FOUR PEAKS ENVIRONMENTAL
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STATE OF WASHINGTON INTERAGENCY ZEBRA AND QUAGGA MUSSEL RAPID RESPONSE PLAN

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Acknowledgements

Acknowledging the Indigenous People of the Pacific Northwest

Since time immemorial, Indigenous People have lived in the Pacific Northwest and hunted, fished, and gathered natural resources, traditional foods, and medicinal plants to support their diverse cultures. They were the original occupants and stewards of this land that all Washingtonians enjoy today.

The very survival of the Pacific Northwest Tribes is a testament of resiliency of what they have endured and continue to endure throughout generations on this landscape. Through many historical encounters of massacre, renunciation of religious freedom, systemic racism, cultural assimilation of native children through institutional residential schools, and the fight for their inherent rights and liberties, they have prevailed. Throughout this painful history brought by colonization, abrogated treaties, infringement of civil rights, and the salmon protests of the 1960s, the Northwest Tribes and the Washington Department of Fish and Wildlife (WDFW) have founded a commitment of respect, unity, and alliance informed by the realities of the past.

Today, tribal governments and WDFW work collaboratively to conserve and manage aquatic and terrestrial resources statewide and practice sound science to guide management decisions. The Tribes and WDFW work together to ensure the sustainability of fish, wildlife, ecosystems, and culture for the next seven generations and beyond.

Acknowledging the Pioneering Efforts of the Confederated Tribes of the Colville Reservation

The development of the State of Washington Interagency Zebra and Quagga Mussel Rapid Response Plan greatly benefitted from the pioneering efforts of the Confederated Tribes of the Colville Reservation. The Confederated Tribes of the Colville Reservation spearheaded the development of the Northern Pike Rapid Response Plan for the Columbia River between Priest Rapids and Chief Joseph Dams and the Okanogan River (Four Peaks 2023), and much of the structure from their plan has been directly replicated with permission in this plan. The Washington Department of Fish and Wildlife is grateful for their forethought, contributions, and willingness to share content.

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Abbreviations

Abbreviation	Definition
AIS	Aquatic Invasive Species
CD^3	Clean, Drain, Dry, Dispose
CRB	Columbia River Basin
CRBDirt	Columbia River Basin Dreissenid Incident Response Toolkit
CRBT	Columbia River Basin Team
CRITFC	Columbia River Inter-Tribal Fish Commission
Ecology	Washington Department of Ecology
eDNA	environmental deoxyribonucleic acid
EMI	Emergency Management Institute
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIFRA	Federal Insecticide Fungicide Rodenticide Act
GPS	global positioning system
IAP	Incident Action Plan
ICS	Incident Command System
MAC Group	Multi-Agency Coordination Group
NPDES	National Pollutant Discharge Elimination System
NWIFC	Northwest Indian Fisheries Commission
PCR	polymerase chain reaction
Plan	Washington State Interagency Zebra and Quagga Mussel Rapid Response Plan
RCW	Revised Code of Washington
SitRep	Situation Report
UCUT	Upper Columbia United Tribes
USFWS	U.S. Fish and Wildlife Service
WDFW	Washington Department of Fish and Wildlife
WDNR	Washington Department of Natural Resources
WISC	Washington Invasive Species Council
WSDA	Washington State Department of Agriculture

1 Introduction

Zebra *Dreissena polymorpha* and quagga *Dreissena rostriformis bugensis* mussels are freshwater mollusks native to Ukraine and Russia that have a long history of invasion and successful establishment outside their native habitat. Once they are established, they can cause catastrophic ecosystem impacts, outcompeting native mussels and other filter feeding invertebrates, removing habitat for invertebrates, 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.

Zebra and quagga mussels were first discovered in the United States in the Great Lakes region in the 1980s, 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, California, and Montana), with the most recent detection in the Snake River in Idaho. While a comprehensive eradication effort is underway in the Snake River, the presence of dreissenid mussels in the Columbia River Basin (CRB) has alarmed the region and led to the requirement to revise the *Washington State Interagency Zebra and Quagga Mussel Rapid Response Plan* (Plan).

1.1 The Columbia River Basin Interagency Invasive Species Response Plan

This Plan was informed by the CRB Dreissenid Incident Response Toolkit (CRBDirt) available online at https://www.crbdirt.com/. This toolkit superseded the CRB Interagency Invasive Species Response Plan (CRBT 2018) which was developed by the Columbia River Basin Team (CRBT) to provide a guidance document to assist and guide those that were faced with the discovery of zebra or quagga mussels. The CRBT was established as part of the 100th Meridian Initiative and includes state, federal, tribal, and university aquatic invasive species (AIS) managers and researchers that address special needs of the CRB. Other regional rapid response references compiled at https://www.westernais.org/rapid-response were also reviewed during Plan development to ensure congruity among plans.

1.2 Plan Purpose

The purpose of this Plan is to provide a coordination document and technical resource to enhance the efficiency and effectiveness of zebra and quagga mussel prevention efforts, detection, early response, and extended response activities. These efforts are necessary to protect environmental, economic, recreational, and cultural resources from the deleterious effects of zebra and quagga mussel establishment.

1.2.1 Plan Goals

1. Minimize the probability of zebra and quagga mussel introduction and establishment.
2. Minimize the impact of zebra and quagga mussels on Washington's waters, outdoor recreational resources, aquatic resources, and facilities.

1.2.2 Plan Objectives

1. Minimize the likelihood of human transport of zebra and quagga mussel into waterbodies of the state of Washington.
2. Increase public awareness of the invasive zebra and quagga mussel issue and support for management efforts.

3. Maximize the probability of early detection of zebra and quagga mussels in Washington's waters.
4. Provide a systematic approach to verify alleged detections of zebra or quagga mussels in new waters.
5. Provide clear communication and reporting guidance to trigger rapid response activities within 48 hours of a waterbody being classified as Positive for zebra or quagga mussels.
6. Provide clear communication and reporting guidance to trigger extended response activities within 6 weeks of a Positive waterbody classification.
7. Implement scientifically sound management to detect, eradicate, contain, and/or suppress invasive zebra or quagga mussel populations.

1.3 Plan Overview

The Plan is divided into three general activity classifications: 1) Prevention and Early Detection; 2) Rapid Response Activities; and 3) Extended Response Activities (Figure 1-1). The Plan is organized sequentially to address the following topics:

- Prevention and Early Detection
  - Prevention (Section 3)
  - Routine Monitoring (Section 4.2)
  - Detection Protocols (Section 4.3)
  - Detection Verification (Section 4.5)
- Rapid Response Activities (Section 5)
  - Requesting Incident Command System (ICS) and Designating Rapid Response Leadership (Section 5.1)
  - Range Delimitation (Section 5.2)
  - Minimize Additional Spread (Section 5.3)
  - Data Collation (Section 5.4)
  - Multi-Agency Coordination (MAC) Group Meeting (Section 5.5)
- Extended Response Activities (Section 6)
  - Eradication (Section 6.1)
  - Containment (Section 6.2)
  - Long-Term Management (Section 6.3)

Additional technical information is included in the appendices to supplement each topic.

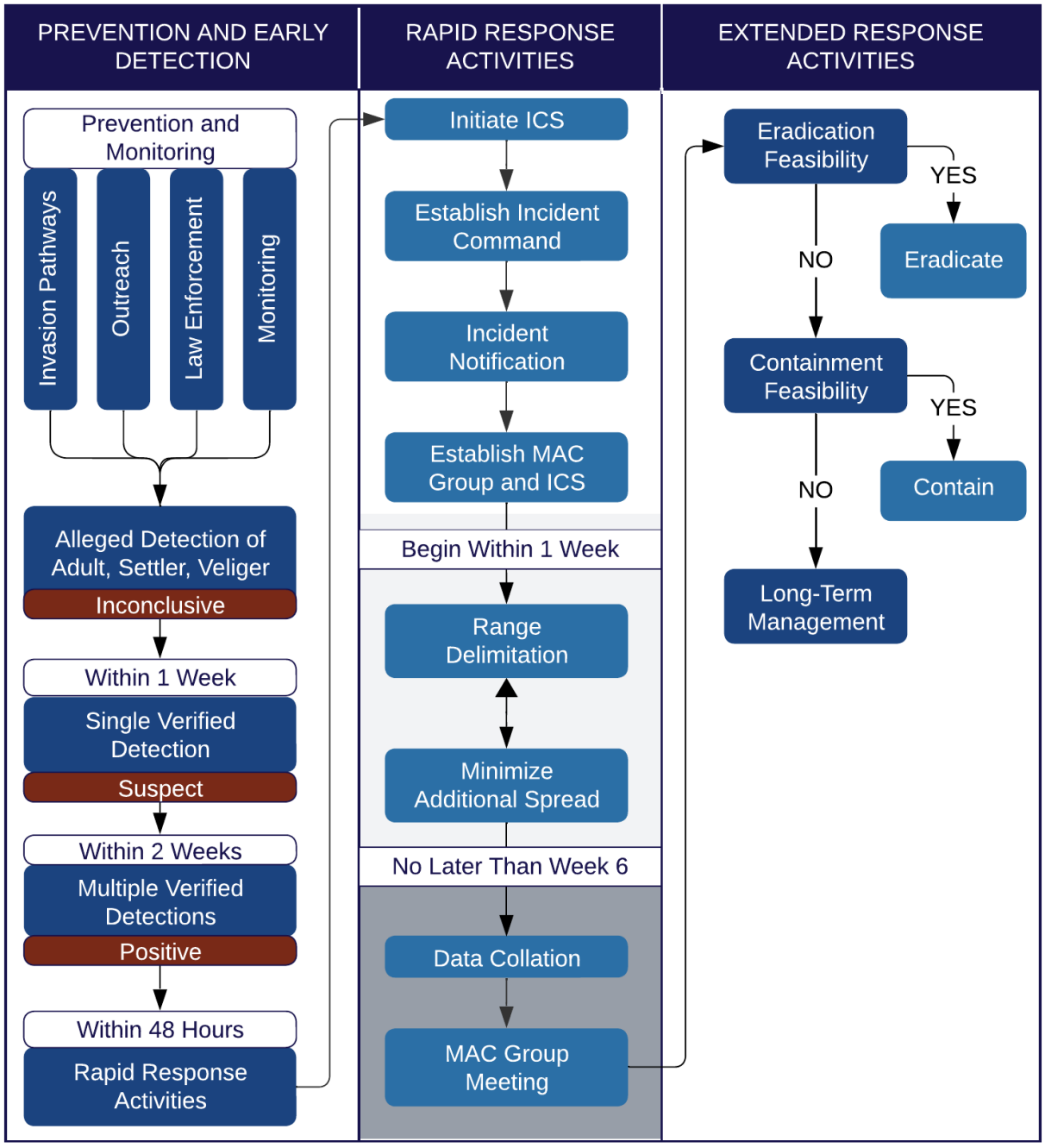


Figure 1-1. Overview of the state of Washington Zebra and Quagga Mussel Management Plan.

1.4 Incident Command System

ICS is a standardized approach to incident management developed by the Federal Emergency Management Agency Emergency Management Institute (FEMA EMI). ICS training and resources are

available from the FEMA EMI ICS Resource Center,[1] which have been referenced throughout this document. Washington Department of Fish and Wildlife (WDFW) should implement an ICS for rapid response management actions where zebra or quagga mussels are detected in a waterbody (Washington Senate Bill 6040, Section 108), and standardized ICS protocols should be used in all multi-agency (federal, state, and local) or multi-jurisdictional incidents and Governor-proclaimed emergencies (Revised Code of Washington [RCW] 38.52). The benefit of ICS is to provide field-based tactical responses to an incident, provide clear command structure, standardize communications and management action implementation across the state, and provide support to federal and tribal participants while they retain their autonomy in management decisions and actions. Formation of the state ICS structure will trigger initiation notification to the CRB Interagency Response network if within the CRB (https://www.crbdirt.com/13-ics-steps).

If zebra or quagga mussels are verified in a new waterbody (Section 1.1), ICS protocols will be used to conduct Rapid Response Activities. RCW 77.135.020 states that WDFW is the lead agency for managing invasive species of the animal kingdom where they have management authority. If a zebra or quagga mussel is detected in waterbodies where WDFW does not have management authority (e.g., within tribal reservations, national wildlife refuges), leadership will be with the associated entity, and they have the option to establish a Unified Command. In these cases, WDFW will work with the associated tribe or federal agency, as applicable, to implement ICS, if desired. In co-managed waterbodies, WDFW will request ICS and invite tribal co-managers to participate through a Unified Command, on the MAC Group, and/or directly through established co-management channels.

1.4.1 Incident Types

There are five incident types based on the complexity of the incident. The types range from the most complex (Type 1) to the least complex (Type 5; Table 1-1). Invasive species incidents would normally be classified as Type 5, 4, or 3. If required, the incident response should be broken down into specific operational periods, with each period scheduled for the execution of a given set of tactical actions specified. Operational periods can be of various lengths depending on operation actions required. If the response is anticipated to extend to multiple operational periods, it is advised that an Incident Action Plan (IAP) be developed. The IAP formally documents incident goals, the operational period objectives, and the response strategy defined by Incident Command. It should provide clear directions and include a comprehensive listing of the tactics, resources, and support needed to accomplish the objectives.

[1] https://training.fema.gov/emiweb/is/icsresource/

Table 1-1. Incident types and resource requirements based on incident complexity, as adapted from the U.S. Fire Administration.

Type	Complexity
5	• Incident can be handled with one or two single resources with up to six personnel • Command and General Staff positions (other than Incident Command) are not activated • Incident is contained within a few hours • No written IAP is required
4	• Several resources are required to mitigate the incident • Command and General Staff functions activated as needed • The incident is usually limited to one operational period • No IAP is required
3	• Significant resources are required to mitigate the incident • Command and General Staff functions activated as needed • The incident may extend to multiple operational periods • A written IAP may be required for each operational period
2	• Out-of-region or out-of-state resources are required to mitigate the incident • Most Command and General Staff functions are activated • Many functional units are needed and staffed • The incident is expected to go into multiple operational periods • A written IAP is required for each operational period
1	• National resources are required to mitigate the incident • All Command and General Staff functions are activated • Many functional units are needed and staffed; total personnel will usually exceed 1,000 • The incident is expected to go into multiple operational periods

1.4.2 ICS Command and General Staff Functions

Within each ICS, there are five major functional areas to organize and manage an incident, commonly referred to as "Sections" (FEMA 2019). These include the following:

- Command (Incident Commander or Unified Command)
  - Sets the incident objectives, strategies, and priorities and has overall responsibility for the incident.
- Operations Lead
  - Develops tactical organization and directs all resources to carry out the Rapid Response Activities.
- Planning Lead
  - Supports the incident action planning process by tracking resources, collecting/analyzing information, and maintaining documentation.
- Logistics Lead
  - Arranges for resources (e.g., personnel, equipment, teams, supplies, and facilities) and needed services to support achievement of the incident objectives.
- Finance/Administration Lead
  - Monitors costs related to the incident. Provides accounting, procurement, time recording, and cost analyses.

The leaders of these Sections are referred to as Leads and are members of the ICS General Staff (Figure 1-2). Only one person should be designated to lead each General Staff position and positions may be filled by qualified persons from any agency or jurisdiction. Additional information about specific tasks associated with each General Staff position can be found in the ICS Review Document (FEMA 2019).

In addition to General Staff, Command should delegate specific functions to Command Staff personnel (Figure 1-2). During a zebra or quagga mussel Rapid Response, these functions may include, but are not limited to, the following positions:

- Public Information Officer
- Safety Officer
- Liaison Officer
- Legal Officer

Once established, ICS General Staff should work collaboratively to identify specific entities to provide staff, equipment, and other resources to support Rapid Response Activities, from which a Responding Entity Lead (Section 5.1.3) will be designated. Entities should have a combination of one or more of the following attributes: fisheries management authority, proximity to the affected waterbody, and/or the capability to provide staff, equipment, and other resources to support Rapid Response Activities.

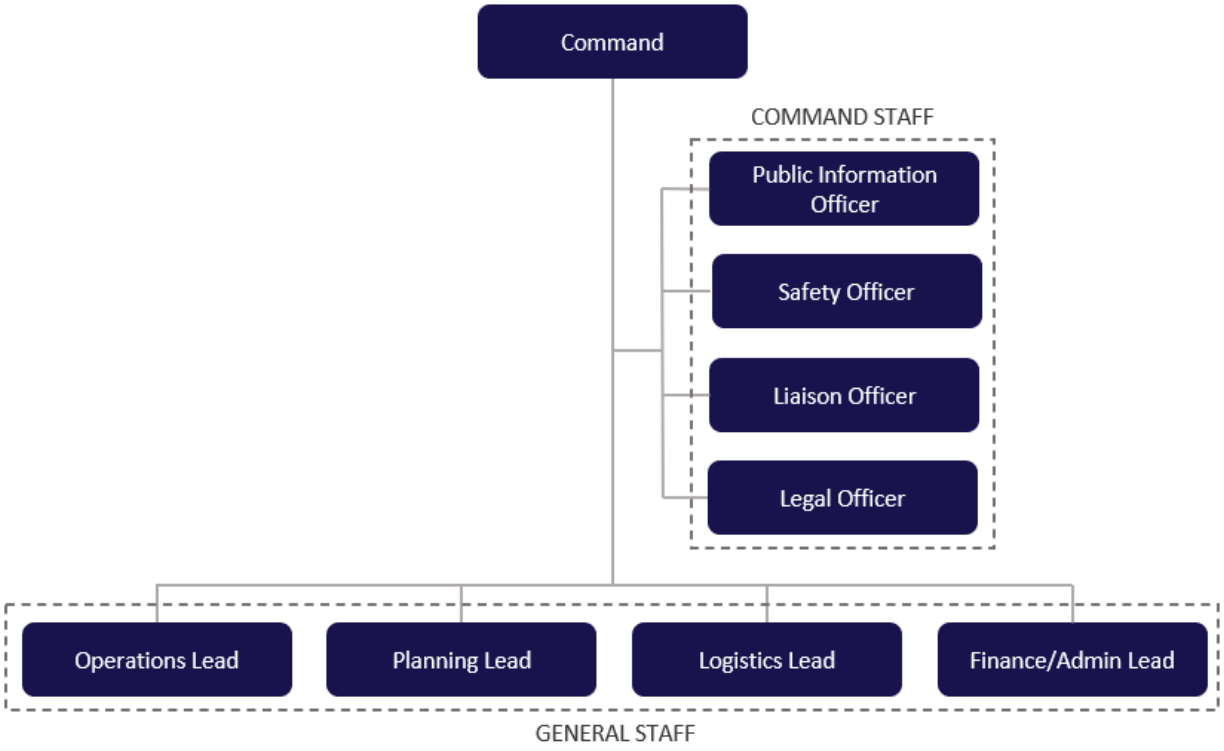


Figure 1-2. Standard organizational structure for Incident Command System, including Command, Command Staff, and General Staff.

1.4.3 ICS Forms

To support ICS operations, the CRBT has compiled a series of forms that may be used in the instance of a zebra or quagga mussel response. These forms have been modified to more accurately reflect the activities that would occur in such a response and are available from the CRBT website: (https://www.crbdirt.com/ics-forms). If other forms are needed, a series of standardized forms not modified for invasive species response is available from the FEMA EMI website (https://training.fema.gov/emiweb/is/icsresource/icsforms/). All forms can be used as provided or modified to meet incident needs.

1.4.4 ICS Situational Reports

Situational Reports (SitReps) will be used to communicate activities and accomplishments of the ICS for each operational period. SitReps will include a summary of actions taken, funding allocations, detection events, sampling efforts, and other relevant information for dissemination among ICS participants, tribal co-managers, state and federal partners, the Governor's Office, and interested state or Congressional Legislators. This information will be solicited from Responding Entity Leads at the conclusion of each operational period using a Status Summary Report template (e.g., ICS Form 209).[2] SitReps are not public-facing reports. Instead, Public Affairs will synthesize information ascertained from the SitReps into a public-facing outreach report to be posted on the WDFW website.

1.4.5 Termination of ICS

An Incident Commander or a Unified Command, as applicable, has the authority to terminate the incident when deemed appropriate. This may include returning to baseline prevention and early detection or the establishment of a long-term management plan. Key milestones that may influence this decision are eradication, containment, or control of zebra or quagga mussels without need for further management action, or when long-term monitoring and suppression activities are established.

1.5 Rapid Response Oversight

1.5.1 Command

In the event an ICS is initiated, an Incident Commander or Unified Command (Section 5.1.1) will be established depending on whether there is a single or multiple jurisdictions associated with the waterbody from which a zebra or quagga mussel was detected. If the incident occurs in a waterbody within a single jurisdiction (i.e., where one organization or agency has the authority and/or resources to manage the incident on its own) an Incident Commander is designated. In situations where there are multiple jurisdictions, a Unified Command is generally designated comprising Commanders from each agency or organization with jurisdictional authority. In situations where there are five or more jurisdictional authorities, those entities will need to determine how large the Unified Command can be to remain effective. In most cases, only the most critical jurisdictions should be on the Unified Command and the rest represented on the MAC Group.

[2] All communications to and from the WDFW are subject to Public Disclosure Requests.

1.5.2 Multi-Agency Coordination Group

In addition to ICS implementation, a non-field-based MAC Group should be convened by Command to implement ICS protocols together. MAC Groups act as a policy-level body supporting resource prioritization and allocation while enabling decision-making among elected and appointed officials with Command. Specifically, the MAC Group allows for input from other local, state, tribal, and federal agencies that have legal responsibility for the protection of natural resources 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 Activities. MAC Groups should consist of administrators or executives, or their designee, who are authorized to commit agency resources and funds. A full list of entities that have fisheries management responsibilities and their associated waterbodies is provided in APPENDIX A. If the waterbody from which a zebra or quagga mussel was detected occurs within the CRB, ICS Command should contact the U.S. Fish and Wildlife Service (USFWS) Pacific Region AIS Coordinator or the Pacific States Marine Fisheries Commission AIS Coordinator[3] to ensure the designated CRB MAC Group contacts are notified (CRB Notification List on https://www.crbdirt.com/13-ics-steps).

1.6 Funding Considerations

Resources to support Rapid Response Activities (initial 6 weeks of response) in a focal waterbody will be drawn from dedicated and general state funds and federal funds such as the 2014 Water Resource Reform and Development Act funds (U.S. Army Corps of Engineers), U.S. Bureau of Reclamation, and USFWS Aquatic Nuisance Plan. Additionally, funds may be requested from entities with fisheries management responsibilities or other involved stakeholders. Depending on the involved entities, these funds would likely need to be directly related to AIS management plans or other related activities (e.g., environmental deoxyribonucleic acid [eDNA] sampling budgets). The establishment of advanced agreements between entities likely to be involved in a response is highly encouraged to expedite response efforts, some of which already exist with WDFW. If the WDFW Director finds that current resources are insufficient to meet response needs, they will request the governor to order emergency measures to prevent or abate the prohibited species under RCW 77.135.090 and make available associated emergency funding to support these efforts.

Extended Response Activities (i.e., eradication, containment, or long-term management) are anticipated to require additional funding support, including funds from grants. ICS staff should lead the grant application process with the MAC Group and other participating partners reviewing the grant applications.

[3] Theresa Thom (theresa_thom@fws.gov; 971-278-8029) or Stephen Phillips (sphillips@psmfc.org; 503-595-3232) are the AIS Coordinators for their respective organizations at the time of this Plan's publication.

2 Zebra and Quagga Mussels in the State of Washington

2.1 Zebra and Quagga Mussel Regulations

WDFW classifies prohibited species according to three levels:

- Level 1: High invasive risk and a priority for prevention and expedited rapid response management actions.
- Level 2: High invasive risk and a priority for long-term infested site management actions.
- Level 3: Moderate to high invasive risk and may be appropriate for prevention, rapid response, or other prohibited species management plan actions.

Zebra and quagga mussels are classified as a Level 1 prohibited species under WAC 220-640-030. This classification indicates that zebra and quagga mussels are considered to have a high risk of becoming an invasive species and may not be possessed, introduced into state waters, or trafficked except as provided under RCW 77.135.040. The unlawful use of a prohibited aquatic animal species is a gross misdemeanor and a second violation within 5 years is a class C felony. In addition to criminal penalties, a court may order a person to pay all costs in capturing, killing, or controlling the invasive species, including its progeny. WDFW may also bring a separate civil action to recover habitat restoration costs necessitated by the person's unlawful use of invasive species (RCWs 77.15.250, 77.15.809, 77.15.811).

2.2 Waterbody Classification

Waterbody classification is based on the detection history of zebra or quagga mussels. The guidelines for waterbody classification have been specified by the Building Consensus in the West Workgroup (WRP 2019). A waterbody is defined as a body of water forming a physiographical feature, for example a lake or a reservoir, but may include jurisdictional or managerial divisions where appropriate such as on sovereign tribal or federal waters or based on the species' habitat.

- **Status Unknown** – Waterbody is not being sampled or monitored for AIS.
- **Undetected/Negative** – Waterbody sampling/testing is ongoing and nothing has been detected, or nothing has been detected within the timeframes for de-listing.
- **Inconclusive** (temporary status) –Waterbody has not met the minimum criteria for detection (i.e., at least two independent laboratory results from a single sample using both visual [cross-polarized microscopy or taxonomic identification] and genetic [DNA-based polymerase chain reaction (PCR), gene sequencing on the organism tissue] methods[4]). Verification Process is initiated (Section 4.5).
- **Suspect** – Waterbody that has met the minimum criteria for detection. Verification Process is continued (Section 4.5).

[4] Currently, eDNA is not a scientifically accepted technique to verify a dreissenid mussel detection (WRP 2019).

- **Positive** – Multiple (two or more) subsequent sampling events[5] that meet the minimum criteria for detection. Rapid Response is initiated (Section 5)**.**
- **Infested** – A waterbody that has an established (recruiting or reproducing) population of zebra or quagga mussels.

Waterbody classification is primarily a tool for consistent communication of zebra or quagga mussel detection status and a guide to what management actions should be considered.

2.2.1 Waterbody Reclassification to Undetected/Negative

In situations where a waterbody was initially classified as Inconclusive, Suspect, Positive, or Infested and following management actions, zebra or quagga mussels are no longer detected, a waterbody may be reclassified to Undetected/Negative (i.e., de-listed; WRP 2019). The protocol to reclassify a waterbody to Undetected/Negative depends on the initial waterbody classification and is defined in Table 2-1.

Table 2-1. Criteria required to reclassify a waterbody to Undetected/Negative based on the initial waterbody classification.

Initial Classification	Criteria for Reclassification to Undetected/Negative
Inconclusive	1 year of negative testing including at least one sample collected in the same month of the subsequent year as the previous positive sample.
Suspect	3 years of negative testing.
Positive	5 years of negative testing.
Infested	Following a successful eradication or extirpation event as determined by a minimum of 5 years post-event testing and monitoring with negative results.

2.3 Washington State Natural Resource Agencies with Invasive Species Roles

The entities in this section will be relied upon to handle various aspects of a response to a zebra or quagga mussel introduction or establishment. Each entity's unique role regarding zebra or quagga mussels is described below.

2.3.1 Washington Invasive Species Council

The Washington Invasive Species Council (WISC), created in 2006 by the Legislature is administered by the Washington Recreational and Conservation Office. It is tasked with policy-level direction, planning, and coordination for combating harmful invasive species throughout the state and preventing the introduction of others that may be potentially harmful. WISC is composed of 22 members representing federal, state, and local agencies, eastern and western Washington tribes, private industry, academic institutions, and nonprofit organizations.

[5] Subsequent is defined as samples taken on different days, or another sample not taken on the same day after the previous sampling event using decontaminated equipment. Sampling event is defined as samples collected on 1 day in a unique water body. Each sample has a unique identifier/label, and all equipment must be decontaminated between sampling events (WRP 2019).

2.3.2 Washington Department of Fish and Wildlife

Charged with managing wildlife by preventing the depletion of endemic species while providing optimum recreational benefits, WDFW is the lead state agency tasked with managing invasive animals, excluding pests, domesticated animals, livestock managed by the Washington Department of Natural Resources (WDNR), and mosquito and algae control and shellfish sanitation managed by the Department of Health. Primary lead agency responsibilities include developing and implementing invasive species programs, establishing and maintaining outreach and education programs, managing invasive species, providing technical assistance, researching and developing management tools and standards to decontaminate aquatic conveyances, and controlling or eradicating invasive species.

2.3.3 Washington Department of Ecology

The Washington Department of Ecology (Ecology) is the delegated authority for National Pollutant Discharge Elimination System (NPDES) permitting in the state of Washington, which provides for the use of chemical treatments of waters of the state to manage AIS.

2.3.4 Washington State Department of Agriculture

The Pesticide Management Division of the Washington State Department of Agriculture (WSDA) is responsible for ensuring that pesticides are used safely and legally. To accomplish this responsibility, WSDA registers pesticides, licenses pesticide applicators, and investigates complaints of possible misuse. These duties are performed under the authority of the Washington Pesticide Control Act (RCW 15.58), the Washington Pesticide Application Act (RCW 17.21), and the General Pesticide Rules (WAC 16-228). WSDA is the lead authority for regulating pesticides in the state of Washington.

2.3.5 Washington Department of Natural Resources

WDNR manages an AIS Program.[6] The goals of this program are to (1) preserve the value and ecological integrity of state-owned aquatic lands by eliminating small noxious weed infestations through Early Detection and Rapid Response, (2) to eradicate or reduce large-scale infestations to a scale that no longer threatens fish and wildlife habitat, native plants, agriculture, industry, and other ecological and human values, (3) to restore aquatic lands where possible, (4) to increase public awareness about sustainable natural resource management and the value of aquatic lands to Washington's communities and economy, and (5) to build partnerships within WDNR and with individuals, organizations, and governments to leverage efforts to achieve a shared vision of healthy habitats for all living creatures, including humans.

2.4 Tribal Fisheries Coordinating Bodies in Washington

There are three major tribal fisheries coordinating bodies in the state of Washington. The Columbia River Inter-Tribal Fish Commission (CRITFC) and the Upper Columbia United Tribes (UCUT) support

[6] https://www.dnr.wa.gov/programs-and-services/aquatics/habitat-conservation/invasive-species-control

waterbodies in the CRB, whereas the Northwest Indian Fisheries Commission (NWIFC) supports Puget Sound and other western Washington waterbodies.

CRITFC member tribes include the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe. CRITFC's mission is "ensuring a unified voice in the overall management of the fishery resources." Its staff of legal experts, biologists, hydrologists, enforcement officers, and public information specialists supports fisheries management, fishery science, fisheries enforcement, policy development, outreach, and watershed restoration. The CRITFC AIS Coordinator collaborates with federal, state, and local government partners on a variety of invasive species issues through forums, such as the Western Regional Panel, state invasive species councils, Pacific Northwest Economic Region, and the 100th Meridian Initiative CRBT.

UCUT member tribes include the Coeur d'Alene Tribe of Indians, the Confederated Tribes of the Colville Reservation, the Kalispel Tribe of Indians, the Kootenai Tribe of Idaho, and the Spokane Tribe of Indians. UCUT's mission is to "unite Upper Columbia River Tribes for the protection, preservation, and enhancement of Treaty/Executive Order Rights, sovereignty, culture, fish, water, wildlife, habitat and other interests and issues of common concern in our respective territories through a structured process of cooperation and coordination for the benefit of all people." UCUT takes a proactive, collaborative, and science-based approach to promoting fish, water, wildlife, diverse habitat, and Indian culture in the Northwest.

NWIFC is a natural resources management support service organization for 20 treaty Indian tribes in western Washington. NWIFC member tribes include Lummi, Nooksack, Swinomish, Upper Skagit, Sauk-Suiattle, Stillaguamish, Tulalip, Muckleshoot, Puyallup, Nisqually, Squaxin Island, Skokomish, Suquamish, Port Gamble S'Klallam, Jamestown S'Klallam, Lower Elwha Klallam, Makah, Quileute, Quinault, and Hoh. The NWIFC assists member tribes in their role as natural resources co-managers, providing direct services to tribes in areas such as biometrics, fish health, and salmon management. It provides a forum for tribes to address shared natural resources management issues and enables the tribes to speak with a unified voice. The NWIFC could play a crucial role in coordinating a multi-tribal response to illegal introduction of zebra or quagga mussels into the Puget Sound and/or coastal areas of Washington.

2.5 History of Zebra and Quagga Mussels in the Western United States

Zebra and quagga mussels have not been detected in Washington state waterbodies at the time this plan was written. A detailed history of zebra and quagga mussels in the West is available in the *Updated Recommendations for the Quagga and Zebra Mussel Action Plan for Western U.S. Waters* (WRP 2020a). Status of zebra and quagga mussels near the CRB can be found at https://www.crbdirt.com/status-of-dreissenids-near-crb. Additionally, in September 2023, quagga mussel presence was confirmed in the Snake River near Twin Falls. An eradication effort was initiated in October 2023, the effect of which is still being evaluated.

While no zebra or quagga mussels have been detected in Washington state waterbodies, they have been routinely discovered on watercraft at watercraft inspection stations (Table 2-2). The success of watercraft inspection stations is enhanced by AIS coordinators throughout the CRB, particularly from Idaho, Oregon, Montana, and British Columbia, who routinely provide advanced notification of boats with potential mussels to Washington state inspection station staff.

Table 2-2. Watercraft inspection station data 2020 to 2023.

Year	Operational Days	Number of Inspections	Boats with Mussels
2020	532	31,651	23
2021	940	55,812	39
2022	1,236	51,551	25
2023	1,501	58,618	25

3 Prevention

Many factors contribute to the risk of zebra and quagga mussel introduction and establishment, including environmental parameters (e.g., dissolved calcium, pH) and the extent and types of public usage (e.g., total day use, presence of boat ramps and marinas, proximity to transportation corridors, motorized boating, fishing).

3.1 Invasion Pathways

Likely invasion pathways into the state of Washington include the following:

- Contaminated watercraft, aquatic construction, or sampling equipment
- Contaminated fire-fighting aircraft, tankers, trucks, pumps, hoses
- Aquarium trade
- Public and commercial aquaculture and hatcheries
- Live sea food importation
- Transportation and release of live fish, shellfish, bait, and aquatic pets
- Contaminated irrigation and agricultural equipment, spray rigs, tanks, and hoses
- Contaminated dust abatement water tanks

Boat transport from contaminated waters is the most likely pathway of introduction to new water bodies in Washington (Lucy et al. 1999; Frischer et al. 2005; Johnson et al. 2001; Karatayev et al. 2007). Adult mussels may survive out of water for up to 5 days in dry environments and for several weeks in wet areas and compartments of boats, motors, trailers, water tanks, fire-fighting equipment, fire-fighting aircraft, agricultural equipment including spray tanks, water tanks, hoses, and other conveyances (Johnson et al. 2001; Timar and Phaneuf 2009). While adult mussel survival enables long-distance spread, research has shown that distance between water bodies is a strong predictor of boater behavior such that the highest risk vectors will be to water bodies in proximity to an invaded water body (Leung et al. 2004).

3.1.1 Expected Habitats

Zebra and quagga mussels attach to a broad range of surfaces. Zebra mussels are primarily warm, eutrophic, shallow water inhabitants whereas quagga mussels prefer deep, oligotrophic, cold-water (MacIsaac 1994; PMFC 2024). They both can tolerate a wide range of water temperatures and require calcium concentrations of 10 mg Ca^{2+}/l to initiate shell growth and 25 mg Ca^{2+}/l to maintain shell growth (Ramcharan et al. 1992; PMFC 2024).

3.2 Outreach

Effective outreach campaigns can help prevent unintentional spread through contamination and further illegal introductions. In addition, public awareness can increase the likelihood that the public will assist with early detection of new zebra or quagga mussel introductions or support long-term management actions, if required. WDFW participates in several outreach campaigns. Key methods are as follows:

- Mandatory and voluntary watercraft inspection and decontamination stations
- Mandatory and voluntary agricultural and construction equipment with water storage (tankers or tanks) or conveyance systems, fire-fighting equipment and tanker, aircraft, inspection and decontamination stations

- AIS prevention permits
- Participation in the Clean Drain Dry and Don't Let it Loose national campaigns
- Stop the Spread and Protect Your Waters pamphlets
- Signs at water access sites throughout the state of Washington
- Highway signs
- Disseminating posters, pamphlets, and stickers
- Hosting booths at boat shows
- School presentations
- Paid advertisements on social media outlets.

Examples of signs, stickers, and pamphlets commonly distributed can be found in APPENDIX B.

3.3 Law Enforcement

WDFW Enforcement Officers are primarily responsible for enforcing RCW Title 77. If enforcement is required, WDFW law enforcement should be contacted at WILDCOMM@dfw.wa.gov or 360-902-2936, Option 1.

Until July 1, 2024, WDFW's Enforcement Program managed and conducted mandatory watercraft check stations. Starting July 1, 2024, the check stations are now managed and conducted by WDFW's Fish Program. All aquatic conveyances are required to stop at mandatory check stations (RCW 77.135.120), be inspected for clean and drain requirements and AIS, and if an AIS is found, be decontaminated (RCW 77.135.130). Aquatic conveyances include but are not limited to vessels and associated equipment, float planes, construction equipment, fish tanker trucks, hydroelectric and irrigation equipment, personal fishing and hunting gear, and materials used for aquatic habitat mitigation or restoration (RCW 77.135.010). Any person who fails to stop at a mandatory check station may be guilty of a gross misdemeanor under RCW 77.15.809. Furthermore, a person in possession of a non-exempt (RCW 77.135.230) aquatic conveyance who enters Washington is required to have a certificate of inspection that the conveyance meets clean and drain requirements (RCW 77.135.100 and 77.135.110) and an AIS prevention permit (RCW 77.135.210 or 77.135.220).

Knowingly releasing, planting, possessing, or placing zebra or quagga mussels within the state is a class C felony (RCW 77.15.250). The law also specifies that WDFW shall order a guilty person to pay all costs incurred in capturing, killing, or controlling the shellfish or its progeny, which does not affect the existing authority of WDFW to bring a separate civil action to recover these costs or the costs of habitat restoration necessitated by the felony action.

4 Early Detection

Early detection of zebra or quagga mussels in a waterbody may provide managers with more options to prevent further spread and reduce harm. Detections may come from the public or from routine monitoring efforts conducted by fisheries experts. Given the variety of sources and levels of expertise, rigorous detection verification should always occur.

4.1 Reporting Protocol for Alleged Detection

In the state of Washington, there are three key avenues for reporting sightings of all AIS:

- The WDFW AIS hotline 1-888-WDFW-AIS
- The WISC online AIS reporting form found at invasivespecies.wa.gov or smartphone app ('WA Invasives')
- Email the WDFW AIS Coordinator at ais@dfw.wa.gov

This information is also available on WDFW's invasive species website (wdfw.wa.gov/species-habitats/invasive). Additionally, all WDFW Regional offices will accept AIS reports (https://wdfw.wa.gov/about/regional-offices).

The following information should be communicated for all reported detections:

- Name, agency, and contact information of the person making the report
- Date and time of the report
- Name and type of organism (e.g., zebra mussel)
- Date and time of the sighting(s)
- Details of the location of the suspected detection
  - State
  - County
  - Name/description of the waterbody
  - Global positioning system (GPS) coordinates (if possible)
  - Landmarks, highway mile, and other identifying details
  - Description of surface attached to or substrate found in, if appropriate
- Digital or other photographs or video (with scale indicator and multiple angles)
- A detailed description of organism (size, coloration, etc.) and an estimate of the number, density, and extent, if available

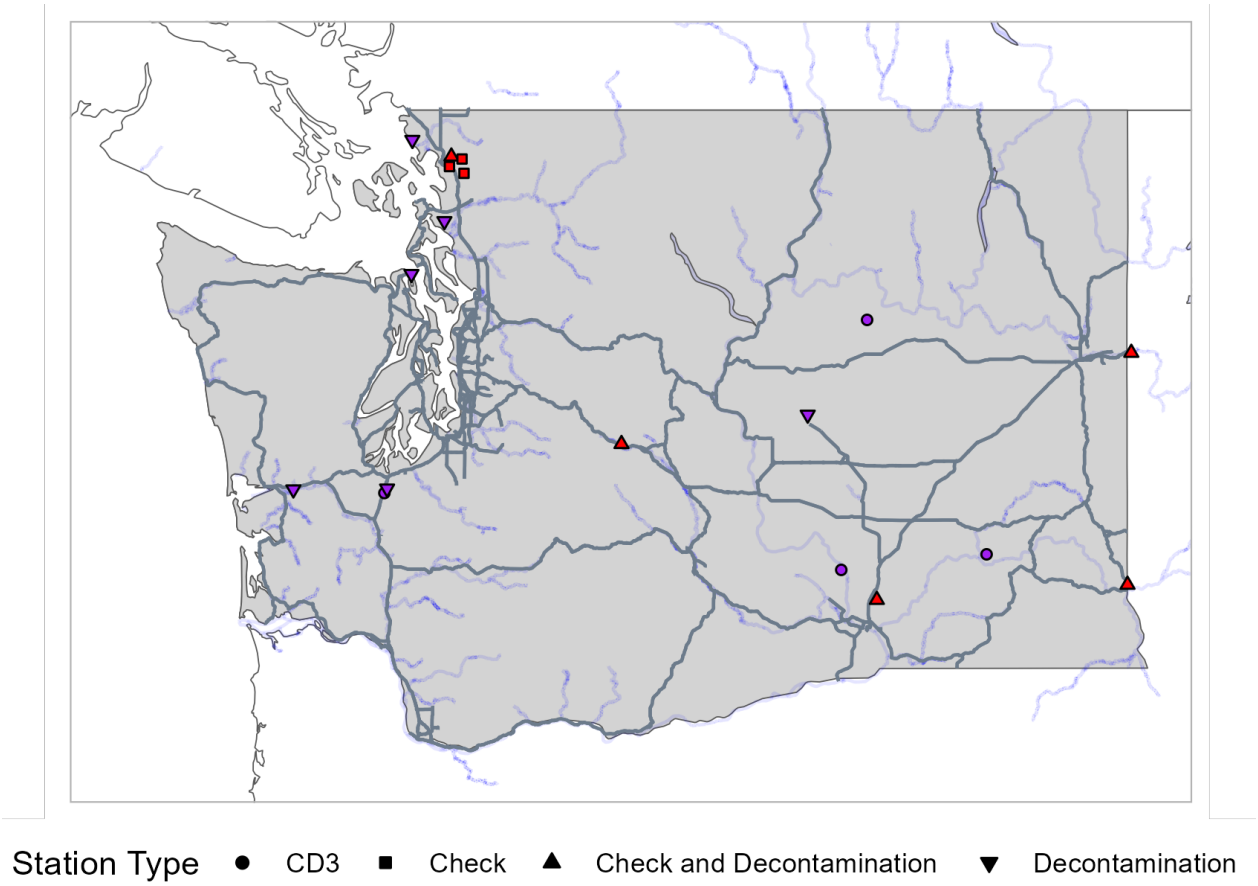
4.2 Routine Monitoring

Routine monitoring is classified into three categories: 1) inspections and cleaning at watercraft stations; 2) reports related to Fish Stocking and Transport Permits; and 3) sampling efforts.

4.2.1 Watercraft Inspection and Decontamination

One of the main invasion pathways of zebra and quagga mussels is assessed to be the overland transport of contaminated watercraft and associated equipment. In response, the WDFW implements an annual Watercraft Inspection Program that incorporates static fixed locations that are supplemented by additional roving stations at high-use boat ramps during the busy summer boating season. Fixed

locations managed by WDFW were strategically placed to maximize early detections by intercepting aquatic conveyances carrying zebra or quagga mussels, standing water, and other AIS along the main travel routes into the central CRB from the Great Lakes Region and the Lower Colorado River Basin reservoirs (Figure 4-1; APPENDIX C). The City of Bellingham also implements mandatory boat inspections for Lake Whatcom and Lake Samish. Finally, WDFW and others provide voluntary inspection stations, decontamination sites, or Clean, Drain, Dry, Dispose (CD^3) System sites (https://www.cd3systems.com/) throughout the state (Figure 4-1; APPENDIX C).



Note: Red indicates mandatory stations, and purple indicates voluntary stations.

Figure 4-1. Map of inspection and decontamination stations throughout Washington by station type.

4.2.2 Fish Stocking and Transport Permits

One of the express goals of requiring a fish stocking and/or transport permit is to ensure that AIS do not get shipped with the target species being transported (https://wdfw.wa.gov/licenses/fishing/fish-stocking-transport). Permit requests involving states and provinces currently infested with zebra or quagga mussels require AIS inspections and reports prior to approval.

4.2.3 Zebra and Quagga Mussel Sampling

Annually, WDFW prioritizes waterbodies for zebra and quagga mussel monitoring based on an assessment of relative risk of introduction and potential population establishment. Risk assessments are

based on intensity of use (e.g., number of boats, boat ramps, marinas), water chemistry, and proximity to an infested or suspect waterbody (Table 4-1; WRP 2020b). A list of currently monitored high-risk waterbodies in Washington state is available in APPENDIX D.

4.2.3.1 Protocols

A wide variety of sampling efforts occur across the state by WDFW and other entities, which can be viewed at https://www.westernais.org/monitoring. Routine water chemistry and eDNA monitoring follow the internal protocols of each sampling entity. By contrast, sampling efforts to collect physical specimens must follow protocols set forth by the *Zebra and Quagga Mussel Field Sampling and Monitoring Protocol* (WRP 2020b). Sampling methods covered by this protocol include horizontal and vertical plankton net tows, artificial substrate monitoring, surface visual shoreline monitoring, and petite PONAR grab sampling. Zebra and quagga mussel veligers are sampled via plankton tows whereas substrate samplers and shoreline surveys are used to monitor for other life stages. Samples should be preserved using methods suitable for microscopic and PCR analysis and be analyzed using both visual and molecular techniques following standards provided in the *Lab Standards for Dreissena Analysis* (WRP 2020c). WDFW is currently contracted with Aquaticus LLC and Civil & Environmental Services but recognizes the laboratories in APPENDIX E as qualified experts.

4.2.3.2 Schedules

Routing monitoring schedules are determined based on the waterbody risk assignment (APPENDIX D). These schedules are followed unless Verification Sampling is triggered (Section 4.3).

Table 4-1. Waterbody scoring matrix to determine monitoring location and frequency.

Scoring	0 Point	1 Point	2 Point	3 Point	4 Point
Establishment					
Dissolved Calcium (mg/L)	0—5 (no monitoring)	6—11	12—15	16—24	25 or more
Salinity (ppt)	10 or more (no monitoring)				
Introduction					
Public	No (no monitoring)				Yes
No. of Boat Ramps	0 (no monitoring)	1	2	3	4 or more
Boat Ramp Paved	No				Yes
Boat Ramp with Dock	No	Yes			
Motorized Watercraft Allowed	No				Yes
Speed Limit > 10 mph	No				Yes
Moorage	No				Yes
Private Docks	No				Yes
Access Year Around	No	Yes			
Ease of Access		Foot	Ferry	Gravel road	Paved road
In Columbia River Basin	No	Yes			
Water Body Size		0—10	11—49	50—99	100 or more
Fish Stocked	No	Yes			
Hatchery/ Net Pens	No				Yes
Fishing Tournaments	No	1-2	3-4	5-6	7 or more
Motorized Watersports Tournaments	No				1 or more
Boatyard	No				Yes
Hydropower/ Flood Control	No				Yes
Irrigation	No				Yes
Municipal Water	No				Yes
Proximity to Source Population		No drainages west of continental divide	West of continental divide	Nearby, but may not be as easily assessable	Downstream, connected, or within easy drive
Monitoring Frequency					
0	1—20	21—34	35—39	40—49	50 or more
No monitoring	Once every 3 years	Once every 2 years	Once a year	Twice a year	Three a year

4.3 Detection Protocols

4.3.1 Alleged Specimen

For larger specimens (APPENDIX G), the discovering entity shall collect the following data from the mussel sample:

1. Photo
    a. Send photo to ais@dfw.wa.gov, upload to the WISC online AIS reporting form, and deliver specimen to the nearest WDFW office for shipment or ship directly to qualified expert laboratory.
2. Total length (mm), if applicable
3. Weight (g), if applicable

For all sized specimens, the discovering entity shall take the following actions:

1. Place the specimen in a container, preserve the specimen according to methods compatible with the procedures of the laboratory that will be performing the analysis, and label with waterbody name, sample location name and coordinates, date, collectors name, and, if applicable, the % absolute ethanol.
2. Ship specimen to qualified expert.
3. The qualified expert will determine if the specimen is a zebra or quagga mussel using methods appropriate for the life-history stage sent following the *Lab Standards for Dreissena Analysis* (WRP 2020c).
    a. If the qualified expert confirms the specimen is a zebra or quagga mussel, the expert shall immediately communicate the result with the discovering entity and send the specimen and/or photo of the specimen to a second qualified expert, thus beginning the Verification Process (Section 4.5).
    b. The discovering entity shall notify WDFW, or if in waters where WDFW does not have management authority and ICS is not desired, an entity with management authority.

4.3.2 Positive eDNA Result

A positive zebra or quagga mussel eDNA result is any result that is not 0/3.[7] A result of 0/3 means no DNA was detected. A result of 1/3 or 2/3 indicates that a small amount of DNA was detected. These results should be interpreted with caution as DNA contamination can easily occur while collecting samples and animals can move DNA throughout the environment. A result of 3/3 typically means that a substantial amount of DNA was detected but does not constitute proof of mussel presence.

The presence of mussel eDNA in a waterbody is not considered sufficient to meet detection standards for classifying a waterbody for the presence of zebra or quagga mussels (WRP 2019). However, a

[7] Each eDNA sample is analyzed in three replicate wells and results are provided as the number of wells with positive amplification out of the total wells analyzed (i.e., number of positive amplifications out of three total wells).

positive eDNA result that was not contaminated may indicate that the waterbody was exposed to some level of live or dead zebra or quagga mussel biological matter. If there is a positive eDNA result:

- If a control sample is available, confirm there was no evidence of contamination.
- If no contamination is evident or there was no control, conduct Verification Sampling (Section 4.4) weekly for 1 month of negative results or until a verified specimen is collected.

4.3.3 Ambiguous Results

If at any time the Verification Process (Section 4.5) produces ambiguous results, conduct Verification Sampling (Section 4.4) at a sampling interval determined by the involved entities based on the circumstances of the incident until either at least two specimens are verified or until the waterbody meets the requirements to be reclassified as Undetected/Negative (Section 2.2.1).

4.3.4 Connected Waterbody

If a waterbody that is classified as Undetected/Negative for zebra or quagga mussels is connected to a waterbody that becomes classified as Positive, conduct Verification Sampling (Section 4.4) weekly until the end of the season (May 1 to November 1).

- If the connected waterbody remains Undetected/Negative for first season, monitoring frequency can be decreased to monthly for the subsequent season.
- If after 2 seasons the waterbody remains Undetected/Negative, then the normal monitoring schedule can be resumed.
- If a verified specimen is collected, begin the Verification Process (Section 4.5).

4.3.5 Post-Eradication Treatment

If a waterbody has received eradication treatments, conduct Verification Sampling (Section 4.4) monthly until the waterbody can be reclassified to Undetected/Negative (Section 2.2.1) or a verified specimen is collected.

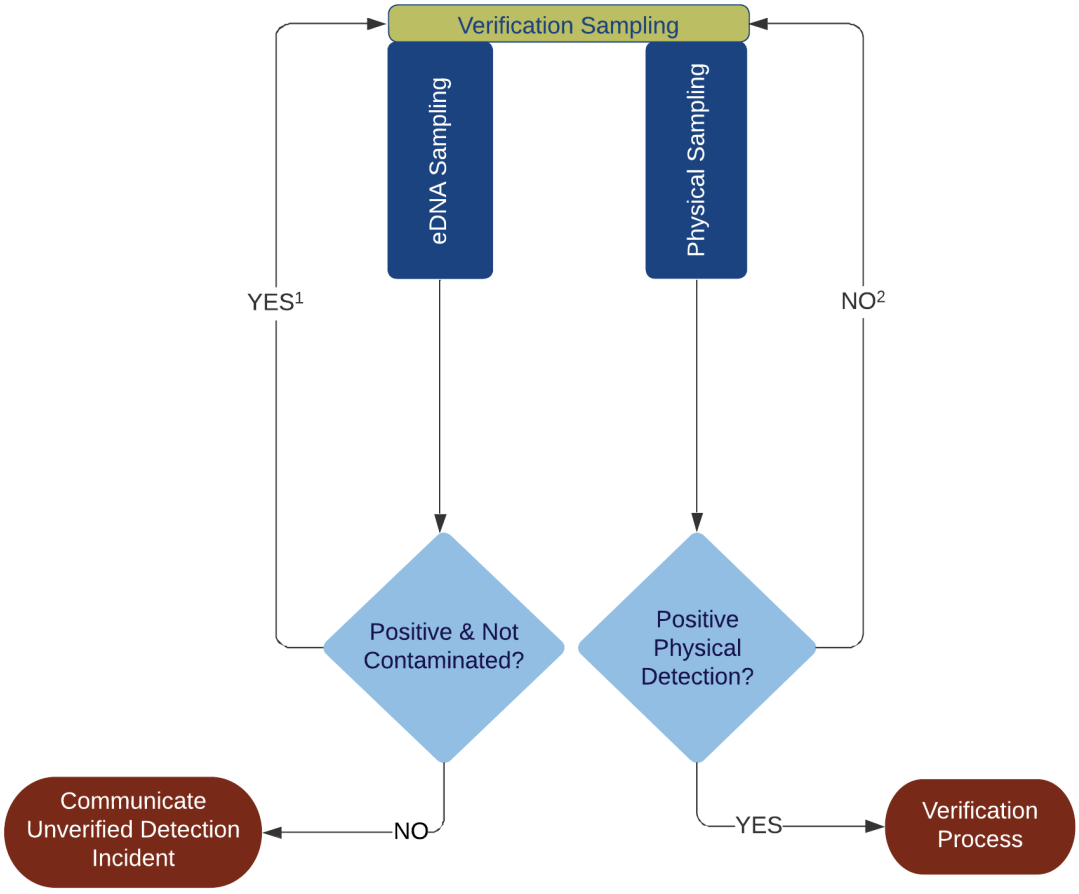
4.4 Verification Sampling

Verification Sampling is required under the following conditions:

- There is a positive eDNA result that was not contaminated or cannot confirm lack of contamination
- The Verification Process has produced ambiguous results (Section 4.5)
- If an Undetected/Negative waterbody is connected to a waterbody classified as Positive for zebra or quagga mussels
- If a waterbody has been treated to eradicate zebra or quagga mussels

If Verification Sampling is triggered by a positive eDNA result, the entity that collected the positive sample is responsible for conducting or coordinating Verification Sampling. However, if the waterbody is within WDFW's management authority, WDFW will assist. If the waterbody is not within WDFW's management authority, WDFW will be available to provide support as requested. If Verification Sampling is triggered for reasons other than a positive eDNA result, WDFW or the applicable management authority will conduct Verification Sampling.

Verification Sampling includes iterative eDNA and physical sampling until a physical specimen is collected, at which point the Verification Process (Section 4.5) would begin, or the sampling efforts lead to an Unverified Detection Incident report (Section 4.7.1) or the ability to reclassify the waterbody to Undetected/Negative (Section 2.2.1; Figure 4-2).



Notes:
1. Continue Verification Sampling until there is 1 month of negative eDNA results prior to communicating Unverified Detection Incident or a specimen is collected.
2. Continue Verification Sampling until waterbody can be reclassified to Undetected/Negative or Positive, or if sampling because waterbody is connected to a Positive waterbody, 2 seasons with all negative results.

Figure 4-2. Verification Sampling flow diagram.

The location of sampling efforts should follow recommendations set forth in the *Zebra and Quagga Mussel Field Sampling and Monitoring Protocol* (WRP 2020b), with eDNA sampling following the plankton sampling location recommendations. Verification Sampling should include the following methods:

- Plankton tows (minimum of two replicate samples for each location)
- Benthic sampling and/or diver/snorkeler surveys of hard substrate
- Shoreline and fixed/temporary hard substrate surveys
- Moored boats, moorages, marina surveys
- eDNA sampling (minimum of two replicate samples for each location)

4.5 Detection Verification Process (within 48 hours of a positive physical detection)

The detection Verification Process begins once a single specimen has been identified as positive for zebra or quagga mussels and follows the flow diagram in Figure 4-3. Action items to be taken by the qualified experts and WDFW (or other entity with management authority) at each decision point are detailed in Table 4-2.

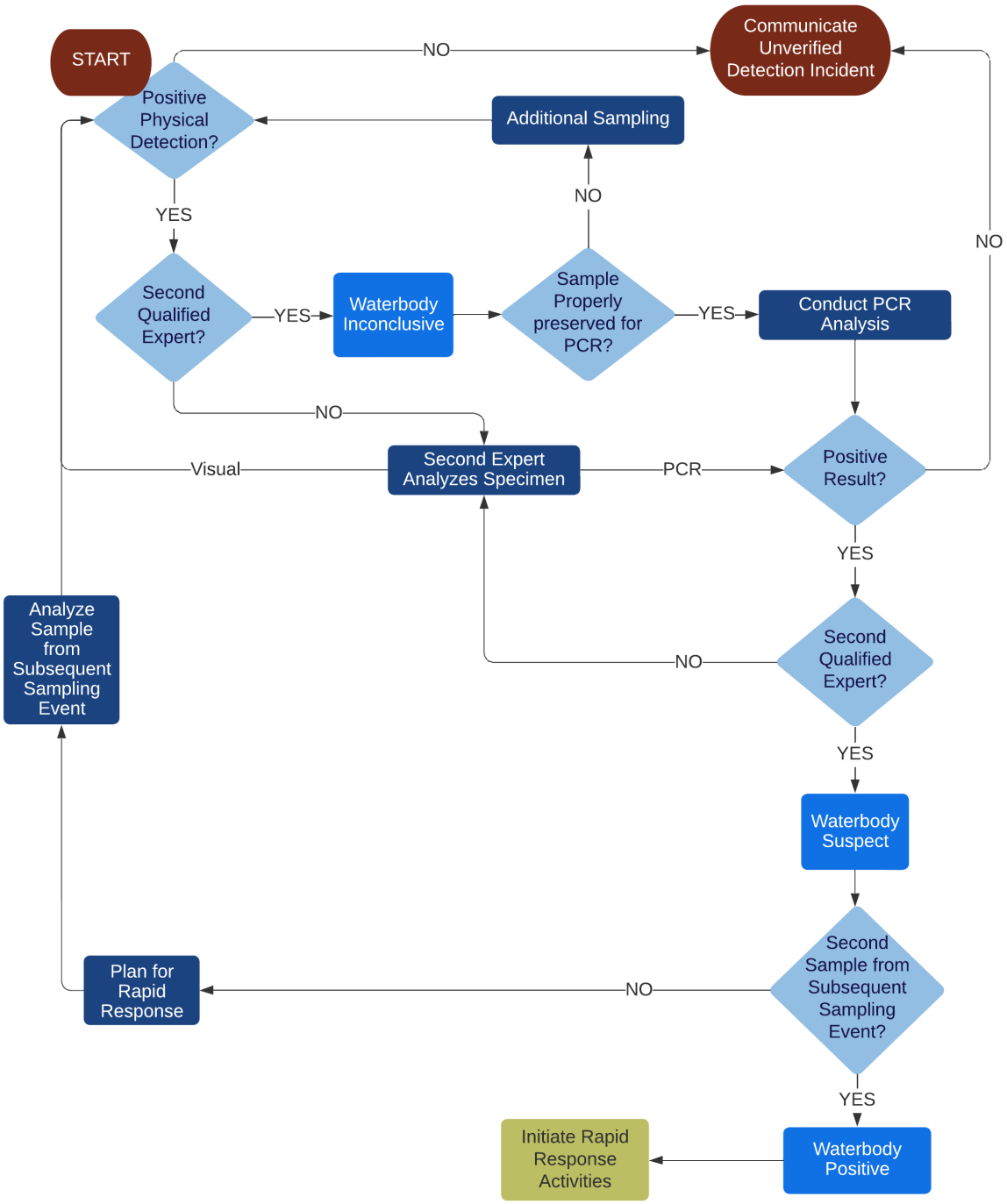


Figure 4-3. Overview of zebra and quagga mussel detection verification process.

Table 4-2. Action items for each step within the Verification Process.

Entity	First Positive Visual Analysis Actions	Second Positive Visual Analysis Actions "Inconclusive"	First Positive PCR Actions	Second Positive PCR Actions "Suspect"	Second Independent Sample "Positive"
Qualified Expert 1	• Immediately notify discovering entity of positive visual analysis results. • Prepare and send images for second expert assessment. • Prepare sample for PCR analysis.	• Conduct PCR analysis on original sample. • Begin visual analyses of additional or archived samples from subsequent sampling events, if available.	• Immediately notify discovering entity of positive PCR. • Send remaining tissue from original sample to second expert, or if all tissue was used during DNA extraction, an aliquot of the DNA. • Plan for subsequent sample analysis.	• Begin PCR analyses of additional or archived samples from subsequent sampling events, if available.	
Qualified Expert 2		• Immediately notify qualified expert 1 and discovering entity of positive results.		• Immediately notify qualified expert 1 and discovering entity of positive PCR results.	
Discovering Entity	• Within 48 hours, notify WDFW or other entity with management authority, as applicable.	• Within 48 hours, notify WDFW or other entity with management authority, as applicable.	• Within 48 hours, notify WDFW or other entity with management authority, as applicable.	• Within 48 hours, notify WDFW or other entity with management authority, as applicable.	
WDFW / Other Entity with Management Authority	• Plan for mobilization of resources and response teams. • Review Section 5.1 and identify entities appropriate to fill ICS roles.	• Within 48 hours, notify entities of Inconclusive status (Section 4.7.2).		Within 48 hours: • Notify entities of Suspect status (Section 4.7.2). • Deploy roving decontamination stations. When possible: • Survey boater movement to determine high-risk water bodies for spread. • Draft ICS initiation request. • Identify ICS Command. • Identify MAC Group members.	• Within 48 hours: initiate Rapid Response (Section 5).

4.5.1 Visual Methods Results Decision Tree

For a single or first specimen, the following actions are conducted depending on the analysis results:

- If visual analyses (e.g., cross-polarized microscopy, taxonomic identification) produce positive results from two qualified experts, the waterbody is reclassified as Inconclusive. Communicate waterbody classification change (Section 4.7.2), initiate PCR analysis on the original sample and visual analyses of additional samples taken during subsequent sampling events, if available (Table 4-2).
- If visual analyses produce negative results, make an Unverified Detection Incident Report (Section 4.7.1).
- If visual analyses produce ambiguous results (i.e., a positive result from the first expert, but a negative result from the second expert), have a third qualified expert conduct visual analyses.

4.5.2 PCR Results Decision Tree

For a single or first specimen (i.e., waterbody Inconclusive), the following actions are conducted depending on analysis results:

- If PCR analysis produces a positive result from two qualified experts (Table 4-2), the waterbody is reclassified as Suspect. Communicate waterbody classification change (Section 4.7.2), start planning for Rapid Response, and analyze additional specimens taken during subsequent sampling events, if available. If additional specimens are not available, conduct Verification Sampling (Section 4.4).
- If PCR analysis produces a negative result, make an Unverified Detection Incident Report (Section 4.7.1) and consider initiating Verification Sampling (Section 4.4).
- If PCR analyses produce ambiguous results (i.e., a positive result from the first expert, but a negative result from the second expert), have a third qualified expert conduct PCR analysis. If insufficient amounts of tissue or DNA are available for a third expert to conduct a PCR analysis, conduct Verification Sampling (Section 4.4) at a sampling interval determined by the involved entities based on the circumstances of the incident until either at least two specimens are verified or until the waterbody meets the requirements to be reclassified as Undetected/Negative (Section 2.2.1).

4.5.3 Additional Specimens

For additional specimens collected during subsequent sampling events that have been identified as positive using visual methods, the following actions are conducted depending on analysis results:

- If PCR analysis of an additional specimen produces a positive PCR result, the waterbody is reclassified as Positive. Initiate Rapid Response Activities (Section 5).
- If PCR analysis of an additional specimen produces a negative result, the waterbody remains as Suspect. Make an Unverified Detection Incident Report (Section 4.7.1) and conduct Verification Sampling (Section 4.4) at a sampling interval determined by the involved entities based on the circumstances of the incident until either at least two specimens are verified or until the waterbody meets the requirements to be reclassified as Undetected/Negative (Section 2.2.1).

All verified detections of AIS are reported to the national U.S. Geological Survey aquatic invasive database (https://nas.er.usgs.gov/) by WDFW.

4.6 Data Management

Positive results from laboratory analyses should be sent directly to the WDFW AIS coordinator (ais@dfw.wa.gov) along with all supporting documents (i.e., lab reports and photographs) and the sample collection information (i.e., information listed above plus the sample preservation technique).

WDFW maintains a centralized data repository for monitoring data and an internal aquatic invasive animal database. Each year, these data get reviewed and vetted, and follow-up inquiries are made as necessary. If entities wish to contribute to WDFW's centralized data repository, please contact the WDFW AIS Coordinator at ais@dfw.wa.gov. Additionally, the results of all routine zebra or quagga mussel sampling efforts (negative or positive) are stored in a centralized data repository (https://www.westernais.org/monitoring).

4.7 Detection Communications

4.7.1 Unverified Detection Incident Reports

Unverified Detection Incident Reports provide an opportunity to identify trends and patterns that might indicate presence of zebra or quagga mussels. Thus, it is recommended that every Unverified Detection Incident be declared to the WDFW AIS Coordinator (ais@dfw.wa.gov).

The following critical information is to be included in an Unverified Detection Incident Report:

- Date of reported Unverified Detection
- Method(s) of Unverified Detection (e.g., eDNA, cross-polarized microscopy, PCR)
- Location of Unverified Detection (waterbody name and GPS coordinates)
- Summary of Verification Sampling conducted, if applicable
- Summary of sample preservation
- Summary of laboratory procedures

4.7.2 Notification of Waterbody Classification Change for Zebra or Quagga Mussel

Should a waterbody classification change from Undetected/Negative to either Inconclusive or Suspect, a notification will be sent out within 48 hours to all (i.e., tribal, state, federal, non-governmental, private, and other) entities with fisheries management responsibilities in state of Washington waterbodies (APPENDIX A). If the waterbody is within the CRB, the USFWS Pacific Region AIS Coordinator will also be notified. The following critical information is to be included in the Notification of Waterbody Classification Change for Zebra or Quagga Mussel (APPENDIX H):

- Date of positive detection(s)
- Location(s) of positive detection(s) (waterbody names and GPS coordinates)
- Name, agency, and contact information for person making the report
- Method(s) of detection (e.g., plankton tow)
- Name of the laboratories (minimum two) that conducted and verified the analyses
- Analyses completed and associated results (e.g., cross-polarized light microscopy)
- Analyses in progress, if applicable (e.g., PCR)
- Planned Verification Sampling, if applicable

5 Rapid Response Activities

The intent of the Rapid Response Activities is to identify the extent of the zebra and quagga mussel colonization event, restrict further spread, and provide the MAC Group with the data required to determine appropriate Extended Response Activities within 6 weeks of a Positive waterbody classification. The following sampling schemata were developed to assess whether zebra or quagga mussels are localized or expanding into connected waterbodies.

The 6-week Rapid Response Activities include the following steps:

1. Week 1
    a. Request ICS (Section 5.1)
    b. Establish Command (Section 5.1.1)
    c. Send out Notification of Rapid Response (Section 5.1.2)
    d. Establish MAC Group and ICS Staff (Section 5.1.3)
2. Begin Within 1 Week
    a. Delimit range and update ICS Type, as required (Section 5.2)
    b. Minimize Additional Spread (Section 5.3)
3. Week 6 (or as soon as lab results are available)
    a. Data Collation (Section 5.4)
    b. MAC Group Meeting (Section 5.5)

5.1 Requesting Incident Command System and Designating Rapid Response Leadership

Adherence to a clear and repeatable organizational structure will ensure that all Rapid Response Activities are coordinated effectively. As such, ICS should be requested immediately upon a Positive waterbody classification. To request ICS from WDFW, entities should submit an ICS Request to WDFW at ais@wa.dfw.gov. The email should include the following details:

- Name and contact information for the entity that collected the zebra or quagga mussel specimens.
- Names and contact information for the entities that verified the specimens to be zebra or quagga mussels.
- Date of zebra or quagga mussel sample collections.
- Location of zebra or quagga mussel collections (waterbody name, county, and GPS coordinates).
- A description of any Verification Sampling conducted and associated results.
- A description of the laboratory methods used.

Once received, the WDFW AIS Coordinator will verify the information and, if appropriate, elevate the request to the WDFW Fish Program Director who will request ICS from the WDFW Director.

5.1.1 Establishing Command and Requesting Emergency Measures

If ICS is approved by the WDFW Director, an Incident Commander or the WDFW Representative Commander within a Unified Command will be assigned (Section 1.5.1). Additionally, the WDFW

Director will, in accordance with RCW 77.135.090, request the governor to order "emergency measures to prevent or abate the prohibited species" under RCW 43.06.010(14). If an emergency is declared, WDFW may consult the WISC to advise the governor regarding necessary emergency measures. According to RCW 77.135.090, WISC "must involve owners of the affected water body or property, state and local governments, federal agencies, tribes, public health interests, technical service providers, and environmental organizations, as appropriate."

If a Unified Command is required, the WDFW Representative Commander will identify Commanders from each applicable organization, including those from the CRB Interagency Response network if within the CRB, and form the Unified Command.

5.1.2 Notification of Rapid Response

Once ICS has been approved and Command (i.e., the Incident Commander or Unified Command) established, Command will send out the Notification of Rapid Response to all entities with fisheries management responsibilities in state of Washington waterbodies (APPENDIX A). A Notification template is provided in APPENDIX H to assist with communications.

Public outreach is also a critical component of a successful invasive species prevention and response plan. As such, once designated, the ICS Public Information Officer should lead public outreach efforts.[8] If ICS is led by WDFW, the WDFW Communications Division will generate a press release to notify the public of zebra or quagga mussel presence, the initiation of Rapid Response Activities, and other associated information. The following includes typical information provided to the public regarding the nature and status of a new invasion:

- Information about zebra or quagga mussels
- The current understanding of the distribution
- The time of first detection in the affected waterbody
- Likely origin, if known
- The risks it poses to local industries
- Potential control options in consideration
- Likelihood of success of control options
- Potential interruptions to local recreation or fisheries

5.1.3 Establishing the MAC Group and ICS Staff

Following Notification of Rapid Response, the Incident Commander or Unified Command, as applicable, will immediately convene a MAC Group (Section 1.5.2) and designate General and Command Staff according to Section 1.4.2. The Operations Lead (Section 5.1.3.1) will then designate Responding Entity Leads (Section 5.1.3.2) for specified waterbodies from selected applicable entities that have a combination of one or more of the following attributes: fisheries management authority, proximity to the affected waterbody, and/or the capability to provide staff, equipment, and other resources to support Rapid Response Activities. Each Responding Entity Lead will designate Field Leads

[8] A sample press release is available at https://www.crbdirt.com/13-ics-steps

(Section 5.1.3.3) from their organization, as applicable, to oversee sampling teams. All information should be provided to Command via the designated chain of command (Figure 5-1).

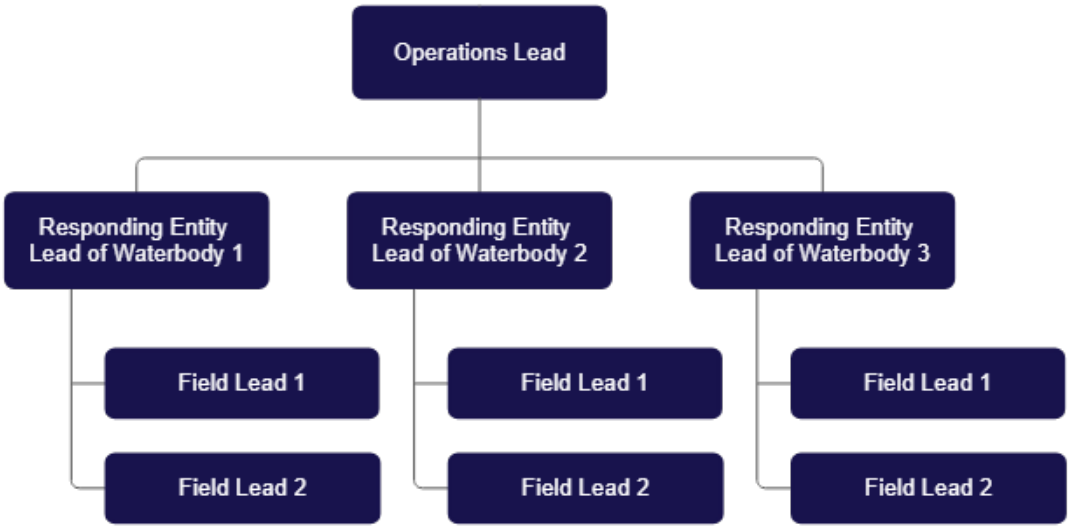


Figure 5-1. An example Rapid Response organizational chart for the scenario where there are detections in waterbodies spanning three jurisdictions.

5.1.3.1 Operations Lead Responsibilities

The Operations Lead is responsible for the following activities associated with a Rapid Response:

- Ensure safety of tactical operations.
- Initiate and supervise the execution of operations portion of the Rapid Response.
- Manage the Rapid Response timeline, tracking the progress of Rapid Response sampling.
- Coordinate with Responding Entity Leads.
- Communicate to Command about the progress of Rapid Response efforts.
- Approve the release of resources.
- Provide guidance at decision points.
- Provide data from the Rapid Response sampling to the Planning Lead (Section 1.4.2).

5.1.3.2 Responding Entity Lead Responsibilities

The Responding Entity Lead is a designated point of contact responsible for the following activities associated with a Rapid Response:

- Designate Field Leads to conduct sampling according to guidance from the Operations Lead.
- Coordinate and manage individual Field Leads.
- Manage the timelines and track the progress of individual field campaigns.
- Summarize data collected from Field Leads and provide data to the Operations Lead.

5.1.3.3 Field Lead Responsibilities

The Field Lead is responsible for managing a group of people designated to conduct Rapid Response sampling in assigned waterbodies. Field Leads are responsible for the following activities:

- Conduct sampling and collect data according to Rapid Response Activities (Section 5) in assigned waterbodies (sample data collection worksheets provided in APPENDIX F).
- Provide a summary of executed sampling protocols and data to the Responding Entity Lead by the end of the 6-week Rapid Response period.
- Support the Responding Entity Lead.

5.2 Range Delimitation

Efforts to determine the range of the infestation should be started immediately upon ICS initiation and continue, as necessary, through Week 6, for a maximum of 5 weeks of sampling (Figure 5-2). Physical sampling should occur as early as feasible to allow for laboratory processing time. This timeline was developed to garner a general understanding of the geographic limits of the current invasion and relative abundance (i.e., new introduction versus established population with confirmed reproduction) while minimizing the cost and burden to the involved entities prior to the establishment of a regional monitoring, suppression, and/or eradication plan. Efforts to delimit the range may be discontinued sooner than Week 6 if the limits of the current invasion are determined earlier.

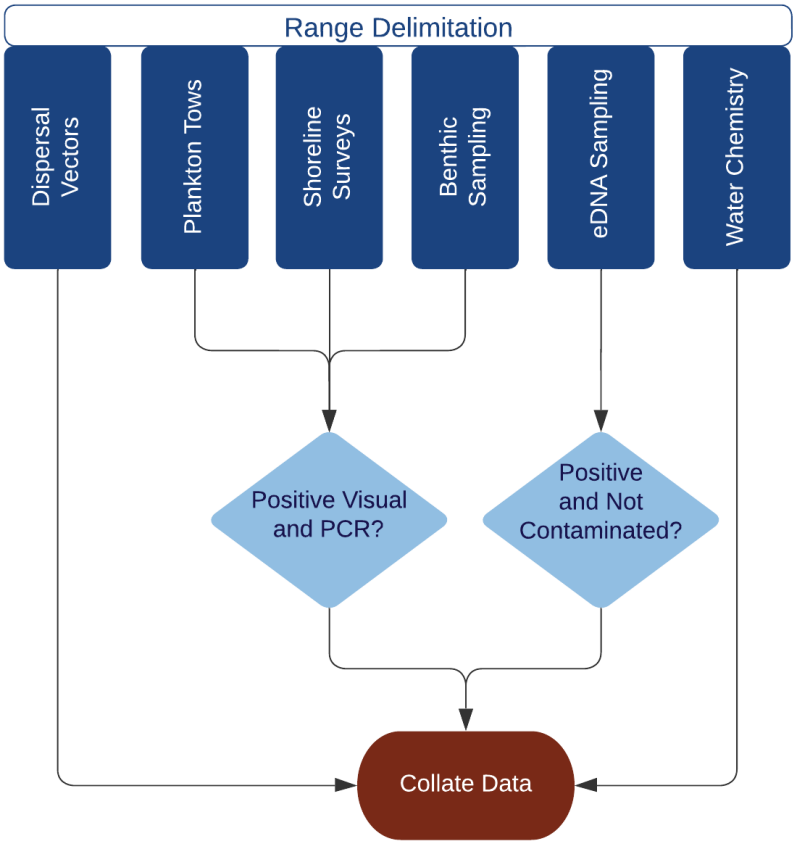


Figure 5-2. Process flow for defining the extent of an invasion.

All physical sampling should be conducted in the affected waterbody, downstream of the affected waterbody, upstream of the affected waterbody, and in waterbodies connected by shared boating traffic. The Operations Lead should assign a Responding Entity Lead appropriate for each jurisdictional boundary. Guidance on specific recommended sampling locations within each waterbody is provided in WRP 2020b, and sample processing should follow the same steps detailed in Sections 4.2, 4.3, and 1.1. Recommended equipment and example data collection sheets are available in APPENDIX F. Physical sampling activities include the following:

1. Determine likely water flow dispersal of zebra or quagga mussel veligers.
    a. Dye studies or other hydrographic research techniques
2. Conduct plankton tow sampling, collecting a minimum of two (i.e., duplicate) samples per site.
3. Conduct shoreline surveys.
    a. Rocks, wood, vegetation, and other debris
    b. Exposed infrastructure (e.g., moored boats, piers, docks, buoys)
    c. Employ canine survey teams
4. Conduct benthic sampling.
    a. PONAR grab
    b. SCUBA or snorkeler surveys of hard substrate
    c. Existing substrate samplers in region
5. Conduct eDNA sampling, collecting a minimum of two (i.e., duplicate) samples per site.
6. Conduct water chemistry sampling.

As applicable, surveys of nearby facilities that could be impacted (e.g., hydropower facilities, irrigation systems, hatcheries) should also be requested.

5.3 Minimize Additional Spread

The goal is to minimize all pathways from the affected waterbodies including implementing decontamination protocols for Rapid Response Activity sampling. The following actions will require close coordination among entities with management authority:

1. Decontaminate[9] all watercraft, equipment, tools, and gear used in sampling waters classified as Inconclusive, Suspect, Positive, or Infested for zebra or quagga mussels prior to sampling other waterbodies.
2. Initiate mandatory inspections, decontaminations, or closures as feasible.
3. Inventory boat launches near the affected area.
4. Identify dispersal vectors other than water flow such as movement by humans, fish and wildlife, water traffic, and other processes.
5. Inform waterbody users of the presence of zebra or quagga mussels.

[9] https://wdfw.wa.gov/sites/default/files/publications/01490/wdfw01490.pdf

a. Zebra or quagga mussel alert signs deployed.
b. Alert prior users of the affected waterbodies of the risks their boats and equipment create for other waterbodies.

6. Implement Hazard Analysis and Critical Control Point[10] plans, if applicable, to ensure that response personnel do not further spread the original introduction.

5.4 Data Collation

Once results from Rapid Response sampling are available, data collection worksheets and laboratory reports should be provided to Responding Entity Leads who will collate the data from their respective organization and provide it to the Operations Lead. The Operations Lead will, in turn, provide the combined data from all Responding Entity Leads to the Planning Lead (Section 1.4.2), who will organize and compile data to share with Command and the MAC Group.

5.5 MAC Group Meeting

A MAC Group meeting should be convened and hosted by Command no later than 6 weeks after the initiation of Rapid Response Activities or as soon as laboratory results are available. This meeting will serve two key purposes: 1) to disseminate the information collected to date to the MAC Group, and 2) to begin coordinating Extended Response Activities.

5.5.1 Deliverables

Prior to the meeting, relevant documentation should be distributed to the MAC Group. This should include the following:

- A map depicting sampling and detection information
- Summary of detection, verification, and sampling conducted during range delimitation
  - Initial detection date
  - Dates, gear, and effort of each sampling event
  - Results of each sampling event

5.5.2 Agenda

The MAC Group meeting agenda should cover the documentation described above and establish a general plan for next steps and subsequent communications. The following topics are recommended for the meeting agenda:

- Present an overview of the Rapid Response effort, including map review
- Review public outreach information sent
- Check on Emergency Declaration Request status
- Fill out the Invaded Waterbody Situation Assessment (APPENDIX I)
- Identify available gear and gear procurement needs

[10] https://www.fws.gov/course/hazard-analysis-and-critical-control-point-planning-prevent-spread-invasive-species

- Identify trained personnel and training requirements
- Identify funding resources
- Identify permit requirements
- Identify Endangered Species Act (ESA) consultation requirements (Section 5.5.3)
- Develop Extended Response Activity plan (Section 6)
- Assign roles

5.5.3 Endangered Species Act Consultation

Some Extended Response Activities in certain waterbodies may trigger an ESA consultation process. Guidance on what triggers consultation and information to facilitate emergency consultation procedures is available at https://www.crbdirt.com/introduction and in an ESA Manual developed expressly to facilitate ESA Section 7 compliance during a dreissenid mussel rapid response (USFWS and PMFC 2021).

6 Extended Response Activities

The appropriate management strategy to employ during Extended Response Activities depends on a combination of the extent of the infestation, habitat accessibility, complexity, and connectivity, eradication feasibility, permit and resource availability, funding, and the biological communities within the affected waterbody. An Invaded Waterbody Situation Assessment (APPENDIX I) should be completed to guide feasibility of potential Extended Rapid Response Activities (i.e., eradication, containment, or long-term management).

6.1 Eradication

When feasible, eradication (i.e., complete removal of all individuals in a population) of zebra or quagga mussels is the preferred management option in the state of Washington. This approach allows for the rapid restoration of native and/or important game fish assemblages and minimizes costs associated with long-term suppression. Eradication tools considered by WDFW include chemical treatment, the de-watering of waterbodies, and/or water temperature manipulation.

6.1.1 Chemical Treatments

The following include general procedures to be followed for all chemical treatments:

- Evaluate chemicals available, including efficacy, availability, and lead time to obtain the chemical:
  - Sodium chloride
  - Potassium chloride
  - Chlorine
  - Acetic acid
  - Calcium hydroxide / oxide (lime)
  - Rotenone
  - Potassium permanganate
  - Endothall (Hydrothol 191™)
  - Sodium carbonate peroxyhydrate
  - Methoprene
  - Chelated copper
  - Pseudomonas fluorescens strain CL 145A
  - Other effective products
- Engage all regulatory authorities to obtain permitting and regulatory approval.
- Draft cooperative agreements with entities participating in eradication, as needed.
- Evaluate timing of treatment.
- Evaluate water movement and subsurface flow in the treatment area.
- Calculate area, volume, and flow for the chemical treatment to determine the amount of chemical required.
- Determine the availability and lead time for silt curtains or other containment booms to contain or restrict water movement in treatment areas.
- Engage stakeholders on details and anticipated impacts of eradication action.

- Identify a lead for pesticide application and contract, as necessary, with a pesticide applicator to conduct treatment, following applicable purchasing and contracting laws.
  - Determine the lead time needed to mobilize the contractor to conduct the application.
- Evaluate in-water target concentration rates following treatment.
- Evaluate treatment efficacy and continue monitoring for evidence of surviving mussels.

When applying chemicals, all protocols and procedures specified in chemical-specific Standard Operating Procedures Manuals, if available, as well as laws and regulations of all jurisdictions must be followed. Pesticide applications to waters of the state must also meet the terms and timelines identified by the Clean Water Act, which is administered by Ecology via a NPDES pesticide general permit.

WDFW has been issued an Aquatic and Invasive Species Control general permit[11] for the control of fish, animals, and insects, which went into effect July 28, 2023, and expires July 27, 2028. This permit is a combined NPDES and State Waste Discharge general permit and ensures that applicators of chemicals and other control products comply with the Federal Clean Water Act and with state law (RCW 90.48.080). This permit does not apply outside of state managed lands. If an infestation were to be found in federally managed waters where the federal agency is the decision maker or in tribal waters, then the pesticide application would have to occur under the Environmental Protection Agency pesticide General Permit.[12]

If a "New Use" of a currently registered pesticide is required, it would have additional permitting requirements. For new uses of currently registered pesticides, a registrant must apply to WSDA for a Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 24(c) Special Local Need pesticide registration.[13] Alternatively, if it is determined that there are inadequate tools to address the zebra or quagga mussel incident (including a New Use application), an application for a FIFRA Section 18 emergency exemption from federal registration may be submitted to WSDA.[14]

6.1.2 Alternative Eradication Methods

Eradication may also be conducted via non-chemical treatments or in combination with non-chemical treatments. Available options include complete de-watering of a waterbody, heating, cooling, or partial de-watering of a waterbody in combination with chemical, heating, or cooling treatments. Complete de-watering of a waterbody allows for eradication of zebra or quagga mussels via desiccation. Alternatively, heating or cooling a waterbody can be lethal if temperatures are outside the thermal tolerances of all life-stages of zebra or quagga mussels. Finally, incomplete drawdowns may also be used to lower the water level. Reducing the volume of the waterbody reduces the amount of chemical product required to

[11] https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/aquatic-invasive-species-control-general-permit; https://apps.ecology.wa.gov/paris/DownloadDocument.aspx?Id=459920
[12] https://www.epa.gov/npdes/pesticide-permitting
[13] https://agr.wa.gov/services/licenses-permits-and-certificates/summary-descriptions/special-local-need; https://www.epa.gov/pesticide-registration/guidance-fifra-24c-registrations
[14] https://agr.wa.gov/departments/pesticides-and-fertilizers/pesticides/pesticide-registration/product-registration/special-registrations/section-18-emergency-exemption

treat the waterbody or makes heating or cooling more practical. Impacts to non-target species should be considered and managers must ensure that all requisite permits are acquired prior to these alternative eradication options.

The following are general procedures to be followed for all waterbody drawdowns:

- Engage all regulatory authorities to obtain permitting and regulatory approval.
- Draft cooperative agreements with entities participating in eradication, as needed.
- Evaluate timing of treatment.
- Determine the availability and lead time for silt curtains or other containment booms to contain or restrict water movement.
- Engage stakeholders on details and anticipated impacts of eradication action.
- Evaluate treatment efficacy and continue monitoring for evidence of surviving mussels.

6.2 Containment

To prevent or slow the spread of zebra or quagga mussels, it may be necessary to mobilize a quarantine or emergency closure of an affected waterbody and/or install a physical barrier to prevent volitional spread. Under RCW 77.135.050, WDFW is authorized to implement a quarantine against a waterbody, property, or region within the state. However, managers must ensure all requisite permits are acquired prior to a barrier installation. Note that the effectiveness of barriers is contingent on the complexity and connectivity of the infested waterbody, barrier design, and whether there is a requirement to allow for fish passage. Furthermore, it is difficult to prevent downstream passage with barriers due to the propensity for veliger dispersal during high water events.

The following are general procedures to be followed for containment (as feasible and applicable):

- Engage all regulatory authorities to obtain permitting and regulatory approval.
- Quarantine affected waterbodies to prevent spread by watercraft.
- Quarantine any hatcheries or aquaculture operations that share a water source with the affected waterbody.
- Inspect and decontaminate watercraft and equipment from the affected waterbody.
- Stop or slow water release to potentially unaffected sites.
- Establish public outreach efforts:
  - Alert signs at access points
  - Contacting prior users about the risks their boats and equipment create for other waterbodies
  - Broad outreach via print and electronic media
- Enforce quarantines through state law enforcement or cooperating local jurisdictions

6.3 Long-Term Management

Although eradication may be the foremost goal of any response plan, it may not always be feasible in aquatic systems. In these cases, ICS staff and the MAC Group will need to determine which goals are attainable and cost effective. Management action goals other than eradication or containment may include suppression (i.e., reduction of population densities to reduce negative impacts and slow the rate of spread) or development of other strategies to minimize the impact of an established population of

zebra or quagga mussels. 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. In addition to suppression activities and long-term management plans, monitoring strategies should be developed in parallel. Generally, annual monitoring surveys are recommended. Managers must ensure all requisite permits are acquired prior to initiation of suppression or monitoring activities.

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APPENDIX A Entities with Fisheries Management Responsibilities in State of Washington Waterbodies

Appendix Table A-1. Agencies and entities with AIS or fisheries management responsibilities or interests in Washington and/or regionally.

Water Body Entities
Anderson Island Parks and Recreation District
Asotin County
Avista Corporation
Chehalis River Basin Flood Authority
Chelan County
City of Aberdeen
City of Anacortes
City of Bellevue
City of Bellingham
City of Black Diamond
City of Bonney Lake
City of Bremerton
City of Centralia
City of Chelan
City of Everett
City of Everett, Public Works
City of Federal Way
City of Ilwaco
City of Kennewick
City of Kent
City of Lakewood
City of Leavenworth
City of Longview
City of Lynnwood
City of Maple Valley
City of Medical Lake
City of Monroe
City of Mountlake Terrace
City of Naches
City of Newcastle
City of Ocean Shores
City of Puyallup
City of Rock Island
City of Sammamish
City of SeaTac
City of Seattle
City of Seattle, Seattle Public Utilities
City of Sequim
City of Shoreline
City of Snohomish
City of Spokane
City of Springdale
City of Tacoma, Tacoma Public Utilities
City of Walla Walla

Water Body Entities
City of Woodland
Clallam County
Clark County
Confederated Tribes and Bands of the Yakama Nation
Confederated Tribes of the Chehalis Reservation
Confederated Tribes of the Colville Reservation
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of Warm Springs
Fairchild Air Force Base
Fort William Symington Division 5 Homeowners' Association
Grays Harbor County
Harder Farms
Island County
ITT Rayonier
Jamestown S'Klallam Tribe
Jefferson County
Kalispel Tribe of Indians
Kent Parks, Recreation & Community Services
King County
King County Parks and Recreation Division
King County Water and Land Resources Division
Kitsap County
Lacey Parks and Recreation Department
Lake Chelan Reclamation District
Lake Symington Community Club Homeowners' Association
Lewis County
Lower Elwha Klallam Tribe
Lummi Island Scenic Estates Community Club
Makah Tribe
Mason County
Muckleshoot Indian Tribe
National Park Service
Nez Perce Tribe
Nooksack Tribe
Oregon Department of Fish and Wildlife
Pacific County Department of Public Works
PacificCorp
Pierce County
Point No Point Treaty Council
Private Entity
Public Utility District No. 1 of Chelan County
Public Utility District No. 1 of Douglas County
Public Utility District No. 1 of Pend Oreille County
Public Utility District No. 1 of Skagit County
Public Utility District No. 1 of Snohomish County
Public Utility District No. 2 of Grant County

Water Body Entities
Puget Sound Energy
Puyallup Tribe of Indians
Quileute Nation
Quinault Indian Nation
Riley Creek Timber
Seattle City Light
Seattle Parks and Recreation
Skagit County Parks and Recreation
Skokomish Indian Tribe
Snohomish County
Snohomish County Parks, Recreation & Tourism
Spokane County
Spokane Tribe of Indians
Squaxin Island Tribe
Stemilt Irrigation District
Stillaguamish Tribe
Tacoma Metro Parks
Thurston County Parks & Recreation
Tulalip Tribes
U.S. Army Corps of Engineers
U.S. Army Corps of Engineers Portland District
U.S. Army Corps of Engineers Walla Walla District
U.S. Bureau of Land Management
U.S. Bureau of Reclamation
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
U.S. Forest Service
Washington Department of Enterprise Services
Washington Department of Fish and Wildlife
Washington Department of Natural Resources
Washington Department of Social and Health Services
Washington State Parks and Recreation Commission
Water Resource Inventory Area 8 Salmon Recovery Council
Water Resource Inventory Area 9 Salmon Recovery Council
Wenatchee Heights Reclamation District
Whatcom County

Appendix Table A-2. Washington lacustrine waterbodies and associated entities with AIS or fisheries management responsibilities or interests.

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Admiralty Bay Pond East	Pond	N/A	48.164323	-122.63822	Island	4	Western	
Admiralty Bay Pond West	Pond	N/A	48.164365	-122.640212	Island	4	Western	
Aeneas Lake	Lake	N/A	48.678856	-119.511161	Okanogan	2	Eastern	
Albright Lake	Lake	N/A	48.542119	-119.608755	Okanogan	2	Eastern	
Alder Lake	Reservoir	Alder	46.7984	-122.2926	Pierce	6	Western	WDF
Aldrich Lake	Lake	N/A	47.432625	-123.08225	Mason	6	Western	
Alkali Lake	Lake	N/A	47.528527	-119.488081	Grant	2	Eastern	
Alta Lake	Lake	N/A	48.0275	-119.9355	Okanogan	2	Eastern	
Amber Lake	Lake	N/A	47.3479	-117.7146	Spokane	1	Eastern	
American Lake	Lake	N/A	47.1220092	-122.5693366	Pierce	6	Western	WDFW
Ancient Lake South	Lake	N/A	47.148509	-119.943755	Grant	2	Eastern	
Anderson Lake	Lake	N/A	48.015881	-122.800699	Jefferson	6	Western	WDFW, Sk Treaty Coun
Angle Lake	Lake	N/A	47.427512	-122.286785	King	4	Western	WDFW,
Antilon Lake Lower	Lake	N/A	47.967512	-120.157567	Chelan	2	Eastern	WD
Antilon Lake Upper	Lake	N/A	47.97575	-120.160764	Chelan	2	Eastern	WI
Apex Lake	Lake	N/A	48.2418	-118.213	Ferry	2	Eastern	
Ashes Lake	Lake	N/A	45.673526	-121.914129	Skamania	5	Western	
Asotin Headgate County Park Pond	Pond	N/A	46.325859	-117.212087	Asotin	1	Eastern	
Aspen Lake	Lake	N/A	48.409144	-120.212161	Okanogan	2	Eastern	
Badger Lake	Lake	N/A	47.3423418	-117.6369987	Spokane	1	Eastern	
Baker Lake	Reservoir	Baker	48.7266	-121.6555	Whatcom	4	Western	
Ballinger Lake	Lake	N/A	47.782021	-122.326817	Snohomish	4	Western	WDFW &
Banks Lake	Reservoir	Banks	47.8634586	-119.1178923	Grant	2	Eastern	WD
Barclay Lake	Lake	N/A	47.784586	-121.426684	Snohomish	4	Western	
Baseline Lake	Lake Manmade	N/A	47.0893	-119.8442	Grant	2	Eastern	
Bass Lake	Lake	N/A	47.254853	-121.995621	King	4	Western	
Battle Ground Lake	Lake	N/A	45.804756	-122.494045	Clark	5	Western	
Bay Lake	Lake	N/A	47.244207	-122.757943	Pierce	6	Western	
Bayley Lake	Lake	N/A	48.420209	-117.662316	Stevens	1	Eastern	
Bead Lake	Lake	N/A	48.288824	-117.110072	Pend Oreille	1	Eastern	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Bear Lake	Lake	N/A	47.925425	-117.355156	Spokane	1	Eastern	WDF
Beaver Lake	Lake Manmade	N/A	46.283607	-117.654194	Columbia	1	Eastern	
Beaver Lake	Reservoir	N/A	48.850535	-118.972252	Okanogan	2	Eastern	
Beaver Lake	Lake	N/A	48.112174	-124.245833	Clallam	6	Western	WDF
Beaver Lake	Lake	N/A	48.448756	-122.218729	Skagit	4	Western	
Beaver Lake	Lake	N/A	47.589592	-121.999614	King	4	Western	WDFW, Cit
Beda Lake	Lake	N/A	47.046326	-119.541041	Grant	2	Eastern	WD
Beehive Reservoir	Reservoir	Beehive	47.326567	-120.399643	Chelan	2	Eastern	
Bennington Lake	Reservoir	N/A	46.065562	-118.260595	Walla Walla	1	Eastern	
Benson Lake	Lake	N/A	47.3373	-122.9215	Mason	6	Western	
Big Bow Lake	Lake	N/A	47.383246	-120.160413	Douglas	2	Eastern	WI
Big Buck Lake	Lake	N/A	48.395525	-120.184783	Okanogan	2	Eastern	
Big Four Lake	Lake	N/A	46.260185	-117.66534	Columbia	1	Eastern	
Big Lake	Lake	N/A	48.37921	-122.23304	Skagit	4	Western	
Big Meadow Lake	Lake	N/A	48.727765	-117.557637	Pend Oreille	1	Eastern	
Big Twin Lake	Lake	N/A	48.446238	-120.194755	Okanogan	2	Eastern	
Billy Clapp Lake	Reservoir	Billy Clapp	47.4528891	-119.2520288	Grant	2	Eastern	WDFW,
Bitter Lake	Lake	N/A	47.726624	-122.35235	King	4	Western	WDFW,
Black Lake	Lake	N/A	46.98314	-122.97438	Thurston	6	Western	
Black Lake	Lake	N/A	48.561744	-117.626181	Stevens	1	Eastern	
Black Lake	Reservoir	Black	47.303782	-120.334751	Chelan	2	Eastern	
Black Lake	Lake	N/A	46.315314	-124.040612	Pacific	6	Western	WD
Black Pine Lake	Lake	N/A	48.311182	-120.277515	Okanogan	2	Eastern	
Blackbird Island Pond	Pond	N/A	47.593037	-120.662047	Chelan	2	Eastern	WDFW
Blackmans Lake	Lake	N/A	47.932269	-122.094003	Snohomish	4	Western	WDFW
Blue Creek	Creek	N/A	46.492613	-122.724828	Lewis	5	Western	
Blue Lake	Lake	N/A	47.5713854	-119.4359765	Grant	2	Eastern	
Blue Lake	Lake	N/A	48.906835	-119.491883	Okanogan	2	Eastern	
Blue Lake	Lake	N/A	48.687127	-119.694673	Okanogan	2	Eastern	
Blue Lake	Lake	N/A	48.566949	-119.612742	Okanogan	2	Eastern	
Blue Lake	Lake	N/A	46.323879	-117.670915	Columbia	1	Eastern	
Blythe Lake	Lake	N/A	46.958207	-119.2832	Grant	2	Eastern	
Bonaparte Lake	Lake	N/A	48.80019	-119.054356	Okanogan	2	Eastern	
Bonney Lake	Lake	N/A	47.189008	-122.185772	Pierce	6	Western	WDFW

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Bonnie Lake	Lake	N/A	47.28183	-117.558588	Spokane	1	Eastern	
Borderline Lake	Lake Manmade	N/A	48.95561	-122.68294	Whatcom	4	Western	
Bosworth Lake	Lake	N/A	48.043358	-121.970741	Snohomish	4	Western	
Boundary Reservoir	Reservoir	Boundary	48.8529253	-117.3856592	Pend Oreille	1	Eastern	WDFW
Bourgeau Lake	Lake	N/A	48.2311	-118.2168	Ferry	2	Eastern	
Bow Lake	Lake Manmade	N/A	48.58562	-122.35614	Skagit	4	Western	
Box Canyon Reservoir	Reservoir	Box Canyon	48.3167	-117.2761	Pend Oreille	1	Eastern	WDFW, Pend
Broho Lake	Lake Manmade	N/A	46.99332	-122.25333	Pierce	6	Western	
Browns Lake	Lake	N/A	48.438173	-117.192565	Pend Oreille	1	Eastern	
Buck Lake	Lake	N/A	48.604092	-120.200825	Okanogan	2	Eastern	
Buck Lake	Lake	N/A	47.910657	-122.559429	Kitsap	6	Western	WD
Buffalo Lake	Lake	N/A	48.063	-118.8888	Okanogan	2	Eastern	
Bumping Lake	Reservoir	Bumping	46.8634761	-121.3023	Yakima	3	Eastern	WDFW
Burke Lake	Lake	N/A	47.1347	-119.9256	Grant	2	Eastern	WD
Butterworth Reservoir	Reservoir	Butterworth	47.2067	-122.6911	Pierce	6	Western	Pier
Buzzard Lake	Lake	N/A	48.418705	-119.715081	Okanogan	2	Eastern	
Cady Lake	Lake	N/A	47.426342	-123.051357	Mason	6	Western	
Cain Lake	Lake	N/A	48.649705	-122.329306	Whatcom	4	Western	
Caldwell Lake	Lake	N/A	48.650799	-117.337691	Pend Oreille	1	Eastern	
Campbell Lake	Lake	N/A	48.442031	-120.066884	Okanogan	2	Eastern	
Canal Lake	Lake	N/A	46.92596	-119.183532	Grant	2	Eastern	
Capitol Lake	Reservoir	Capitol	47.0359	-122.9096	Thurston	6	Western	WDES
Carlisle Lake	Lake	N/A	46.579893	-122.727066	Lewis	5	Western	
Carls Lake	Lake	N/A	48.6604	-117.441216	Pend Oreille	1	Eastern	
Carney Lake	Lake	N/A	47.403298	-122.760955	Pierce	6	Western	
Carrie BLake Park Pond	Pond	N/A	48.083863	-123.083778	Clallam	6	Western	WDFW, Jame
Cascade Lake	Lake	N/A	48.6516	-122.8555	San Juan	4	Western	
Cases Pond	Pond	N/A	46.677111	-123.716561	Pacific	6	Western	
Cassidy Lake	Lake	N/A	48.052035	-122.095196	Snohomish	4	Western	
Castle Lake	Lake	N/A	46.250352	-122.275074	Cowlitz	5	Western	
Cattail Lake	Lake	N/A	46.94429	-119.224895	Grant	2	Eastern	
Cedar Lake	Lake	N/A	48.9415	-117.5894	Stevens	1	Eastern	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Chain Lake	Lake	N/A	47.903786	-121.970839	Snohomish	4	Western	
Chambers Lake	Lake	N/A	47.025949	-122.841233	Thurston	6	Western	WDFW &
Chambers Lake	Lake	N/A	46.466595	-121.534791	Lewis	5	Western	
Chance Lake	Reservoir	N/A	46.665822	-119.031235	Franklin	3	Eastern	WD
Chaplain Lake	Reservoir	Chaplain	47.9614	-121.8467	Snohomish	4	Western	Ev
Chapman Lake	Lake	N/A	47.3558	-117.568	Spokane	1	Eastern	
Chehalis River	River	N/A	46.962226	-123.601197	Grays Harbor	6	Western	WDFW, CR
Chelan Golf Course Pond West	Pond	N/A	47.851579	-120.028134	Chelan	2	Eastern	
Cherry Lake	Lake	N/A	47.765571	-121.826886	King	4	Western	WDF
Chester Morse Lake	Reservoir	Chester Morse	47.3873	-121.6963	King	4	Western	
Chitwood Lake	Lake	N/A	48.083855	-121.885424	Snohomish	4	Western	
Chopaka Lake	Lake	N/A	48.917747	-119.69997	Okanogan	2	Eastern	WD
Chukar Lake	Lake	N/A	46.957525	-119.274008	Grant	2	Eastern	
Clara Lake	Lake	N/A	47.428232	-123.064159	Mason	6	Western	
Clark Pond	Pond	N/A	46.521249	-119.071278	Franklin	3	Eastern	
Cle Elum Lake	Reservoir	Cle Elum	47.2816	-121.0921	Kittitas	3	Eastern	WDFW
Clear Lake	Lake	N/A	47.5392	-117.6853	Spokane	1	Eastern	WDFW,
Clear Lake	Lake	N/A	46.823	-122.4734	Thurston	6	Western	
Clear Lake	Lake	N/A	46.9313	-122.2803	Pierce	6	Western	
Clear Lake	Lake	N/A	48.4602	-122.2252	Skagit	4	Western	WDFW
Clear Lake	Lake	N/A	47.2971	-120.3017	Chelan	2	Eastern	WDFW &
Clear Lake	Reservoir	Clear	46.6259	-121.2705	Yakima	3	Eastern	
Cliff Lake	Lake	N/A	47.133993	-119.940169	Grant	2	Eastern	
Coffee Pot Lake	Lake	N/A	47.492847	-118.563408	Lincoln	1	Eastern	WDFW,
Coffin Lake	Lake	N/A	48.576514	-117.553742	Stevens	1	Eastern	WDFW, WD
Coldwater Lake	Lake	N/A	46.302863	-122.240325	Skamania	5	Western	
Columbia Basin Hatchery Creek	Creek	N/A	47.18502	-119.25105	Grant	2	Eastern	
Columbia Park Pond	Pond	N/A	46.218275	-119.142696	Benton	3	Eastern	WDFW, Ci
Columbia River	River	N/A	45.6122	-122.634	Clark	5	Western	WDFW,
Conconully Lake	Reservoir	Conconully Lake	48.563477	-119.719804	Okanogan	2	Eastern	
Conconully Reservoir	Reservoir	Conconully	48.544925	-119.750935	Okanogan	2	Eastern	WDFW,
Conger Pond 1	Pond	N/A	48.386282	-117.388674	Pend Oreille	1	Eastern	
Conger Pond 2	Pond	N/A	48.38221	-117.385395	Pend Oreille	1	Eastern	
Conners Lake	Lake	N/A	48.749041	-119.663027	Okanogan	2	Eastern	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Cook Lake	Lake	N/A	48.2884	-119.5291	Okanogan	2	Eastern	
Cooks Lake	Lake	N/A	48.34329	-117.172458	Pend Oreille	1	Eastern	
Cooper Lake	Lake	N/A	47.426187	-121.176924	Kittitas	3	Eastern	
Coot Lake	Lake	N/A	46.921174	-119.205624	Grant	2	Eastern	
Corral Lake	Lake	N/A	46.96393	-119.302999	Grant	2	Eastern	
Cottage Lake	Lake	N/A	47.7556	-122.0873	King	4	Western	WDFW, Ki
Cougar Lake	Lake	N/A	48.4776	-120.09517	Okanogan	2	Eastern	
Council Lake	Lake	N/A	46.2667	-121.6294	Skamania	5	Western	
Cow Lake	Lake	N/A	47.132084	-118.158123	Adams	2	Eastern	
Cowlitz River	River	N/A	46.278164	-122.911193	Cowlitz	5	Western	WDF
Cox Lake	Lake	N/A	48.206	-118.8947	Okanogan	2	Eastern	
Crabapple Lake	Lake	N/A	48.131372	-122.273778	Snohomish	4	Western	
Cranberry Lake	Lake	N/A	48.394095	-122.655777	Island	4	Western	
Crater Lake	Lake	N/A	48.882158	-117.262408	Pend Oreille	1	Eastern	
Crawfish Lake	Lake	N/A	48.481654	-119.215954	Okanogan	2	Eastern	WI
Crescent Lake	Lake	N/A	48.986787	-117.312662	Pend Oreille	1	Eastern	
Crescent Lake	Lake	N/A	47.812355	-122.003426	Snohomish	4	Western	
Crescent Lake	Lake	N/A	47.391862	-122.568558	Pierce	6	Western	WD
Crocker Lake	Lake	N/A	47.9363	-122.8843	Jefferson	6	Western	WDFW, Sk Trea
Crystal Lake	Lake	N/A	47.129911	-119.93512	Grant	2	Eastern	
Cup Lake	Lake	N/A	47.131451	-119.936315	Grant	2	Eastern	
Curl Lake	Lake	N/A	46.2545	-117.672	Columbia	1	Eastern	
Curlew Lake	Lake	N/A	48.721378	-118.6626392	Ferry	1	Eastern	
Dalton Lake	Lake	N/A	46.297145	-118.800111	Franklin	3	Eastern	
Dam Pond	Pond	N/A	46.583043	-118.016208	Columbia	1	Eastern	
Davis Lake	Lake	N/A	48.2301	-117.2898	Pend Oreille	1	Eastern	
Davis Lake	Lake	N/A	48.438172	-120.120724	Okanogan	2	Eastern	
Davis Lake	Lake	N/A	48.738422	-118.23071	Ferry	1	Eastern	
Davis Lake	Lake	N/A	46.541317	-122.250822	Lewis	5	Western	
Dayton Pond	Pond	N/A	46.3135	-117.9734	Columbia	1	Eastern	
Deception Lake	Lake	N/A	48.727581	-117.336089	Pend Oreille	1	Eastern	
Decoursey Pond	Pond	N/A	47.18676	-122.321837	Pierce	6	Western	WDF
Deep Lake	Lake	N/A	48.8626	-117.6033	Stevens	1	Eastern	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Deep Lake	Lake	N/A	47.5886	-119.3238	Grant	2	Eastern	
Deep Lake	Lake	N/A	46.909	-122.9157	Thurston	6	Western	
Deep Lake	Lake	N/A	47.273605	-121.939852	King	4	Western	WDF
Deep River	River	N/A	46.3141	-123.7132	Wahkiakum	5	Western	
Deer Lake	Lake	N/A	48.108274	-117.6052139	Stevens	1	Eastern	
Deer Lake	Lake	N/A	46.305305	-117.652497	Columbia	1	Eastern	
Deer Lake	Lake	N/A	47.974244	-122.384032	Island	4	Western	WD
Deer Springs Lake	Lake	N/A	47.473034	-118.617065	Lincoln	1	Eastern	WDF
Depression Lake	Lake	N/A	48.659828	-121.694718	Whatcom	4	Western	
Desert Lake Chain	Lake	N/A	47.009833	-119.485882	Grant	2	Eastern	WD
Devereaux Lake	Lake	N/A	47.405965	-122.848095	Mason	6	Western	
Diablo Lake	Reservoir	Diablo	48.69006	-121.09527	Whatcom	4	Western	W
Diamond Lake	Lake	N/A	48.1293	-117.1869443	Pend Oreille	1	Eastern	
Dibble Lake	Lake	N/A	48.432904	-120.170624	Okanogan	2	Eastern	
Dickey Lake	Lake	N/A	48.110702	-124.507741	Clallam	6	Western	WDF
Dickinson Lake	Reservoir	N/A	48.6815	-122.6443	San Juan	4	Western	
Dog Lake	Lake	N/A	46.657375	-121.359731	Yakima	3	Eastern	
Doheny Lake	Lake	N/A	48.585219	-119.664681	Okanogan	2	Eastern	
Dohman Reservoir	Reservoir	Dohman	46.3468	-123.9964	Pacific	6	Western	Pacifi
Domke Lake	Lake	N/A	48.1774	-120.588	Chelan	2	Eastern	
Donnie Lake	Lake	N/A	46.236285	-117.700049	Columbia	1	Eastern	
Downs Lake	Lake	N/A	47.279381	-117.808298	Spokane	1	Eastern	WDF
Dream Lake	Lake	N/A	48.5796	-123.0839	San Juan	4	Western	
Drunken Charlie Lake	Lake	N/A	47.763881	-121.813686	King	4	Western	WDF
Dry Falls Lake	Lake	N/A	47.603663	-119.359123	Grant	2	Eastern	
Dry Lake	Lake	N/A	47.911558	-120.173843	Chelan	2	Eastern	
Duck Lake	Lake	N/A	46.997423	-124.147699	Grays Harbor	6	Western	WDFW, Q
Duley Lake	Lake	N/A	48.1655	-119.4938	Okanogan	2	Eastern	
Dusty Lake	Lake	N/A	47.139093	-119.949076	Grant	2	Eastern	
Duwamish River	River	N/A	47.5196	-122.3069	King	4	Western	WDFW, USAC Suquamish
Easton Ponds	Pond	N/A	47.234701	-121.168984	Kittitas	3	Eastern	
Echo Lake	Lake	N/A	47.992356	-121.796537	Snohomish	4	Western	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Echo Lake	Lake	N/A	47.771421	-122.343184	King	4	Western	WDFW, C
Echo Lake Maltby	Lake	N/A	47.78634	-122.051413	Snohomish	4	Western	
Eden Creek Reservoir	Reservoir	Eden Creek	47.2011	-122.6962	Pierce	6	Western	Pier
Eells Spring Hatchery	Spring	N/A	47.3096	-123.2395	Mason	6	Western	
Egg Lake	Lake	N/A	48.566628	-123.081596	San Juan	4	Western	
Elbow Lake 1	Lake	N/A	48.950609	-117.985032	Stevens	1	Eastern	
Elk River	River	N/A	46.85866	-124.04079	Grays Harbor	6	Western	
Ell Lake	Lake	N/A	48.604481	-119.11741	Okanogan	2	Eastern	
Eloika Lake	Lake	N/A	48.0188691	-117.3676775	Spokane	1	Eastern	
Elton Pond North	Pond	N/A	46.6579	-120.493382	Yakima	3	Eastern	
Emma Lake	Lake	N/A	46.328842	-118.77205	Franklin	3	Eastern	
Empire Lake 1	Lake	N/A	48.809836	-118.712834	Ferry	1	Eastern	
Evergreen Reservoir	Reservoir	Evergreen	47.1329	-119.9273	Grant	2	Eastern	WD
Failor Lake	Lake	N/A	47.108	-123.9586	Grays Harbor	6	Western	
Falcon Lake East	Lake	N/A	46.980711	-119.290055	Grant	2	Eastern	
Falcon Lake West	Lake	N/A	46.980141	-119.291368	Grant	2	Eastern	
Fan Lake	Lake	N/A	48.055395	-117.405988	Pend Oreille	1	Eastern	
Fanchers Dam Reservoir	Reservoir	Fanchers Dam	48.827544	-119.259193	Okanogan	2	Eastern	
Fargher Lake	Lake	N/A	45.88628	-122.519197	Clark	5	Western	
Fawn Lake	Lake	N/A	47.1644	-123.0706	Mason	6	Western	
Ferry Lake	Lake	N/A	48.522063	-118.813084	Ferry	1	Eastern	
Fiorito Pond North	Lake	N/A	46.938561	-120.50463	Kittitas	3	Eastern	
Fiorito Pond South	Lake	N/A	46.935771	-120.502576	Kittitas	3	Eastern	
Firing Center Pond 1	Pond	N/A	46.674537	-120.445278	Yakima	3	Eastern	
First Thought Lake	Lake	N/A	48.90388	-118.169269	Stevens	1	Eastern	
Fish Hook Pond	Pond	N/A	46.308285	-118.763212	Walla Walla	1	Eastern	
Fish Lake	Lake	N/A	47.518953	-117.521433	Spokane	1	Eastern	WDF
Fish Lake	Lake	N/A	47.834435	-120.704719	Chelan	2	Eastern	
Fish Lake	Lake	N/A	48.50515	-118.80812	Ferry	1	Eastern	
Fish Lake	Lake	N/A	48.613598	-119.70359	Okanogan	2	Eastern	WD
Fish Lake	Lake	N/A	47.270693	-121.956131	King	4	Western	
Fishtrap Lake	Lake	N/A	47.3549	-117.8238	Lincoln	1	Eastern	WDFW
Fivemile Lake	Lake	N/A	47.272799	-122.285686	King	4	Western	WDFW, Ki
Florence Lake	Lake	N/A	47.167228	-122.687371	Pierce	6	Western	WDFW

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Flowing Lake	Lake	N/A	47.947196	-121.987578	Snohomish	4	Western	WDFW &
Forde Lake	Lake	N/A	48.736591	-119.66736	Okanogan	2	Eastern	
Fort Borst Lake	Lake	N/A	46.723118	-122.978059	Lewis	5	Western	WDF
Fourth of July Lake	Lake	N/A	47.25243	-117.975721	Adams	2	Eastern	
Frank's Pond	Pond	N/A	47.8177	-119.974	Chelan	2	Eastern	
Frater Lake	Lake	N/A	48.6551	-117.4846	Pend Oreille	1	Eastern	
Frozen Lake	Lake	N/A	46.9193	-121.6671	Pierce	6	Western	
Gadwall Lake	Lake	N/A	46.944724	-119.229159	Grant	2	Eastern	
Garfield Pond	Pond	N/A	46.997848	-117.191985	Whitman	1	Eastern	
Gibbs Lake	Lake	N/A	47.972125	-122.814382	Jefferson	6	Western	WDFW, Sk Treaty Co
Gilchrist Pond	Pond	N/A	46.788131	-117.398094	Whitman	1	Eastern	
Gissburg Ponds	Pond	N/A	48.142131	-122.191541	Snohomish	4	Western	WDFW &
Gold Course Pond	Pond	N/A	46.414379	-117.08938	Asotin	1	Eastern	
Goose Lake	Lake	N/A	45.941185	-121.764446	Skamania	5	Western	
Gorge Lake	Reservoir	Gorge	48.70045	-121.191189	Whatcom	4	Western	
Grande Ronde River	River	N/A	46.041	-117.2529	Asotin	1	Eastern	WD
Grandy Lake	Lake	N/A	48.565773	-121.799509	Skagit	4	Western	WDFW
Granger Pond	Pond	N/A	46.334887	-120.19432	Yakima	3	Eastern	
Green Lake	Lake	N/A	48.445821	-119.629553	Okanogan	2	Eastern	
Green Lake	Lake	N/A	47.678114	-122.338465	King	4	Western	WDFW, Ki
Grimes Lake	Lake	N/A	47.731304	-119.590418	Douglas	2	Eastern	
H & H Reservoir/Pascal Pond	Reservoir	H & H	47.332396	-120.39832	Chelan	2	Eastern	WDFW,
Halfmoon Lake	Lake	N/A	48.410696	-117.216789	Pend Oreille	1	Eastern	
Haller Lake	Lake	N/A	47.719898	-122.333801	King	4	Western	
Hammond Lake	Lake	N/A	47.36952	-120.123582	Douglas	2	Eastern	WI
Hampton Lake Lower	Lake	N/A	46.928247	-119.221725	Grant	2	Eastern	
Hampton Lake Upper	Lake	N/A	46.933717	-119.226877	Grant	2	Eastern	
Hanson Lake	Lake	N/A	48.057051	-121.851339	Snohomish	4	Western	
Hanson Pond Lower	Pond	N/A	47.184571	-120.911085	Kittitas	3	Eastern	
Hanson Pond Upper	Pond	N/A	47.185801	-120.915949	Kittitas	3	Eastern	
Harts Lake	Lake	N/A	46.893296	-122.469339	Pierce	6	Western	
Hatch Lake	Lake	N/A	48.498159	-117.807077	Stevens	1	Eastern	
Haven Lake	Lake	N/A	47.456523	-122.983041	Mason	6	Western	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Hayes Lake	Lake	N/A	46.722914	-122.974227	Lewis	5	Western	
Heart Lake	Lake	N/A	46.930498	-119.185858	Grant	2	Eastern	WD
Heart Lake	Lake	N/A	48.47604	-122.630665	Skagit	4	Western	WDF
Heritage Lake	Lake	N/A	48.63295	-117.528244	Stevens	1	Eastern	
Herman Lake	Lake	N/A	46.900575	-119.199157	Adams	2	Eastern	
Heron Lake Lower	Lake	N/A	46.980125	-119.28077	Grant	2	Eastern	
Heron Lake Upper	Lake	N/A	46.981313	-119.28171	Grant	2	Eastern	
Hess Lake	Lake	N/A	48.505331	-119.641611	Okanogan	2	Eastern	
Hicks Lake	Lake	N/A	47.0221	-122.8021	Thurston	6	Western	WI
Hideaway Lake	Lake	N/A	47.38436	-120.147184	Douglas	2	Eastern	WI
Hilltop Lake	Lake Manmade	N/A	48.11263	-122.12673	Snohomish	4	Western	
Hog Canyon Lake	Lake	N/A	47.3738	-117.8097	Spokane	1	Eastern	
Holiday Lake	Reservoir	N/A	48.6805	-122.6413	San Juan	4	Western	
Holm Lake	Lake	N/A	47.302913	-122.126733	King	4	Western	
Homestead Lake	Lake	N/A	47.292714	-119.318527	Grant	2	Eastern	WD
Hood Park Ponds	Pond	N/A	46.214731	-119.010788	Walla Walla	1	Eastern	
Horseshoe Lake	Lake	N/A	48.5692	-122.8133	San Juan	4	Western	
Horseshoe Lake	Lake	N/A	45.9012	-122.7442	Cowlitz	5	Western	WDF
Horseshoe Lake	Lake	N/A	48.111488	-117.41657	Pend Oreille	1	Eastern	
Horseshoe Lake	Lake	N/A	47.764068	-117.756784	Spokane	1	Eastern	
Horseshoe Lake	Lake	N/A	47.408221	-122.664339	Kitsap	6	Western	WD
Horseshoe Lake	Lake	N/A	47.897153	-122.753616	Jefferson	6	Western	WDFW, Sk
Horsetheif Lake	Lake	N/A	45.6423127	-121.1034861	Klickitat	5	Eastern	
Hourglass Lake	Lake	N/A	46.940588	-119.225413	Grant	2	Eastern	
Howard Hanson Reservoir	Reservoir	Howard Hanson	47.2734	-121.7637	King	4	Western	WDFW, Muckleshoo Ind
Howell Lake	Lake	N/A	47.430345	-122.991059	Mason	6	Western	
Hummel Lake	Lake	N/A	48.519957	-122.890262	San Juan	4	Western	
Hunsinger Lake	Lake	N/A	48.44492	-119.601261	Okanogan	2	Eastern	
Hutchinson Lake	Lake	N/A	46.8772	-119.2974	Adams	2	Eastern	
Hyas Lake	Lake	N/A	47.566452	-121.120522	Kittitas	3	Eastern	
I-82 Pond 1	Pond	N/A	46.483178	-120.408652	Yakima	3	Eastern	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
I-82 Pond 2	Pond	N/A	46.47949	-120.403738	Yakima	3	Eastern	
I-82 Pond 3	Pond	N/A	46.466724	-120.382767	Yakima	3	Eastern	
I-82 Pond 4	Pond	N/A	46.437258	-120.347319	Yakima	3	Eastern	
I-82 Pond 5	Pond	N/A	46.4334	-120.3468	Yakima	3	Eastern	
I-82 Pond 6	Pond	N/A	46.420253	-120.321726	Yakima	3	Eastern	
I-82 Pond 7	Pond	N/A	46.411388	-120.295347	Yakima	3	Eastern	
Ice House Lake	Lake	N/A	45.662279	-121.906296	Skamania	5	Western	
Indian Flat Pond	Pond	N/A	46.982502	-121.13171	Yakima	3	Eastern	
Isabella Lake	Lake	N/A	47.171335	-123.116084	Mason	6	Western	
Island Lake	Lake	N/A	47.681874	-122.66028	Kitsap	6	Western	WD
Island Lake	Lake	N/A	47.248735	-123.11793	Mason	6	Western	
Jackson Lake	Lake	N/A	47.287684	-122.774062	Pierce	6	Western	
Jameson Lake	Lake	N/A	47.681736	-119.625147	Douglas	2	Eastern	
Janet Lake	Lake	N/A	46.942654	-119.205701	Grant	2	Eastern	WD
Jay Lake	Lake	N/A	47.9158	-121.688469	Snohomish	4	Western	
Jefferson Park Pond	Pond	N/A	46.055302	-118.34555	Walla Walla	1	Eastern	WDFW
Judy Reservoir	Reservoir	Judy	48.4743	-122.183	Skagit	4	Western	
Jump Off Joe Lake	Lake	N/A	48.1368	-117.686	Stevens	1	Eastern	
June Lake	Lake	N/A	46.945154	-119.176121	Grant	2	Eastern	WD
Kachess Lake	Reservoir	Kachess	47.347938	-121.250499	Kittitas	3	Eastern	WDFW
Keechelus Lake	Reservoir	Keechelus	47.3766231	-121.3872739	Kittitas	3	Eastern	WDFW
Kellogg Lake	Lake	N/A	47.902927	-121.76283	Snohomish	4	Western	
Kettle River	River	N/A	48.7347	-118.1166	Stevens	1	Eastern	
Kidney Lake	Lake	N/A	45.662923	-121.947424	Skamania	5	Western	
Kitsap Lake	Lake	N/A	47.5722	-122.7086	Kitsap	6	Western	WDFW
Kiwanis Pond	Pond	N/A	47.186806	-120.919742	Kittitas	3	Eastern	
Klineline Pond	Pond	N/A	45.70791	-122.656174	Clark	5	Western	WD
Klone Lake 1	Lake	N/A	47.47216	-123.543874	Grays Harbor	6	Western	W
Klone Lake 2	Lake	N/A	47.47564	-123.541311	Grays Harbor	6	Western	W
Koeneman Lake	Lake	N/A	47.409757	-122.784485	Kitsap	6	Western	
Koppert Lake	Lake Manmade	N/A	46.48731	-122.85745	Lewis	5	Western	
Kress Lake	Lake	N/A	46.04705	-122.850953	Cowlitz	5	Western	
Lacamas Lake	Lake	N/A	45.616843	-122.425798	Clark	5	Western	
Lafleur Lake	Lake	N/A	48.4063	-118.2568	Ferry	2	Eastern	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Lake Aberdeen	Lake	N/A	46.984113	-123.742329	Grays Harbor	6	Western	WDFW, C
Lake Alice	Lake	N/A	47.5325	-121.8842	King	4	Western	
Lake Armstrong	Lake	N/A	48.226467	-122.123942	Snohomish	4	Western	
Lake Beth	Reservoir	N/A	48.859356	-118.988903	Okanogan	2	Eastern	
Lake Bonneville	Reservoir	Bonneville	45.6940965	-121.8776181	Skamania	5	Western	USACE, , NF
Lake Boren	Lake	N/A	47.5325	-122.1637	King	4	Western	WDFW, C
Lake Bradley	Lake	N/A	47.161091	-122.284218	Pierce	6	Western	WDF
Lake Bryan	Reservoir	Bryan	46.61583	-117.79712	Whitman	1	Eastern	WDFW, USA
Lake Campbell	Lake	N/A	48.440314	-122.609411	Skagit	4	Western	
Lake Cavanaugh	Lake	N/A	48.3115	-121.98824	Skagit	4	Western	
Lake Celilo	Reservoir	Celilo	45.68289	-120.82044	Klickitat	5	Eastern	WDFW, ODI
Lake Chelan	Lake	N/A	47.8417	-120.0244	Chelan	2	Eastern	WDFW,
Lake Clyde	Lake	N/A	48.619	-123.0176	San Juan	4	Western	
Lake Crescent	Lake	N/A	48.0589	-123.7867	Clallam	6	Western	NPS, Quile
Lake Cushman	Reservoir	Cushman	47.4291	-123.2201	Mason	6	Western	WDFW,
Lake Desire	Lake	N/A	47.442292	-122.107457	King	4	Western	
Lake Dolloff	Lake	N/A	47.3238	-122.285	King	4	Western	
Lake Dorothy	Lake	N/A	47.784387	-121.849787	Snohomish	4	Western	
Lake Easton	Reservoir	Easton	47.24982	-121.198193	Kittitas	3	Eastern	
Lake Ellen	Lake	N/A	48.498261	-118.259807	Ferry	1	Eastern	
Lake Entiat/Rocky Reach	Reservoir	Entiat/Rocky Reach	47.7970336	-119.9846785	Chelan	2	Eastern	WDFW, Ch
Lake Erie	Lake	N/A	48.4494	-122.6397	Skagit	4	Western	WDF
Lake Fazon	Lake	N/A	48.865879	-122.367774	Whatcom	4	Western	
Lake Fenwick	Lake	N/A	47.3659	-122.2726	King	4	Western	WDFW
Lake Geneva	Lake	N/A	47.291536	-122.281304	King	4	Western	
Lake Gillette	Lake	N/A	48.609207	-117.543755	Stevens	1	Eastern	
Lake Goodwin	Lake	N/A	48.13596	-122.29041	Snohomish	4	Western	WDFW &
Lake Goss	Lake	N/A	48.0391	-122.4782	Island	4	Western	WD
Lake Herbert G West	Reservoir	Herbert G West	46.5875	-118.3694	Walla Walla	1	Eastern	WDFW, R
Lake Howard	Lake	N/A	48.157036	-122.326473	Snohomish	4	Western	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Lake Jay	Lake	N/A	48.6159	-123.0205	San Juan	4	Western	
Lake Julia	Lake	N/A	48.065656	-121.874691	Snohomish	4	Western	
Lake Kapowsin	Lake	N/A	46.9844	-122.2188	Pierce	6	Western	
Lake Ketchum	Lake	N/A	48.282212	-122.345132	Snohomish	4	Western	
Lake Ki	Lake	N/A	48.151673	-122.265065	Snohomish	4	Western	
Lake Killarney	Lake	N/A	47.286263	-122.290801	King	4	Western	WDFW, Cit
Lake Kokanee	Reservoir	Kokanee	47.402091	-123.207444	Mason	6	Western	WDF
Lake Lawrence	Lake	N/A	46.852029	-122.571011	Thurston	6	Western	
Lake Lenore	Lake	N/A	47.487056	-119.517425	Grant	2	Eastern	
Lake Leo	Lake	N/A	48.647901	-117.496481	Pend Oreille	1	Eastern	
Lake Limerick	Lake	N/A	47.28613	-123.045265	Mason	6	Western	
Lake Loma	Lake	N/A	48.13432	-122.252195	Snohomish	4	Western	
Lake Louise	Lake	N/A	47.161861	-122.567972	Pierce	6	Western	
Lake Maggie	Lake	N/A	47.401477	-123.029778	Mason	6	Western	
Lake Margaret	Lake	N/A	47.769636	-121.900626	King	4	Western	
Lake McMurray	Lake	N/A	48.314316	-122.22616	Skagit	4	Western	
Lake Meridian	Lake	N/A	47.362526	-122.152956	King	4	Western	WDFW
Lake Merwin	Reservoir	Merwin	45.979143	-122.419485	Cowlitz	5	Western	WI
Lake Morton	Lake	N/A	47.324354	-122.084616	King	4	Western	
Lake Number 12	Lake	N/A	47.325254	-121.975884	King	4	Western	
Lake Padden	Lake	N/A	48.7005	-122.4465	Whatcom	4	Western	
Lake Pateros	Reservoir	Pateros	48.0902253	-119.7861685	Douglas	2	Eastern	WDFW
Lake Pleasant	Lake	N/A	48.064034	-124.328724	Clallam	6	Western	WDFW, Quile
Lake Quinault	Lake	N/A	47.4722	-123.8731	Grays Harbor	6	Western	
Lake River	River	N/A	45.7063	-122.7221	Clark	5	Western	
Lake Roesiger	Lake	N/A	47.97285	-121.9235	Snohomish	4	Western	WDFW &
Lake Roosevelt	Reservoir	Roosevelt	47.8539486	-118.3415214	Stevens	1	Eastern	WDFW, NP
Lake Sacajawea	Reservoir	Sacajawea	46.3176594	-118.767056	Franklin	3	Eastern	WDFW, USA
Lake Sacajawea	Lake	N/A	46.13117	-122.949935	Cowlitz	5	Western	WDF
Lake Samish	Lake	N/A	48.66654	-122.377	Whatcom	4	Western	WDFW

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Lake Sammamish	Lake	N/A	47.564913	-122.057068	King	4	Western	WDFW, M Suquamish Indian Tribe,
Lake Sawyer	Lake	N/A	47.340915	-122.038936	King	4	Western	WDFW, City
Lake Scanewa	Reservoir	Scanewa	46.474736	-122.090887	Lewis	5	Western	WDF
Lake Serene	Lake	N/A	47.869861	-122.285584	Snohomish	4	Western	
Lake Shannon	Reservoir	N/A	48.562399	-121.734075	Skagit	4	Western	
Lake Sherry	Lake	N/A	48.605045	-117.543446	Stevens	1	Eastern	
Lake Shoecraft	Lake	N/A	48.1258	-122.307	Snohomish	4	Western	
Lake Stevens	Lake	N/A	48.01307	-122.06682	Snohomish	4	Western	WDFW &
Lake Sutherland	Lake	N/A	48.078623	-123.715003	Clallam	6	Western	WDFW, Lowe
Lake Swano	Lake	N/A	46.95336	-123.8004	Grays Harbor	6	Western	
Lake Symington	Reservoir	William Symington	47.5961	-122.8299	Kitsap	6	Western	WDFW, Lak
Lake Tapps	Reservoir	Tapps	47.2409	-122.1743	Pierce	6	Western	WDFW, Pie
Lake Terrell	Lake	N/A	48.86171	-122.68919	Whatcom	4	Western	
Lake Thomas	Lake	N/A	48.622108	-117.540915	Stevens	1	Eastern	
Lake Umatilla	Reservoir	Umatilla	46.2441047	-119.2054862	Benton	3	Eastern	WDF
Lake Union	Lake	N/A	47.6445	-122.3346	King	4	Western	WDFW, M Suquamish USA
Lake Wallula	Reservoir	Wallula	46.238556	-119.2190711	Benton	3	Eastern	WDFW, ODF
Lake Washington	Lake	N/A	47.647609	-122.276007	King	4	Western	WDFW, M Suquamish USACE,
Lake Washington Ship Canal	Canal	N/A	47.6596	-122.3769	King	4	Western	WDFW, M Suquamish USA
Lake Wenatchee	Lake	N/A	47.807847	-120.7261069	Chelan	2	Eastern	WD
Lake Whatcom	Lake	N/A	48.67356	-122.31585	Whatcom	4	Western	WDFW

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Lake Whitman	Lake	N/A	46.963023	-122.257368	Pierce	6	Western	
Lake Wooten	Lake	N/A	47.467303	-122.981581	Mason	6	Western	
Langendorfer Lake	Lake	N/A	47.75404	-121.852075	King	4	Western	WDF
Langlois Lake	Lake	N/A	47.635	-121.8847	King	4	Western	
Larsen Lake	Lake	N/A	47.6059	-122.1401	King	4	Western	WDFW,
Lavender Lake	Lake	N/A	47.2179	-121.1274	Kittitas	3	Eastern	
Lead King Beaver Pond	Pond	N/A	48.93873	-117.35603	Pend Oreille	1	Eastern	WDFW, R
Leadbetter Lake	Lake	N/A	48.917498	-117.355362	Pend Oreille	1	Eastern	
Leader Lake	Lake	N/A	48.359905	-119.678267	Okanogan	2	Eastern	
Leech Lake	Lake	N/A	46.6447	-121.383	Yakima	3	Eastern	
Leland Lake	Lake	N/A	47.896676	-122.881788	Jefferson	6	Western	WDFW, Sko
Lemna Lake	Lake	N/A	46.942577	-119.229909	Grant	2	Eastern	
Lenice Lake	Lake	N/A	46.84088	-119.834982	Grant	2	Eastern	
Leroy Burns Pond	Pond	N/A	46.2323	-123.3241	Wahkiakum	5	Western	
Lewis River	River	N/A	45.8686	-122.731	Clark	5	Western	WI
Liberty Lake	Lake	N/A	47.653852	-117.084098	Spokane	1	Eastern	WDF
Lilly Lake	Reservoir	Lilly	47.294792	-120.308571	Chelan	2	Eastern	WDFW &
Lincoln Park Pond 1	Pond	N/A	48.115624	-123.476152	Clallam	6	Western	WDFW, Jar
Lions Park Pond	Pond	N/A	46.040982	-118.375655	Walla Walla	1	Eastern	
Little Ash Lake	Lake	N/A	45.669287	-121.910478	Skamania	5	Western	
Little Beaver Lake	Reservoir	N/A	48.849776	-118.961988	Okanogan	2	Eastern	
Little Falls Reservoir	Reservoir	Little Falls	47.8352	-117.9104	Stevens	1	Eastern	WDI
Little Goose Lake	Lake	N/A	48.275	-119.5171	Okanogan	2	Eastern	
Little Green Lake	Lake	N/A	48.437093	-119.62953	Okanogan	2	Eastern	
Little Lost Lake	Lake	N/A	48.821436	-117.439076	Pend Oreille	1	Eastern	WDFW
Little Spokane River	River	N/A	47.7901	-117.4003	Spokane	1	Eastern	
Little Twin Lake	Lake	N/A	48.449225	-120.189797	Okanogan	2	Eastern	
Little Twin Lake	Lake	N/A	48.572653	-117.642592	Stevens	1	Eastern	
Lois Lake	Lake	N/A	46.950488	-119.165685	Grant	2	Eastern	
Lone Lake	Lake	N/A	48.021126	-122.461805	Island	4	Western	WD
Long Lake	Lake	N/A	46.6899	-118.2381	Franklin	3	Eastern	Har
Long Lake	Lake	N/A	47.4852	-122.5921	Kitsap	6	Western	WD

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Long Lake	Lake	N/A	47.02177	-122.78063	Thurston	6	Western	WI
Long Lake	Lake	N/A	48.615207	-119.133714	Okanogan	2	Eastern	
Long Lake	Lake	N/A	48.496152	-118.813243	Ferry	1	Eastern	
Long Lake	Lake	N/A	46.931177	-119.20702	Grant	2	Eastern	WDFW,
Long Lake	Lake	N/A	46.628468	-121.805033	Lewis	5	Western	
Long Lake/Spokane Lake	Reservoir	Long	47.833872	-117.761059	Stevens	1	Eastern	WDFW, City
Long's Pond	Pond	N/A	47.039336	-122.791497	Thurston	6	Western	
Loomis Lake	Lake	N/A	46.437317	-124.043019	Pacific	6	Western	
Loon Lake	Lake	N/A	48.0523721	-117.6439909	Stevens	1	Eastern	
Lost Lake	Lake	N/A	47.334672	-121.404686	Kittitas	3	Eastern	
Lost Lake	Lake	N/A	46.639255	-121.067065	Yakima	3	Eastern	
Lost Lake	Lake	N/A	48.849335	-119.052122	Okanogan	2	Eastern	
Lost Lake	Lake	N/A	47.157153	-123.247505	Mason	6	Western	
Lost Lake/by Lake Chaplain	Lake	N/A	47.947368	-121.855254	Snohomish	4	Western	
Lost Lake/Crappie Lake	Lake	N/A	47.828475	-121.791552	Snohomish	4	Western	
Lost Lake/Devil's Lake	Lake	N/A	47.800493	-122.04206	Snohomish	4	Western	
Lower Goose Lake	Lake	N/A	46.923852	-119.288988	Grant	2	Eastern	WD
Lower Granite Lake	Reservoir	Lower Granite	46.3869	-117.047	Whitman	1	Eastern	
Lower Lead King Lake	Lake	N/A	48.9415	-117.3562	Pend Oreille	1	Eastern	WDFW
Ludlow Lake	Lake	N/A	47.914882	-122.775195	Jefferson	6	Western	WDFW, Sko
Lyman Lake	Lake	N/A	48.526916	-119.022454	Okanogan	2	Eastern	
Marmes Pond	Pond	N/A	46.614683	-118.201583	Franklin	3	Eastern	
Marshall Lake	Lake	N/A	48.2565	-117.0785	Pend Oreille	1	Eastern	
Martha Alderwood Manor	Lake	N/A	47.852714	-122.243454	Snohomish	4	Western	WDFW &
Martha Lake	Lake	N/A	47.094756	-119.836975	Grant	2	Eastern	
Martha Warm Beach	Lake	N/A	48.16899	-122.341379	Snohomish	4	Western	
Mary Ann Lake	Lake	N/A	48.937025	-119.088566	Okanogan	2	Eastern	
Maryhill Pond	Pond	N/A	45.6807	-120.8317	Klickitat	5	Eastern	
Mason Lake	Lake	N/A	47.356841	-122.923069	Mason	6	Western	WDI
Mattoon Lake	Lake	N/A	46.977364	-120.550637	Kittitas	3	Eastern	
Mayfield Lake	Reservoir	Mayfield	46.554081	-122.53686	Lewis	5	Western	WDF
Maytown Lake	Lake Manmade	N/A	46.88178	-122.94757	Thurston	6	Western	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
McCabe Pond	Pond	N/A	46.924453	-120.507147	Kittitas	3	Eastern	
McDaniel Lake	Lake	N/A	46.807241	-121.110328	Yakima	3	Eastern	
McDowell Lake	Lake	N/A	48.465029	-117.676345	Stevens	1	Eastern	
McGinnis Lake	Lake	N/A	48.036	-118.8928	Okanogan	2	Eastern	
McIntosh Lake	Lake	N/A	46.866594	-122.76761	Thurston	6	Western	
Medical Lake	Lake	N/A	47.563044	-117.690143	Spokane	1	Eastern	WDFW
Melbourne Lake	Lake	N/A	47.500781	-123.127541	Mason	6	Western	
Menzel Lake	Lake Manmade	N/A	48.04018	-121.92037	Snohomish	4	Western	
Mercer Slough	Slough	N/A	47.582	-122.1858	King	4	Western	WDFW, M Suquamish I WF
Merrill Lake	Lake	N/A	46.094333	-122.324233	Cowlitz	5	Western	
Mesa Lake	Lake	N/A	46.567828	-119.037891	Franklin	3	Eastern	
Methow River	River	N/A	48.04575	-119.91168	Okanogan	2	Eastern	
Meyers Falls Reservoir	Reservoir	Myers Falls	48.596	-118.0584	Stevens	1	Eastern	
Milk Lake	Lake	N/A	46.984977	-120.996136	Kittitas	3	Eastern	
Milk Pond	Pond	N/A	46.986693	-121.06156	Kittitas	3	Eastern	
Mineral Lake	Lake	N/A	46.7203	-122.182	Lewis	5	Western	
Mint Lake	Lake Manmade	N/A	45.89392	-122.50722	Clark	5	Western	
Mission Lake	Lake	N/A	47.532294	-122.825118	Kitsap	6	Western	
Mission Pond	Pond	N/A	48.271142	-120.240592	Okanogan	2	Eastern	
Mitchell Pond	Pond	N/A	46.06271	-118.951675	Benton	3	Eastern	
Molson Lake	Lake	N/A	48.988026	-119.206914	Okanogan	2	Eastern	
Moses Lake	Lake	N/A	47.1055272	-119.326228	Grant	2	Eastern	WD
Moss Lake	Lake	N/A	47.694115	-121.850073	King	4	Western	
Mound Pond	Pond	N/A	46.028572	-118.965528	Benton	3	Eastern	
Mountain Lake	Lake	N/A	48.660119	-122.816263	San Juan	4	Western	
Mountain Meadows Lake	Lake	N/A	48.1946	-117.23082	Pend Oreille	1	Eastern	
Mud Lake	Lake	N/A	46.772144	-120.834993	Yakima	3	Eastern	
Mudgett Lake	Lake	N/A	48.038976	-118.219205	Stevens	1	Eastern	
Munn Lake	Lake	N/A	46.985028	-122.879391	Thurston	6	Western	
Muskegon Lake	Lake	N/A	48.7977	-117.0381	Pend Oreille	1	Eastern	
Myron Lake	Lake	N/A	46.622131	-120.556064	Yakima	3	Eastern	
Mystic Lake	Lake	N/A	48.327843	-117.143753	Pend Oreille	1	Eastern	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Naches Park Sportsmen Day Pond	Pond	N/A	46.736092	-120.700418	Yakima	3	Eastern	WDI
Nahwatzel Lake	Lake	N/A	47.242394	-123.333193	Mason	6	Western	
Naneum Pond	Pond	N/A	47.004286	-120.463918	Kittitas	3	Eastern	
Neva Lake	Lake	N/A	48.5765	-123.0861	San Juan	4	Western	
Newman Lake	Lake	N/A	47.772817	-117.085096	Spokane	1	Eastern	WDF
Nicholas Lake	Lake	N/A	48.4621	-118.2452	Ferry	2	Eastern	
Nile Lake	Lake	N/A	48.656945	-117.472586	Pend Oreille	1	Eastern	
Nine Mile Reservoir	Reservoir	Nine Mile	47.7712	-117.5495	Spokane	1	Eastern	V
Nooksack River	River	N/A	48.842946	-122.589901	Whatcom	4	Western	WDNR, Wha
North Lake	Lake	N/A	47.3074	-122.2884	King	4	Western	V
North Silver Lake	Lake	N/A	47.578455	-117.652925	Spokane	1	Eastern	WDF
North Skookum Lake	Lake	N/A	48.406117	-117.181029	Pend Oreille	1	Eastern	WD
North Teal Lake	Lake	N/A	46.919253	-119.201225	Grant	2	Eastern	V
North Twin Lake	Lake	N/A	48.2892	-118.3637	Ferry	2	Eastern	
North Windmill Lake	Lake	N/A	46.93763	-119.172857	Grant	2	Eastern	
Northup Lake	Lake	N/A	47.886928	-119.041848	Grant	2	Eastern	V
Nunnally Lake	Lake	N/A	46.8396	-119.8859	Grant	2	Eastern	WDFW
Offut Lake	Lake	N/A	46.9195	-122.8304	Thurston	6	Western	
Ohop Lake	Lake	N/A	46.8852	-122.2789	Pierce	6	Western	
Okanogan River	River	N/A	48.1015	-119.7118	Okanogan	2	Eastern	WD
Omak Lake	Lake	N/A	48.2713	-119.3956	Okanogan	2	Eastern	
Orchard Pond	Pond	N/A	46.58242	-118.220886	Columbia	1	Eastern	
Osoyoos Lake	Lake	N/A	48.9495409	-119.4301135	Okanogan	2	Eastern	V
Ozette Lake	Lake	N/A	48.152616	-124.668131	Clallam	6	Western	N
Pacific Lake	Lake	N/A	47.412296	-118.719279	Lincoln	1	Eastern	WDFW,
Padden Creek	Creek	N/A	48.7157	-122.4924	Whatcom	4	Western	
Palmer Lake	Lake	N/A	48.8743	-119.6201	Okanogan	2	Eastern	WD
Palmer Pond	Pond	N/A	46.004879	-118.996917	Benton	3	Eastern	V
Palouse River	River	N/A	46.59366	-118.21803	Franklin	1	Eastern	
Pampa Pond	Pond	N/A	46.781249	-117.94499	Whitman	1	Eastern	
Panther Lake	Lake	N/A	47.522698	-122.851536	Kitsap	6	Western	
Panther Lake	Lake	N/A	47.948629	-122.00585	Snohomish	4	Western	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Park Lake	Lake	N/A	47.590535	-119.395535	Grant	2	Eastern	
Parker Lake	Lake	N/A	48.478488	-117.361102	Pend Oreille	1	Eastern	
Pass Lake	Lake	N/A	48.420344	-122.636058	Skagit	4	Western	
Patterson Lake	Lake	N/A	48.456386	-120.245597	Okanogan	2	Eastern	
Pattison Lake	Lake	N/A	46.994751	-122.77742	Thurston	6	Western	
Pearrygin Lake	Lake	N/A	48.494331	-120.15982	Okanogan	2	Eastern	
Pepoon Lake	Lake	N/A	48.90044	-117.891735	Stevens	1	Eastern	
Perch Lake	Lake	N/A	47.595962	-119.367348	Grant	2	Eastern	
Peterson Lake	Lake	N/A	47.422507	-122.077049	King	4	Western	
Petit Lake	Lake	N/A	48.638056	-117.086938	Pend Oreille	1	Eastern	
Phantom Lake	Lake	N/A	47.5951	-122.1214	King	4	Western	WDFW,
Phillips Lake	Lake	N/A	48.953781	-117.767227	Stevens	1	Eastern	WD
Phillips Lake	Lake	N/A	47.250767	-122.960191	Mason	6	Western	
Phillips Lake Chewelah	Lake	N/A	48.405947	-117.621394	Stevens	1	Eastern	
Pierre Lake	Lake	N/A	48.900554	-118.138693	Stevens	1	Eastern	
Pillar Lake	Lake	N/A	46.949145	-119.225852	Grant	2	Eastern	
Pine Lake	Lake	N/A	47.587448	-122.044763	King	4	Western	WDFW, Cit
Pit Lake	Lake	N/A	47.376184	-120.14047	Douglas	2	Eastern	WDFW
Plummer Lake	Lake	N/A	46.715809	-122.973893	Lewis	5	Western	
Poacher Lake	Lake	N/A	46.954294	-119.164421	Grant	2	Eastern	
Potholes Reservoir	Reservoir	Potholes	46.9677729	-119.3191678	Grant	2	Eastern	WDFW,
Potter's Pond	Pond	N/A	48.426279	-117.662405	Stevens	1	Eastern	
Powerline Lake	Lake	N/A	46.640017	-119.065921	Franklin	3	Eastern	
Price Lake	Lake	N/A	47.471221	-123.171537	Mason	6	Western	
Priest Rapids Lake	Reservoir	Priest Rapids	46.6844245	-119.9324931	Grant	2	Eastern	W
Purdue Lake	Lake	N/A	48.6885	-122.8606	San Juan	4	Western	
Putters Lake	Lake	N/A	47.374841	-120.132886	Douglas	2	Eastern	WDFW
Puyallup River	River	N/A	47.2055	-122.3139	Pierce	6	Western	WDFW, Pie
Quail Lake	Lake	N/A	46.903498	-119.192953	Adams	2	Eastern	
Quarry Pond	Pond	N/A	46.15015	-118.942782	Walla Walla	1	Eastern	
Quartz Creek Pond	Pond	N/A	47.020687	-121.139101	Kittitas	3	Eastern	
Quigg Lake	Lake	N/A	46.948508	-123.643972	Grays Harbor	6	Western	
Quincy Lake	Lake	N/A	47.1414	-119.927	Grant	2	Eastern	WD
Rainbow Lake	Lake	N/A	46.313936	-117.660611	Columbia	1	Eastern	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Rainbow Lake/Vic Meyers	Lake	N/A	47.590661	-119.375001	Grant	2	Eastern	
Rainer Lake	Lake Manmade	N/A	46.90273	-122.61448	Thurston	6	Western	
Rapjohn Lake	Lake	N/A	46.905177	-122.342204	Pierce	6	Western	
Rat Lake	Lake	N/A	48.180743	-119.801692	Okanogan	2	Eastern	
Rattlesnake Lake	Lake	N/A	47.430448	-121.774583	King	4	Western	WD
Rebecca Lake	Lake	N/A	48.0552	-118.9345	Okanogan	2	Eastern	
Reflection Pond	Pond	N/A	46.600703	-120.475969	Yakima	3	Eastern	
Reflection Pond	Pond	N/A	48.7371	-119.672681	Okanogan	2	Eastern	
Renner Lake	Lake	N/A	48.780467	-118.188779	Ferry	1	Eastern	
Riffe Lake	Reservoir	Riffe	46.476698	-122.168405	Lewis	5	Western	WDF
Rigley Lake	Lake	N/A	48.652989	-117.988698	Stevens	1	Eastern	
Riley Lake	Lake	N/A	48.246402	-121.946916	Snohomish	4	Western	
Rimrock Lake	Reservoir	Rimrock	46.6426921	-121.1797988	Yakima	3	Eastern	
Ringold Hatchery	Spring	N/A	46.5085	-119.2479	Franklin	3	Eastern	WD
Riparia Pond	Pond	N/A	46.578391	-118.082898	Whitman	1	Eastern	
Robbins Lake	Lake	N/A	47.427065	-123.081515	Mason	6	Western	
Roche Harbor Lake	Lake	N/A	48.5884	-123.1228	San Juan	4	Western	
Rock Island Lake	Reservoir	Rock Island	47.3874848	-120.2660881	Chelan	2	Eastern	WD
Rock Lake	Lake	N/A	47.1393	-117.7251	Whitman	1	Eastern	
Rock Lake 1	Lake	N/A	48.456684	-119.791986	Okanogan	2	Eastern	
Rock Lake 2	Lake	N/A	48.452771	-119.791109	Okanogan	2	Eastern	
Rocky Lake	Lake	N/A	48.49541	-117.873677	Stevens	1	Eastern	
Roses Lake	Lake	N/A	47.904241	-120.154174	Chelan	2	Eastern	
Ross Lake	Reservoir	Ross	48.949476	-121.079427	Whatcom	4	Western	W
Rotary Lake	Lake	N/A	46.628322	-120.509264	Yakima	3	Eastern	
Round Lake	Lake	N/A	48.607181	-119.124577	Okanogan	2	Eastern	
Rowland Lake	Lake	N/A	45.709942	-121.380543	Klickitat	5	Eastern	
Rufus Woods Lake	Reservoir	Rufus Woods	48.0142229	-119.6070386	Okanogan	2	Eastern	
Sacheen Lake	Lake	N/A	48.1509	-117.3071	Pend Oreille	1	Eastern	
Sage Lake East	Lake	N/A	46.933166	-119.198487	Grant	2	Eastern	WD
Sage Lake West	Lake	N/A	46.931629	-119.20294	Grant	2	Eastern	WD
Sago Lake	Lake	N/A	46.941009	-119.223083	Grant	2	Eastern	
Saint Clair Lake	Lake	N/A	46.9985	-122.7182	Thurston	6	Western	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Sammamish River	River	N/A	47.7543	-122.2506	King	4	Western	WDFW, M Suquamish
Sandy Shore Lake	Lake	N/A	47.890814	-122.767617	Jefferson	6	Western	WDFW, Sko
Schalow Pond	Pond	N/A	48.600548	-119.677246	Okanogan	2	Eastern	
Scooteney Reservoir	Reservoir	Scooteney	46.7046801	-119.0249045	Franklin	3	Eastern	WD
Scott Lake	Lake	N/A	46.9189	-122.9324	Thurston	6	Western	
Scriber Lake	Lake	N/A	47.820505	-122.307294	Snohomish	4	Western	WDFW
Shadow Lake	Lake	N/A	47.405695	-122.086397	King	4	Western	W
Shady Lake	Lake	N/A	47.429321	-122.106794	King	4	Western	W
Shaw Lake	Lake	N/A	47.93291	-121.693691	Snohomish	4	Western	W
Shelley Lake	Lake	N/A	47.6515	-117.1847	Spokane	1	Eastern	WDF
Shiner Lake	Lake	N/A	46.878383	-119.300263	Adams	2	Eastern	
Shoveler Lake	Lake	N/A	46.942446	-119.228153	Grant	2	Eastern	W
Sidley Lake	Lake	N/A	48.990656	-119.22308	Okanogan	2	Eastern	
Silcott Pond	Pond	N/A	46.411902	-117.19155	Asotin	1	Eastern	
Silent Lake	Lake	N/A	47.790192	-122.770777	Jefferson	6	Western	WDFW, Sk Trea
Silver Lake	Lake	N/A	47.571576	-117.655332	Spokane	1	Eastern	
Silver Lake	Lake	N/A	46.31	-122.776667	Cowlitz	5	Western	
Silver Lake	Lake	N/A	46.884852	-122.365583	Pierce	6	Western	
Silver Lake	Lake	N/A	47.892498	-122.208828	Snohomish	4	Western	WDF
Silver Lake	Lake	N/A	48.978457	-122.069853	Whatcom	4	Western	WDFW
Silver Nail Lake	Lake	N/A	48.993217	-119.464077	Okanogan	2	Eastern	
Silverado Lake	Lake Manmade	N/A	46.63515	-123.05031	Lewis	5	Western	
Sixteen Lake	Lake	N/A	48.344219	-122.288796	Skagit	4	Western	
Skagit River	River	N/A	48.490016	-122.206718	Skagit	4	Western	
Ski Park Lake	Lake Manmade	N/A	47.10107	-122.14768	Pierce	6	Western	
Ski View Lake	Lake Manmade	N/A	46.96416	-122.96434	Thurston	6	Western	
Skookumchuck Reservoir	Reservoir	Skookumchuck	46.785449	-122.699039	Thurston	6	Western	
Skykomish River	River	N/A	47.9988	-122.1781	Snohomish	4	Western	WDFW, Tu
Smelling Lake	Lake	N/A	48.059194	-121.876985	Snohomish	4	Western	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Smith Lake	Lake	N/A	48.318321	-119.761122	Okanogan	2	Eastern	
Snag Lake/Radar Hill Ponds	Lake	N/A	46.419967	-123.813923	Pacific	6	Western	
Snake River Arm	Reservoir	Wallula	46.214826	-119.018882	Walla Walla	1	Eastern	
Snipe Lake	Lake	N/A	46.94682	-119.224593	Grant	2	Eastern	
Snohomish River	River	N/A	47.917	-122.1207	Snohomish	4	Western	WD
Snoqualmie River	River	N/A	47.8118	-122.0089	Snohomish	4	Western	WDFW, Tu
Soda Lake	Lake	N/A	46.963	-119.238451	Grant	2	Eastern	WD
Soos Creek	Creek	N/A	47.308488	-122.169072	King	4	Western	
South Bend Mill Pond	Pond	N/A	46.670528	-123.818763	Pacific	6	Western	
South Fork Tolt Reservoir	Reservoir	South Fork Tolt	47.7002	-121.6561	Snohomish	4	Western	
South Lewis Park Pond	Pond	N/A	46.432923	-122.843539	Lewis	5	Western	WD
South Skookum Lake	Lake	N/A	48.392631	-117.181498	Pend Oreille	1	Eastern	
South Teal Lake	Lake	N/A	46.914057	-119.2028	Grant	2	Eastern	
South Twin Lake	Lake	N/A	48.2652	-118.3837	Ferry	2	Eastern	
Spada Lake	Reservoir	Spada	47.9753	-121.6136	Snohomish	4	Western	WDF
Spanaway Lake	Lake	N/A	47.114143	-122.446075	Pierce	6	Western	WD
Spearfish Lake	Lake	N/A	45.628672	-121.131551	Klickitat	5	Eastern	
Spectacle Lake	Lake	N/A	48.8104382	-119.5324738	Okanogan	2	Eastern	
Spencer Lake	Lake	N/A	48.556	-122.804	San Juan	4	Western	
Spencer Lake	Lake	N/A	47.265563	-122.960074	Mason	6	Western	
Spirit Lake	Lake	N/A	46.2651	-122.1479	Skamania	5	Western	
Spokane River Arm	Reservoir	Spokane River Arm	47.909815	-118.311552	Stevens	1	Eastern	WDFW &
Sportsman Lake	Lake	N/A	48.568147	-123.073639	San Juan	4	Western	
Sprague Lake	Lake	N/A	47.2548216	-118.0836862	Adams	2	Eastern	
Spring Lake	Lake	N/A	46.332981	-117.678114	Columbia	1	Eastern	
Spring Lake	Lake	N/A	47.436579	-122.087991	King	4	Western	
Springdale City Pond	Pond	N/A	48.057952	-117.742204	Stevens	1	Eastern	WDFW
Squalicum Lake	Lake	N/A	48.797505	-122.350141	Whatcom	4	Western	
Squaw Lake	Lake	N/A	47.833527	-120.823652	Chelan	2	Eastern	
Stan Coffin Lake	Lake	N/A	47.1492	-119.9193	Grant	2	Eastern	WD
Star Lake	Lake	N/A	47.354909	-122.287071	King	4	Western	
Starvation Lake	Lake	N/A	48.491364	-117.711327	Stevens	1	Eastern	
Starzman Lake Middle	Lake	N/A	48.23058	-119.776142	Okanogan	2	Eastern	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Starzman Lake Upper	Lake	N/A	48.234114	-119.77638	Okanogan	2	Eastern	
Steel Lake	Lake	N/A	47.3261	-122.3001	King	4	Western	WDFW, Cit
Steilacoom Lake	Lake	N/A	47.161412	-122.531473	Pierce	6	Western	WDF
Stickney Lake	Lake	N/A	47.875195	-122.256048	Snohomish	4	Western	
Stillaquamish River	River	N/A	48.1985	-122.1897	Snohomish	4	Western	WDFW, S
Storm Lake	Lake	N/A	47.939438	-121.97294	Snohomish	4	Western	
Sugarloaf Lake	Lake	N/A	48.591245	-119.696686	Okanogan	2	Eastern	
Sullivan Lake	Lake	N/A	48.8369336	-117.2784062	Pend Oreille	1	Eastern	
Sullivan Pond	Pond	N/A	48.51956	-120.145597	Okanogan	2	Eastern	
Summit Lake	Lake	N/A	47.04933	-123.11684	Thurston	6	Western	
Summit Lake	Lake	N/A	48.958958	-118.127036	Stevens	1	Eastern	
Summit Lake	Lake	N/A	48.886022	-119.34055	Okanogan	2	Eastern	
Summit Lake Tribe	Lake	N/A	48.2832	-119.1511	Okanogan	2	Eastern	
Sun Basin Ski Ranch	Lake Manmade	N/A	47.16935	-119.21564	Grant	2	Eastern	
Sunday Lake	Lake	N/A	48.229399	-122.257839	Snohomish	4	Western	
Sunday Lake	Lake	N/A	47.626681	-121.580534	King	4	Western	WD
Swan Lake	Lake	N/A	48.512762	-118.83803	Ferry	1	Eastern	
Swift Power Canal	Canal	N/A	46.058772	-122.231758	Skamania	5	Western	
Swift Reservoir	Reservoir	Swift	46.050991	-122.044196	Skamania	5	Western	W
Switch Pond	Pond	N/A	46.011968	-118.98798	Benton	3	Eastern	
Swofford Pond	Pond	N/A	46.497908	-122.404393	Lewis	5	Western	
Sylvia Lake	Lake	N/A	46.996263	-123.595356	Grays Harbor	6	Western	WD
Tahuya Lake	Lake	N/A	47.5663	-122.8374	Kitsap	6	Western	
Takhlakh Lake	Lake	N/A	46.278152	-121.596481	Skamania	5	Western	
Tanwax Lake	Lake	N/A	46.94429	-122.27385	Pierce	6	Western	
Tarboo Lake	Lake	N/A	47.924272	-122.852881	Jefferson	6	Western	WDFW, Sko
Tate Lake	Lake Manmade	N/A	46.61699	-119.20679	Franklin	3	Eastern	
Teal Lake	Lake	N/A	47.893474	-122.673613	Jefferson	6	Western	WDFW
Tee Lake	Lake	N/A	47.433407	-123.022955	Mason	6	Western	
Temple Pond 1	Pond	N/A	47.846324	-122.042712	Snohomish	4	Western	WDFW
Thompson Pond	Pond	N/A	48.324371	-119.997264	Okanogan	2	Eastern	
Thompson Seep North	Seep	N/A	46.688762	-119.260496	Franklin	3	Eastern	WD
Thompson Seep South	Seep	N/A	46.675362	-119.272949	Franklin	3	Eastern	WD

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Tieton Ranger Pond	Pond	N/A	46.69205	-121.074446	Yakima	3	Eastern	
Tiger Lake	Lake	N/A	47.516053	-122.832372	Mason	6	Western	
Tims Ponds	Pond	N/A	46.732017	-120.796486	Yakima	3	Eastern	
Toad Lake	Lake	N/A	48.789335	-122.400205	Whatcom	4	Western	
Tradition Lake	Lake	N/A	47.528743	-122.003832	King	4	Western	WDF
Trails End Lake	Lake	N/A	47.380191	-122.888271	Mason	6	Western	
Trask Lake	Lake	N/A	47.3338	-122.9893	Mason	6	Western	
Trout Lake	Reservoir	Trout	48.5335	-123.1279	San Juan	4	Western	
Trout Lake	Lake	N/A	48.627221	-118.241009	Ferry	1	Eastern	
Trout Lake	Lake	N/A	47.266125	-122.27959	King	4	Western	
Trout Lake	Lake	N/A	47.617116	-121.313778	King	4	Western	WD
Tucannon River	River	N/A	46.54748	-118.17776	Columbia	1	Eastern	
Tucquala Lake	Marsh	N/A	47.512597	-121.064741	Kittitas	3	Eastern	
Tug Lake	Lake Manmade	N/A	45.65134	-122.46874	Clark	5	Western	
Tunnel Lake	Lake	N/A	45.717531	-121.615839	Skamania	5	Western	
Turner Lake	Lake	N/A	48.669994	-119.002708	Okanogan	2	Eastern	
Twin Lake Big	Lake	N/A	47.483937	-122.95104	Mason	6	Western	
Twin Lakes Lower	Lake	N/A	47.525655	-118.516156	Lincoln	1	Eastern	
Twin Lakes Upper	Lake	N/A	47.532049	-118.499224	Lincoln	1	Eastern	
Tye Lake	Lake Manmade	N/A	47.866349	-122.010182	Snohomish	4	Western	WDF
Union River Reservoir	Reservoir	Union River	47.5429	-122.7703	Kitsap	6	Western	
Upper Caliche Lake	Lake	N/A	47.033053	-119.9252	Grant	2	Eastern	WD
Upper Goose Lake	Lake	N/A	46.941414	-119.278265	Grant	2	Eastern	WD
Upper Lead King Lake	Lake	N/A	48.946848	-117.357031	Pend Oreille	1	Eastern	WDFW
Upriver Dam Reservoir	Reservoir	Upriver Dam	47.697245	-117.042081	Spokane	1	Eastern	WDFW, C
Vance Creek Pond 1/Bowers Lake	Pond	N/A	46.997779	-123.411846	Grays Harbor	6	Western	WDFW
Vance Creek Pond 2/Inez Lake	Pond	N/A	46.993904	-123.422798	Grays Harbor	6	Western	WDFW, Q
Vancouver Lake	Lake	N/A	45.6736	-122.6993	Clark	5	Western	
Vogler Lake	Lake	N/A	48.570151	-121.773841	Skagit	4	Western	
Wagner Lake	Lake	N/A	47.882735	-121.932554	Snohomish	4	Western	
Waitts Lake	Lake	N/A	48.1774642	-117.7819694	Stevens	1	Eastern	
Walker Lake	Lake	N/A	47.264228	-121.9085	King	4	Western	
Wallace Lake	Lake	N/A	47.904539	-121.676913	Snohomish	4	Western	

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Wanapum Lake	Reservoir	Wanapum	47.2151551	-119.9940088	Grant	2	Eastern	W
Wannacut Lake	Lake	N/A	48.869072	-119.517267	Okanogan	2	Eastern	
Wapato Lake	Lake	N/A	47.9128	-120.1545	Chelan	2	Eastern	
Wapato Lake	Lake	N/A	47.195726	-122.456792	Pierce	6	Western	WDFW
Ward Lake	Lake	N/A	47.008767	-122.875442	Thurston	6	Western	
Ward Lake Lower	Lake	N/A	48.786454	-118.73106	Ferry	1	Eastern	
Warden Lake	Lake	N/A	46.971015	-119.164773	Grant	2	Eastern	
Warman Lake	Lake Manmade	N/A	45.64724	-122.46282	Clark	5	Western	
Washburn Island Pond	Pond	N/A	48.095985	-119.671127	Okanogan	2	Eastern	WDFW
Washburn Lake	Lake	N/A	48.84089	-119.596055	Okanogan	2	Eastern	
Watson Lake	Lake	N/A	46.284969	-117.654836	Columbia	1	Eastern	
Waughop Lake	Lake	N/A	47.170579	-122.564531	Pierce	6	Western	
Webb Slough	Lake Manmade	N/A	47.09667	-117.60636	Whitman	1	Eastern	
Wentworth Lake	Lake	N/A	48.009717	-124.530547	Clallam	6	Western	WDFW, Qui
West Evans Pond	Pond	N/A	46.419672	-117.116366	Asotin	1	Eastern	
West Medical Lake	Lake	N/A	47.562336	-117.702224	Spokane	1	Eastern	
Western Lake/Radar Hill Ponds	Lake	N/A	46.423237	-123.820335	Pacific	6	Western	
Wheeler Reservoir Upper	Reservoir	Wheeler Upper	47.2869	-120.3658	Chelan	2	Eastern	
Whistle Lake	Lake	N/A	48.459681	-122.60616	Skagit	4	Western	WDF
Whitestone Lake	Lake	N/A	48.788793	-119.469055	Okanogan	2	Eastern	
Widgeon Lake	Lake	N/A	46.938604	-119.225604	Grant	2	Eastern	
Wildcat Lake	Lake	N/A	47.601069	-122.771247	Kitsap	6	Western	WD
Wilderness Lake	Lake	N/A	47.374573	-122.035608	King	4	Western	WDFW, Cit
Willapa River	River	N/A	46.6779	-123.6712	Pacific	6	Western	
Williams Lake	Lake	N/A	47.3350056	-117.6698054	Spokane	1	Eastern	
Williams Lake	Lake	N/A	48.755139	-117.967317	Stevens	1	Eastern	
Windmill Lake	Lake	N/A	46.932525	-119.175017	Grant	2	Eastern	WD
Winlock Waters Lakes	Lake Manmade	N/A	46.4546	-122.8931	Lewis	5	Western	
Wiser Lake	Lake	N/A	48.9053	-122.4848	Whatcom	4	Western	
Wood Lake	Lake	N/A	47.395081	-123.065307	Mason	6	Western	
Woodhouse Pond	Pond	N/A	46.946425	-120.518545	Kittitas	3	Eastern	
Worth Lake	Lake	N/A	46.603865	-119.084616	Franklin	3	Eastern	
Wye Lake	Lake	N/A	47.426506	-122.758571	Kitsap	6	Western	
Wynoochie Lake	Reservoir	Wynoochie	47.3912	-123.60124	Grays Harbor	6	Western	W

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	
Yahoo Lake	Lake	N/A	47.67676	-124.018382	Jefferson	6	Western	WI
Yakima River	Reservoir	Yakima	46.631916	-120.521916	Yakima	3	Eastern	WDFW,
Yakima Sportsmens Pond	Pond	N/A	46.593338	-120.458419	Yakima	3	Eastern	
Yale Reservoir	Reservoir	Yale	46.0264	-122.3133	Cowlitz	5	Western	WI
Yellepit Pond	Pond	N/A	46.018868	-118.979441	Benton	3	Eastern	
Yokum Lake	Lake	N/A	48.6123	-117.331298	Pend Oreille	1	Eastern	
Z Lake	Lake	N/A	47.603311	-118.419599	Lincoln	1	Eastern	
Zillah Winery Pond	Pond	N/A	46.405473	-120.282026	Yakima	3	Eastern	

Notes:

Anderson Island Parks: Anderson Island Parks and Recreation District
Avista Utilities: Avista Corporation
BLM: U.S. Bureau of Land Management
Chehalis Tribe: Confederated Tribes of the Chehalis Reservation
Chelan PUD: Public Utility District No. 1 of Chelan County
CRBFA: Chehalis River Basin Flood Authority
CTCR: Confederated Tribes of the Colville Reservation
CTUIR: Confederated Tribes of the Umatilla Indian Reservation
CTWS: Confederated Tribes of Warm Springs
Douglas PUD: Public Utility District No. 1 of Douglas County
Everett Public Works: City of Everett, Public Works
Fairchild AFB: Fairchild Air Force Base
Ft. Wm. Symington HOA: Fort William Symington Division 5 Homeowners' Association
Grant PUD: Public Utility District No. 2 of Grant County
KCWLR: King County Water and Land Resources Division
Kent Parks: Kent Parks, Recreation & Community Services
King County Parks: King County Parks and Recreation Division
Kalispel Tribe: Kalispel Tribe of Indians
Lacey Parks: Lacey Parks and Recreation Department
Lake Symington HOA: Lake Symington Community Club Homeowners' Association
LCRD: Lake Chelan Reclamation District
LISECC: Lummi Island Scenic Estates Community Club
NPT: Nez Perce Tribe
NPS: National Park Service
ODFW: Oregon Department of Fish and Wildlife
Pacific County Public Works: Pacific County Department of Public Works
Pend Oreille PUD: Public Utility District No. 1 of Pend Oreille County
PNP Treaty Council: Point No Point Treaty Council
PSE: Puget Sound Energy
Puyallup Tribe: Puyallup Tribe of Indians
QIN: Quinault Indian Nation
Reclamation: U.S. Bureau of Reclamation
SCL: Seattle City Light
Seattle Parks: Seattle Parks and Recreation
Skagit PUD: Public Utility District No. 1 of Skagit County
Skagit Parks: Skagit County Parks and Recreation
Snohomish County Parks: Snohomish County Parks, Recı
Snohomish PUD: Public Utility District No. 1 of Snohomis
SPU: City of Seattle, Seattle Public Utilities
Tacoma Power: City of Tacoma, Tacoma Public Utilities
Thurston County Parks: Thurston County Parks & Recrea
USACE: U.S. Army Corps of Engineers
USEPA: U.S. Environmental Protection Agency
USFS: U.S. Forest Service
USFWS: U.S. Fish and Wildlife Service
WDES: Washington Department of Enterprise Services
WDFW: Washington Department of Fish and Wildlife
WDNR: Washington Department of Natural Resources
WDSHS: Washington Department of Social and Health S
WHRD: Wenatchee Heights Reclamation District
WRIA 8 SRC: Water Resource Inventory Area 8 Salmon R
WRIA 9 SRC: Water Resource Inventory Area 9 Salmon R
WSPRC: Washington State Parks and Recreation Commis
Yakama Nation: Confederated Tribes and Bands of the Y

APPENDIX B Public Outreach Signs

Appendix Figure B-1. Example of an aquatic invasive species highway sign.

Appendix Figure B-2. Example of public outreach stickers provided by Washington Department of Fish and Wildlife.

Appendix Figure B-3. Example notice at public boat launch.

Protect Your Waters
From Aquatic Invasive Species

BEFORE and AFTER launching boat

CLEAN

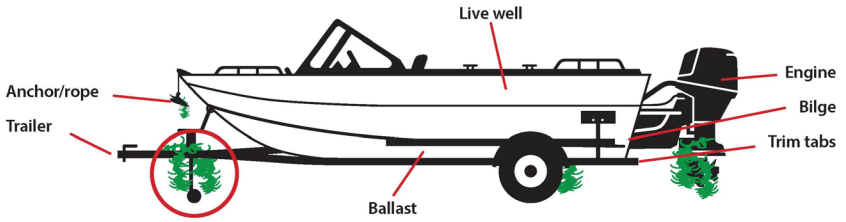
Clean interior/exterior of boat, trailer, & vehicle of any organic matter such as aquatic plants & mud. Dispose organic matter & unused bait in trash.

DRAIN

Drain bilge, ballast, wells & buckets before you leave area. Keep bilge plug out during transport.

DRY

Dry equipment before launching watercraft into another body of water.



For information on FREE boat inspections, call 1-888-WDFW-AIS (933-9247) or visit wdfw.wa.gov/ais.

Before you launch a boat that is not registered in Washington, you MUST purchase an Aquatic Invasive Species Prevention Permit.

How to buy:

- Online at fishhunt.dfw.wa.gov
- Find a license dealer near you at wdfw.wa.gov/licenses/dealers

Funds from permit sales supports efforts to keep Washington's waters free of aquatic invasive species and manage infestations when prevention fails.

Avoid Citations or Fines

Failure to possess an Aquatic Invasive Species Prevention Permit – Infraction — RCW 77.15.160

Possession of aquatic conveyance not meeting clean drain requirements – Infraction — RCW 77.135.110

Introduction or possession of prohibited species – up to class C felony — RCW 77.15.160 (4)

FISH AND WILDLIFE POLICE OFFICER

Washington Department of FISH and WILDLIFE

STOP AQUATIC HITCHHIKERS!™
www.protectyourwaters.net

Appendix Figure B-4. Example of public outreach sign provided by Washington Department of Fish and Wildlife.

Appendix Figure B-5. Example of public outreach sign provided by Washington Department of Fish and Wildlife.

Appendix Figure B-6. Example of public outreach sign provided by Washington Department of Fish and Wildlife.

Appendix Figure B-7. Example of public outreach sign provided by Washington Department of Fish and Wildlife.

Appendix Figure B-8. Example of public outreach pamphlet provided by Washington Department of Fish and Wildlife.

Reporting requirements

All vessels (including articulated tug and barges, barges, and recreational vessels) of 300 gross tons and greater, except military vessels, must file a ballast water management form to the Washington Department of Fish and Wildlife (WDFW) at least 24 hours prior to entering Washington state waters and before transiting between state ports. International Maritime Organization (IMO) reporting forms are acceptable although the U.S. Coast Guard Form is preferred. The U.S. Coast Guard form can be found on the WDFW ballast water webpage at wdfw.wa.gov/ballast.

Submit reporting forms as PDF files to ballastwater@dfw.wa.gov.

Penalties for violations

Civil penalties:
WDFW may impose a civil penalty of up to $27,500 per violation per day on a vessel owner or operator who fails to comply with the requirements of state laws including:

- Failure to file a ballast water management form,
- Failure to meet the requirements in a Notice of Correction,
- Discharge of improperly exchanged or treated ballast water without valid exemption.

Criminal penalties:
A vessel owner or operator who knowingly and intentionally falsifies a ballast water management form may be subject to criminal penalties of up to five years imprisonment in addition to any civil penalties.

Request this information in an alternative format or language at wdfw.wa.gov/accessibility/requests-accommodation, 833-855-1012, TTY (711), or CivilRightsTeam@dfw.wa.gov.

Compliance is required by law
Chapter 77.120 RCW | Chapter 220.650 WAC

Washington state Ballast water reporting and inspections

Washington Dept. of Fish and Wildlife
Ballast Water Management
P.O. Box 43150
Olympia, WA 98504-3150
360-902-2189
ballastwater@dfw.wa.gov

Scan for more information or visit: wdfw.wa.gov/ballast

Ballast Water Brochure Version 1.0 November 2023

Management requirements

All vessels intending to discharge ballast water within Washington state waters are required to manage their ballast by treating with an approved ballast water treatment system and/or conducting a mid-ocean exchange. Specifically:

- Vessels using a ballast water treatment system must adhere to the operational parameters in their Alternate Management System (AMS) or Type Approval letter, issued by the U.S. Coast Guard.
- Vessels conducting an exchange during an ocean crossing must do so at least 200 nautical miles (nm) offshore in waters at least 2,000 meters deep.
- Vessels conducting an exchange during a coastal voyage must do so at least 50 nm offshore in waters at least 200 meters deep.
- All exchanges must be conducted using the Empty Refill method at 100% or greater exchange or the Flowthrough method at 300% or greater exchange.
- In the event that an installed ballast water treatment system fails or is inoperable, the vessel should contact the U.S. Coast Guard Captain of the Port Office for their intended arrival port.

Vessels must also comply with all applicable federal laws.

Management exemptions

Ballast water exchange is not required if:

- The vessel has treated their ballast with a compliant ballast water treatment system in accordance with their AMS or Type Approval letter.
- The vessel does not intend to discharge ballast in waters of the state.
- The vessel master requests a safety exemption and files a minimum $500 administrative fee. Unless unsafe to do otherwise, the vessel may not discharge unmanaged ballast water into waters of the state without WDFW authorization.

WDFW inspections

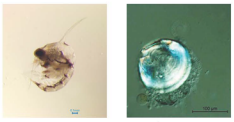
A WDFW Inspector will examine management records, make inquiries to evaluate compliance with Washington state laws, and may take ballast water samples.

Inspectors may examine documentation and equipment related to installed ballast water treatment technology. They may request to see treatment system reports and readouts if available.

Ballast water samples, when taken, will be evaluated for the presence of invasive or potentially invasive species.

Unless managed well, **ballast water can spread aquatic invasive species** like European green crabs and zebra and quagga mussels.

An aquatic invasive species is a freshwater or marine organism that has spread beyond its native range and is either causing harm or may cause harm to environmental, economic, or human resources.



European green crab zoea (left, Padilla Bay National Estuarine Research Reserve) and zebra mussel veliger (right, California Dept. of Fish and Wildlife).

Reporting waivers

Vessel operators who do not regularly discharge ballast water while in Washington state ports and who do not wish to file a ballast water management report (BWMR) for every visit may complete and sign a Washington Department of Fish and Wildlife (WDFW) waiver request form. The form can be found on the WDFW ballast water webpage at wdfw.wa.gov/ballast.

Appendix Figure B-9. Example of public outreach pamphlet provided by Washington Department of Fish and Wildlife.

APPENDIX C Watercraft Inspection and Decontamination Stations

Appendix Table C-1. List of watercraft inspection and decontamination stations.

Station Type	Decontamination Method	Station Duration	For Public	Mandatory	Name of Station	Latitude	Longitude	
Mandatory Watercraft Check Station and Decontamination Site	Hot water pressure washer	Permanent	Yes	Yes	Spokane – Interstate 90 (West Bound exit 299)	47.69630	-117.05080	
Mandatory Watercraft Check Station and Decontamination Site	Hot water pressure washer	Permanent	Yes	Yes	Pasco (North Bound Highway 395 near mile marker 33 at WSP scale No. 39)	46.39200	-119.06260	
Mandatory Watercraft Check Station and Decontamination Site	Hot water pressure washer	Permanent	Yes	Yes	Cle-Elum (Eastbound I-90 at exit 88)	47.18200	-121.01100	
Mandatory Watercraft Check Station	N/A	Roving	Yes	Yes	SW Washington			N
Mandatory Watercraft Check Station and Decontamination Site	Hot water pressure washer	Permanent	Yes	Yes	Clarkston – USACE recreation area	46.42430	-117.06510	
Decontamination Site	Hot water pressure washer	Permanent	Yes	No	Ephrata Decontamination Station	47.33630	-119.53400	
CD^3 Station	Vacuum, air compressor, and hand tools	Permanent	Yes	No	Kettle Falls Marina	46.59920	-118.12100	R s d
CD^3 Wayside Solar	Vacuum, air compressor, and hand tools	Permanent	Yes	No	Steamboat Rock State Park Northrup Boat Launch	47.87060	-119.09680	R s d
CD^3 Roadside/Outpost	Hand tools	Permanent	Yes	No	Ringold Boat Launch	46.50510	-119.25970	R s d

Station Type	Decontamination Method	Station Duration	For Public	Mandatory	Name of Station	Latitude	Longitude	
CD[3] Mobile Trailer	Vacuum, air compressor, and hand tools	Roving	Yes	No	CD3 Mobile Trailer	46.94760	-122.94030	R s d p e h o d
Decontamination Site	Hot water pressure washer	Permanent	No	No	Lake Terrell Wildlife Area	48.85740	-122.69140	
Decontamination Site	Hot water pressure washer	Permanent	No	No	La Connor Office	48.38630	-122.50020	
Decontamination Site	Hot water pressure washer	Permanent	No	No	Port Townsend Office	48.11850	-122.75220	
Decontamination Site	Hot water pressure washer	Permanent	No	No	Montesano Office	46.97440	-123.62370	
Decontamination Site	Hot water pressure washer	Permanent	No	No	Tumwater Warehouse	46.94820	-122.94100	
Mandatory Watercraft Check Station and Decontamination Site	Hot water pressure washer	Permanent	Yes	Yes	Bloedel Donovan Park Boat Launch	48.76026	-122.41831	
Mandatory Watercraft Check Station	N/A	Roving	Yes	Yes	Lake Whatcom South Bay WDFW Boat Launch	48.67326	-122.31497	
Mandatory Watercraft Check Station	N/A	Roving	Yes	Yes	Lake Samish WDFW Boat Launch	48.66681	-122.37664	
Mandatory Watercraft Check Station	N/A	Roving	Yes	Yes	Sudden Valley Marina	48.72121	-122.32482	

Notes:
AIS: Aquatic Invasive Species
CD3: Clean, Drain, Dry, Dispose
N/A: not applicable
WSP: Washington State Patrol
WDFW: Washington Department of Fish and Wildlife

APPENDIX D High Risk Waterbodies in Washington State

Appendix Table D-1. Waterbodies monitored.

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Adams						
Fourth of July Lake	1 every 3 years 2024 all sampling possible except eDNA	119	N/A	Lake	47.2689	-117.967
Hutchinson Lake	1 every 3 years 2024 all sampling possible except eDNA	141	N/A	Lake	46.8772	-119.297
Sprague Lake – Sprague Lake	2 a year	348	N/A	Lake	47.2548	-118.083
Benton						
Columbia River – Lake Umatilla	3 a year	216	Umatilla	Reservoir	45.8566	-119.853
Columbia River – Lake Wallula	3 a year	218	Wallula	Reservoir	46.2220	-119.138
Chelan						
Antilon Lake Lower	1 every 3 years 2024 all sampling possible except eDNA	7	N/A	Lake	47.9676	-120.156
Beehive Reservoir	1 every 3 years 2025 all sampling possible except eDNA	22	N/A	Reservoir	47.3263	-120.400
Dry Lake	1 every 2 years 2024 all sampling possible except eDNA	102	N/A	Lake	47.9087	-120.167
Fish Lake	2 a year	114	N/A	Lake	47.8289	-120.712
Chelan Lake – Lake Chelan	3 a year	163	N/A	Lake	47.9938	-120.261
Columbia River – Rock Island Lake	3 a year	311	Rock Island	Reservoir	47.4251	-120.305
Roses Lake	1 a year	313	N/A	Lake	47.9025	-120.158
Wapato Lake	2 a year	388	N/A	Lake	47.9128	-120.154
Clallam						
Beaver Lake	1 every 2 years 2024 all sampling possible except eDNA	20	N/A	Lake	48.1131	-124.247
Sutherland Lake – Lake Sutherland	2 a year	212	N/A	Lake	48.0744	-123.711
Clark						
Lacamas Lake	2 a year	152	N/A	Lake	45.6054	-122.409
Lake River	2 a year	200	N/A	River	45.8165	-122.750
Vancouver Lake	1 a year	381	N/A	Lake	45.6736	-122.699
Columbia						
Snake River – Lake Herbert G West	3 a year	178	Herbert G West	Reservoir	46.5671	-118.536
Tucannon River	1 a year	768	N/A	River	46.5476	-118.177

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Cowlitz						
Cowlitz River	3 a year	79	N/A	River	46.2782	-122.911
Kress Lake	1 every 3 years 2023 all sampling possible except eDNA	151	N/A	Lake	46.0466	-122.853
Douglas						
Big Bow Lake	1 every 2 years 2024 all sampling possible except eDNA	25	N/A	Lake	47.3834	-120.154
Hammond Lake	1 every 2 years 2024 all sampling possible except eDNA	126	N/A	Lake	47.3737	-120.127
Jameson Lake	2 a year	145	N/A	Lake	47.6665	-119.629
Columbia River – Lake Entiat/Rocky Reach	3 a year	170	Entiat/Rocky Reach	Reservoir	47.5404	-120.280
Putters Lake	1 every 2 years 2024 all sampling possible except eDNA	300	N/A	Lake	47.3767	-120.139
Ferry						
Curlew Lake	3 a year	85	N/A	Lake	48.7214	-118.662
Ferry Lake	1 every 3 years 2023 all sampling possible except eDNA	111	N/A	Lake	48.5218	-118.811
Ellen Lake – Lake Ellen	1 every 2 years 2024 all sampling possible except eDNA	169	N/A	Lake	48.4964	-118.263
Swan Lake	1 every 3 years 2023 all sampling possible except eDNA	363	N/A	Lake	48.5112	-118.835
Trout Lake	1 every 3 years 2023 all sampling possible except eDNA	374	N/A	Lake	48.6243	-118.239
Franklin						
Clark Pond	1 every 2 years 2024 all sampling possible except eDNA	63	N/A	Pond	46.5188	-119.070
Dalton Lake	1 every 2 years 2024 all sampling possible except eDNA	86	N/A	Lake	46.2955	-118.808
Snake River – Lake Sacajawea	3 a year	203	Sacajawea	Reservoir	46.2528	-118.876
Mesa Lake	1 every 2 years 2024 all sampling possible except eDNA	266	N/A	Lake	46.5654	-119.045
Columbia River – Scooteney Reservoir	2 a year	322	Scooteney	Reservoir	46.7047	-119.024

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Snake River – Snake River Arm	3 a year	334	Snake River Arm	Reservoir	46.2017	-119.037
Palouse River	3 a year	767	N/A	River	46.5934	-118.217
Garfield						
Snake River – Lake Bryan	3 a year	159	Bryan	Reservoir	46.6969	-117.470
Grant						
Columbia River – Banks Lake	3 a year	12	Banks	Reservoir	47.6282	-119.327
Columbia River – Billy Clapp Lake	2 a year	29	Billy Clapp	Reservoir	47.4529	-119.252
Blue Lake	2 a year	38	N/A	Lake	47.5712	-119.435
Blythe Lake	1 every 2 years 2024 all sampling possible except eDNA	39	N/A	Lake	46.9587	-119.293
Burke Lake	1 every 2 years 2023 all sampling possible except eDNA	49	N/A	Lake	47.1347	-119.925
Canal Lake	1 every 2 years 2024 all sampling possible except eDNA	52	N/A	Lake	46.9301	-119.181
Corral Lake	1 every 2 years 2024 all sampling possible except eDNA	78	N/A	Lake	46.9639	-119.310
Deep Lake	1 every 2 years 2024 all sampling possible except eDNA	90	N/A	Lake	47.5881	-119.340
Dry Falls Lake	1 every 3 years 2024 all sampling possible except eDNA	101	N/A	Lake	47.6030	-119.354
Evergreen Lake – Evergreen Reservoir	1 a year	107	Evergreen	Reservoir	47.1329	-119.927
Hampton Lake Lower	1 every 3 years 2025 all sampling possible except eDNA	127	N/A	Lake	46.9275	-119.220
Heart Lake – Heart Lake	1 every 2 years 2024 all sampling possible except eDNA	131	N/A	Lake	46.9311	-119.183
Lenice Lake	1 every 3 years 2024 all sampling possible except eDNA	230	N/A	Lake	46.8381	-119.832
Long Lake	1 every 2 years 2024 all sampling possible except eDNA	243	N/A	Lake	46.9285	-119.197
Goose Lake Lower – Lower Goose Lake	1 every 2 years 2024 all sampling possible except eDNA	252	N/A	Lake	46.9240	-119.295
Martha Lake	1 every 3 years 2024 all sampling possible except eDNA	256	N/A	Lake	47.0955	-119.837

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Moses Lake	3 a year	270	N/A	Lake	47.1086	-119.285
North Teal Lake	1 every 3 years 2024 all sampling possible except eDNA	280	N/A	Lake	46.9179	-119.204
Park Lake	2 a year	289	N/A	Lake	47.5899	-119.395
Columbia River – Potholes Reservoir	3 a year	297	Potholes	Reservoir	46.9814	-119.347
Columbia River – Priest Rapids Lake	3 a year	299	Priest Rapids	Reservoir	46.7118	-119.953
Quincy Lake	1 every 2 years 2023 all sampling possible except eDNA	302	N/A	Lake	47.1414	-119.927
Rainbow Lake – Rainbow Lake /Vic Meyers	1 every 3 years 2024 all sampling possible except eDNA	303	N/A	Lake	47.5919	-119.376
Soda Lake	1 a year	337	N/A	Lake	46.9630	-119.238
South Teal Lake	1 every 3 years 2024 all sampling possible except eDNA	340	N/A	Lake	46.9153	-119.204
Stan Coffin Lake	1 every 2 years 2023 all sampling possible except eDNA	351	N/A	Lake	47.1492	-119.919
Goose Lake Upper – Upper Goose Lake	1 every 2 years 2024 all sampling possible except eDNA	378	N/A	Lake	46.9412	-119.273
Ward Lake – Warden Lake	1 every 2 years 2024 all sampling possible except eDNA	390	N/A	Lake	46.9810	-119.158
Windmill Lake	1 every 2 years 2024 all sampling possible except eDNA	399	N/A	Lake	46.9299	-119.180
Grays Harbor						
Chehalis River	2 a year	61	N/A	River	46.9622	-123.601
Duck Lake	1 a year	103	N/A	Lake	46.9711	-124.141
Failor Lake	1 every 2 years 2023 all sampling possible except eDNA	108	N/A	Lake	47.1072	-123.964
Aberdeen Lake – Lake Aberdeen	1 every 2 years 2024 all sampling possible except eDNA	153	N/A	Lake	46.9807	-123.742
Quigg Lake	1 every 2 years 2023 all sampling possible except eDNA	301	N/A	Lake	46.9466	-123.639
Wynoochie River – Wynoochie Lake	1 a year	402	Wynoochie	Reservoir	47.3912	-123.601

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Island						
Cranberry Lake	1 every 3 years 2024 all sampling possible except eDNA	81	N/A	Lake	48.3990	-122.662
Goss Lake – Lake Goss	1 every 3 years 2023 all sampling possible except eDNA	177	N/A	Lake	48.0391	-122.478
Lone Lake	1 every 2 years 2024 all sampling possible except eDNA	239	N/A	Lake	48.0237	-122.460
Jefferson						
Anderson Lake	1 every 3 years 2024 all sampling possible except eDNA	5	N/A	Lake	48.0179	-122.803
Leland Lake	1 every 2 years 2024 all sampling possible except eDNA	229	N/A	Lake	47.8977	-122.876
Crocker Lake	1 every 2 years 2024 all sampling possible except eDNA	763	N/A	Lake	47.9361	-122.884
King						
Bass Lake	1 every 3 years 2024 all sampling possible except eDNA	13	N/A	Lake	47.2539	-121.991
Desire Lake – Lake Desire	1 every 2 years 2024 all sampling possible except eDNA	166	N/A	Lake	47.4461	-122.107
Dolloff Lake – Lake Dolloff	1 every 2 years 2024 all sampling possible except eDNA	167	N/A	Lake	47.3237	-122.284
Fenwick Lake – Lake Fenwick	1 every 2 years 2024 all sampling possible except eDNA	173	N/A	Lake	47.3661	-122.272
Geneva Lake – Lake Geneva	1 every 3 years 2024 all sampling possible except eDNA	174		Lake	47.2915	-122.281
Killarney Lake – Lake Killarney	1 every 3 years 2024 all sampling possible except eDNA	183		Lake	47.2901	-122.287
Meridian Lake – Lake Meridian	1 every 2 years 2024 all sampling possible except eDNA	194	N/A	Lake	47.3607	-122.143
Morton Lake – Lake Morton	1 every 2 years 2024 all sampling possible except eDNA	195	N/A	Lake	47.3251	-122.088
Number 12 Lake – Lake Number 12	1 every 3 years 2024 all sampling possible except eDNA	196	N/A	Lake	47.3254	-121.975
Sammamish Lake – Lake Sammamish	2 a year	205	N/A	Lake	47.5649	-122.057

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Sawyer Lake – Lake Sawyer	1 a year	206	N/A	Lake	47.3368	-122.040
Union Lake – Lake Union	2 a year	217	N/A	Lake	47.6464	-122.311
Washington Lake – Lake Washington	3 a year	219	N/A	Lake	47.5749	-122.190
Washington Lake Ship Canal – Lake Washington Ship Canal	2 a year	220	N/A	Channel	47.6614	-122.380
Langlois Lake	1 every 3 years 2024 all sampling possible except eDNA	225	N/A	Lake	47.6350	-121.884
Mercer Slough	1 every 2 years 2023 all sampling possible except eDNA	263	N/A	Slough	47.5820	-122.186
North Lake	1 every 2 years 2024 all sampling possible except eDNA	278	N/A	Lake	47.3074	-122.288
Rattlesnake Lake	1 every 2 years 2024 all sampling possible except eDNA	306	N/A	Lake	47.4322	-121.769
Sammamish River	1 a year	320	N/A	River	47.7544	-122.249
Shadow Lake	1 every 3 years 2024 all sampling possible except eDNA	323	N/A	Lake	47.4113	-122.085
Shady Lake	1 every 2 years 2024 all sampling possible except eDNA	324	N/A	Lake	47.4282	-122.106
Spring Lake	1 every 3 years 2023 all sampling possible except eDNA	349	N/A	Lake	47.4367	-122.091
Star Lake	1 every 3 years 2024 all sampling possible except eDNA	352		Lake	47.3549	-122.287
Steel Lake	1 every 2 years 2024 all sampling possible except eDNA	354	N/A	Lake	47.3261	-122.300
Trout Lake	1 every 3 years 2023 all sampling possible except eDNA	373		Lake	47.2649	-122.279
Wilderness Lake	1 every 2 years 2024 all sampling possible except eDNA	395	N/A	Lake	47.3741	-122.037
Kitsap						
Kitsap Lake	1 a year	150	N/A	Lake	47.5722	-122.708
Long Lake	1 a year	241	N/A	Lake	47.4852	-122.592
Mission Lake	1 every 2 years 2024 all sampling possible except eDNA	268	N/A	Lake	47.5333	-122.823

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Wildcat Lake	1 every 2 years 2024 all sampling possible except eDNA	394	N/A	Lake	47.6024	-122.766
Tahuya Lake	2 a year	717	N/A	Lake	47.5680	-122.836
Kittitas						
Cle Elum River – Cle Elum Lake	2 a year	64	Cle Elum	Reservoir	47.2458	-121.077
Kachess River – Kachess Lake	2 a year	147	Kachess	Reservoir	47.3420	-121.250
Yakima River – Keechelus Lake	2 a year	148	Keechelus	Reservoir	47.3766	-121.387
Yakima River – Lake Easton	1 a year	168	Easton	Reservoir	47.2530	-121.195
Lavender Lake	1 every 3 years 2024 all sampling possible except eDNA	226	N/A	Lake	47.2179	-121.127
Lost Lake	1 every 2 years 2024 all sampling possible except eDNA	248	N/A	Lake	47.3339	-121.394
Mattoon Lake	1 every 2 years 2023 all sampling possible except eDNA	259	N/A	Lake	46.9784	-120.553
Columbia River – Wanapum Lake	3 a year	386	Wanapum	Reservoir	46.9413	-119.983
Horsethief Lake	1 every 2 years 2023 all sampling possible except eDNA	139	N/A	Lake	45.6423	-121.103
Columbia River – Lake Bonneville	3 a year	157	Bonneville	Reservoir	45.7085	-121.457
Columbia River – Lake Celilo	3 a year	162	Celilo	Reservoir	45.6624	-121.035
Rowland Lake	1 every 3 years 2023 all sampling possible except eDNA	316	N/A	Lake	45.7097	-121.381
Spearfish Lake	1 every 3 years 2023 all sampling possible except eDNA	343	N/A	Lake	45.6260	-121.128
Lewis						
Cowlitz River – Lake Scanewa	1 every 2 years 2023 all sampling possible except eDNA	207	Scanewa	Reservoir	46.4814	-122.095
Cowlitz River – Mayfield Lake	3 a year	260	Mayfield	Reservoir	46.5035	-122.572
Cowlitz River – Riffe Lake	2 a year	307	Riffe	Reservoir	46.5166	-122.404
South Lewis Park Pond	1 every 2 years 2024 all sampling possible except eDNA	338	N/A	Pond	46.4331	-122.842
Lincoln						
Coffee Pot Lake	1 every 2 years 2024 all sampling possible except eDNA	70	N/A	Lake	47.4928	-118.563
Fishtrap Lake	2 a year	115	N/A	Lake	47.3550	-117.823

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Pacific Lake	1 every 2 years 2024 all sampling possible except eDNA	285	N/A	Lake	47.4123	-118.719
Twin Lakes Upper	1 every 3 years 2024 all sampling possible except eDNA	376	N/A	Lake	47.5309	-118.505
Twin Lakes Lower	1 every 3 years 2024 all sampling possible except eDNA	734	N/A	Lake	47.5292	-118.506
Mason						
Haven Lake	1 every 2 years 2024 all sampling possible except eDNA	129	N/A	Lake	47.4571	-122.977
Isabella Lake	1 every 2 years 2024 all sampling possible except eDNA	142	N/A	Lake	47.1671	-123.116
Skokomish River – Lake Cushman	2 a year	165	Cushman	Reservoir	47.4597	-123.221
Skokomish River – Lake Kokanee	1 every 2 years 2023 all sampling possible except eDNA	184	Kokanee	Reservoir	47.3972	-123.199
Limerick Lake – Lake Limerick	1 every 2 years 2024 all sampling possible except eDNA	188	N/A	Lake	47.2806	-123.050
Tee Lake	1 every 2 years 2024 all sampling possible except eDNA	369	N/A	Lake	47.4369	-123.022
Twin Lake Big	1 every 3 years 2023 all sampling possible except eDNA	375		Lake	47.4828	-122.950
Okanogan						
Aeneas Lake	1 every 3 years 2024 all sampling possible except eDNA	1	N/A	Lake	48.6768	-119.508
Alta Lake	2 a year	3	N/A	Lake	48.0275	-119.935
Big Twin Lake	1 every 3 years 2023 all sampling possible except eDNA	28	N/A	Lake	48.4471	-120.192
Black Pine Lake	1 every 3 years 2024 all sampling possible except eDNA	34	N/A	Lake	48.3127	-120.275
Blue Lake	1 every 2 years 2024 all sampling possible except eDNA	36	N/A	Lake	48.9023	-119.497
Blue Lake	1 every 3 years 2023 all sampling possible except eDNA	37	N/A	Lake	48.6732	-119.690
Bonaparte Lake	1 every 2 years 2024 all sampling possible except eDNA	40	N/A	Lake	48.7928	-119.059

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Buck Lake	1 every 3 years 2023 all sampling possible except eDNA	47	N/A	Lake	48.6046	-120.199
Campbell Lake	1 every 3 years 2024 all sampling possible except eDNA	51	N/A	Lake	48.4405	-120.066
Chopaka Lake	1 every 3 years 2024 all sampling possible except eDNA	62	N/A	Lake	48.9139	-119.701
Salmon Creek – Conconully Lake	3 a year	73	Conconully Lake	Reservoir	48.5642	-119.730
Salmon Creek – Conconully Reservoir	3 a year	74	Conconully	Reservoir	48.5491	-119.747
Conners Lake	1 every 3 years 2023 all sampling possible except eDNA	75	N/A	Lake	48.7507	-119.663
Davis Lake	1 every 3 years 2024 all sampling possible except eDNA	88	N/A	Lake	48.4422	-120.121
Forde Lake	1 every 3 years 2023 all sampling possible except eDNA	118	N/A	Lake	48.7371	-119.669
Green Lake	1 every 3 years 2023 all sampling possible except eDNA	125	N/A	Lake	48.4513	-119.627
Beth Lake – Lake Beth	1 every 2 years 2024 all sampling possible except eDNA	156	N/A	Reservoir	48.8602	-118.986
Columbia River – Lake Pateros	3 a year	198	Pateros	Reservoir	48.0551	-119.895
Leader Lake	1 every 2 years 2024 all sampling possible except eDNA	227	N/A	Lake	48.3605	-119.690
Little Green Lake	1 every 2 years 2024 all sampling possible except eDNA	235	N/A	Lake	48.4367	-119.628
Little Twin Lake	1 every 3 years 2024 all sampling possible except eDNA	238	N/A	Lake	48.4485	-120.190
Long Lake	1 every 2 years 2024 all sampling possible except eDNA	242	N/A	Lake	48.6128	-119.132
Lost Lake	1 every 3 years 2025 all sampling possible except eDNA	250		Lake	48.8508	-119.054
Osoyoos Lake	3 a year	283	N/A	Lake	48.9496	-119.430
Palmer Lake	2 a year	286	N/A	Lake	48.8739	-119.619
Patterson Lake	1 a year	291	N/A	Lake	48.4613	-120.244
Pearrygin Lake	2 a year	293	N/A	Lake	48.4934	-120.162

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Rat Lake	1 every 2 years 2024 all sampling possible except eDNA	305	N/A	Lake	48.1807	-119.801
Round Lake	1 every 2 years 2024 all sampling possible except eDNA	315	N/A	Lake	48.6075	-119.125
Columbia River – Rufus Woods Lake	3 a year	317	Rufus Woods	Reservoir	48.0141	-119.607
Sidley Lake	1 a year	325	N/A	Lake	48.9917	-119.221
Spectacle Lake	2 a year	344	N/A	Lake	48.8104	-119.532
Wannacut Lake	2 a year	387	N/A	Lake	48.8789	-119.512
Washburn Island Pond	1 every 3 years 2025 all sampling possible except eDNA	391		Pond	48.0943	-119.667
Whitestone Lake	1 a year	393	N/A	Lake	48.7888	-119.469
Okanogan River	2 a year	762	N/A	River	48.1025	-119.708
Methow River	1 a year	766	N/A	River	48.0458	-119.911
Pacific						
Loomis Lake	1 every 3 years 2023 all sampling possible except eDNA	245	N/A	Lake	46.4384	-124.044
Snag Lake/Radar Hill Ponds	1 every 3 years 2024 all sampling possible except eDNA	333	N/A	Lake	46.4194	-123.815
Pend Oreille						
Big Meadow Lake	1 every 3 years 2024 all sampling possible except eDNA	27	N/A	Lake	48.7298	-117.564
Pend Oreille River – Boundary Reservoir	3 a year	43	Boundary	Reservoir	48.7816	-117.417
Pend Oreille River – Box Canyon Reservoir	3 a year	44	Box Canyon	Reservoir	48.7404	-117.413
Browns Lake	1 every 3 years 2023 all sampling possible except eDNA	45	N/A	Lake	48.4364	-117.195
Carls Lake	1 every 3 years 2023 all sampling possible except eDNA	54	N/A	Lake	48.6585	-117.438
Cooks Lake	1 every 3 years 2024 all sampling possible except eDNA	76	N/A	Lake	48.3431	-117.169
Crescent Lake	1 every 3 years 2024 all sampling possible except eDNA	84	N/A	Lake	48.9880	-117.312
Davis Lake	1 a year	87	N/A	Lake	48.2301	-117.289

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Diamond Lake	2 a year	98	N/A	Lake	48.1295	-117.187
Fan Lake	1 every 2 years 2024 all sampling possible except eDNA	109	N/A	Lake	48.0542	-117.403
Horseshoe Lake	1 every 2 years 2024 all sampling possible except eDNA	136	N/A	Lake	48.1115	-117.416
Leo Lake – Lake Leo	1 every 2 years 2023 all sampling possible except eDNA	187	N/A	Lake	48.6495	-117.496
Nile Lake	1 every 3 years 2024 all sampling possible except eDNA	275	N/A	Lake	48.6583	-117.472
North Skookum Lake	1 every 2 years 2023 all sampling possible except eDNA	279	N/A	Lake	48.4061	-117.181
Sacheen Lake	2 a year	318	N/A	Lake	48.1510	-117.307
South Skookum Lake	1 every 2 years 2024 all sampling possible except eDNA	339	N/A	Lake	48.3926	-117.181
Sullivan Lake	1 a year	360	N/A	Lake	48.8380	-117.284
Yokum Lake	1 every 3 years 2025 all sampling possible except eDNA	405	N/A	Lake	48.6084	-117.328
Pierce						
Nisqually River – Alder Lake	2 a year	2	Alder	Reservoir	46.7984	-122.292
American Lake	2 a year	4	N/A	Lake	47.1217	-122.569
Bay Lake	1 every 2 years 2024 all sampling possible except eDNA	15	N/A	Lake	47.2473	-122.759
Bonney Lake	1 every 2 years 2023 all sampling possible except eDNA	41	N/A	Lake	47.1899	-122.187
Clear Lake	1 every 2 years 2024 all sampling possible except eDNA	67	N/A	Lake	46.9313	-122.280
Harts Lake	1 a year	128	N/A	Lake	46.8935	-122.464
Bradley Lake – Lake Bradley	1 every 3 years 2024 all sampling possible except eDNA	158		Lake	47.1611	-122.284
Kapowsin Lake – Lake Kapowsin	1 a year	180	N/A	Lake	46.9844	-122.218
Louise Lake – Lake Louise	1 every 2 years 2024 all sampling possible except eDNA	190	N/A	Lake	47.1630	-122.565
White River – Lake Tapps	2 a year	213	Tapps	Reservoir	47.2411	-122.172
Whitman Lake – Lake Whitman	1 every 2 years 2024 all sampling possible except eDNA	223	N/A	Lake	46.9606	-122.258

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Ohop Lake	1 a year	282	N/A	Lake	46.8852	-122.278
Rapjohn Lake	1 every 2 years 2024 all sampling possible except eDNA	304	N/A	Lake	46.9056	-122.345
Silver Lake	2 a year	328	N/A	Lake	46.8861	-122.361
Spanaway Lake	1 a year	342	N/A	Lake	47.1141	-122.446
Steilacoom Lake	1 a year	355	N/A	Lake	47.1737	-122.534
Tanwax Lake	2 a year	367	N/A	Lake	46.9449	-122.274
San Juan						
Cascade Lake	1 every 2 years 2023 all sampling possible except eDNA	56	N/A	Lake	48.6515	-122.851
Hummel Lake	1 every 3 years 2024 all sampling possible except eDNA	140	N/A	Lake	48.5212	-122.892
Mountain Lake	1 every 3 years 2023 all sampling possible except eDNA	271	N/A	Lake	48.6572	-122.818
Sportsman Lake	1 every 3 years 2024 all sampling possible except eDNA	347	N/A	Lake	48.5689	-123.070
Martin Lake	1 every 3 years 2023 all sampling possible except eDNA	774	N/A	Lake	48.6207	-122.896
Killebrew Lake	1 every 3 years 2023 all sampling possible except eDNA	775	N/A	Lake	48.6047	-122.898
Skagit						
Beaver Lake	1 every 2 years 2023 all sampling possible except eDNA	18	N/A	Lake	48.4459	-122.221
Big Lake	1 a year	26	N/A	Lake	48.3792	-122.233
Clear Lake	1 every 2 years 2024 all sampling possible except eDNA	65	N/A	Lake	48.4644	-122.225
Grandy Lake	1 every 3 years 2024 all sampling possible except eDNA	124	N/A	Lake	48.5656	-121.804
Heart Lake	1 every 2 years 2024 all sampling possible except eDNA	130	N/A	Lake	48.4752	-122.628
Campbell Lake – Lake Campbell	1 a year	160	N/A	Lake	48.4426	-122.618
Erie Lake – Lake Erie	1 a year	171	N/A	Lake	48.4494	-122.639
McMurray Lake – Lake McMurray	1 every 2 years 2024 all sampling possible except eDNA	193	N/A	Lake	48.3128	-122.220

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Baker River – Lake Shannon	1 every 2 years 2024 all sampling possible except eDNA	209	N/A	Reservoir	48.5562	-121.729
Pass Lake	1 every 3 years 2024 all sampling possible except eDNA	290	N/A	Lake	48.4171	-122.643
Sixteen Lake	1 every 2 years 2024 all sampling possible except eDNA	330	N/A	Lake	48.3419	-122.289
Skagit River	2 a year	331	N/A	River	48.4896	-122.222
Skamania						
Columbia River	3 a year	72	N/A	River	45.6224	-122.019
Goose Lake	1 every 3 years 2024 all sampling possible except eDNA	121	N/A	Lake	45.9395	-121.758
Snohomish						
Ballinger Lake	1 every 2 years 2024 all sampling possible except eDNA	11	N/A	Lake	47.7835	-122.326
Blackmans Lake	1 every 3 years 2024 all sampling possible except eDNA	35	N/A	Lake	47.9303	-122.095
Echo Lake – Echo Lake Maltby	1 every 3 years 2024 all sampling possible except eDNA	105	N/A	Lake	47.7857	-122.049
Goodwin Lake – Lake Goodwin	1 a year	176	N/A	Lake	48.1360	-122.290
Howard Lake – Lake Howard	1 every 3 years 2024 all sampling possible except eDNA	179	N/A	Lake	48.1584	-122.329
Ketchum Lake – Lake Ketchum	1 every 3 years 2024 all sampling possible except eDNA	181	N/A	Lake	48.2811	-122.346
Serene Lake – Lake Serene	1 every 2 years 2024 all sampling possible except eDNA	208	N/A	Lake	47.8714	-122.290
Shoecraft Lake – Lake Shoecraft	1 every 2 years 2024 all sampling possible except eDNA	210	N/A	Lake	48.1258	-122.307
Stevens Lake – Lake Stevens	2 a year	211	N/A	Lake	47.9964	-122.086
Lost Lake/Devil's Lake	1 every 2 years 2024 all sampling possible except eDNA	251	N/A	Lake	47.7998	-122.042
Martha Alderwood Manor	1 every 2 years 2024 all sampling possible except eDNA	255	N/A	Lake	47.8500	-122.242
Martha Warm Beach	1 every 2 years 2023 all sampling possible except eDNA	257	N/A	Lake	48.1701	-122.345

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Stickney Lake	1 every 2 years 2024 all sampling possible except eDNA	356	N/A	Lake	47.8758	-122.254
Tye Lake	1 every 2 years 2024 all sampling possible except eDNA	377	N/A	Lake Manmade	47.8633	-122.101
Wagner Lake	1 every 3 years 2024 all sampling possible except eDNA	383	N/A	Lake	47.8817	-121.935
Spokane						
Badger Lake	2 a year	9	N/A	Lake	47.3426	-117.637
Clear Lake	2 a year	69	N/A	Lake	47.5392	-117.685
Downs Lake	1 every 2 years 2023 all sampling possible except eDNA	100	N/A	Lake	47.2794	-117.808
Eloika Lake	2 a year	106	N/A	Lake	48.0189	-117.367
Fish Lake	1 every 3 years 2023 all sampling possible except eDNA	113	N/A	Lake	47.5219	-117.518
Hog Canyon Lake	1 every 2 years 2024 all sampling possible except eDNA	134	N/A	Lake	47.3738	-117.809
Liberty Lake	1 a year	232	N/A	Lake	47.6539	-117.084
Spokane River Little – Little Spokane River	3 a year	236	N/A	River	47.7896	-117.400
Medical Lake	1 every 2 years 2024 all sampling possible except eDNA	262	N/A	Lake	47.5630	-117.690
Spokane River – Nine Mile Reservoir	3 a year	276	Nine Mile	Reservoir	47.7275	-117.511
Silver Lake	2 a year	329	N/A	Lake	47.5716	-117.655
Spokane River – Upriver Dam Reservoir	3 a year	379	Upriver Dam	Reservoir	47.6972	-117.042
West Medical Lake	2 a year	392	N/A	Lake	47.5622	-117.702
Williams Lake	2 a year	398	N/A	Lake	47.3350	-117.669
Stevens						
Bayley Lake	1 every 3 years 2023 all sampling possible except eDNA	16	N/A	Lake	48.4202	-117.662
Cedar Lake	1 every 2 years 2024 all sampling possible except eDNA	58	N/A	Lake	48.9415	-117.589
Deep Lake	1 a year	89	N/A	Lake	48.8653	-117.600
Deer Lake	2 a year	93	N/A	Lake	48.1078	-117.602

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Jump Off Joe Lake	2 a year	146	N/A	Lake	48.1368	-117.686
Kettle River	1 every 2 years 2024 all sampling possible except eDNA	149	N/A	River	48.7348	-118.116
Gillette Lake – Lake Gillette	1 a year	175	N/A	Lake	48.6133	-117.540
Columbia River – Lake Roosevelt	3 a year	202	Roosevelt	Reservoir	48.8104	-117.951
Spokane River – Little Falls Reservoir	3 a year	234	Little Falls	Reservoir	47.8352	-117.910
Little Twin Lake	1 every 2 years 2024 all sampling possible except eDNA	237	N/A	Lake	48.5727	-117.642
Spokane River – Long Lake/Spokane Lake	3 a year	244	Long	Reservoir	47.8336	-117.761
Loon Lake	3 a year	246	N/A	Lake	48.0527	-117.643
Pierre Lake	1 every 2 years 2024 all sampling possible except eDNA	296	N/A	Lake	48.9053	-118.140
Potter's Pond	1 every 3 years 2023 all sampling possible except eDNA	298	N/A	Pond	48.4256	-117.662
Spokane River – Spokane River Arm	3 a year	346	Spokane River Arm	Reservoir	47.9422	-118.193
Starvation Lake	1 every 3 years 2023 all sampling possible except eDNA	353	N/A	Lake	48.4923	-117.709
Summit Lake	1 every 3 years 2024 all sampling possible except eDNA	362	N/A	Lake	48.9579	-118.126
Waitts Lake	2 a year	384	N/A	Lake	48.1776	-117.782
Williams Lake	1 every 3 years 2024 all sampling possible except eDNA	397	N/A	Lake	48.7549	-117.965
Thurston						
Black Lake	2 a year	33	N/A	Lake	46.9829	-122.975
Clear Lake	1 every 2 years 2024 all sampling possible except eDNA	66	N/A	Lake	46.8181	-122.476
Deep Lake	1 every 2 years 2024 all sampling possible except eDNA	91	N/A	Lake	46.9090	-122.915
Lawrence Lake – Lake Lawrence	1 a year	185	N/A	Lake	46.8520	-122.571
Long Lake	1 a year	240	N/A	Lake	47.0218	-122.781
McIntosh Lake	1 every 2 years 2024 all sampling possible except eDNA	261	N/A	Lake	46.8672	-122.769

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Pattison Lake	1 every 2 years 2024 all sampling possible except eDNA	292	N/A	Lake	46.9959	-122.770
Saint Clair Lake	1 a year	319	N/A	Lake	46.9985	-122.718
Summit Lake	1 every 2 years 2023 all sampling possible except eDNA	361	N/A	Lake	47.0493	-123.116
Scott Lake	1 every 3 years 2024 all sampling possible except eDNA	764	N/A	Lake	46.9189	-122.932
Wahkiakum						
Deep River	1 every 2 years 2023 all sampling possible except eDNA	92	N/A	River	46.3141	-123.713
Walla Walla						
Bennington Lake	1 every 2 years 2024 all sampling possible except eDNA	23	N/A	Reservoir	46.0652	-118.264
Whatcom						
Cain Lake	1 every 3 years 2023 all sampling possible except eDNA	50	N/A	Lake	48.6468	-122.328
Fazon Lake – Lake Fazon	1 every 3 years 2023 all sampling possible except eDNA	172	N/A	Lake	48.8639	-122.370
Padden Lake – Lake Padden	1 every 2 years 2024 all sampling possible except eDNA	197	N/A	Lake	48.7056	-122.449
Samish Lake – Lake Samish	2 a year	204	N/A	Lake	48.6665	-122.377
Terrell Lake – Lake Terrell	1 every 2 years 2024 all sampling possible except eDNA	214	N/A	Lake	48.8584	-122.689
Whatcom Lake – Lake Whatcom	3 a year	222	N/A	Lake	48.7615	-122.417
Nooksack River	1 a year	277	N/A	River	48.8429	-122.589
Skagit River – Ross Lake	1 a year	314	Ross	Reservoir	48.9867	-121.073
Silver Lake	1 a year	326	N/A	Lake	48.9713	-122.069
Squalicum Lake	1 every 3 years 2025 all sampling possible except eDNA	350	N/A	Lake	48.7996	-122.349
Wiser Lake	1 a year	400	N/A	Lake	48.9053	-122.484
Whitman						
Garfield Pond	1 every 3 years 2025 all sampling possible except eDNA	120	N/A	Pond	46.9979	-117.191
Snake River – Lower Granite Lake	3 a year	253	Lower Granite	Reservoir	46.5595	-117.271

Water Body System, by County	Monitoring Schedule	Water Body No.	Reservoir Name	Water Body Category	Latitude	Longitud
Rock Lake	1 every 2 years 2024 all sampling possible except eDNA	312	N/A	Lake	47.1393	-117.725
Yakima						
Clear Lake	2 a year	68	N/A	Reservoir	46.6259	-121.270
Lost Lake	1 every 3 years 2024 all sampling possible except eDNA	249	N/A	Lake	46.6393	-121.068
Tieton River – Rimrock Lake	2 a year	309	Rimrock	Reservoir	46.6433	-121.179
Yakima River	3 a year	403	N/A	Reservoir	46.7643	-120.456

Notes:
eDNA: environmental deoxyribonucleic acid
N/A: not applicable
WDFW: Washington Department of Fish and Wildlife

APPENDIX E Qualified Expert Laboratories

Appendix Table E-1. List of Qualified Expert Laboratories.

Name	Address	Contact Information	Capacity for New Clients	Methodology fo Microscopy and
Pisces Molecular LLC	1600 Range St., Suite 201 Boulder, CO 80301	John Woods info@pisces-molecular.com (303) 546-9300	Yes – unlimited	QPCR, PCR, eDNA, dreissenids
Colorado Parks and Wildlife: Invasive Species Program - ANS Lab	6060 Broadway, Denver, CO 80216	Robert Walters robert.walters@state.co.us (303) 291-7833	Yes	Stereo, CPLM
EcoAnalysts, Inc.	1420 S. Blaine St., Suite 14 Moscow, ID 83843	Megan Payne mpayne@ecoanalysts.com (208) 882-2588	Yes – limited	Stereo, CPLM
Analytical Services Laboratory, Texas Parks and Wildlife Dept.	505 Staples Road San Marcos, TX 78666	Greg Southard greg.southard@tpwd.texas.gov (512) 353-7332	Internal only	Stereo, CPLM PCR, eDNA
Portland State University	1719 SE 10th Ave, SRTC 119 Portland, OR 97201	"Arick ""Kit"" Rouhe" arouhe@pdx.edu (503) 725-9798	No	
Aquaticus LLC	12251 NW 85th Ave. Chiefland, FL 32626	Steve Wells sww@aquaticus-science.com (503) 713-3579	No	Stereo, CPLM
North Dakota Game and Fish	3320 East Lakeside Road Jamestown, ND 58401	Ben Holen bholen@nd.gov (701) 368-9117	No	CPLM
USBR - Ecologic Services Lab	Attn: Bureau of Reclamation - ECOLAB (86-68560) 1 Denver Federal Center Denver, CO 80225	Sherri Pucherelli spucherelli@usbr.gov (303) 445-2015	Yes	Stereo, CPLM PCR, QPCR, eDNA, dreissenids
California Department of Fish and Wildlife, Bodega Marine Laboratory	2099 Westside Road Bodega Bay, CA 94923	Jim Snider james.snider@wildlife.ca.gov (707) 875-2066	Yes – limited	Stereo, CPLM PCR, Sequencing/t
Washington State University - Vancouver	Aquatic Ecology Lab 14204 NE Salmon Creek Avenue Vancouver, WA 98686	Steve Bollens sbollens@wsu.edu (360) 608-6893	No	CPLM
USGS Texas Water Science Center	North Texas Program Office 501 West Felix Street, Building 24 Fort Worth, TX 76115	CeJay Peterson cbpetersen@usgs.gov (682) 215-2962	Internal only	CPLM

Name	Address	Contact Information	Capacity for New Clients	Methodology fo Microscopy and
Civil & Environmental Services Inc.	908 Niagara Falls Boulevard Suite 203 North Tonawanda, NY 14120	Cameron Lange clange@cecinc.com (716) 930-6080	Yes	Stereo, CPLM
Invert Solutions	RR 3Site 309 Comp 13 Onoway, Alberta T0E1V0 CANADA	Pauline Molnar contactus@invert-solutions.com (780) 887-4404	Yes	Stereo
Montana Fish Wildlife and Parks	1420 E. 6th Ave Helena, MT 59601	Stacy Schmidt Sschmidt@mt.gov (406) 444-5228	No	Stereo, CPLM
RMB Environmental Laboratories Inc.	22796 County Highway 6 Detroit Lakes, MN 56501	Jeff Kasowski jeff.kasowski@rmbel.info (701) 238-0326	Yes	CPLM
Jonah Ventures, LLC	5485 Conestoga Ct. Boulder, CA 80301	Joseph Craine josephmcraine@jonahventures.com (785) 371-9318	Yes	PCR, QPCR, eDNA, dreissenids
USACE Genetics Reconnaissance Team/Lab	CEERD-EPP 3909 Hallsferry Rd Vicksburg, MS 39180	Richard Lance richard.f.lance@erdc.dren.mil (601) 634-3971	Yes	PCR, QPCR, eDNA, dreissenids
USGS Pacific NW Environmental DNA Laboratory	230 N Collins Rd Building 4 Boise, ID 83702	David Pilliod dpilliod@usgs.gov (208) 387-1363	Yes	PCR, QPCR, eDNA
KASF Consulting, LLC	1684 Clovercrest Ct. Henderson, NV 89012	Kelly Stockton-Fiti kellystockton13@gmail.com (970) 217-2245	Yes	Stereo, CPLM
Limno Lab	506-2260 West 10th Avenue Vancouver, BC V6K 2H8 Canada	Lidija Vidmanic l.vidmanic@gmail.com (604) 323-0379	Yes	Stereo, CPLM
Oregon State Fisheries Genomics Lab	2030 SE Marine Science Dr. Newport, OR 97365	Kathleen O'Malley kathleen.Omalley@oregonstate.edu (541) 961-3311	Yes	PCR, QPCR, eDNA, dreissenids

Notes:
CPLM: cross-polarized light microscopy
eDNA: environmental deoxyribonucleic acid
PCR: polymerase chain reaction
QPCR: quantitative polymerase chain reaction

APPENDIX F Example Rapid Response Data Collection Worksheets

Lighter		_	Each	_	
Para cord		Roll	Each	_	
WDFW identification tag/label		_	Each	_	
Zip lock bags		_	Box	_	
Zip ties		8 inch	Each	_	
Dissolved Calcium					
Item	**Item #**	**Size**	**Units**	**Cost**	
Black sharpie		_	Each	_	
Calcium bar code labels		Sheet	Each	_	
Calcium sample bottles	16155-546	60 ml	Case	$ 96.35	
Cooler for samples		30 qt	Each	_	
Deionized water Type 1	CW-DW1-55G	55 gallon drum	Drum	$ 480.00	https://
Ice		_	Each	_	
Nitric Acid Ultrex II	JT6901-5	500 ml	ml	$ 407.08	
Disposable transfer pipet	10754-270	5 ml	Case	$ 705.21	
Salinity label		Sheet	Each	_	
BD Syringe Luer-Lok	BD309653	60 ml	Pack	$ 27.35	
Syringe filter 25 mm - 0.45uM STERILE	76479-020	25 mm -0.45 uM	Case	$ 1,425.58	
Water quality					
Item	**Item #**	**Size**	**Units**	**Cost**	
Batteries (4)		AA	Each	_	
Cleaning solution	HI 70671	0.5 L	L	$ 37.00	
Conductivity Standard 1413 uS/cm	HI7031/1L	1 L	L		
Multiparameter Portable Meter	HI 98194	_	Each	$ 1,624.00	
pH 5.0 buffer solution	HI 5005	1 L	L	$ 47.00	
pH 7.01 buffer solution	HI 7007	0.5 L	L	$ 24.00	
pH 9.18 buffer solution	HI 5091	0.5 L	L	$ 33.00	
Quick calibration solution	HI 9828-27	1 Gal	Gal	$ 185.00	
Secchi disk - Limnological 8 Globe	470101-430	8 inch	Each	$ 46.35	
Secchi disk Calibrated Line	470004-364	(25 ft./7.75 m)	Each	$ 91.65	
Storage solution	HI 70300	0.5 L	L	$ 18.00	
Transparent protective cap for pH sensor	HI740211	__	Each	$ 19.00	
Plankton tows					
Item	**Item #**	**Size**	**Units**	**Cost**	
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	_	
Plankton net assembly (3:1 #60/63 micron mesh, 30cm. Diameter).	90-30x3-60-AB6	30 cm., 3:1, #60/63	Each	$ 380.00	S
Plankton sample bottle	16155-548	250 ml	Case	$ 550.00	
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	_	

Bleach wipes		_	Each	_	
Boot picks		_	Each	_	
Brush		_	Each	_	
Household bleach		1 gal	Gal	_	
Nitrile gloves		1 box	Box	_	
Paper towels		_	Each	_	
Potable water in weed sprayer		2 gal	Gal	_	
Tap water		1 L	L	_	
Two buckets w/ lid		5 gal	Gal	_	
General					
Item	**Item #**	**Size**	**Units**	**Cost**	
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	
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	Casca
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	_	

Zebra and Quagga Mussel Monitoring Datasheet 2024

Team:	Samplers:			
Date (M/D/YY):	Site #:	Site Name:	Latitude (N):	Longitude (W):

Artificial Substrate

Attached To:	Total Water Depth (m):	Substrate Depth (m):

Substrate: Present Absent	Condition: Intact Damaged Out of Water	Redeployed: Yes No 1st Deployment

Zebra Quagga: Present Absent Contact DFW Now if Present

Organisms Present: Algae Bryozoans Chironomids Eggs Isopods Limpets Periphytons Snails Sponges

Trichoptera Worms	Other:

Horizontal and Vertical Plankton Tow

Vertical Depth (m):	Plankton Sample #:

Visual Shoreline

Surveyed: Boat Ramp Boulders Buoys Chains Concrete Structs Docks LWD Lines

Zebra Quagga: Present Absent Contact DFW Now if Present

Organisms Present: Asian Clams Chinese Mystery Snails New Zealand Mudsnails Nonnative Crayfish

Other:

Petite Ponar Grab Sampler

Vertical Depth (m):	Zebra Quagga: Present Absent Contact DFW Now if Present

Organisms Present: Asian Clams Chinese Mystery Snails New Zealand Mudsnails Nonnative Crayfish

Other:

Water Quality

Calcium: Yes No	Calcium Sample #:	Salinity (ppt):	pH:	Temp ©:	Secchi Depth (m):

eDNA

Sample Method: Smith-Root Sampler Peristaltic Pump Other_____

eDNA Sample #:	eDNA Negative Control #:
Sample Water Filtered (L):	Negative Control Water Filtered (L):

AIS Signs

AIS Boat Ramp Sign Deployed: Yes No	AIS PP Supplemental Sign Deployed: Yes No

Comments

Zebra and Quagga Mussel Monitoring Equipment Checklist 2024

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	
Flashlights		Each	2	
Retractable mirror		Each	2	

Petite Ponar Grab	Size	Units	Quantity	Check
Bucket (hold line)				
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	
Northern Pike 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	
Whistle on PFD type V's		Each	2	
Stabil	Bottle	Each	1	

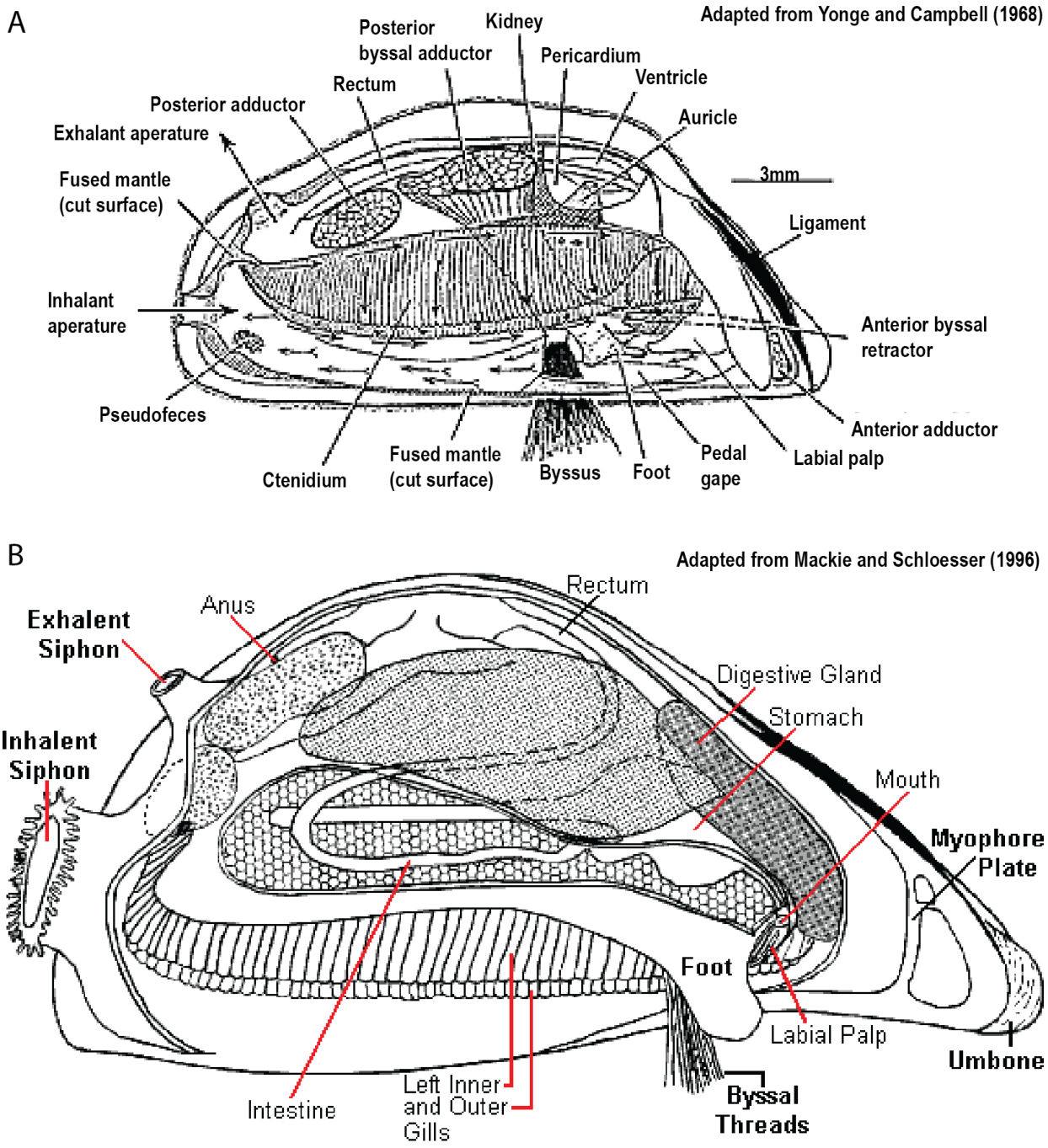
APPENDIX G Zebra and Quagga Mussel Taxonomic Keying Characteristics

Zebra and Quagga Mussel Taxonomic Keying Characteristics

These taxonomic characteristics are provided as a general overview and have been summarized from Mackie and Schloesser 1996. A qualified expert should be relied upon to identify zebra or quagga mussels.

Appendix Table G-1. Summary of diagnostic shell features of zebra and quagga mussels adapted from Mackie and Schloesser 1996.

Shell features		Zebra Mussel (*D. polymorpha*)	Quagga Mussel (*D. bugensis*)
Exterior	Shape, color	Mytiliform, striped, all black or white	Mytiliform, striped, light colored, white in deep water
	Ventral margin	Arched, flattened, acute ventro-lateral shoulder	Convex, rounded ventro-lateral shoulder
	Dorsal margin	Rounded	Rounded, often wing-like
	Umbone	Pointed	Pointed
	Posterior margin	Angled ventro-posteriorly	Rounded ventro-posteriorly
Interior	Myophore plate	Broad and well developed	Broad and well developed
	Apophosis	Absent	Absent
	Position of anterior abductor muscle scar	Myophore plate	Myophore plate
	Position of anterior byssal retractor muscle scar	Myophore plate	Myophore plate
	Pallial line	Entire, rounded	Entire, rounded



Note: Adapted from Yonge and Campbell 1968 and Mackie and Schloesser 1996 and https://zebramusselresource.weebly.com/physiology.html

Appendix Figure G-1. A diagram of diagnostic shell features of zebra and quagga mussels.

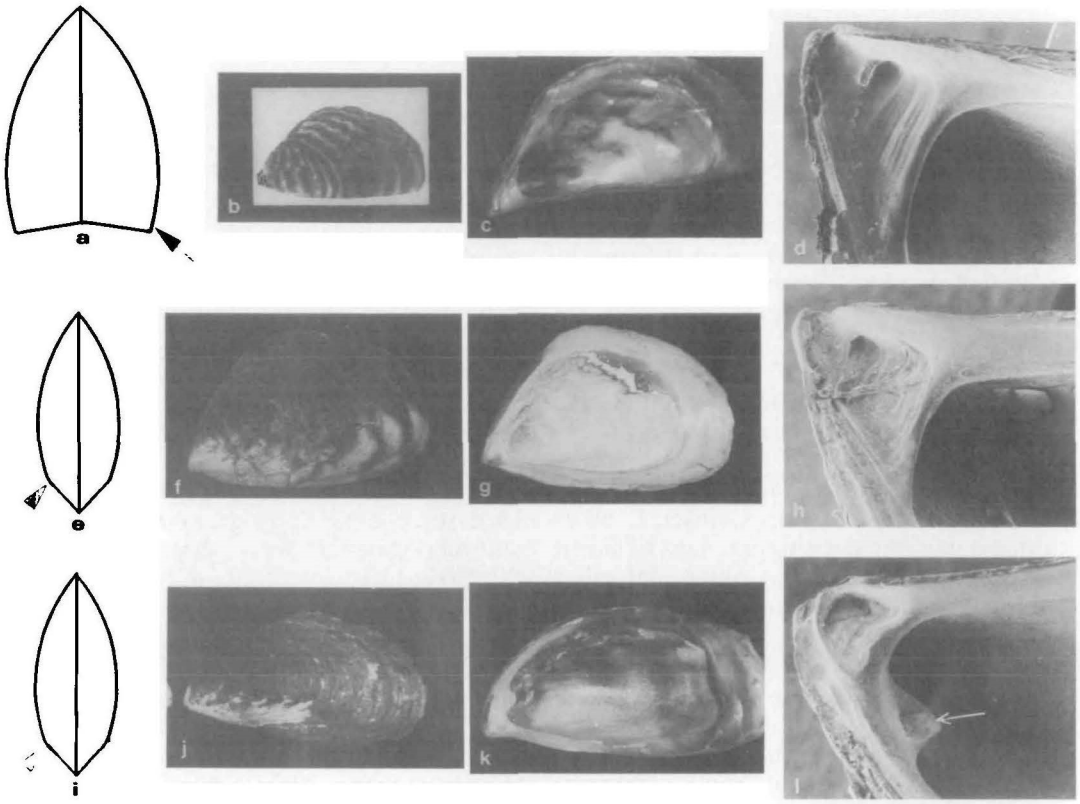


FIG. 1. Shell characteristics of dreissenids in North America. (a)–(d) *Dreissena polymorpha:* (a) schematic drawing of end view showing carinate ventro-lateral margin (arrow) and concave ventral margin; (b) outer view of right valve; (c) inner view of right valve; (d) myophore plate; (e)–(h) *Dreissena bugensis:* (e) schematic drawing of end view showing rounded ventro-lateral margin (arrow) and convex ventral margin; (f) outer view of right valve; (g) inner view of right valve; (h) myophore plate; (i)–(l) *Mytilopsis leucophaeata:* (i) schematic drawing of end view showing rounded ventro-lateral margin (arrow) and convex ventral margin; (j) outer view of right valve; (k) inner view of right valve; (l) myophore plate showing apophisis (arrow).

Appendix Figure G-2. Shell characteristics of dreissenids in North America (Figure 1a-h from Mackie and Schloesser 1996).

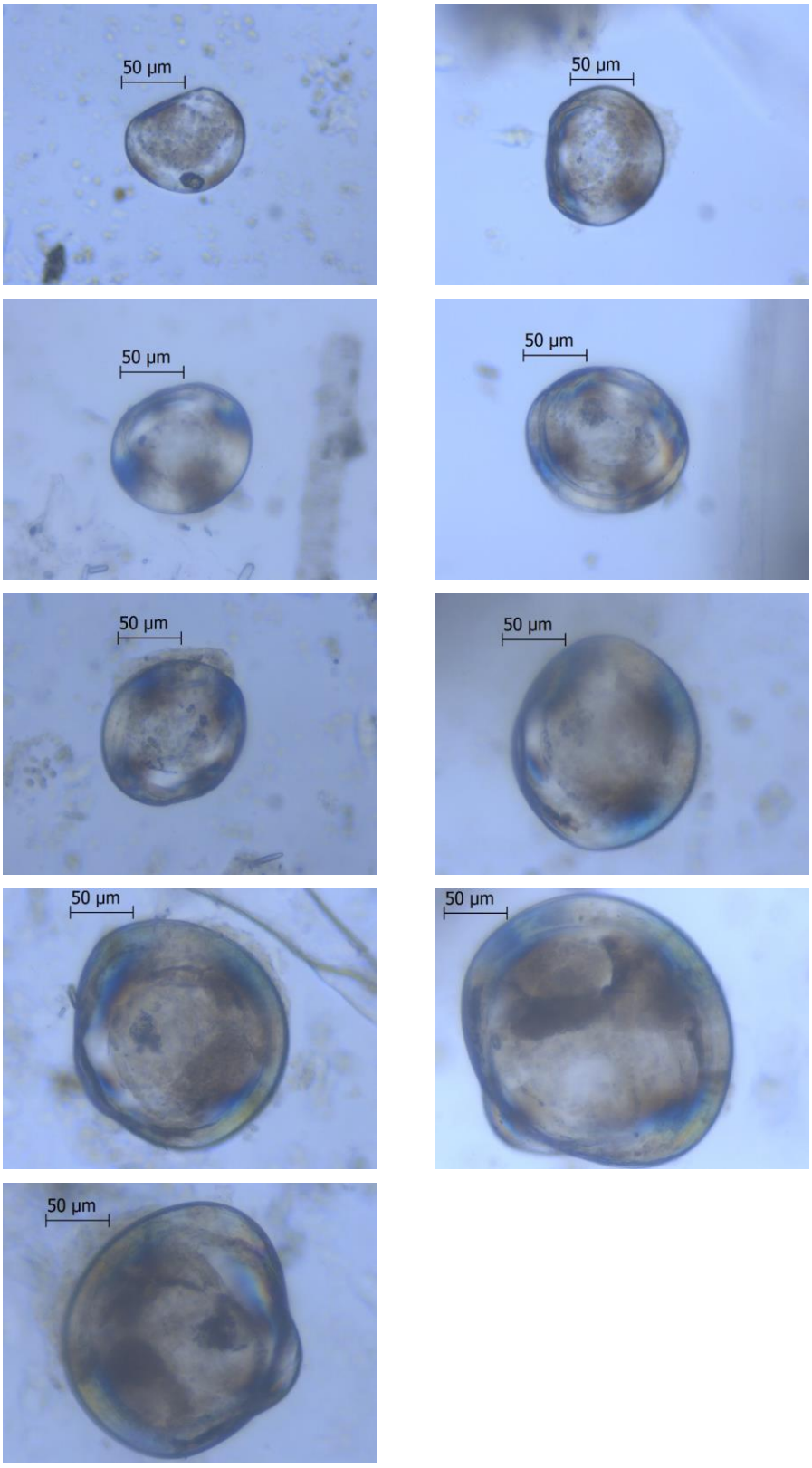


Photo credit: Steve Wells, Aquaticus LLC

Appendix Figure G-3. Dreissena r. bugensis (quagga mussel).

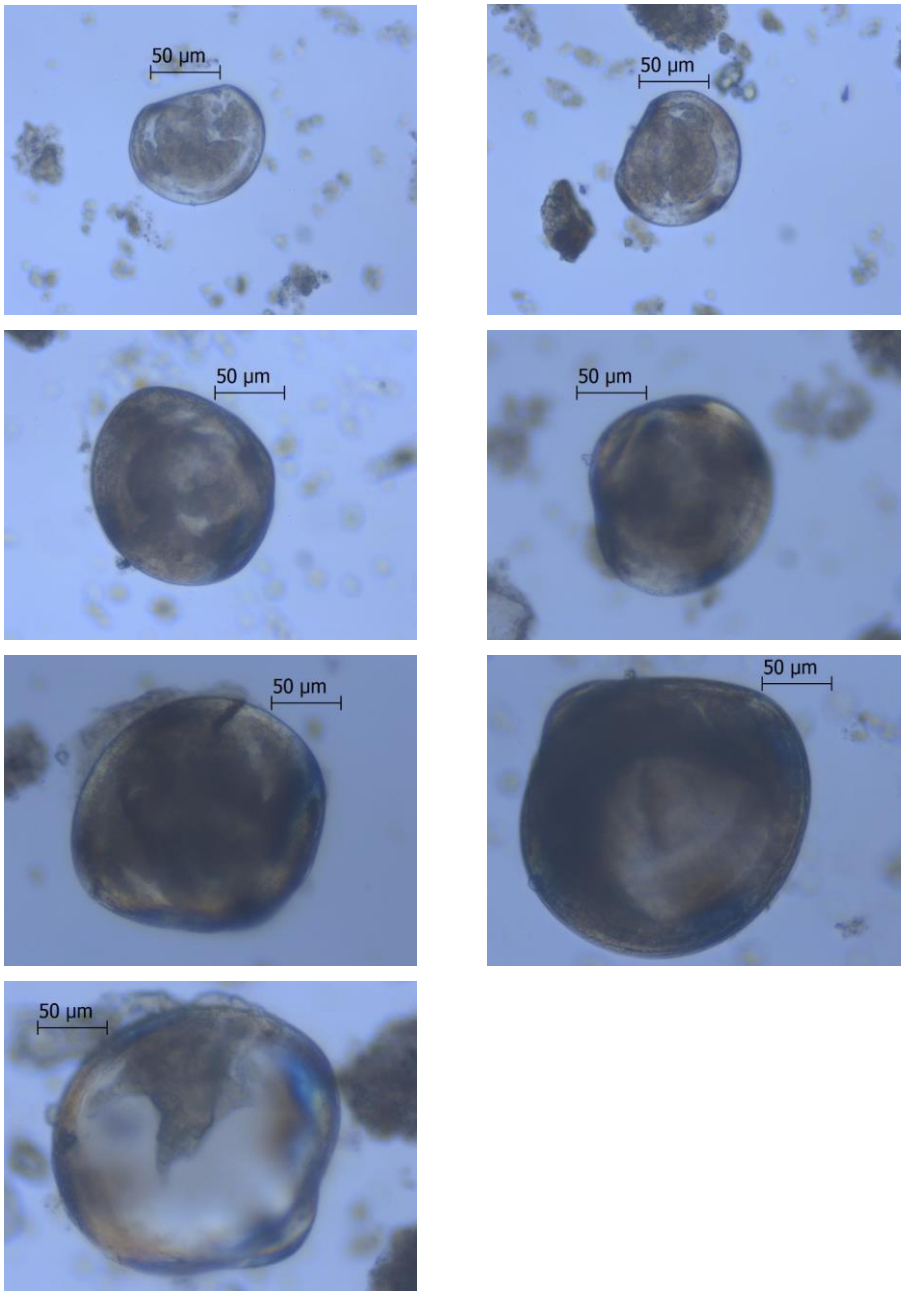


Photo credit: Steve Wells, Aquaticus LLC

Appendix Figure G-4. Dreissena polymorpha (zebra mussel).

Photo credit: Steve Wells, Aquaticus LLC
Appendix Figure G-5. Dreissena r. bugensis (quagga mussel).

Photo credit: Steve Wells, Aquaticus LLC
Appendix Figure G-6. Dreissena polymorpha (zebra mussel)

APPENDIX H Notification Templates

Date

RE: **Notification of Waterbody Classification Change for Zebra or Quagga Mussels**

Dear Stakeholder,

This letter is to notify you that there has been a verified detection of a zebra *Dreissena polymorpha* or quagga *D. bugensis* mussel in WATERBODY NAME in COUNTY NAME (GPS COORDINATE). The mussel specimen has been verified by two qualified experts (Entity 1 and Entity 2) using TECHNIQUE (cross-polarized microscopy and/or PCR) on Date, thus WATERBODY NAME is now classified as CLASSIFICATION ("Inclusive" or "Suspect"). The first detection occurred on Date, detected via DETECTION METHOD by Entity. As a result, additional sampling (plankton tows, benthic sampling, shoreline and hard substrate surveys, and eDNA) will occur in WATERBODY NAME conducted by Entity (PhoneNumber, EmailAddress) for a minimum of NUMBER OF YEARS (1 or 3) years of negative testing. If an additional specimen is collected and verified or verified detections occur in proximate waterbodies, a follow-on notification will be sent. If you have any questions, please direct them to ais@dfw.wa.gov.

Sincerely,

YourName
Title

Date

RE: **Notification of Rapid Response**

Dear Stakeholder,

This letter is to notify you that a Rapid Response effort has been initiated in response to at least two verified specimens of zebra *Dreissena polymorpha* or quagga *D. bugensis* mussels in WATERBODY NAME in COUNTY NAME (GPS COORDINATE) on Date. The first detection in WATERBODY NAME occurred on Date, detected via DETECTION METHOD. All specimens have been verified by FISHERIES EXPER 1 (name and organization) and FISHERIES EXPER 2 (name and organization) using METHODS. Incident Command System (ICS) has now been approved. RR_FirstName RR_LastName has been designated as the Incident Commander (PhoneNumber, EmailAddress) [add all Commanders' information if a Unified Command]. Incident Command is in the process of convening a Multi-Agency Coordinating Group and designating General and Command Staff. Once in place, Responding Entity Leads will be designated to oversee sampling in WATERBODY NAME. Sampling is planned to begin Date and the initial Rapid Response efforts will be completed no later than 6 weeks from Rapid Response initiation, Date. Rapid Response efforts will culminate in a meeting to establish a plan for any required extended response activities, to include potential eradication, containment, or suppression efforts. Situation reports and public notices will be provided at regular intervals until ICS has been terminated. If you have any questions, please contact RR_FirstName RR_LastName at PhoneNumber or EmailAddress.

Sincerely,

YourName
Title

APPENDIX I Extended Response Situation Assessment Form

Invasive Zebra and Quagga Mussel Situation Assessment

Baseline Information

Date	
Waterbody Name	
Have zebra or quagga mussels ever been eradicated here?	
Is a bathymetric map available?	
Acres	
Max Depth	
Means to access waterbody?	

Scoring

Question	**Score**
How difficult is the waterbody to access (Scale 1-5)?	
Transportation costs to site?	
Is the waterbody open or closed? *(Regular status, not during flood stage)*	
If open, on a scale of 1-5 how expansive is the connectivity?	
On a scale of 1-5, how complex is the habitat?	
Is the invasion isolated or dispersed?	
Will the volume and/or flow of water allow for effective chemical treatment?	
Can barriers be used to contain the population?	
Are there conservation concerns in the waterbody?	
Does the water body have a special status?	
Are native fish present?	
Cost to eradicate?	
Post-eradication, is fishery restoration needed?