 4.6.1 and 5.2).</li> <li>Evaluate complicating factors involved with each viable response option (water movement, subsurface flow, water volume, ESA species, water use; Section 4.6.1).</li> </ul>
Liaison Officer	<ul> <li>Engage all regulatory authorities to obtain permitting and regulatory approval.</li> <li>Draft cooperative agreements with entities participating in response, as needed.</li> </ul>
Logistics Officer	<ul> <li>Work with Liaison Officer to obtain permitting approval.</li> <li>Evaluate the timing of the response.</li> <li>Determine the availability and lead time to obtain equipment, permits, personnel, food and lodging, and communications.</li> </ul>
Public Information Officer	Engage interested parties on details and anticipated impacts of response options.
Responding Entity	<ul> <li>Evaluate water movement and subsurface flow in the treatment area in preparation for the response options.</li> <li>After treatment(s), evaluate treatment efficacy and continue to monitor for evidence of surviving mussels.</li> </ul>

Table 10 describes the additional general procedures to follow when employing chemical or bacterial treatment response options.

Table 10. Additional extended response activity procedures for chemical or bacterial treatment response options

ICS Staff Role	Responsibility
Logistics Section Chief	<ul> <li>Identify a lead for pesticide application and contract, as necessary, with a pesticide applicator to conduct treatment, following applicable purchasing and contracting laws.</li> <li>Determine the lead time needed to mobilize the contractor to conduct the application.</li> <li>Facilitate information exchange between responding entity and Operations Officer.</li> </ul>
Responding Entity	<ul> <li>Calculate area, volume, and flow for the chemical treatment to determine the amount of product required.</li> <li>Evaluate in-water target concentration rates during and following treatment.</li> </ul>

# 6 Long-Term Management

If a water body is classified as positive for quagga, zebra, or golden mussels, the preferred response outcome is eradication. However, eradication will not always be feasible or successful given the circumstances. If that occurs, ICS staff and the MAC Group will need to determine which outcomes are attainable and cost effective. Management outcomes other than eradication will include minimizing additional spread (i.e., decontamination, mandatory inspections, alternative outflow management) and suppression (i.e., reduction of population densities to reduce negative impacts and slow the rate of spread). Suppression techniques include (but are not limited to) manual scraping, abrasive blast cleaning, hydraulically activated pipeline pigging, low-dose chemical treatments, mussel repellent technology, and biological control. Long-term management plans that include monitoring, mitigation, and recovery strategies should be developed at the same time as plans for suppression.

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# APPENDIX A Strategic Communications Plan: Invasive Mussel Rapid Response

# 1. Purpose

The purpose of this Strategic Communications Plan is to ensure timely, transparent, and accurate communication to all jurisdictions and stakeholders—including tribes and tribal organizations, agency staff, local governments, industry partners, and Whatcom County community members—following the detection of quagga, zebra, or golden mussels in Lake Whatcom, the drinking water source for more than 120,000 residents.

# 2. Communications Objectives

- Provide consistent, factual, and accessible information to all audiences.
- Maintain public trust through timely and transparent updates.
- Support incident response by reducing misinformation and establishing clear expectations for how and when updates will be provided.
- Coordinate messaging among agencies with legal jurisdiction.
  - As the lead state agency, the Washington State Department of Fish and Wildlife (WDFW) will provide statewide messaging.
  - The City of Bellingham, Whatcom County, and Lake Whatcom Water and Sewer District (LWWSD) will provide communications to their local constituents.

# 3. Audiences

# Internal Audiences

- Incident Command System (ICS) personnel from WDFW, City of Bellingham, LWWSD, Whatcom County
- Multi-Agency Coordination (MAC) Group members, as identified in Section 2.2 of the Plan
- Unified Command member leadership
- Other partner local, state, or federal agency staff (e.g., Washington Invasive Species Council, Washington State Department of Agriculture, Washington Military Department, Ecology, U.S. Fish and Wildlife Service)
- Field crews and response contractors

# External Audiences

A contact list is being developed that can be referred to in the event of an invasive mussel detection. Audiences to contact include:

- Lake Whatcom watershed residents
- Recreational water users and facilities that use Lake Whatcom, including:
  - Individual boaters registered through the <u>Whatcom Boat Inspections Program</u>
  - Fishing clubs that host tournaments on Lake Whatcom:
    - American Bass Association

- Borderline Bassin' Contenders
- Kayak Fishing Northwest
- Washington Bass Association
- Washington State Pond Jumperz
- Boating groups:
  - Rikkole Cree Canoe Club
  - Bellingham Bay Outrigger Paddlers
- Private boat launches:
  - Western Washington University Lakewood
  - Wildwood
  - · The Firs
- City of Bellingham and LWWSD drinking water customers
- Media outlets, including:
  - Bellingham Herald
  - Cascadia Daily News
  - The Northern Light
  - Salish Current
  - My Bellingham Now/ KGMI Radio
  - King 5
- Elected officials, including:
  - City of Bellingham City Council and Mayor
  - Whatcom County Council and Executive
  - LWWSD Board of Commissioners
  - Sudden Valley Community Association Board
  - State Legislative and Congressional Delegates
- Governments, agencies, and community members throughout Washington State

# 4. Key Messages

These messages are to be shared by the Public Information Officers, with tailored messaging at the local level.

Initial Response (within 1 week of detection)

- What happened: Confirmation of mussel detection
- Where and when: First detection, location, and timeline
- What it means: Potential risk to water infrastructure, environment, recreation, shoreline properties
- What is being done: Overview of rapid response activities, including establishment of ICS and MAC and immediate containment measures (range delimitation)

- **How people could be affected**: Recreation restrictions, potential changes in drinking water access or quality, etc.
- What is next: Next steps in response, when and how to receive updates on progress
- **How to help**: Ensure boats are inspected and cleaned, drained, and dried before entering water bodies; limit non-essential traffic in affected areas; follow posted signs; report mussel sightings
- Where to find more information: Public information phone numbers, email addresses, and websites

# Ongoing Updates

- Response activities: What steps continue to be taken to address the detection
- Lake access: Continued or new recreation restrictions
- Treatment plan and implementation: Treatment options and trade-offs; logistics for implementing the treatment options
- Monitoring: Results of data collection, changes in mussel populations or spread over time

# 5. Potential Communications Channels

The following communications channels could be used to share information about the detection depending on the severity of the situation and the resources available.

## Internal Audience Channels

Internal and partner staff will generally be kept informed on the response through the following channels:

- ICS briefings and situation reports
- Email notifications
- Internal FAQ and talking points document
- Briefings with relevant staff
- Command and general staff meetings

# External Audience Channels

- Press release(s) (via local and state agencies)
- Website and social media updates (through agency channels, including targeted community resources such as NextDoor)
- Public meetings or webinars (including public elected official meetings)
- FAQs added to website (translated into commonly spoken languages)
- On-site signage (at all affected access points)
- **Emails to specific audiences** (including neighborhood associations, Whatcom Boat Inspection Program participants, drinking water customers)
- Email updates to self-selected list (provide option for people to sign up to receive updates via email)
- Printed mailer (work with local print company to generate a mailing list of Lake Whatcom watershed residents)

The table below provides a detailed look at how these communication channels will be used to inform specific external audiences, as well as which key messages will be emphasized.

External Audience	Key Messages to Emphasize	Potential Communications Channels
Lake Whatcom watershed residents	<ul> <li>Impacts to boat access on lake, including from private docks</li> <li>Impacts to shoreline properties, if applicable</li> <li>How to help (avoid non-essential traffic in affected area)</li> </ul>	<ul> <li>Emails to neighborhood groups, including Sudden Valley, Silver Beach, Geneva</li> <li>NextDoor posts</li> <li>Mailer sent to watershed residents</li> <li>Lake Whatcom Lowdown email (joint City/County newsletter)</li> <li>Neighborhood meetings or webinars, if needed</li> <li>WDFW website, with links from the Lake Whatcom Management Program and Whatcom Boat</li> </ul>
Recreational water users, including boaters, swimmers, and recreation groups.	<ul> <li>Impacts to recreational access on lake, including which access points or areas of the lake are restricted</li> <li>Potential impacts of chosen treatment option on water quality and human health</li> <li>How to help (have boats inspected and always clean, drain, dry)</li> </ul>	<ul> <li>Inspections websites</li> <li>Signs posted at public access locations, including AM/PM Beach, Bloedel Donovan Park, Euclid Park, Haner Park, Lake Whatcom Park, Lake Whatcom Park, Lake Whatcom Southerly Boat Launch (WDFW launch), North Point Beach, Silver Beach, Sofield Park, Sudden Valley Marina</li> <li>Emails sent to boaters registered through the Whatcom Boat Inspections program</li> <li>Bellingham and Whatcom County Parks Departments social media posts</li> <li>Announcement on the Whatcom Boat Inspections program website and on webpages for parks in Lake Whatcom watershed</li> <li>Announcements to private boat launch managers, including Lakewood, Wildwood, Camp Firwood, and the Firs</li> </ul>
City of Bellingham and LWWSD water customers	Governments and agencies are working as quickly and effectively as possible to prevent or limit drinking water impacts     Chosen treatment option will not impact quality of drinking water	Communications through utility bill emails, if possible Social media posts on City and LWWSD channels Press release Inside Bellingham Weekly news releases Banner on City of Bellingham homepage Information and FAQs posted on Lake Whatcom Management Program, City, and LWWSD websites
Media outlets	Impacts to recreational access, drinking water, natural resources	<ul> <li>Press release sent to local media outlets</li> <li>Media inquiry responses</li> </ul>

External Audience	Key Messages to Emphasize	Potential Communications Channels
Elected officials	Our pre-approved Rapid Response Plan will help guide our response, with WDFW, the City, LWWSD, and Whatcom County leading the efforts	<ul> <li>Emails</li> <li>Updates at elected official meetings</li> <li>Lake Whatcom Policy Group meeting updates</li> </ul>
Governments, agencies, and community members throughout Washington State	Mussel detection has occurred in a     Washington State water body, which     can have implications for other nearby     water bodies	<ul><li>WDFW social media and website</li><li>News release</li></ul>

# 6. Communication Roles and Responsibilities

Role	Responsibility
ICS Public Information Officers	Draft and distribute messaging; coordinate with local Public Information Officers
Local Public Information Officers	Tailor messages to local context, distribute via local channels
MAC Group Liaison	Coordinate with relevant organization staff and leadership
Field Supervisors	Disseminate key information to on-site personnel and contractors
Non-Incident Command Agency Communications Leads	Amplify messaging through agency networks

# 7. Timeline and Triggers

Anticipated Timeframe	Action	
Day 0 (Confirmation)	Internal alert to ICS and MAC Group (once established); draft initial messaging and	
	signage	
Day 1 (Public Notification)	Issue press release; update websites and social channels; share key messages and	
	talking points with relevant staff; place signage if there are closures	
Day 2-3	Add FAQs to website; send mailer to watershed residents	
Week 1+	Ongoing updates based on delimitation findings, response efforts (posted on websites	
	and shared in emails and newsletters)	

# 8. Evaluation

- Track public engagement (web traffic, calls, social metrics)
- Monitor media coverage
- Conduct post-incident communications debrief (identify strengths, gaps, areas for improvement)

# 9. Draft Communication Materials

Communication materials must be drafted and distributed quickly after the detection of invasive mussels. The draft materials below can be used as a starting place.

# Draft Press Release

Invasive Mussels Detected in Lake Whatcom: Rapid Response Underway

Bellingham, WA — State and local officials have confirmed the presence of [invasive] mussels in Lake Whatcom, the drinking water source for more than 120,000 people. This detection marks a serious ecological and infrastructure threat, and agencies have launched a coordinated rapid response effort to assess and contain the infestation as quickly as possible. This response includes [identify immediate response actions – i.e., closing boat launches or beaches].

"[Invasive] mussels pose a major risk to our region's drinking water infrastructure, natural ecosystems, and recreational access, which is why many measures are already in place to prevent and detect their presence," said [Official Name, Title]. "We are moving quickly with state, local, and federal partners to contain the threat and protect our community's water resources. Fortunately, we worked with our partners to develop a comprehensive and coordinated plan for responding to an invasive mussel detection in 2025, so we are well-prepared to address this issue quickly and efficiently."

Response efforts are being led by the Washington Department of Fish and Wildlife (WDFW) in coordination with the City of Bellingham, Whatcom County, Lake Whatcom Water and Sewer District, and other organizations.

The mussels were first detected on [date], during routine monitoring conducted by [organization name], which has been monitoring Lake Whatcom for invasive species for [#] of years. Follow-up testing confirmed their presence on [confirmation date]. Invasive mussels can spread rapidly, clogging drinking water intake systems and harming aquatic habitat, water quality, and recreation areas.

"At this time, there is no immediate threat to our drinking water," said [Official Name, Title]. "However, a quick response offers the best chance at limiting spread and reducing potential long-term impacts."

This is a rapidly evolving situation and information may change quickly. Information is available on the WDFW website [insert hyperlink here] with an option to sign up for email updates.

#### How the Community Can Help

- Follow all posted signs at recreation areas along Lake Whatcom.
- Limit non-essential traffic in affected areas to help response crews work quickly and safely.
- <u>Clean, Drain, and Dry</u> all boats and gear after visiting any water body.
- Report suspected mussel sightings to [Insert Hotline or Online Reporting Portal].
- Follow updates at [website link].

# Draft FAQ

This will be updated with more accurate and relevant information once the detection occurs.

#### 1. What are quagga mussels?

[Invasive] mussels [Scientific Name] are invasive freshwater invasive species that rapidly attach to surfaces including boats, docks and other solid structures, ropes, and aquatic plants – outcompeting native species for space and resources. They can clog pipes and damage water infrastructure.

#### 2. Where were they found?

They were confirmed in [Water Body Name] on [Date] during routine monitoring. The exact extent of the infestation is currently being assessed.

# 3. How did they get here?

They are often introduced by boats, trailers, or gear that has not been properly cleaned after use in infested waters. The exact origin is under investigation but may never be known.

### 4. Is our drinking water safe?

Yes. At this time, there is no immediate threat to drinking water quality. However, infrastructure impacts may occur if the infestation spreads, which is why rapid response is critical.

## 5. Will recreation or water access be affected?

*Before restrictions are determined*: Possibly. Temporary closures or restrictions may be put in place to support containment efforts and prevent further spread.

Once restrictions are determined: Yes. [Closed facility] is temporarily closed to support containment efforts and prevent further spread. Additional temporary closures or restrictions may be put in place. We are working as quickly as possible to contain and eradicate the invasive mussels to prevent long-term impacts to drinking water treatment equipment, recreation access, and water quality. Your cooperation will help us be efficient and effective in our response actions. Thank you for your understanding.

Please check [website or social media] for updates before visiting the area.

#### 6. What are the risks?

- Clogging of drinking water treatment equipment, including water intakes and pipes in the lake
- Harm to native aquatic species and ecosystems
- Reduced water quality and increased maintenance costs
- Restricted water access and damage to boat launches, docks, and shorelines

#### 7. What is being done about it?

A multi-agency Incident Command response team is conducting surveys to determine how far the species has spread, is determining how to contain the threat and prevent further spread, analyzing management actions to remove the species, and sharing information with the public on how they can help.

#### 8. What can I do to help?

- Always <u>Clean, Drain, and Dry</u> boats and equipment.
- Avoid launching in restricted areas.
- Report sightings via [hotline or website].
- Share information with other water users.

# 9. How will you keep the public updated?

Updates will be provided through [Website], social media, and press releases. A public meeting or webinar will be announced soon to share response progress and answer community questions.

#### Draft Mailer for Lake Whatcom Watershed Residents:

# PUBLIC NOTICE: INVASIVE MUSSELS FOUND IN LAKE WHATCOM

# Invasive [species name] mussels were confirmed in Lake Whatcom on [date]

- Invasive mussels can spread rapidly, clogging drinking water intake systems and harming aquatic habitat, water quality, and recreation areas
- There is no immediate threat to our drinking water, but a quick response offers the best chance at limiting spread

# We are responding quickly to limit long-term impacts to our drinking water source and recreation

- [Describe immediate actions here, such as closing boat launches or beaches]
- Response efforts are led by the Washington State
  Department of Fish and Wildlife with support from the City
  of Bellingham, Whatcom County, and Lake Whatcom Water
  and Sewer District, who have a response plan in place

Insert map here that shows detection location and any beach or boat launch closures





# For more information and updates:

This is a rapidly evolving situation. Visit [WDFW website] or scan the QR code below for the latest updates.

Información del proyecto: Thông tin dự án: Информация о проекте: ਪ੍ਰੋਜੈਕਟ ਜਾਣਕਾਰੀ: 项目信息:

Insert QR code here

# How you can help:

- Follow all posted signs at recreation areas
- · Limit non-essential traffic in affected areas
- Clean, Drain, Dry all boats and gear after visiting any water body
- Report suspected mussel sightings to [hotline or online reporting portal]

City of Bellingham Public Works 2221 Pacific Street Bellingham, WA 98229 Draft Sign to be Posted at Closed Recreation Areas

# [beach/trail/launch] CLOSED DUE TO INVASIVE MUSSELS



Invasive [species name] mussels were confirmed in Lake Whatcom on [date]. For your safety and to support efforts to quickly remove mussels and prevent their spread, this [site] is temporarily CLOSED.

Insert QR code here

For updates, visit: [insert link here]

# APPENDIX B Example Rapid Response Data Collection Worksheets

Quag	gga, Zebra,	and Go	lden Mus	sel Mor	nitoring	Data	sheet 2024	
Team:			Samplers:					
Date (M/D/YY):	Site #:	Site	Name:	Latitu	de (N):	Long	gitude (W):	
			Artificial S	Substrate				
Attac	ched To:	Total V	Vater Dept	:h (m):		Substrate Depth (m):		
Substrate:		Condi		Redeployed:				
Present Absent	Intact	t Damageo	d Out of Wa	ter Yes No 1st Deployment				
Quagga Zebra Golde	n: Present Ab	sent Conta	act DFW No	w if Preser	nt			
Organisms Present:	Algae Bryozoa	ns Chiron	omids Eggs	Isopods Lii	mpets Per	iphyto	ns Snails Sponges	
Trichoptera Worms		Other:						
		Horizor	ntal and Ver	tical Plank	ton Tow			
Vertical Depth (m):			Plankton S	ample #:				
			Visual Sh	oreline				
Surveyed: Boat Ram	p Boulders Bu	oys Chain	s Concrete S	Structs Doo	ks LWD Li	ines		
Quagga Zebra Golde	n: Present Ab	sent Conta	act DFW No	w if Preser	nt			
Organisms Present:	Asian Clams C	hinese My	stery Snails	New Zeala	and Mudsi	nails N	onnative Crayfish	
Other:								
		Pe	etite Ponar (	Grab Samp	ler			
Vertical Depth (m): Quagga Zebra Golden: Present Absent Contact DFW Now if Present								
Organisms Present:	Asian Clams C	hinese My	stery Snails	New Zeal	and Mudsi	nails N	onnative Crayfish	
Other:								
			Water (	Quality				
Calcium: Yes No	Calcium Sample #:		Salinity (ppt):	рН:	Temp ©:		Secchi Depth (m):	
			eDI	NA				
Sample Method: Sm	ith-Root Samp	oler Perist	altic Pump (	Other				
eDNA Sample #: eDNA Negative Control #:								
Sample Water Filtered (L):			Negative Control Water Filtered (L):					
			AIS S	Ť				
AIS Boat Ramp Sign I	Deployed: Yes	No		L	pplement	al Sign	Deployed: Yes No	
			Comn	nents				

# Quagga, Zebra, and Golden Mussel Field Monitoring Equipment List

		Signa	age						
Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #			
AIS motorized boat ramp sign	_	18" x 24"	Each	-	WDFW	_			
AIS PP supplemental sign	_	9" x 9"	Each	_	WDFW	_			
AIS WA Northern pike sign	_	18" x 24"	Each	_	WDFW	_			
AIS non-motorized boat ramp sign	_	18" x 24"	Each	_	WDFW	_			
Bolts and nuts	_	_	Pack	_	_	_			
Camera (phone)	_	_	Each	_	_	_			
Drill	_	_	Each	_	_	_			
Drill bits	_	_	Each	_	_	_			
Drill charger	_	_	Each	_	_	_			
Level	_	_	Each	_	_	_			
Magnet	_	_	Each	_	_	_			
Screws	_	1 in., 1.5 in.	Pack	_	_	_			
Zip Lock bags	_	_	Box	_	_	_			
		Surface visua	l shoreline			1			
Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #			
Camera (phone)	_		Each	_	_	_			
Extended mirror	_		Each	_	_	_			
Flashlight	_		Each	_	_	_			
Sample bottle (unknown organisms)	16155-548	250 ml	Case	\$550.00	<u>Avantor VWR</u>	(800) 932- 5000			
Zip lock bags	_		Вох	_	_	_			
Artificial substrate									
Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #			
Completed artifical substrate	-	_	Each	_	WDFW	_			
PVC sheet (to build artificial substrates)	PVCGRAY0.187EXT48X96	48" X 96"	Each	\$151.41	Plastic Sheets, Rod, Tube & Fabrication Services Since 1914   ePlastics®	800-474-3688			
Camera (phone)	_	١	Each	-	_	_			
Hole punch	_		Each	_	_	_			
Knife	_		Each	-		_			
Lighter	_		Each	-		_			
Para cord	_	Roll	Each	_	_	_			

Created: 03/15/2024, NP

# Quagga, Zebra, and Golden Mussel Field Monitoring Equipment List

Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #
WDFW identification tag/label	_	_	Each	_	WDFW	_
Zip lock bags	<del>_</del>	_	Box	_	_	_
Zip ties	_	8 inch	Each	_	_	_
		Dissolved (	Calcium			
Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #
Black sharpie	_	_	Each	_	_	_
Calcium bar code labels	_	Sheet	Each	_	WDFW	_
<u>Calcium sample bottles</u>	16155-546	60 ml	Case	\$96.35	<u>Avantor VWR</u>	(800) 932 - 5000
Cooler for samples	_	30 qt	Each	_	_	_
Deionized water Type 1	CW-DW1-55G	55 gallon drum	Drum	\$480.00	https://www.chemworld.com/	800-768-5810
Ice	_	_	Each	_	_	_
Nitric Acid Ultrex II	JT6901-5	500 ml	ml	\$407.08	<u>Avantor VWR</u>	(800) 932- 5000
Disposable transfer pipet	10754-270	5 ml	Case	\$705.21	<u>Avantor VWR</u>	(800) 932- 5000
Salinity label	=	Sheet	Each	_	WDFW	_
BD Syringe Luer-Lok	BD309653	60 ml	Pack	\$27.35	<u>Avantor VWR</u>	(800) 932- 5000
Syringe filter 25 mm - 0.45uM STERILE	76479-020	25 mm -0.45 uM	Case	\$1,425.58	Avantor VWR	(800) 932- 5000
		Water q	uality	1		
Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #
Batteries (4)	_	AA	Each	_	_	_
Cleaning solution	HI 70671	0.5 L	L	\$37.00	<u>Hanna Instruments</u>	(800) 426-6287
Conductivity Standard 1413 uS/cm	HI7031/1L	1 L	L		<u>Hanna Instruments</u>	(800) 426-6287
Multiparameter Portable Meter	HI 98194	_	Each	\$1,624.00	Hanna Instruments	(800) 426-6287
pH 5.0 buffer solution	HI 5005	1 L	L	\$47.00	Hanna Instruments	(800) 426-6287
pH 7.01 buffer solution	HI 7007	0.5 L	L	\$24.00	Hanna Instruments	(800) 426-6287
pH 9.18 buffer solution	HI 5091	0.5 L	L	\$33.00	<u>Hanna Instruments</u>	(800) 426-6287
Quick calibration solution	HI 9828-27	1 Gal	Gal	\$185.00	Hanna Instruments	(800) 426-6287
Secchi disk - Limnological 8 Globe	470101-430	8 inch	Each	\$46.35	<u>Avantor VWR</u>	(800) 932- 5000
Secchi disk Calibrated Line	470004-364	(25 ft./7.75 m)	Each	\$91.65	<u>Avantor VWR</u>	(800) 932- 5000
Storage solution	HI 70300	0.5 L	L	\$18.00	Hanna Instruments	(800) 426-6287

Created: 03/15/2024, NP

# Quagga, Zebra, and Golden Mussel Field Monitoring Equipment List

Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #			
Transparent protective cap for pH	HI740211		Each	\$19.00	Hanna Instruments	(800) 426-6287			
sensor	1, 10222	Dlawktow		Ψ23.00		(666) 126 6267			
Plankton tows									
Item	item#			Cost	vendor	vendor Priorie #			
70% Isopropyl alcohol	_	1 Gal	Gal	_	-				
Baking soda	_	1 lb	Each	_	_	_			
Black sharpie	_	_	Each	_	_				
Bucket/tote (for holding line)	_	5 gal	Each	_	-	_			
Plankton bar code labels	_	Sheet	Each	-	WDFW	_			
Plankton net assembly (3:1 #60/63 micron mesh, 30cm. Diameter). Stainless steel ring/towing brindle & 903.5-CB6 Cod End Bucket	90-30x3-60-AB6	30 cm., 3:1, #60/63	Each	\$380.00	Sea-Gear Corporation	(321) 728-9116			
Plankton sample bottle	16155-548	250 ml	Case	\$550.00	<u>Avantor VWR</u>	(800) 932- 5000			
Spoon (for baking soda)	_	10 ml	Each	_	_	_			
Squirt bottle	_	500 ml	Each	_	_	_			
Tow line	_	(325 ft/100 m)	Feet	_	_	_			
Weight with clip	_	3 lbs.	Each	_	_	_			
Zip ties	_	8 inch	Each	_	_	_			
		Pona	ar						
Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #			
Bucket/tote (for holding line)	_	5 gal	Each	_	_	_			
Camera (phone)	_	_	Each	_	_	_			
Main lead line (1/2 in. diameter) *AVOID PARACORD*	_	(325 ft/100 m)	Feet	_	-	_			
Wildco. Petite Ponar grab sampler	77928	_	Each	\$1,534.00	Forestry Supplier Inc.	(800) 647-5368			
Safety line (1/2 in. diameter) *AVOID PARACORD*	_	(325 ft/100 m)	Feet	_	-	-			
VWR Sieve 8 in. 710 um	57334-454	710 um	Each	\$230.76	<u>Avantor VWR</u>	(800) 932- 5000			
WHITE tupperware		12 qt/11 L	Each	_		_			
eDNA									
Item	Item#	Size	Units	Cost	Vendor	Vendor Phone #			
10% bleach (make solution)	_	1 L	L						

Created: 03/15/2024, NP

### Quagga, Zebra, and Golden Mussel Field Monitoring Equipment List

Created: 03/15/2024, NP
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Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #
Black sharpie		_	Each	_	_	_
Bleach wipes	_	_	Each	_	_	_
Car battery inverter		_	Each	_	_	_
Charger for eDNA backpack (Lithium)	12034	_	Each	\$299.00	Smith-Root inc.	360-573-0202
Deionized water Type 1	CW-DW1-55G	55 gallon drum	Drum	\$480.00	https://www.chemworld.com/	800-768-5810
eDNA barcode labels (sample and negative)	-	Sheet	Each		WDFW	
Garbage bags	_	_	Each	_	_	_
Nitrile gloves	_	1 box	Each	_	<del>-</del>	_
Self preserving filters	11580-25	5 um	Case	\$423.75	Smith-Root inc.	360-573-0202
Smith-Root inc. eDNA Sampler (Lithium)	12063	_	Each	\$7,995.00	Smith-Root inc.	360-573-0202
Tap water	_	3 L	L	_	<del>-</del>	_
Zip lock bags FOR FILTERS	_	_	Each	_	<del>-</del>	_
Zip lock bags for nitrile gloves	_	_	Each	_	<del>-</del>	_
		Decontam	ination			
Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #
10% bleach (make solution)	_	1 L	L	_	_	
5% acetic acid (make solution)	_	2 gal	Gal	_	=	
Absorbent cloths	-	_	Each	_	=	_
Bleach wipes	_	_	Each	_	<del>-</del>	_
Boot picks	_	_	Each	_	=	_
Brush	_	_	Each	_	<del>-</del>	_
Household bleach	_	1 gal	Gal	_	<del>-</del>	_
Nitrile gloves	_	1 box	Box	_	_	_
Paper towels	_	_	Each	_	_	_
Potable water in weed sprayer	<del>-</del>	2 gal	Gal	_	_	_
Tap water	_	1 L	L	_	_	_
Two buckets w/ lid	_	5 gal	Gal	_	_	_

### Quagga, Zebra, and Golden Mussel Field Monitoring Equipment List

		Gene	ral			
Item	Item #	Size	Units	Cost	Vendor	Vendor Phone #
Batteries	_	AA	Pack			
Clipbopard	_	-	Each			
Cooler for drinking water	_		Each			
Drinking water	_	Case	Each			
Flashlights	_	-	Each			
Ice packs	_	-	Each			
iPhone	_	_	Each			
iPhone charger	_	_	Each			
Laser Tough-Tags	TTGP-1050	1.50 x 0.75 in	Each	\$72.75	<u>Diversified Biotech</u>	(800) 769 9199
Leatherman	_	_	Each	_	_	_
Lighter	_	_	Each	_	_	_
Paracord	_	Roll	Each	_	_	_
Pencils	_	_	Each	_	_	_
Pens	_	_	Each	_	_	_
Scissors	_	_	Each	_	_	_
Sharpies	_	-	Each	_	_	_
Vehicle power inverter	_	_	Each	_	_	_
Vinagreen 20%	919840TD	55 Gal	Drum	\$350.00	Cascade Columbia Distribution	(206) 282-6334
Zip lock bags 2 mm thick	_	12 x 15 inch	Each	_	_	_
Zip lock bags 2 mm thick	_	12x12 inch	Each	_	_	_
Zip lock bags 4 mm thick	_	12 x 15 inch	Each	_	_	_
Zip lock bags 4 mm thick	_	6 x 6 inch	Each	_		_
Zip lock bags 4 mm thick	_	4 X 6 inch	Each	_	_	_
Zip Ties		8 inch	Each	_		

General	Size	Units	Quantity	Check
Clipboard	_	Each	2	-
Cooler for drinking water	30 quart	Each	1	_
Cooler for samples	30 quart	Each	1	_
Drinking water	Case	Each	1	_
Ice packs	_	Each	4	_
iPhone	_	Each	2	_
iPhone charger	_	Each	2	_
Leatherman	_	Each	2	_
Lighter	_	Each	4	_
Pencils	_	Each	6	_
Pens	_	Each	6	_
Scissors	_	Each	2	_
Sharpies	_	Each	6	_
Vehicle power inverter	_	Each	2	_
Zip lock bags 4 mm thick	12 x 15 inch	Each	100	_
Zip lock bags 4 mm thick	6 x 6 inch	Each	100	_
Zip Ties	8 inch	Each	100	_

Artificial Substrates	Size	Units	Quantity	Check
Artificial substrates	_	Each	40	-
Paracord	Roll	Each	1	-
Plastic scrapers	3 inch	Each	2	_

Plankton Net Tows	Size	Units	Quantity	Check
Baking soda	1 lb	Each	2	_
Bucket (hold line)	5 gal	Each	1	_
Isopropyl alcohol 70%	2 gal carboy	Each	1	_
Plankton sample bottles	250 ml	Each	50	_
Plankton net barcode labels	sheet	Each	2	_
Line	325 ft/100 m	Each	1	_
Plankton net including cod end	_	Each	10	_
Spoons for baking soda	10 ml	Each	4	_
Squirt bottle filled with potable water	500 ml	Each	1	_
Weights with clips	3 lbs	Each	2	_

Visual and Tactile Shoreline	Size	Units	Quantity	Check
Batteries	AA	Each	2	l
Flashlights	_	Each	2	_
Retractable mirror	_	Each	2	_

Petite Ponar Grab	Size	Units	Quantity	Check
Bucket (hold line)	_	1	-	-
Main lead line 1/2 diameter	325 ft/100 m	Each	1	_
Petite Ponar grab sampler	_	Each	2	_
Safety line (use paracord)	325 ft/100 m	Each	100	_
Sieve 8 inch with lanyard	750 um	Each	1	_
White Tupperware	12 quart/11 L	Each	1	_

Water Quality	Size	Units	Quantity	Check
Clear protective cap for pH sensor	_	Each	2	_
HI 5005 pH 5.0 buffer solution	_	Each	1	_
HI 7007 pH 7.01 buffer solution	-	Each	1	_
HI 5091 pH 9.18 buffer solution	_	Each	1	_
HI 70300 pH sensor storage solution	-	Each	1	_
HI 70671 cleaning solution	-	Each	1	_
HI 9828 quick calibration solution	-	Each	1	_
Hydro lab	=	Each	1	_
Rechargeable batteries	AA	Each	4	_
Hydro lab car charger	-	Each	1	_
Hydro lab house outlet charger	_	Each	1	_
Secchi disk with line marked every meter	25 ft/7.5 m	Each	1	_

Dissolved Calcium	Size	Units	Quantity	Check
Deionized water for blanks	1 L	Each	1	-
Calcium sample bottles	60 ml	Each	60	-
Calcium barcode labels	sheet	Each	2	_
Nitric ultra solution preservative 50%	60 ml	ml	1	_
Pipette	50	Each	50	_
Syringe filters	0.45 um	Each	100	_
Syringes	60 ml	Each	60	_

Environmental DNA	Size	Units	Quantity	Check
eDNA sampler car charger	_	Each	1	_
Self preserving eDNA filters	5 um	Each	100	_
eDNA barcode labels	sheet	Each	2	_
Batteries for remote	AA	Each	8	_
Bleach solution wipes 50%	_	Each	100	_
Deionized water for control sample	1 L	Each	50	_
Deionized water for rinse	1 L	Each	10	_
Smith-Root eDNA sampler	-	Each	1	_
eDNA sampler input and output covers	-	Each	4	_

Signage	Size	Units	Quantity	Check
AIS motorized boat launch signs	_	Each	50	-
AIS prevention permit supplemental signs	_	Each	50	-
Specific species signs	_	Each	50	-
Drill	_	Each	1	_
Screws	1 1/4 inch	Each	200	_

Personal Protective Equipment (PPE)	Size	Units	Quantity	Check
Nitrile gloves	What crew needs	Box	1	_
Protective eye ware	_	Each	2	_
Sun block	_	Each	2	_
Hearing protection	_	Each	10	_
N95	1	Each	2	_
KN95	1	Each	2	_

Decontamination	Size	Units	Quantity	Check
Absorbent drying cloths	Rolls	Each	1	_
Bleach solution in squirt bottle 10%	32 oz	Each	1	_
Bleach wipes	Packages	Each	2	_
Boot picks	_	Each	4	_
Buckets and lid	5 gal	Each	2	_
Household bleach	1 gal	Each	1	_
Household vinegar (5% acetic acid)	2 gal	Each	1	_
Paper towels	Rolls	Each	2	_
Potable water in weed sprayer	2 gal	Each	1	

Watercraft	Size	Units	Quantity	Check
Anchor	_	Each	1	_
Anchor line	100 ft/30 m	Each	1	_
Boat keys	_	Each	2	_
Carbon monoxide sticker by engine	_	Each	1	_
Engine kill switch	_	Each	2	_
Fenders	_	Each	2	_
Fire extinguisher	_	Each	1	_
First aid kit	_	Each	1	_
Flares	_	Each	3	_
Oars	_	Each	2	_
PFD type V (mesh)	_	Each	2	_
PFD type IV (throwable)	_	Each	1	_
Sound horn	_	Each	1	_
Sounder/GPS	_	Each	1	
Trailer keys	_	Each	2	
Whistle on ignition kill switch	_	Each	1	_

Watercraft	Size	Units	Quantity	Check
Whistle on PFD type V's	_	Each	2	_
Stabil	Bottle	Each	1	1

### APPENDIX C Extended Response Activity Options Overview

### **Chemical Treatments Overview**

At the time of writing this plan, there are three main chemical treatments considered as deployable within the Plan Area. More detailed information about each treatment type can be found at https://www.westerninvasivemussel.org/control-methods.

### Potassium Chloride (KCI)

Potassium chloride (KCL), also called muriate of potash, is a salt-based treatment effective at disrupting ionic balance in invasive species such as quagga, zebra, and golden mussels. While it has proven efficacy, it may have non-target toxicity for freshwater organisms and the potential for ion accumulation in water bodies. Additionally, it is not yet labelled for use as a pesticide by the U.S. Environmental Protection Agency, although emergency permits for its use have been obtained in certain situations and the process to get it labeled for use has been initiated.

### Chelated Copper (e.g., EarthTec ZQ, Natrix)

Chelated copper (e.g., EarthTec ZQ, Natrix) uses copper ions stabilized by chelating agents, enhancing bioavailability to target invasive species while reducing free copper's toxicity. However, the potential for copper accumulation in sediments and long-term effects on non-target species, including sensitive fish such as salmonids and macroinvertebrates, are significant concerns.

### Zequanox (Pseudomonas fluorescens CL145A)

Zequanox (*Pseudomonas fluorescens* CL145A) is a biopesticide derived from a naturally occurring bacterium. It selectively targets invasive mussels with minimal reported effects on non-target species. However, its effectiveness can be influenced by water conditions (e.g., temperature, turbidity), and its application may require repeated treatments, raising logistical and cost considerations.

### **Physical Treatments Overview**

Physical treatments include removal by hand and/or the deployment of physical structures that kill mussels. Physical treatments are an appealing option because they can allow precise targeting of mussel removal but are only effective as eradication strategies for scenarios where only adults have been detected (i.e., no veliger detections). Physical treatments often have increased labor costs and are not feasible in areas of high flow, high turbidity, and high turbulence either pragmatically or in terms of human safety. Two widely used physical treatment methods for managing aquatic invasive species are manual removal and benthic mats.

#### Manual Removal

Trained divers can be employed to manually remove invasive species from within the delineated range. This method is highly targeted and allows for selective removal of invasive organisms while minimizing disturbance to non-target species. However, it is labor-intensive and typically limited to small-scale infestations or high-priority sites. Effective long-term use often depends on consistent monitoring and repeated interventions to prevent re-establishment.

#### Benthic Mats

Benthic mats are durable, synthetic coverings placed on the substrate to smother invasive species and prevent their attachment and growth. They are effective for reducing populations in localized areas, particularly for sessile organisms like mussels or aquatic plants. However, the mats can also impact native benthic organisms and disrupt natural substrate dynamics. Proper installation, maintenance, and removal are critical to minimize non-target impacts and ensure effectiveness. Benthic mats may be used in combination with chemical treatments, where chemicals are inserted underneath the benthic mat to facilitate eradication.

### Containment Overview

### Containment Curtains

Containment curtains create a physical barrier in a water body, restricting water exchange between the contained and non-contained zones. All containment curtain options for the Plan Area will be short-term efforts to support localized treatment efforts. The U.S. Army Corps of Engineers and Washington Department of Fish and Wildlife are engaging with private entities that develop containment curtains to be used in potential future rapid response efforts.

### Alternative Outflow Management

Alternative outflow management strategies include adding filtration, chlorination, or ultraviolet light systems at water intake infrastructure to prevent spread to connected waterbodies. Coordination with municipalities, water rights holders, and entities responsible for public and industrial runoff is essential to ensure comprehensive containment.

### Summary of Extended Response Options

Appendix Table C-1 provides a summary of the extended response activity options detailed above. Appendix Table C-2 provides an overview of considerations of those treatments.

#### **Appendix Table C-1. Treatment Options**

Treatment	Description	Permitting <sup>1</sup>	Mechanism	Treatment Time Per Concentration
Do Nothing	Mussel invasion in the water column	NA	NA	NA
Potash (KCL)	Biocide	NPDES; FIFRA registration or emergency exemption	Prevents mussels from breathing	21 days at 95-115 ppm
EarthTec QZ (copper ions)	EPA-registered molluscicide; contains copper	NPDES; drinking water regulations	Copper on surfaces prevents settlement; lethal to mussels when ingested	4-30 days at ~1 ppm
Zequanox (dead bacteria cells)	The dead cells of a naturally occurring soil organism (Pseudomonas fluorescens)	NPDES	Bacteria lethally deteriorates the mussels' digestive lining	1-2 weeks at 150 ppm
Benthic Mats	Large, dark tarps that are anchored to the bottom of the lake	See Section 3.2.1.1	Suffocates organisms under mat by depriving the area of oxygen, light, and food	9 weeks

Treatment	Description	Permitting <sup>1</sup>	Mechanism	Treatment Time Per Concentration
Divers	Divers scrape off mussels and remove shells	AIS prohibited species permit	Physical removal of mussels by hand	276 dive hours per acre
Containment Curtain	Curtain that quarantines an area of a water body, likely used in tandem with a chemical treatment	See Section 3.2.1.1	Quarantine a shoreline area with surface to bottom curtains	Time based on partnered product treatment
Desiccation/Water Drawdowns	Drawing lake levels down to expose the mussels to air	Not viable in Lake Whatcom	Suffocates mussels	2-10 days at 25-10°C

#### Note:

1. Responsibility for complying with all applicable laws lies with the agencies leading and conducting the treatment. This table presents general information about permitting considerations for various treatment options and is not a substitute for professional legal advice. Responding agencies should consult with legal counsel to evaluate compliance risks and permitting strategies for potential treatment options.

#### **Appendix Table C-2. Treatment considerations**

Treatment	Persistence Time	Water Quality Impacts	Risks	Cost (per acre)
Do Nothing	In perpetuity if ecologically viable	Increased water clarity, water contamination from increased chance of harmful algal blooms, oxygen depletion, contaminated sediments on lake floor	Damaged drinking water, hatchery, and recreation infrastructure; decreased recreation	Long-term control efforts could be incredibly expensive
Potash (KCL)	Days depending on water quality conditions	Unpleasant salty taste; very unlikely to impact water quality significantly	Lethal to all mussels	\$7,000-\$30,416
EarthTec QZ (copper ions)	Days in the water column depending on water quality conditions, years in soils	Bitter/metallic taste; high levels of copper can lead to gastrointestinal issues	Lethal and sublethal effects on salmonids; lethal for gastropods and mollusks	\$150-250
Zequanox (dead bacteria cells)	Hours depending on water quality conditions	None	No impacts to non- target species	\$10,000-\$100,000
Benthic Mats	NA	Low dissolved oxygen near mats	Can be lethal to non- target organisms under the mat	\$30,000
Divers	None	None	No impacts to non- target species	\$27,600-\$55,200
Containment Curtain	NA	None	Could quarantine non- target species	\$1,948 per 100 ft. long x 15 ft. skirt
Desiccation/Water Drawdowns	NA	NA	Impacts to non-target species that are exposed to air	Could impact single home water intake pipes or shallow draw pipes

### APPENDIX D Example Consequences Table

### NORMALIZED VALUES (best = 1, worst = 0)

					· , , , , , , , , , , , , , , , , , , ,	<u> </u>			,	
					Objectives					
		Total treat cost	Water quality cost	Ecological impacts	Short impacts to drink water	Long impacts to drink water	Total time			
	Measurable attribute	\$ total	\$ total	1 = no impacts	1 = no impacts	1 = no impacts	# days		Higher scores = bette	er alter
Treatment type	Objective weight		1.000	1.000	1.000	1.000	1.000		Score	
No treatment	NA	1.000	0.000	C		- 19		.000	3.0000	
Chemical	Potash (KCL)	0.655	1.000	€		L avamble	$\mathcal{L}$	0.422	3.0767	
Chemical	Copper ions (EarthTec QZ)	0.811	1.000	C	- a are to	L EXALLE S	) (	0.461	2.2720	
Chemical	Bacterial toxin (Zequanox)	0.349	1.000	- 4 cCO	resaicio	l <sup>-</sup> 1	L (	0.018	4.3668	
Physical	Benthic mat only	0.831	aute 190	ทน รษษ		1	L (	0.568	3.3993	
Physical + chemical	Benthic mat + Potash	\ b. <b>67</b> 4	$Dut_{1.50}$	0	only	1		0.422	3.0957	
Physical + chemical	Benthic mat + Copper ions	0.830	1.000	nurr	inses orig			0.461	2.2910	
Physical + chemical	Benthic mat + Bactieral toxin	0.368	1.000	purp	res are fo	1	L (	0.517	4.8852	
Physical	Manual removal	0.651	1.000	1	1	1	L (	0.982	5.6332	
Physical + chemical	Manual removal + Potash	0.306			) (	1		0.357		
Physical + chemical	Manual removal + Copper ions	0.462	1.000	C	)	0	) (	0.443	1.9052	
Physical + chemical	Manual removal + Bacterial toxin	0.000	1.000	1	1	1	. (	0.000	4.0000	



### AGENDA BILL Item 6.B

### Sudden Valley WTP Chlorine Contact Basin Replacement Drinking Water State Revolving Fund Application Authorization

DATE SUBMITTED:	October 22, 2025	MEETING DATE:	October 29	, 2025		
TO: BOARD OF COMM	1ISSIONERS	FROM: Greg Nicoll, District Engineer				
GENERAL MANAGER	APPROVAL	Solday				
ATTACHED DOCUME	NTS	1. none				
TYPE OF ACTION REQUESTED		RESOLUTION	FORMAL ACTION/ MOTION	INFORMATIONAL /OTHER		

### **BACKGROUND / EXPLANATION OF IMPACT**

The District provides potable water to its South Shore water system, which includes the Sudden Valley and Geneva communities, wholly by water treated at its Sudden Valley Water Treatment Plant (SVWTP). The SVWTP is a rapid-rate, direct filtration plant with a rated capacity of 2.0 million gallons per day (mgd) that was constructed as part of the Sudden Valley development in the early 1970s. An essential component of the SVWTP system is the 225,000-gallon, 40-foot diameter, 24-foot high welded-steel chlorine contact basin (CCB) that was constructed in 1994. The CCB is outfitted with internal baffling that provides filtered water the necessary chlorine contact time, as regulated by the Washington State Department of Health (DOH), for adequate disinfection under current operating flow rates prior to conveyance to the public via the District's water distribution system.

In 2016, BHC Consultants performed a seismic vulnerability assessment of the District's steel reservoirs, including the CCB. The assessment identified two structural deficiencies with the CCB (inadequate uplift resistance of the foundation and lack of piping flexibility) that may prohibit the CCB from surviving a significant earthquake. Subsequent assessments of the CCB's treatment capacity were performed by Gray & Osborne Engineers in 2017 and 2020, which recommended construction of a new CCB that can provide sufficient chlorine contact time for full design flow (2.0 mgd). In addition, a 2020 assessment of the interior and exterior CCB coatings by Evergreen Coating Engineers revealed that the coatings are nearing the ends of their useful service lives.

As a result, the District identified the need to replace the existing CCB with a new CCB that meets current seismic standards and that is sized to accommodate full design flow of the SVWTP.

In 2022, the District submitted a FEMA Hazard Mitigation Grant application to replace the existing CCB with a new 307,000-gallon, 44-foot diameter, 27-foot high welded-steel tank CCB. The grant application was developed in conjunction with Washington State Emergency Management Division (WA-EMD) of the Washington State Military Department and the Federal Emergency Management Agency (FEMA) as a hazard mitigation project. The grant was awarded to the District in 2024, with the cost sharing as follows: FEMA 75% (\$1,472,250), WA-EMD 12.5% (\$245,375), and Lake Whatcom Water and Sewer District 12.5% (\$245,375).

However, since execution of the grant agreement, the total project cost is now estimated at \$3,100,000, creating a funding deficit of approximately \$1,200,000. The impacts to the District's finances were discussed with the Board of Commissioners during its regularly scheduled meeting held on June 11, 2025. During the meeting the Board directed staff to pursue external funding sources for the unfunded portion of the project. One viable external funding source is a low-interest loan through the Drinking Water State Revolving Fund (DWSRF), which is administered by the Washington State Department of Health (DOH). Although this source would not be a grant, it would allow the District to finance the project costs over a 20-year period at a low interest rate (2.25%).

DWSRF loan applications are accepted by DOH on an on-going basis with applications due on November 30, 2025 for the 2026 funding cycle. There is approximately \$150 million available during this loan cycle. Loans will be awarded in March 2026 and contracts executed between July and September 2026.

The new CCB was planned and budgeted to be constructed in 2026. However, due to the projected funding deficit and the schedule for potential award of the DWSRF loan, construction of this project may be delayed until 2027. If, after further evaluation, staff determines that delay of the project is recommended, an action to amend the 2025-2026 Budget to reallocate the currently budgeted funds from 2026 to 2027 will be presented to the Board at a future meeting.

A requirement of the DWSRF application is that the applicant's governing body formally authorize submittal of a loan application.

### **FISCAL IMPACT**

Receipt of a DWSRF loan would create a debt service obligation for the amount of the loan plus interest, which would be amortized over a 20-year loan repayment period.

### <u>APPLICABLE EFFECTIVE UTILITY MANAGEMENT ATTRIBUTE(S)</u>

Financial Viability
Infrastructure Strategy and Performance
Enterprise Resiliency

### RECOMMENDED BOARD ACTION

Staff recommends that the Board authorize development and submittal of a DWSRF construction loan application to the Department of Health for the Sudden Valley Water Treatment Plant Chlorine Contact Basin Replacement Project.

### **PROPOSED MOTION**

A recommended motion is:

"I move to authorize staff to develop and submit an application to the Washington State Department of Health for a Drinking Water State Revolving Fund loan to finance the unfunded portion of the Sudden Valley Water Treatment Plant Chlorine Contact Basin Replacement Project."



### AGENDA BILL Item 6.C

### Geneva Reservoir Recoating Project Drinking Water State Revolving Fund Application Authorization

DATE SUBMITTED:	October 22, 2025	MEETING DATE:	October 29,	2025	
TO: BOARD OF COM	MISSIONERS	FROM: Greg Nicoll, District Engineer			
GENERAL MANAGER	APPROVAL	Sotolday			
ATTACHED DOCUME	NTS	1. none			
TYPE OF ACTION REQUESTED		RESOLUTION	FORMAL ACTION/ MOTION	INFORMATIONAL /OTHER	

### **BACKGROUND / EXPLANATION OF IMPACT**

A structural analysis of the Lake Whatcom Water and Sewer District Geneva Water Reservoir found significant deficiencies in its ability to meet existing earthquake code requirements (BHC report, December 2016). In 2021, the District submitted an application for a FEMA Hazard Mitigation Grant to seismically retrofit the Geneva Reservoir (as well as construct seismic improvements to the Sudden Valley WTP pump house).

Although the grant application was submitted in 2021, the grant was not officially awarded until 2024. During this time, a 2022 coating assessment of the reservoir completed by Evergreen Coating Engineers determined that the interior and exterior coating systems were approaching the end of their service lives and require replacement within the next five years to minimize degradation of the tank structure. The grant-funded seismic improvements were built into the District's 6-year capital improvement program for 2026, with recoating of the reservoir programmed for 2027. However, based upon information recently gained during the initial stages of seismic retrofit design, impacts from the seismic retrofit project will require recoating at the same time. The estimated cost of recoating the Geneva Reservoir is \$1,000,000, which was not built into the District's 2025-26 Budget.

The impacts to the District's finances were discussed with the Board of Commissioners during its regularly scheduled meeting held on June 11, 2025. During the meeting the Board directed staff to pursue external funding sources for the recoating project. One viable external funding source is a low-interest loan through the Drinking Water State Revolving Fund (administered by the Washington State Department of Health); though this source would not be a grant, it would allow the District to finance the project costs over a 20-year period at a low interest rate (2.5%).

DWSRF loan applications are accepted by DOH on an on-going basis with applications due on November 30, 2025 for the 2026 funding cycle. There is approximately \$150 million available during this loan cycle. Loans will be awarded in March 2026 and contracts executed between July and September 2026.

As noted above, the Geneva Reservoir recoating project is budgeted to be completed in 2027 but the recoating needs to be completed concurrently with the seismic improvements that are budgeted to be completed in 2026. District staff are currently evaluating alternatives to accommodate external funding schedules as well as other projects scheduled for the same time period, such as the Division 22-1 replacement project. If, after further evaluation, staff determines that revising the project schedules is recommended, an action to amend the 2025-2026 Budget to reallocate the currently budgeted funds as needed will be presented to the Board at a future meeting.

A requirement of the DWSRF application is that the applicant's governing body formally authorize submittal of a loan application.

#### **FISCAL IMPACT**

Receipt of DWSRF loan would create a debt service obligation for the amount of the loan plus interest, which would be amortized over a 20-year loan repayment period.

### <u>APPLICABLE EFFECTIVE UTILITY MANAGEMENT ATTRIBUTE(S)</u>

Financial Viability
Infrastructure Strategy and Performance
Enterprise Resiliency

### RECOMMENDED BOARD ACTION

Staff recommends that the Board authorize development and submittal of a DWSRF construction loan application to the Department of Health for the Geneva Reservoir Recoating Project.

### **PROPOSED MOTION**

A recommended motion is:

"I move to authorize staff to develop and submit an application to the Washington State Department of Health for a Drinking Water State Revolving Fund loan to finance the unfunded portion of the Geneva Reservoir Recoating Project."

whatcom 5	ENDA G BILL m 8.A	eneral Ma Repo	•		
DATE SUBMITTED:	October 22, 2025	MEETING DATE	E: October 29	9, 2025	
TO: BOARD OF COMM	1ISSIONERS	FROM: Justin Clary, General Manager			
GENERAL MANAGER	APPROVAL	Sat Clay			
ATTACHED DOCUMENTS		General Manager's Report     Gyear Strategic Business Plan Update			
TYPE OF ACTION REQ	UESTED	RESOLUTION	FORMAL ACTION/ MOTION	INFORMATIONAL /OTHER	

### **BACKGROUND / EXPLANATION OF IMPACT**

Updated information from the General Manager in advance of the Board meeting.

### **FISCAL IMPACT**

None.

### **RECOMMENDED BOARD ACTION**

None required.

### **PROPOSED MOTION**

None.



### LAKE WHATCOM WATER AND SEWER DISTRICT

## General Manager's Report Upcoming Dates & Announcements

Regular Meeting – Wednesday, October 29, 2025 – 8:00 a.m.

### **Important Upcoming Dates**

Lake Whatcom Water & Sewer District						
Regular Board Meeting	Wed Nov 12, 2025	6:30 p.m.	Board Room/Hybrid			
Employee Staff Meeting	Thu Nov 13, 2025	8:00 a.m.	Board Room/Hybrid			
Employee Staff Meeting	1110 NOV 13, 2023	6.00 a.iii.	Commissioner Citron to attend			
Investment Comm. Meeting	Wed Oct 29, 2025	10:00 a.m.	Board Room/Hybrid			
Safety Committee Meeting	Safety Committee Meeting Thu Nov 20, 2025 8:00 a.m.					
Lake Whatcom Management I	Program					
Policy Group Meeting	Wed Dec 3, 2025	3:00 p.m.	City of Bellingham Pacific St Ops			
Policy Group Meeting		3.00 p.m.	Center, 2221 Pacific Street			
Joint Councils Meeting	March/April 2026	TBD	TBD			
Other Meetings						
WASWD Section III Meeting	Tue Dec 9, 2025	6:00 p.m.	Bob's Burgers			
WASWD Section in Meeting	Tue Dec 9, 2023	ο.οο μ.π.	8822 Quil Ceda Pkwy, Tulalip, WA			
Whatcom County Council of	Wed Dec 10, 2025	3:00 p.m.	Council of Governments Offices			
Governments Board Meeting	Wed Dec 10, 2025	3.00 μ.π.	314 E Champion Street/Hybrid			

### **Committee Meeting Reports**

#### Safety Committee:

➤ The committee met on October 16; discussion included the status of safety programs review; the installation of fall protection at the North Point sewer lift station wet well, and asbestos cement pipe handling recertification scheduled for November 13.

#### **Investment Committee:**

A committee meeting has not been held since the last board meeting.

### **Upcoming Board Meeting Topics**

- Annual general manager performance evaluation (ongoing)
- > Division 7 reservoir replacement project public works contract closeout
- Flat Car sewer lift station reverse flow project public works contract closeout
- 2026 Washington State legislative session agenda
- > City of Bellingham Scenic Avenue water intertie temporary use interlocal agreement
- Glen Cove Water Association consolidation analysis
- > 2026 Wilson Engineering rates approval
- 2026 non-union staff cost-of-living-adjustment approval
- Commissioner Position No. 3 oath of office

#### 2025 Initiatives Status

### **Administration and Operations**

### Water Right Adjudication

Represent the District in the water right adjudication process to ensure that its certificated and permitted rights are protected.

The District received the adjudication documents from Ecology via certified mail on March 19, 2025 and met with District legal counsel on July 16. District staff are now finalizing claim forms specific to each water right for submittal to Whatcom County Superior Court.

### Safety Program Update

Continue systematic review and revision of District's safety programs by updating nine programs in 2025.

Staff finalized updates to seven (7) programs (asbestos-cement pipe handling, trenching/shoring, lock-out/tag-out, lifting/rigging, ladder safety, respiratory protection, and safety audits) and are reviewing the confined space, fall protection, and hearing conservation programs.

#### **APWA Accreditation**

Initiate work towards multi-year effort to gain American Public Works Association accreditation.

The accreditation team is reviewing/completing the 273 accreditation practices applicable to the District (91 practices have been completed to-date).

### Financial Management

Improve financial sustainability and forecasting over 6- and 20-year planning horizons through the Waterworth financial modeling platform.

Financial benchmarks were adopted by the board during the August 13 meeting. Benchmark attainment will be assessed annually.

### Management Team Development

Continue professional development of the management team.

The general manager has approved management team member attendance of several trainings and conferences in 2025 pertinent to each's role with the District. The general manager also periodically meets with each manager to assess progress of their annual performance map.

### **Emergency Response/System Security**

### **Emergency Readiness**

Continue use of Whatcom County Department of Emergency Management services to hold tabletop and/or field emergency response exercises.

District and Whatcom County Emergency Management Division staff are planning a District-specific emergency response exercise to be held on November 19.

### **Community/Public Relations**

#### General

- Website
  - The District's web content is reviewed and updated on a regular basis.
- Social Media
  - Posts are made to District Facebook, LinkedIn, and Nextdoor pages regularly; Nextdoor is also regularly monitored for District-related posts.
- Press Releases
  - Press releases were issued on March 6 (Division 22-1 reservoir project FEMA hazard mitigation grant award), May 22 (clean 2024 audit), June 30 (Division 7 reservoirs commissioning), and July 8 (Camp Firwood lift station release), and October 1 (DOH TOP 20-year award).
- ➤ J Clary and J Dahlstrom are scheduled to provide public tours of the Sudden Valley Water Treatment Plant on October 28.

### **Intergovernmental Relations**

- > J Clary and J Signs attended the WASWD Section III meeting on October 14.
- > J Clary and J Dahlstrom met with Whatcom County Planning and Development Services staff on October 15 regarding sewer connection coordination for new construction.
- ➤ J Clary attended a Whatcom Water Alliance coordination meeting on October 16.
- ➤ J Clary chaired the Whatcom Water Alliance meeting on October 21.
- > J Clary attended the Water and Sewer Risk Management Pool semi-annual meeting on October 23.
- > J Clary, G Nicoll, and J Dahlstrom are scheduled to meet with Whatcom County Public Works staff on October 28 to coordinate planned capital projects.

#### **Lake Whatcom Water Quality**

#### Lake Whatcom Management Program

Participate in meetings of Lake Whatcom Management Program partners.
J Clary attended the interjurisdiction coordinating team meeting on October 16 and the TMDL status meeting on October 22.

Executive Department Goals	2025 YTD	2026	2027	2028	2029	2030
Facilitate achievement of annually established Board inititatives						
Workload Indicators	20		1	<u> </u>	1	<u> </u>
- Meetings with management team to attain Board initiatives	36			-		
- Reporting on the status of completion of Board initiatives	18					
- Annual number of Board initiatives	8					
- Annual number of Board meetings/work sessions held	18					
Performance Measures	1				1	
- Completion of initiatives within Board/staff agreed timelines	initiatied					
2. Biennial EUM self-assessment and update to strategic plan						
Workload Indicators			•			•
- Draft departmental strategic plans by June 30 of even-numbered years						
- Financial forecast updated biennially (even-numbered years)						
- Balanced budget presented to the Board biennially						
Performance Measures						
- Complete strategic plan and financial forecast by Sep 1 (even-numbered years)						
3. Maintain intergovernmental relations program						
Workload Indicators						
- Participation in LWMP data group, ICT, policy group, and joint councils meetings	yes					
- Participation in WWA, WUCC, COG, and Whatcom Water Districts meetings	yes					
- Participation in WASWD and WSRMP meetings	yes					
- Meet with City, County, SVCA, and SWFA staff	no					
- Attendance of WASWD and IACC conferences	no					
- Presentation at SVCA board meetings	no					
Performance Measures	•		•	•	•	
- Annual budgetary allocation supporting organization memberships	complete					
- Number of LWMP meetings attended	36					
- Number of WWA, WUCC, COG, and Whatcom Water Districts meetings attended	21					
- Number of meetings with City, County, SVCA, and SWFA staff	7					
- Number of conferences attended	2					

Execu	itive Department Goals	2025 YTD	2026	2027	2028	2029	2030
1	- Number of presentations to SVCA board	0					
4.	Enhance public relations program						
	Workload Indicators						
	- Update of District website	no					
	- Issuance of press releases and Facebook posts on a regular basis	yes					
	- Active participation in community events	no					
	Performance Measures						
	- Completion of website udpate by December 31, 2025 (postponed to rebranding)						
	- Completion of District rebranding by December 31, 2028						
	- Number of Facebook followers	220					
	- Number of press releases issued	3					
	- Number of Facebook posts	29					
	- Number of community events participated in	0					
5.	Maintain safety program						
	Workload Indicators						
	- Staff review of District safety programs	initiatied					
	- Staff completion of online safety trainings	initiatied					
	- Staff attendance of required certification courses	initiatied					
	Performance Measures						
	- Annual review of a minimum of 9 safety programs	3					
	- Monthly meeting of the safety committee	9					
	- Annual number of safety inspections by management	5					
	- Annual number of lost time injuries and near misses	0					
6.	Water rights adjudication participation						
	Workload Indicators						
	- Attendance of adjudication-related presentations/meetings	yes					
	Performance Measures						
	- Claims filed for each District water right	0					
	- Documentation supporting claims filed with court						

xecutive Department Goals	2025 YTD	2026	2027	2028	2029	2030
7. American Public Works Association accreditation						
Workload Indicators						
- Accreditation team status meetings	yes					
- Consistent completion of accreditation-required metrics (Practice sub-goals)	yes					
Performance Measures						
- Number of Accreditation Team meetings held annually	1					
- Number of Practice sub-goals completed annually	91					
- Formal registration in 2026						
- APWA accreditation in 2029						

nce Department Goals	2025 YTD	2026	2027	2028	2029	2030
. Improve performance standards and enhance professional growth						
Workload Indicators						
- Regular review of job descripions and cross-train as duties allow	complete			1		
- Identify applicable trainings and encourage accounting principles understanding	ongoing					<del>                                     </del>
- Issue weekly updates to staff	ongoing					
- Increase training centered on accounting standards and best practices	origonia		ong	oing		
- Develop a comprehensive financial procedure manual	ongoing		0.19	l		
Performance Measures	0 0			l		
- Number of trainings and webinars attended	16					Ī
- Implement employee cross-training and development tracking system	underway					
- Number of weekly updates from the Finance Manager	32					
- Number of staff meetings and engagement activities	24					
- Implement comprehensive financial procedures manual	ongoing					
Improve financial sustainability and forecasting						
Workload Indicators						,
- Development and routine evaluation of long-term forecasting model	ongoing					
- Provide instructions/schedule for budget preparation						
- Routine evaluation of biennial budget	ongoing					
- Routine evaluation of financial policies	ongoing					
- Routine evaluation of investments	ongoing					
Performance Measures						
- Alignment of overhead/personnel costs with rate revenue	ongoing					
- Regular use and update to the forecasting model	ongoing					
- Number of management team meetings to review cost alignment with budget	ongoing					
- Financial policies are maintained to align with industry best practices/standards	yes					
- Investment revenue increases while maintaining safety and liquidity requirements	yes					
- Financials and financial policies comply with State Auditor's Office	yes	_	_			

nce Department Goals	2025 YTD	2026	2027	2028	2029	2030
. Maximize and utilize technology to improve workflow						
Workload Indicators						
- Meet with banking representatives to improve daily deposit process	no					
- Utilize records retention software to maintain payroll and benefites lifetime records	ongoing					
- Convert accounts payable process to paperless	no					
- Research implementation of Springbrook Cloud	no					
- Increase staff and management trainings on new technology and processes	ongoing					
Performance Measures						
- Implementation of remote deposit capture or electronic processing of checks	no					
- Implementation of document management software for payroll and benefits records	underway					
- Implementation of paperless accounts payable process	no					
- Utilization of internal server drive for accounts payable records	no					
- Number of meetings with Springbrook representatives re: Springbrook Cloud	0					
- Number of trainings on recent technology and processes	4					

Engi	neering Department Goals	2025 YTD 2026	2027	2028	2029	2030
1.	Identify, design and construct capital improvement projects					
	Workload Indicators			_		
	- Number of capital projects completed during the current biennium	13				
	- Hours of on-site inspection provided by District staff	1011				
	- Hours of design and construction admin provided by consulting engineers	390				
	Performance Measures					
	- Biennial update to the 6- and 20-year capital improvement plans	underway				
	- Board adoption of biennieal capital reinvestment budget	complete				
	- Completion of planned capital projects on schedule and within budget	underway				
2	Further develop the asset management system to ensure timely maintenance	and plan for asset reinvestn	nent			
	Workload Indicators					
	- Number of asset decay curves	1				
	- Number of Overall Condition Index scores added or updated	523				
	- Number of asset replacement plans developed for linear assets	1				
	- Number of Asset Committee meetings held	3				
	Performance Measures	,	•	•		•
	- Life extension of assets beyond the typical expected useful life	underway				
	- Development of written strategic asset management plan	complete				
	- Creation of an asset management committee	complete				
3.	Strategically optimize the use and further development of the District's GIS to	support operations	1	1		
	Workload Indicators					
	- Completion of GIS management and development plan	underway				
	- Number of assets field located by GPS and updated in GIS	426				
	Performance Measures	I	<u> </u>			
	- Completion of internal GIS utilization and improvement plan	planning				
	- Hire temporary GIS/engineering intern to assist with field inspection/GPS	ongoing				
	- Complete updated GIS database with sufficient accuracy for use by staff	ongoing				

eering Department Goals	2025 YTD	2026	2027	2028	2029	2030
Support the development of the document management program to ensure mainte	enance and acce	ess to Eng	ineering doc	cuments		
Workload Indicators						
- Number of records inventoried	268					
- Number of records filed	268					
Performance Measures						
- Complete inventory and prioritization of all needed engineering records	ongoing					
- Revise administrative staff job descriptions	draft					
- Inventory/filing of 25% of records (2025), 50% (2026), 75% (2027), 100% (2028)	25%					

tions Department Goals	2025 YTD	2026	2027	2028	2029	203
Ensure continuity of potable water production that meets or exceeds regulatory requir	oments					
Workload Indicators	CIIICIIIS					
- Number of routine water system reports submitted to agencies	54					
- Number of routine water treatment plant samples collected/analyzed	1,749					
- Number of water distribution system samples collected/analyzed	1,089					
- Number of hours performing equipment calibration and maintenance	660					
- Number of hours inventorying and preparing treatment chemicals	84					
Performance Measures						<u> </u>
- Meet all Department of Health water quality requirements without violation	yes					
- Labor hours used to perform preventitive maintenance tasks at treatment plants	176.5					
- Percentage of samples analyzed by laboratory that are satisfactory	100					
- Number of annual water quality customer complaints received	0					
- Number of tasks related to preventative maintenance completed at plants	28					
- Number of tasks unrelated to preventative maintenance completed at plants	5					
Enhance system resiliency through proactive maintenance of electrical systems, instru	umentation, o	controls, a	nd commu	nications		
Workload Indicators						
- Scheduled inspections of electrical cabinets, components and assoc. equipment	40					
- Repair of electrical cabinents, components and assoc. equipment by staff	14					
- SCADA hardware/software installation and maintenance using contract services	9					
- On-call services provided by external contractors	2					
Performance Measures	-					
- Number of inspections per year	40					
- Number of repairs per year	14					
- Total cost of SCADA services, including District labor and resources	\$25,945					
- Total cost of electrical, instrumentation, and controls services, including District labor and						
resources	\$25,166					
- Total communications network downtime (in hours) due to external failures	43					
- Total communications network downtime (in hours) due to internal failures	7					

tions Department Goals	2025 YTD	2026	2027	2028	2029	203
Ensure collection and conveyance of sewage out of the watershed through routin	e inspection and	preventiti	ve mainten	ance		
Workload Indicators						
- Monthly inspections of sewer lift stations	236					
- Total number of preventative maintenance tasks scheduled	7662					
- Total number of preventative maintenance tasks completed	638					
- Total number of repairs associated with sewer assets	26					
- Labor hours expended televising/inspecting sewer mains	88					
Performance Measures				_		
- Number of sewer system overflows per year	3					
- Labor hours spent performing preventative maintenance tasks for sewer assets	983					
- Total cost of repairs associated with sewer assets	\$48,991					
- Miles of sewer main televised/inspected per year	0.59					
- Annual volume of I&I conveyed to the City of Bellingham	TBD					
- Annual cost of I&I treatment (by City of Bellingham)	TBD					
Ensure the realization of the maximum operable life of District water infrastructure	e					
Workload Indicators						
- Total number of preventative maintenance tasks scheduled	766					
- Total number of preventative maintenance tasks completed	612					
- Total number of PRVs rated as needs replacement	2					
Performance Measures						
- Labor hours performing preventative maintenance tasks on water infrastructure	801					
- Total cost of replacing PRVs needing replacement	\$2,252					
- Number of customer complaints regarding water pressure per year	6					
- Number of water leaks repaired	18					

rations Department Goals	2025 YTD	2026	2027	2028	2029	2030
. Maintain level-of-service expectations relative to development services						
Workload Indicators						
- Water/sewer connection inquiries processed	49					
- Water/sewer connection permits issued	19					
- New water service installations	4					
Performance Measures	-					
- Pre-construction meetings attended (annual)	15					
- Water/sewer permits issued (annual)	19					
- Inspector labor hours for new development inspections (annual)	29					
- Maintenance staff labor hours for new development installations (annual)	105					



# **Engineering Department Report**

DATE SUBMITTED:	October 23, 2025	MEETING DATE	E: October 29	), 2025				
TO: BOARD OF COMP	MISSIONERS	FROM: Greg Nicoll, Engineering						
TO. BOAILD OF COMIS	IIOOIOIVEINO	Manager/Distr	ict Engineer					
GENERAL MANAGER	APPROVAL	OVAL Sotolog						
		1. Summary of Capital Improvement Projects						
ATTACHED DOCUME	NIS							
		RESOLUTION	FORMAL ACTION/	INFORMATIONAL				
TYPE OF ACTION REQ	UESTED	_	MOTION	/OTHER				

### **BACKGROUND / EXPLANATION OF IMPACT**

Updated information regarding District projects and current priorities in advance of the Board meeting.

### **FISCAL IMPACT**

None.

### RECOMMENDED BOARD ACTION

None required.

### **PROPOSED MOTION**

None.

### SUMMARY OF CAPITAL IMPROVEMENT PROJECTS

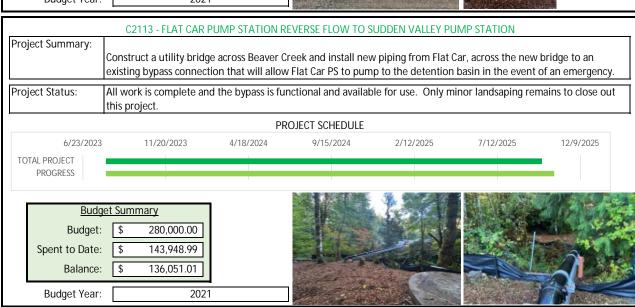
Updated: 10/22/2025 Prepared by: G. Nicoll





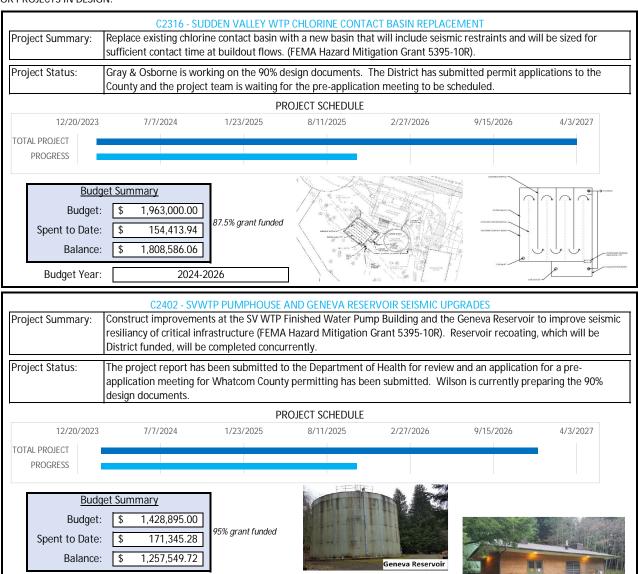
#### MAJOR PROJECTS IN CONSTRUCTION:



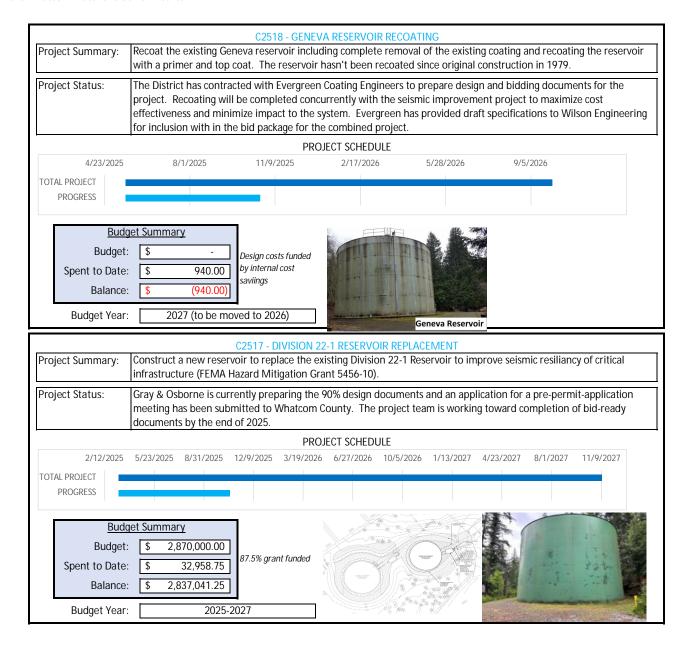


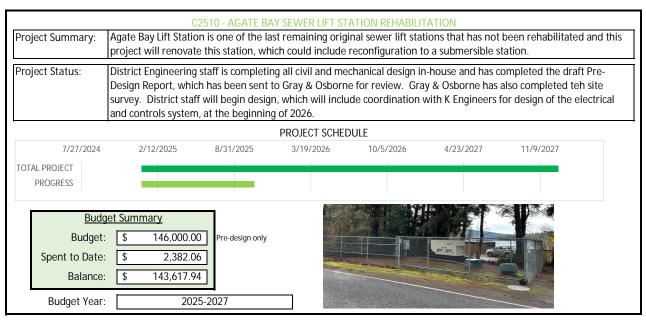
Budget Year:

#### MAJOR PROJECTS IN DESIGN:



2024-2026





#### PROJECTS COMPLETED IN PAST 12 MONTHS

Project #	Project Name	Budget	Spent	Balance
C 2506	Physical Security Improvements	\$ 37,000.00	\$ 34,703.53	\$ 2,296.47
C 2516	Sudden Valley WTP Pump House Skylight Replacement	O&M	\$ 17,408.00	N/A
C 2511	Lake Whatcom Boulevard Interceptor Cured In Place Pipe	\$ 195,000.00	\$ 192,271.36	\$ 2,728.64
C 2505	Scenic Intertie Rehabilitation	\$ 78,000.00	\$ 64,030.29	\$ 13,969.71
C 2509	Eagleridge Booster Station Building Roof	\$ 21,000.00	\$ 15,669.84	\$ 5,330.16
C 2513	Administration Building HVAC Improvements	O&M	\$ 20,282.37	N/A
C 2112	Rocky Ridge and Lakewood Lift Stations Rehabilitation	\$ 2,116,353.00	\$ 1,791,512.87	\$ 324,840.13
C 2303	SVWTP Alum System Replacement	\$ 88,000.00	\$ 74,405.95	\$ 13,594.05
C 2304	Eagleridge Diesel Fuel Tank Replacement	\$ 25,000.00	\$ 12,222.48	\$ 12,777.52
M 2410	Midnight Court Sewer Repair	O&M	\$ 41,001.00	N/A
A 2210	Reservoir and WTP Site Security Assessment	\$ 50,000.00	\$ 50,000.00	\$ -
C 1802	Delesta, Edgewater and Euclid Lift Stations	\$ 1,816,583.06	\$ 1,762,153.54	\$ 54,429.52

Whatcom July	ENDA Fi BILL m 8.C	nance Dep Repor					
DATE SUBMITTED:	October 16, 2025	MEETING DATE	: October 29	, 2025			
TO: BOARD OF COM	MISSIONERS	FROM: Jennifer Signs, Finance Manager					
GENERAL MANAGER	APPROVAL	Sixtellay					
ATTACHED DOCUME	NTS	<ol> <li>Third Quarter Financial Report</li> <li>September Utility Account Adjustments</li> </ol>					
TYPE OF ACTION REQUESTED		RESOLUTION	FORMAL ACTION/ MOTION	INFORMATIONAL /OTHER			

### **BACKGROUND / EXPLANATION OF IMPACT**

Updated information regarding District finances in advance of the Board meeting.

### **FISCAL IMPACT**

None

### **APPLICABLE EFFECTIVE UTILITY MANAGEMENT ATTRIBUTE(S)**

Financial Viability

### **RECOMMENDED BOARD ACTION**

None required.

### **PROPOSED MOTION**

None



### Quarterly Financial Report Third Quarter 2025

Lake Whatcom Water and Sewer District Bellingham, Washington

### Summary

During the third quarter of 2025, Lake Whatcom Water and Sewer District (District) sustained its strong financial position through its continued commitment to conservative financial management. Notable third quarter financial activities included the receipt of approximately \$214,500 from the District's third draw on its Public Works Assistance Account loan for the Division 7 Reservoir Replacement Project. In addition, both the water and sewer funds experienced significant increases in General Facilities Charges during September, bringing the total permits sold year-to-date to 17. This exceeded the budgeted projection of 10 permits, resulting in higher than anticipated revenues in both funds in this category. Revenues in the Water Utility Fund are currently below budget due to grant reimbursements that have not yet been received or requested. The District has three active Hazard Mitigation Grants with FEMA supporting the replacement of the Division 22-1 Reservoir, replacement of the chlorine contact basin at the Sudden Valley Water Treatment Plant, and seismic upgrades for water system assets. Collectively, these grants total approximately \$4.8 million for predesign, design, and construction activities in the current biennium. The District successfully closed out the Hazard Mitigation Grant for the Division 7 Reservoir during the third quarter, following substantial completion of that project.

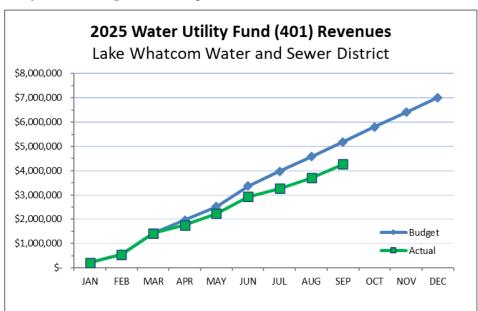
The District's investment portfolio earned approximately \$92,000 in interest during the third quarter of 2025, reflecting a slight decrease from the prior quarter (\$99,000). This decline was primarily due to smaller Treasury Note maturities during the period. With further interest rate cuts anticipated in the fourth quarter, the District continues to closely monitor the actions of the Federal Open Market Committee (FOMC). To strengthen its long-term position, the District added two additional U.S. Treasury Notes to its investment portfolio during the third quarter with more shifts from short-term investing to long-term investing anticipated in the fourth quarter to maximize returns.

Overall, the District remains in a strong financial position as it enters the fourth quarter of 2025. Conservative fiscal management, steady investment performance, and continued progress on capital projects reflect the District's commitment to long-term financial sustainability. While the timing of FEMA grant reimbursements and capital project completion will shift certain revenues and expenditures into fiscal year 2026, these adjustments are consistent with the District's multiyear planning approach. The District will continue to monitor economic and market conditions closely, particularly with respect to interest rate changes and inflation to ensure the prudent management of both operating and capital resources.

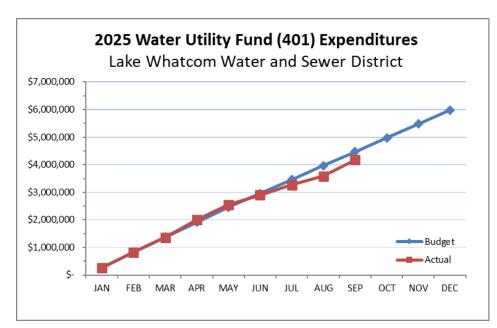
### Water Utility Fund (Fund 401)

Revenues in the Water Utility Fund through the third quarter totaled \$4,270,590, which is below the

budgeted projections of \$5,191,792. Tthis is primarily due to budgeted grant funding not yet received. Service revenue also slightly lagged by 4% of budgeted projections but is anticipated to align closer to budget in the fourth quarter as the final summer usage is billed in the first part of the fourth



quarter. With the closure of the land disturbance window in the Lake Whatcom Watershed (June 1 – September 30), the District recognized a significant increase in General Facilities Charges (GFC) revenue in the last month of the quarter resulting in GFC revenue outpacing projections (\$177,156 actual vs. \$105,485 budgeted).

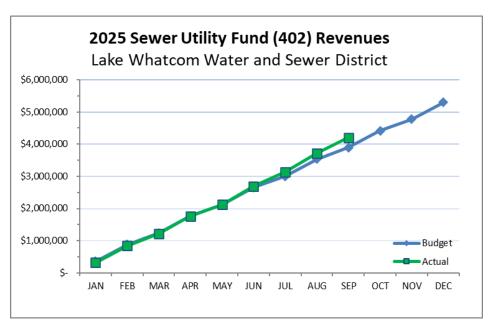


As of the third quarter, expenditures total were approximately \$4.18 million, closely with aligning the budgeted \$4.47 million. This reflects continued progress on capital projects, timely debt service payments, and lower than expected operating The expenses. District's ongoing commitment to fiscal

discipline has maintained spending within budget parameters and expenditures are anticipated to remain on track through the remainder of the fiscal year.

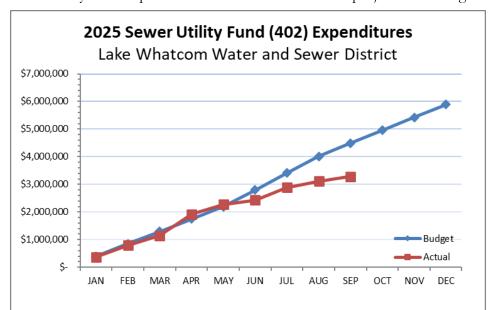
### Sewer Utility Fund (Fund 402)

Revenues in the Sewer Utility Fund slightly outpaced projections due to the signficant increase in **GFC** Revenue in the third (3,890,500 quarter budgeted \$4,209,210 actual). As service revenue in this fund is fixed, significant variances are not expected and remained on track with budgeted projections through



the third quarter. Consistent with the Water Utility Fund, interest earnings in the Sewer Utility Fund decreased during the third quarter, as investment performance trends similarly across both funds

Sewer Utility Fund expenditures continued to fall below projections through the third quarter, totaling



\$3,284,342 compared budgeted the This \$4,487,135. variance is primarily due to the timing of projects capital included in the District's capital improvement plan that have not yet been completed (\$1,037,901 actual vs. \$1,857,000 budgeted) and debt service payments scheduled

for the final quarter of the year. Operating expenditures also trailed projections by roughly 10 percent. However, as the year concludes, expenditures are expected to align more closely with budgeted levels as one-time and capital costs are incurred.

#### District Fund Balances

The District manages its monies within five funds: Water Utility Fund (401), Sewer Utility Fund (402), Sewer Contingency Reserve Fund (425), Water Contingency Reserve Fund (426), and Bond Reserve Fund (460). Within the Water Utility and Sewer Utility funds are system reinvestment funds (i.e., funds dedicated to capital projects) and debt service funds associated with the respective utility. The following discussion summarizes the activity associated with each fund through the third quarter of 2025.

### Water Utility Fund (Fund 401)

The Water Utility Fund, which serves as the primary operating fund for the District's water utility, derives most of its revenue from rates charged to water customers. Fund expenditures are comprised of general operating expenses (personnel salary and benefits, professional services, utilities, etc.), payments relative to debt service on past capital improvement projects, and expenditures on water system reinvestment-defined equipment and projects. Also managed within the Water Utility Fund are monies allocated towards an operating reserve, which is equal to the cost of operating the water utility for 90 days (\$735,519). The fund entered 2025 with a balance of \$2,167,817 and has a balance of \$2,259,907 at the end of the third quarter.

### Sewer Utility Fund (Fund 402)

Like the Water Utility Fund, the Sewer Utility Fund serves as the primary operating fund for the District's sewer utility. Revenues are comprised primarily of rates charged to sewer customers, and expenditures consist of general operating expenses (personnel salary and benefits, professional services, utilities, etc.), payments relative to debt service on past capital improvement projects, and expenditures on sewer system reinvestment-defined equipment and projects. Also managed within the fund are monies allocated towards an operating reserve, which is equal to the cost of operating the sewer utility for 60 days (\$562,836). The fund entered 2025 with a balance of \$4,835,293 and has a balance of \$5,760,163 at the end of the third quarter.

#### Sewer Contingency Reserve (Fund 425)

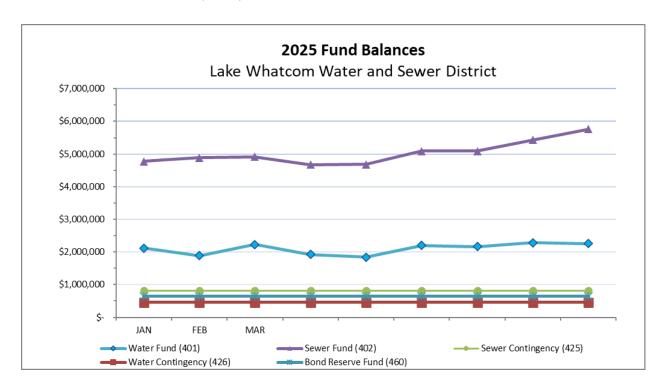
A sewer contingency reserve is maintained in accordance with District financial policies at one percent of the sewer utility infrastructure replacement cost (\$815,000). This fund provides for paying for unanticipated costs that may be incurred by the Sewer Utility. The Sewer Contingency Reserve was fully funded through the end of the third quarter.

### Water Contingency Reserve (Fund 426)

A water contingency reserve is maintained in accordance with District financial policies at one percent of the water utility infrastructure replacement cost (\$460,000). This fund provides for paying for unanticipated costs that may be incurred by the Water Utility. The Water Contingency Reserve was fully funded through the end of the third quarter.

### Bond Reserve Fund (Fund 460)

The District's Bond Reserve Fund is a restricted fund associated with covenants of the 2016 bond sale. It was fully funded at \$646,125 through the third quarter of 2025. As the District moves closer to paying this debt in full, the balance within this fund will be reduced in the coming years to maintain the Maximum Amount Due (MAD).



### District Cash and Investments

In accordance with its financial policies, the District invests its funds in a manner that provides the highest return with maximum security while meeting daily cash flow demands. The following is a summary of the District's cash and investments through September 30, 2025.

### LAKE WHATCOM WATER AND SEWER

### INVESTMENTS/CASH AS OF 09/30/2025

Local Gov't Investment Pool	\$ 4,451,969
WA Federal	\$ 1,896,839
Public Funds Account	\$ 31,640
Debt Service Account	\$ 646,125
Cash	\$ 1,217,474
Petty Cash	\$ 1,600

		PRINCIPAL		1	MARKET	MATURITY	
			COST	,	VALUE	DATE	YIELD
US Treasury Note	Non-callable	\$	747,615	\$	810,000	Dec-25	4.440%
US Treasury Note	Non-callable	\$	797,274	\$	855,000	Jan-26	3.950%
US Treasury Note	Non-callable	\$	467,667	\$	500,000	Jun-26	4.500%
US Treasury Note	Non-callable	\$	499,508	\$	510,000	Oct-26	3.707%
US Treasury Note	Non-callable	\$	497,683	\$	515,000	Feb-27	3.470%
US Treasury Note	Non-callable	\$	534,034	\$	515,000	Jun-27	3.724%
US Bank Short-Term Money Market	<b>Holding Account</b>	\$	48,605				4.110%
US Bank Trust		\$	3,592,386	\$ 3	,705,000		

TOTAL	\$ 9,941,195

#### **USE OF FUNDS:**

Bond Reserve - Restricted	\$ 646,125
Contingency - Assigned	\$ 1,298,355
Operating Reserves	\$ 1,185,000
Operating Assigned	\$ 6,811,715

\$ 9,941,195

### Fund Balance Summary

Water Utility Fund (401)	\$ 2,259,907
Sewer Utility Fund (402)	\$ 5,760,163
Sewer Contingency Fund (425)	\$ 815,000
Water Contingency Fund (426)	\$ 460,000
Bond Reserve Fund (460)	\$ 646,125

\$ 9,941,195



## LAKE WHATCOM WATER AND SEWER DISTRICT September 2025 Utility Account Adjustments

**Sudden Valley Adjustments** 

Late Fee Credits \$ 1,041.37 High Use/Leak Credits \$ 130.79

North Shore/Geneva

Late Fee Credits \$ 265.69 High Use/Leak Credits \$ -

Total Account Adjustments \$ 1,437.85

AGENDA Operations Department BILL Report Item 8.D							
DATE SUBMITTED:	October 23, 2025	MEETING DATE	Cotober 29	), 2025			
TO: BOARD OF COMN	IISSIONERS	FROM: Jason Dahlstrom, Operations & Maintenance Manager					
GENERAL MANAGER	APPROVAL	Sotolder					
ATTACHED DOCUME	NITC	Operations Department Report					
ATTACHED DOCUME	NIS	2. Status of District Water & Sewer Systems					
TYPE OF ACTION REQ	UESTED	RESOLUTION FORMAL ACTION/ INFORM MOTION /OT					

### **BACKGROUND / EXPLANATION OF IMPACT**

Updated information regarding District operations in advance of the Board meeting.

### **FISCAL IMPACT**

None.

### **RECOMMENDED BOARD ACTION**

None required.

### **PROPOSED MOTION**

None.



## Lake Whatcom Water & Sewer District Operations & Maintenance Department Report

Prepared for the October 29, 2025 Board Meeting Data Compiled 10/22/25

State Required Report Status													
	Monthly Reports												
Name Of Report		Completed											
Chlorination Report Agate Heights Prepared by: K Cook	Postmarked by the 10th of month							Nov	Dec				
Surface Water Treatment Rule Report (SVWTP) Prepared by: K Cook	Postmarked by the 10th of month	Jan Feb Mar Apr May June July Aug Aug							Nov	Dec			
	Annual Reports	!								l			
Name Of Report Deadline						Co	mp	let	ed				
WA State Cross Connection Report Prepared by: R Munson	May	April 22, 2025											
OSHA 300 Log Prepared by: R Munson	February 1	January 30, 2025											
Water Use Efficiency Performance Report Prepared by: K Cook	July 1	January 22, 2025											
Community Right to Know (Hazardous Materials) Prepared by: R Munson	March 31	January 9, 2025											
Northwest Clean Air Emissions Report	February 1	March 3, 2025											
Consumer Confidence Reports Prepared by: K Cook	June 30	Geneva SV EagleR Agat 6/17/25 6/17/25 6/17/25 6/17											
	Other Reports												
Name Of Report	Deadline	Last Completed											
CPR/First Aid Training Coordinated by: R Munson	Due Biennially Next Due 2027	February 27, 2025											
Flagging Card Training Coordinated by: R Munson	Due Triennially Next Due 2025	All complete as of 10/22/25											

Safety Program Summary					
Completed by Rich Munson					
	Sun	nmary of Annual Safety Training			
2024/25 Testing Period - Dec 2024 to April 4, 2025					
% Complete					
Engineering - Managers		100%			
Engineering - Staff		100%			
Field Crew - Managers		100%			
Field Crew - Staff		100%			
Office - Managers		100%			
Office - Staff		100%			
Overall		100%			

Safety meetings for the field crew tal	ke place every Thursday a	t 8 a.m.								
Dates of	f Completed Safety Com	nmittee Mo	etings							
1.23.25	5.22.25		9.25.25							
2.20.25	6.26.25			10.	.16.25					
3.20.25	7.24.25									
4.24.25	8.21.25									
Summa	ıries & Illn	esses								
		Current Month	2025	2024	2023	2022	2021			
Total Number of Work Related Injurie	es									
Defined as a work related injury or illness that results in:  Death										
Medical treatment beyond first ai										
Poss of consciousness		0	0	0	0	0	0			
Bignificant injury or illness diagno	sed by a licensed									
health care professional										
Days away from work (off work)										
Restricted work or job transfer										
Total Number of Days of Job Transfe	r or Restriction									
(light duty or other medical restrictio	n)	0	0	0	0	0	0			
Total Number of Days Away from Wo	rk									
(at home, in hospital, not at work)		0	0	0	0	0	0			
Near Misses	0	0	0	0	0	0				
	Safety Coordinator U	pdate								

# Status of District Water and Sewer Systems Prepared by Jason Dahlstrom - Operations and Maintenance Manager 9/24/2025 Board Meeting

### **Safety Activities**

- 1. No time-loss injuries or near misses.
- 2. Daily safety reminders directly relevant to the day's tasks. Weekly safety trainings based on District specific safety programs.
- 3. Jobsite tailgate meetings by project lead.

### Water Utility Activities

#### Water Treatment Plants

- 1. Sudden Valley
  - a. Plant is operating well, averaging 0.6 million gallons per day (MGD) at 700 GPM.
  - b. Water use is consistent with typical seasonal usage.
- 2. Agate Heights
  - a. Plant is operating well.
  - b. Water use is consistent with typical seasonal usage.

### Distribution System

- 1. 3 water leaks repaired this month
- 2. Annual pressure reducing valve maintenance ongoing

## Sewer Utility Activities

### **Lift Stations**

1. Annual wetwell inspections ongoing

### Collection System

1. Sewer camera inspections ongoing, emphasis on defect inspections

### Fleet

### Vehicles

1. Multiple service trucks repaired this month

### Equipment

1. Flat Car generator fuel injector repair complete, North Point repair ongoing

#### **Facilities**

1. Nothing new to report

#### Training

1. J Dahlstrom upcoming financial training for BARS and procurement

### Development

1. There are 11 permits currently in stages of development