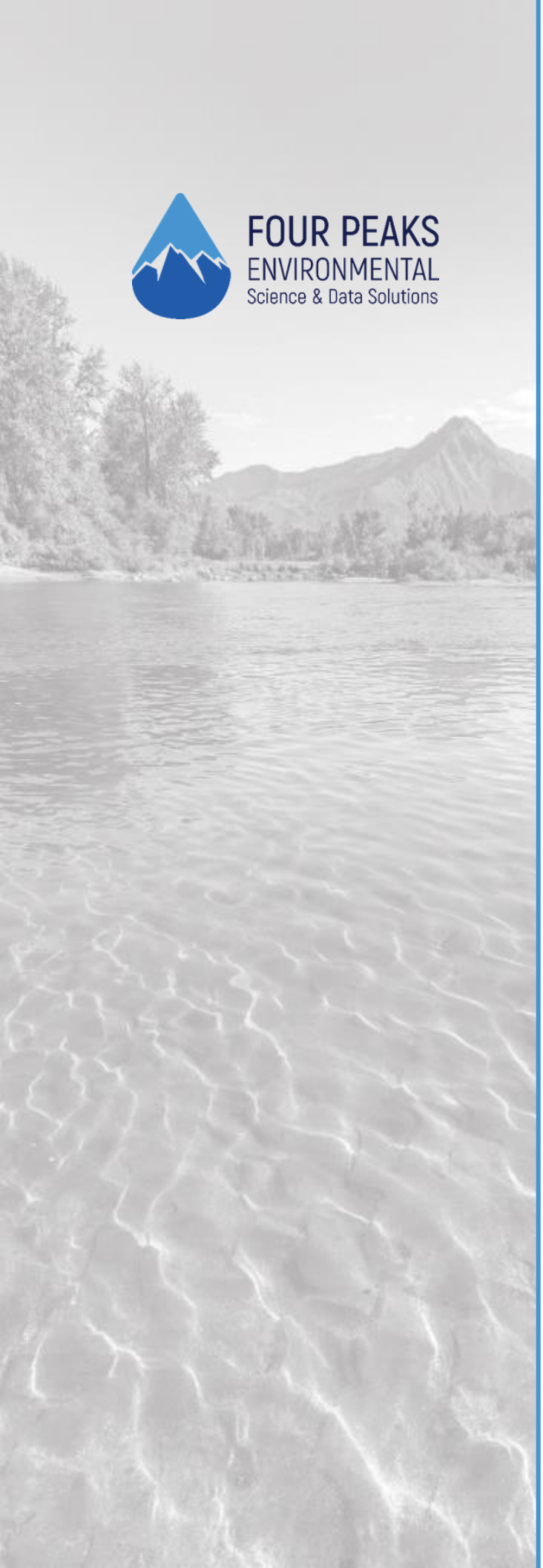

FOUR PEAKS ENVIRONMENTAL
Science & Data Solutions

STATE OF WASHINGTON INTERAGENCY NORTHERN PIKE RAPID RESPONSE PLAN

June 2023

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Abbreviations

Abbreviation	Definition
AIS	Aquatic Invasive Species
CRITFC	Columbia River Inter-Tribal Fish Commission
CTCR	Confederated Tribes of the Colville Reservation
eDNA	environmental deoxyribonucleic acid
ECY	Washington Department of Ecology
EMI	Emergency Management Institute
EPA	Environmental Protection Agency
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
ISAB	Independent Scientific Advisory Board
MAC Group	Multi-Agency Coordination Group
ND	No Data
NPDES	National Pollutant Discharge Elimination System
NWIFC	Northwest Indian Fisheries Commission
Plan	Washington State Interagency Northern Pike Rapid Response Plan
RCW	Revised Code of Washington
SitRep	Situation Report
SOP	Standard Operating Procedure
UCUT	Upper Columbia United Tribes
USGS	U.S. Geological Survey
WDFW	Washington Department of Fish and Wildlife
WDNR	Washington Department of Natural Resources
WGA	Western Governors' Association
WISC	Washington Invasive Species Council
WRIA	Water Resource Inventory Area
WRP	Western Regional Panel
WSDA	Washington State Department of Agriculture

1 Introduction

The Northern Pike *Esox Lucius* is a non-native fish species classified as an aquatic invasive species (AIS) in the state of Washington that has invaded multiple habitats within the state. Illegal stocking in the 1950s in Montana rivers[1] outside its native range led to establishment of Northern Pike in the upper Columbia River Basin (McMahon and Bennett 1996; Vashro 2018). By the 1970s, they had expanded their range into the Flathead River system and a separate illegal introduction also occurred in the Coeur d'Alene River system (Bernall and Moran 2005). Since that time, Northern Pike have steadily expanded their distribution downstream to include the Pend Oreille River, Spokane River (Bennett and Rich 1990; Scholz et al. 2009), and the Columbia River upstream of Grand Coulee Dam (CTCR et al. 2018). Northern Pike have also been introduced in Lake Washington with the first confirmed capture of a Northern Pike specimen occurring in 2017 and several more Northern Pike captured since (Yuasa 2017).

Northern Pike are highly piscivorous, can live over 20 years, and can grow to over 45 pounds (Wydoski and Whitney 2003). They mature at 2-3 years of age, are highly fecund, and can consume substantial quantities of native salmonids, causing substantial declines in prey populations (Craig 2008; Sepulveda et al. 2014). Northern Pike also have broad physiochemical tolerances allowing them to invade waterbodies with a wide range of water quality conditions (Haugen and Vollestad 2018; Dunker et al. 2022). Given their population dynamics and physiology, it is likely that Northern Pike will eventually expand their distribution into waters throughout the state of Washington. Areas that are at especially high risk of invasion, due to proximity to currently established populations, include portions of the Columbia River downstream of Grand Coulee and Chief Joseph dams and waterbodies connected to Lake Washington. Minimizing negative impacts of Northern Pike where they are currently established and preventing further spread within the state of Washington is critically important for protection of native and important fish species, including Endangered Species Act (ESA)-listed salmonids, as negative impacts to these populations could have dramatic deleterious ecological, cultural, and socioeconomic effects across the Pacific Northwest (Naiman et al. 2012; ISAB 2019). Thus, concerns about the potential impacts of Northern Pike have led the Western Governors' Association to designate them as a "Top 25" AIS (WGA 2018).

1.1 Plan Purpose

The purpose of this Interagency Northern Pike Rapid Response Plan (Plan) is to provide a coordination document and technical resource to enhance the efficiency and effectiveness of Northern Pike prevention efforts, detection, early response, and long-term management activities. These efforts are necessary to minimize environmental, economic, and cultural resource impacts of Northern Pike where they are currently established and prevent further invasion of waterbodies within Washington state to protect native and important fish species.

[1] https://wdfw.wa.gov/species-habitats/invasive

1.1.1 Plan Goals

1. Minimize the probability of further Northern Pike invasion.
2. Minimize the impact of Northern Pike on native and important fish species.

1.1.2 Plan Objectives

1. Minimize the likelihood of Northern Pike establishment in additional waterbodies of the state of Washington because of human-transport or volitional movement.
2. Increase public awareness of the invasive Northern Pike issue and support for management efforts.
3. Maximize the probability of early detection of Northern Pike in new waters.
4. Establish clear requirements and procedures to enable action within the first 48 hours of a Northern Pike detection.
5. Provide a systematic approach to verify a detection and investigate reported observations of Northern Pike in new waters.
6. Provide clear communication and reporting guidance to trigger extended response activities within 6 weeks of initial detection.
7. Implement scientifically sound management to detect, eradicate, contain, and/or suppress invasive Northern Pike populations.

1.2 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). The Plan is organized sequentially to address the following topics:

- Prevention and Early Detection
  - Prevention (Section 3)
  - Routine Monitoring (Section 4.2)
  - Detection Verification (Section 4.3)
- Rapid Response Activities (Section 5)
  - Request and Establish Incident Command System (ICS; Section 5.1)
  - Initial Scoping (Section 5.2)
  - Range Delimitation (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.

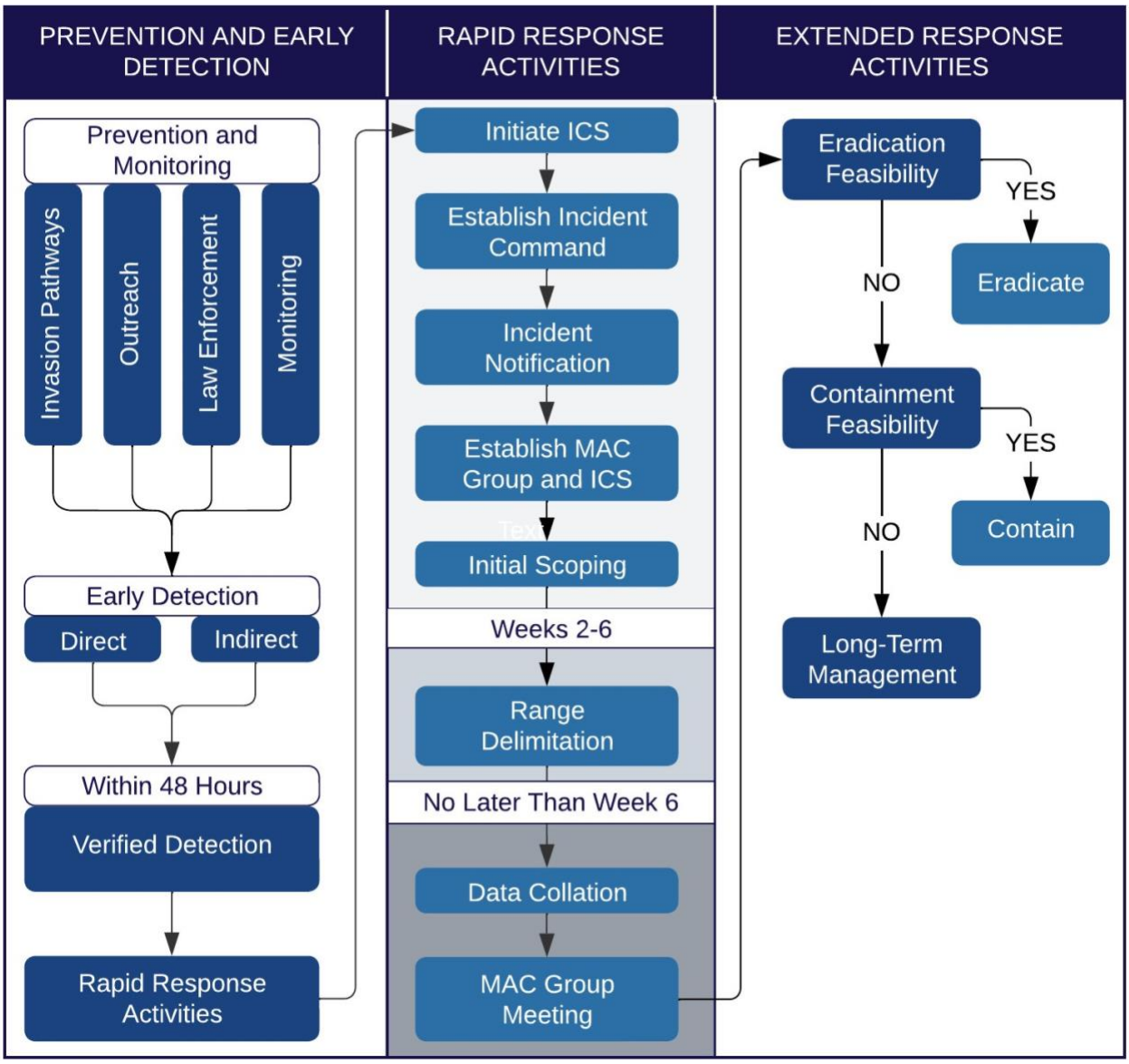


Figure 1. Overview of the state of Washington Northern Pike Management Plan.

1.3 Incident Command System

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,[2] which have been referenced throughout this document. Washington Department of Fish and Wildlife (WDFW) should implement an ICS for rapid response management actions where Northern Pike are detected in a waterbody

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

(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.

If Northern Pike are verified in a new waterbody (Section 4.3), 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 Northern Pike 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.

1.3.1 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). 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.

Table 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 Incident Action Plan (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

Type	Complexity
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

1.3.2 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:

- 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 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 2). During a Northern Pike Rapid Response, these functions may include, but are not limited to:

- 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.

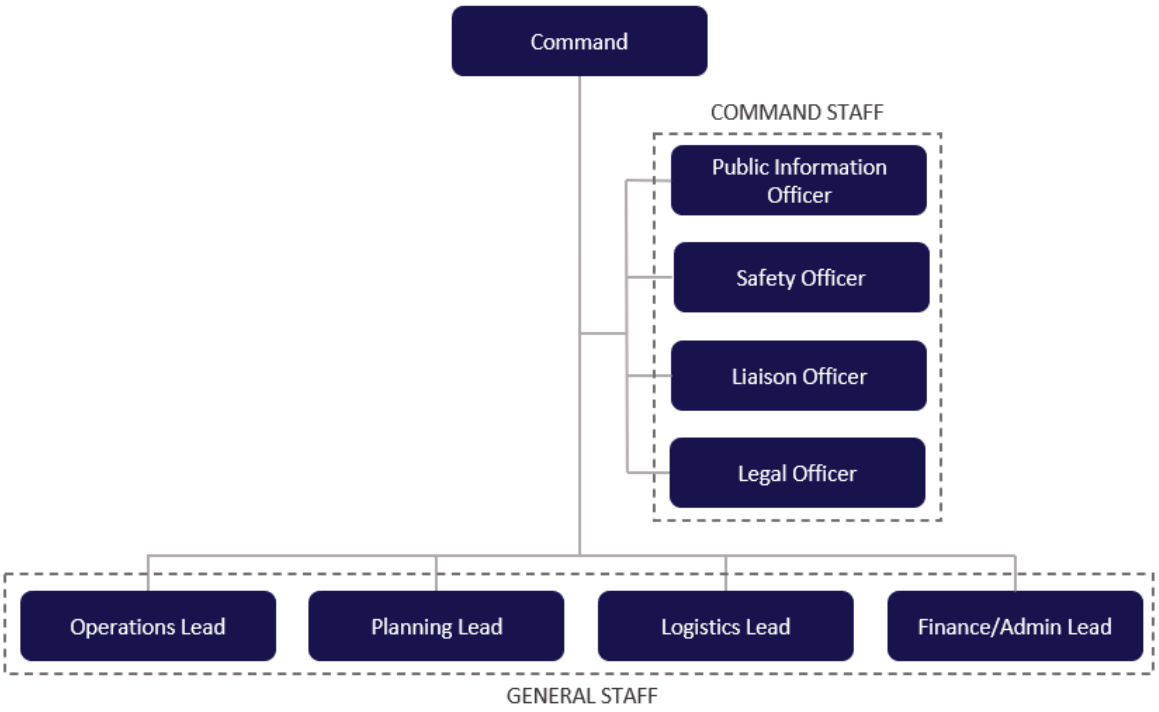


Figure 2. Standard organizational structure for Incident Command System, including Command, Command Staff, and General Staff.

1.3.3 ICS Forms

To support ICS operations, a series of standardized forms are available from the FEMA EMI website: (https://training.fema.gov/emiweb/is/icsresource/icsforms/) to use as provided or as a baseline to develop species-specific forms. These forms can be used as is or modified to meet incident needs.

1.3.4 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, fish 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)[3]. 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.

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

1.3.5 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 Northern Pike without need for further management action, or when long-term monitoring and suppression activities are established.

1.4 Rapid Response Oversight

1.4.1 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 Northern Pike was captured. 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 Multi-Agency Coordination Group.

1.4.2 Multi-Agency Coordination Group

In addition to ICS implementation, a non-field-based Multi-Agency Coordination (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.

1.5 Funding Considerations

Resources to support Rapid Response Activities (initial 6 weeks of response) in a focal waterbody will 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 aquatic invasive species management plans, other related activities (e.g., Northern Pikeminnow removal funds, eDNA budgets), or federal funds such as from the Water Resource Development Act. 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 not sufficient 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.

2 Invasive Northern Pike in the State of Washington

2.1 Northern Pike 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.

Northern Pike is classified as a Level 1 prohibited species under WAC 220-640-030. This classification indicates that Northern Pike 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 five 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 Northern Pike and is adapted from the guidelines set forth by the Western Regional Panel on Aquatic Nuisance Species (WRP 2020). 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 has not been monitored.
- **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 verified suspect detection and no physical specimen collected. Verification Sampling is initiated (Section 4.3).
- **Suspect** – Waterbody that has met the minimum criteria for likely detection of Northern Pike by a single verified detection (e.g., at least two independent positive confirmations of a single eDNA sample, or conclusive photographic or video evidence), but no physical Northern Pike specimen has been captured. Verification Sampling is continued (Section 4.3). Rapid Response may be considered but is not recommended without a physical specimen.
- **Positive** – Multiple (2 or more) verified detections from subsequent sampling events meeting Suspect classification plus at least one Northern Pike specimen is verified using scientifically accepted techniques (e.g., DNA analysis, taxonomic identification). Rapid Response is initiated (Section 5)**.**
- **Infested** – A waterbody has an established population of Northern Pike based on evidence of a reproducing population such as multiple age classes.

Waterbody classification is primarily a tool for consistent communication of Northern Pike detection status and a guide to what management actions should be considered. A waterbody will not be considered positive or infested until a verified Northern Pike specimen is collected.

2.2.1 Waterbody Reclassification to Undetected/Negative

In situations where a waterbody was initially verified as inconclusive, suspect, positive, or infested and subsequent management actions no longer detect Northern Pike, a waterbody may be reclassified to Undetected/Negative (i.e., de-listed) after additional sampling and/or eradication or suppression has occurred. The protocol to reclassify a waterbody to Undetected/Negative depends on the initial waterbody classification and is defined in Table 2.

Table 2. 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 negative eDNA sample collected in the same month of the subsequent year as the previous inconclusive sample and no Northern Pike collected.
Suspect	3 years of negative testing and no Northern Pike collected.
Positive	5 years of negative testing and no Northern Pike collected.
Infested	Following a successful eradication or extirpation event as determined by a minimum of 5 years post-event testing and monitoring with negative results and no Northern Pike collected.

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 Northern Pike introduction or establishment. Each entity's unique role regarding Northern Pike 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 comprised of twenty-one members representing federal, state, and local agencies, Eastern and Western Washington Tribes, and nonprofit organizations.

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 Department of Natural Resources, 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 (ECY) 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

The Washington Department of Natural Resources (WDNR) manages an AIS Program.[4] 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 DNR 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 waterbodies in the Columbia River Basin, 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 Columbia River Basin Team.

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

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. In 2021, UCUT began hosting the Northwest Regional Northern Pike Coordination Forum to share information and collaborate with other fisheries managers, researchers, and the public on Northern Pike information, management strategies, and actions. UCUT members either have or are in the process of determining Northern Pike AIS Coordinators, are developing Northern Pike Rapid Response Plans, and are securing funds for implementing rapid responses. UCUT continues to be proactive co-managers and members of the community committed to addressing preventative actions aimed at stopping the downstream advance of Northern Pike.

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 Northern Pike into the Puget Sound and/or coastal areas of Washington.

2.5 History of Northern Pike Management

Established populations of Northern Pike in the state of Washington are currently limited to the Columbia River upstream of Grand Coulee Dam (i.e., Lake Roosevelt), Spokane River, and Pend Oreille River (Figure 3). These populations occur in WDFW Regions 1 and 4. Additionally, Lake Washington is classified as Positive due to the capture of multiple adult Northern Pike from 2017 to present. Finally, there are three populations of Northern Pike that have been eradicated from state waters where the waterbodies are again classified as Undetected/Negative (Figure 3).

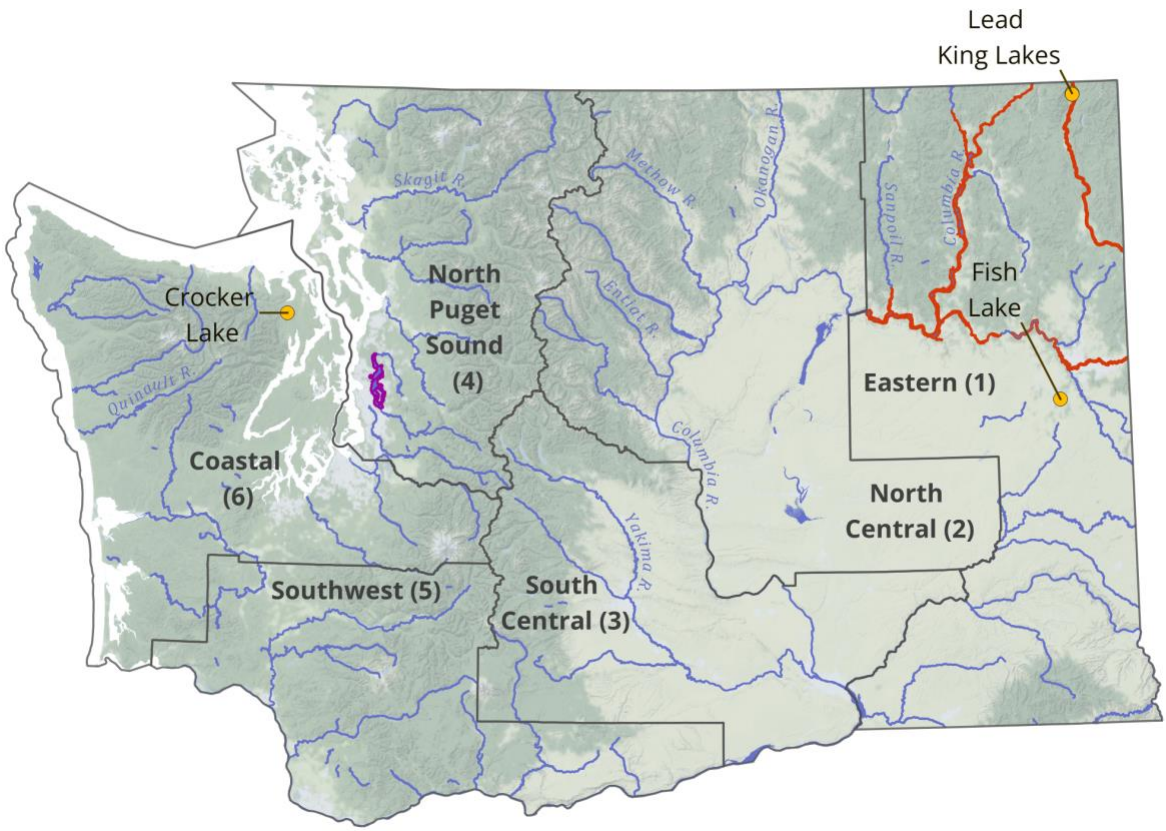


Figure 3. The distribution of waterbodies classified as infested (red), positive (purple), and undetected/negative post eradication (orange) for Northern Pike in the state of Washington and the associated Washington Department of Fish and Wildlife management regions.

2.5.1 Eradications

Northern Pike have been detected and subsequently eradicated in three state of Washington lakes (Table 3). In all cases, lakes were treated with rotenone (Section 6.1.1).

- Upper and Lower Lead King lakes (Pend Oreille County)
- Fish Lake (Spokane County)
- Crocker Lake (Jefferson County)

Table 3. Overview of historical Northern Pike eradication efforts in the state of Washington.

Year	Waterbody	County	Volume (Ac-Ft)	Quantity	Rotenone Product/Formulation Concentration	Detoxification Time	Application Method
2012	Fish Lake	Spokane	1357	54 gal CFT[1] + 8,621 lbs of powder	3.6 ppm	4.5 months[2]	Boat
2015	Upper Lead King Lake	Pend Oreille	110.5	129 gal + 5 lbs of powder	3.6 ppm	1.5 months	Helicopter, Backpack Spray
2015	Lower Lead King Lake	Pend Oreille	65.8	77 gal + 5 lbs of powder	3.6 ppm	5.5 months[2]	Helicopter, Backpack Spray
2015	Beaver Pond adjacent to Lead King Lakes	Pend Oreille	3.4	4 gal CFT	3.6 ppm	5.5 months[2]	Helicopter, Backpack Spray
1998	Crocker Lake	Jefferson	ND[3]	ND	ND	ND	ND

Notes:
1. CFT –Liquid CFT Legumine EPA Reg # 75338-2; Rotenone Cube powdered Fish Toxicant EPA Reg # 6458-6
2. Ice-over prevented bioassays from being conducted during winter months, thus detoxification time is a maximum estimate.
3. No Data (ND)

2.5.2 Suppression Efforts

Established populations of Northern Pike exist within Columbia, Spokane, and Pend Oreille rivers in the state of Washington, and eradication is not feasible due to size and unacceptable negative impacts on non-target fish species. Thus, long-term management and suppression programs have been established on each of these waters. A summary of programs is listed in Table 4.

Table 4. Overview of Northern Pike suppression in the state of Washington.

Project Years	Waterbody	Site	Organizations	Suppression Methods	Project Season	References
2012-Present	Pend Oreille River	Box Canyon Reservoir	Kalispel Tribe of Indians, WDFW	Gill nets, fishing derbies[1]	February-April	a
2016-Present	Pend Oreille River	Boundary Reservoir	Kalispel Tribe of Indians, WDFW	Gill nets	February-April	a
2020-Present[2]	Spokane River	Lake Spokane	WDFW	Gill nets	March-June	
2015-Present	Columbia River	Lake Roosevelt	Confederated Tribes of the Colville Reservation, Spokane Tribe of Indians, WDFW	Gill nets, electrofishing, seine nets, fyke nets, setlines, reward program	February-November	b

Notes:
1. Fishing derbies ended in 2013.
2. Gillnetting efforts from 2017-2019 targeted Common Carp *Cyprinus carpio carpio*, during which Northern Pike were removed when encountered by Spokane Tribe of Indians, Avista, and WDFW.
References:
a. https://wdfw.wa.gov/species-habitats/invasive/esox-lucius
b. https://www.cct-fnw.com/northern-pike

2.5.3 Monitoring and Research

Annual monitoring programs of Northern Pike populations within the state of Washington are summarized in Table 5.

Table 5. Overview of historical Northern Pike monitoring and research in the state of Washington.

Project Years	Waterbody	Site	Organizations	Monitoring Methods	Season	References
2005-Present[1]	Pend Oreille River	Box Canyon Reservoir	Kalispel Tribe of Indians, WDFW	Gill nets	May	a
2005-Present[2]	Pend Oreille River	Boundary Reservoir	Kalispel Tribe of Indians, WDFW	Gill nets	May	a
2001; 2015[3]	Spokane River	Lake Spokane	Spokane Tribe of Indians, WDFW	Gill nets, electrofishing, fyke nets	March; November	b
2022-Present	Spokane River	Little Falls Pool	Spokane Tribe of Indians, WDFW	Gill nets	March; November	c
2015-Present	Columbia River	Lake Roosevelt	Confederated Tribes of the Colville Reservation, Spokane Tribe of Indians, WDFW	Gill nets, eDNA, DNA, microchemistry, stranding surveys, angler creel survey, telemetry, diet study, age, and growth	March; November	c
2017-Present	Lake Washington	Lake Washington	Muckleshoot Indian Tribe, WDFW	Gill nets, trap nets, boat electrofishing	Various[4]	d

Notes:
1. Standardized Spring Pike Index Netting (SPIN) survey methods began in 2010.
2. Standardized Spring Pike Index Netting (SPIN) survey methods began in 2016.
3. Annual Common Carp removal efforts have been conducted since 2017, and creel surveys were conducted by Avista in Lake Spokane March-November in 2011, 2016, 2018, 2020, and 2022.
4. Test Fishery (April-June); Ship canal (April-July); South half (February-April); North half (March-June); Whole lake (September-October)

References:
a. https://wdfw.wa.gov/species-habitats/invasive/esox-lucius
b. Osborne R.S., Divens, M.J., and Baldwin C. 2003. 2001 Warmwater Fisheries Survey of Lake Spokane, Spokane and Stevens Counties, Washington. Washington Department of Fish and Wildlife. Olympia, Washington.
c. https://www.cct-fnw.com/northern-pike
e. Annual Co-Manager's List of Agreed Fisheries (wdfw.wa.gov)

3 Prevention

3.1 Invasion Pathways

A comprehensive study of invasion pathways was not conducted for this Plan. However, generically the likely invasion pathways in the state of Washington include:

Columbia River:

- Downstream volitional expansion from Lake Roosevelt via Rufus Woods Reservoir
- Downstream volitional expansion from Lake Roosevelt via adjacent lakes, reservoirs, and irrigation channels (e.g., Banks Lake, Moses Lake, Potholes Reservoir, Crab Creek)
- Illegal introductions (human transport)

Cedar-Sammamish watershed (i.e., Water Resource Inventory Area [WRIA]-8):

- Volitional expansion from Lake Washington
- Illegal introductions (human transport)

Rest of state:

- Illegal introductions (human transport)

Key monitoring locations to maximize early detection near known populations include tributary mouths, irrigation channel inlets, hydropower facilities, and lakes and reservoirs adjacent to the infested waterbodies.

3.1.1 Expected Habitats

Primary Northern Pike habitat has been identified as habitat with maximum depths ≤12.2 m and slopes ≤23.9°; however, Northern Pike have been captured at depths up to 30 m (CTCR et al. 2018). Rivers with low velocity stream reaches or access to backwater sloughs with aquatic vegetative communities are likely conducive to Northern Pike establishment after introduction.

3.2 Outreach

Public awareness can increase the likelihood that the public will assist with early detection of new Northern Pike introductions. Effective outreach campaigns can also help prevent further illegal introductions. WDFW participates in several outreach campaigns. Key methods include stickers, hosting booths at boat shows, installing Northern Pike signs at water access sites throughout the state of Washington, and paid advertisements on social media outlets. Some examples of signs, stickers, and pamphlets commonly distributed can be found in APPENDIX B.

Public outreach is a critical component of a successful invasive species prevention and response plan. The Public Information Officer designated by the ICS should lead public outreach efforts. One of the key duties of this role is to correct and prevent the dissemination of false information. Typical information provided to the public regarding the nature and status of a new invasion includes:

- Information about Northern Pike
- The current understanding of its new distribution
- When it was first detected in the waterbody
- Likely origin, if known

- The risks it poses to local fisheries
- Potential control options in consideration
- Likelihood of success of control options
- Potential interruptions to local fisheries

3.3 Law Enforcement

If an illegal Northern Pike introduction is suspected (e.g., presence detected in waters with no surface water connection to known populations) in state-managed waterbodies, WDFW law enforcement should be contacted at WILDCOMM@dfw.wa.gov or 360-902-2936, Option 1. WDFW Enforcement Officers are primarily responsible for enforcing RCW Title 77. RCW 77.15.250 specifies that knowingly releasing, planting, possessing, or placing Northern Pike within the state is a class C felony. The law also specifies that WDFW shall order a guilty person to pay all costs incurred in capturing, killing, or controlling the fish 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 Northern Pike 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, including:

- 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
- Date and time of the sighting(s)
- Details of the location of the suspected detection
  - State
  - County
  - Name/ description of the waterbody
  - GPS coordinates (if possible)
  - Landmarks, highway mile, and other identifying details
- Digital or other photographs or video (with scale indicator and multiple angles)
- A detailed description of organism (size, coloration, behavior, etc.)

WDFW maintains a centralized data repository of eDNA sample results and an internal aquatic invasive animal database. Each year, these data get reviewed and vetted, and follow-up inquiries are made as necessary.

4.2 Routine Monitoring

Routine monitoring in Undetected/Negative waterbodies is classified into two categories: 1) explicit efforts to detect Northern Pike, and 2) monitoring of species other than Northern Pike that may result in a Northern Pike detection.

4.2.1 Routine Northern Pike-Specific Monitoring in Undetected/Negative Waterbodies

Annually, WDFW prioritizes waterbodies for eDNA monitoring based on an assessment of relative risk of introduction and potential establishment of zebra and quagga mussels, in which they also analyze samples for Northern Pike DNA (personal communication, Jesse Schultz April 2023; WDFW 2022).

Sampling occurs across the state (APPENDIX C; Figure 4) and results are stored in a centralized data repository. Other entities contributing to these data currently include Public Utility District No. 2 of Grant County, Public Utility District No. 1 of Chelan County, Public Utility District No. 1 of Douglas County, and the Confederated Tribes of the Colville Reservation. If other entities conduct eDNA sampling for Northern Pike and wish to contribute to this centralized data repository, please contact the WDFW AIS Coordinator at ais@dfw.wa.gov.

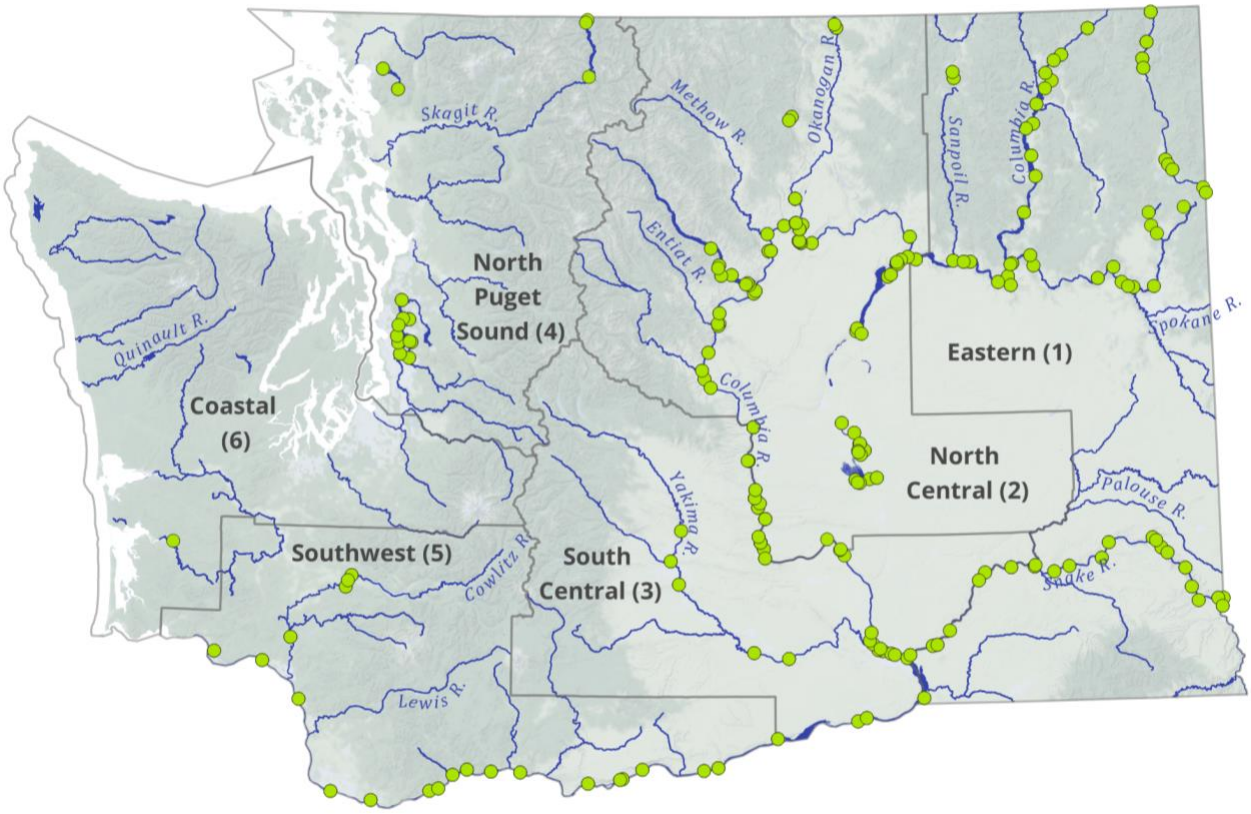


Figure 4. Routine Northern Pike eDNA sampling locations throughout the state of Washington.

4.2.2 Other Routine Fish Monitoring

Routine fish monitoring for species other than Northern Pike may result in a Northern Pike detection. Examples include long-term monitoring programs, fish community surveys, hatchery broodstock collection efforts, creel surveys, fishing contests, fish counts at hydropower facility fish passage ladders, etc.

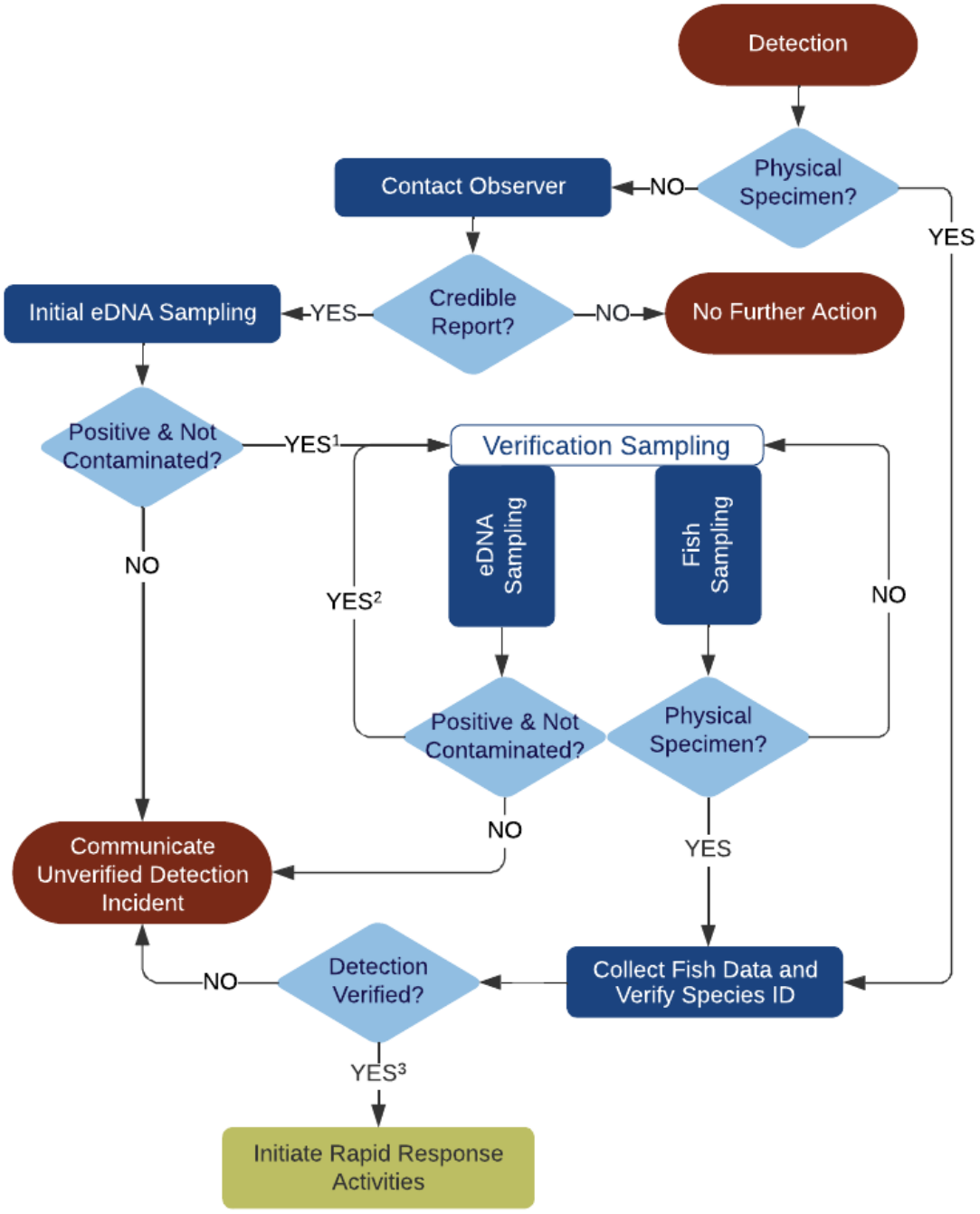
4.3 Detection Verification

Two types of detection data are expected from monitoring activities: direct and indirect. A direct detection enables an external entity with identification expertise to verify the fish identification (e.g., carcass in hand, photograph, or fish count video). While a photograph or fish count video provides evidence to verify fish identification, the certainty of the evidence should be evaluated prior to initiating ICS for a rapid response. If the quality of the image is adequate to conclusively verify species identity and/or if eDNA data support the presence of Northern Pike, initiation of ICS for a rapid response may be considered. By contrast, indirect detections do not enable external entities to immediately verify fish identification (e.g., visual sighting or single positive eDNA result).

A positive Northern Pike eDNA result (as separate from a Positive waterbody classification) is any result that is not 0/3.[5] 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, and Northern Pike are likely present but evidence does not yet support a Positive waterbody classification.

Waterbody classification based on Northern Pike detection history is provided in Section 2.2. Prior to verification of a detection, the waterbody will be classified as Inconclusive. Following verification, the waterbody classification will change to either Suspect or Positive. An overview of the detection and verification process is depicted in Figure 5.

[5] 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., # positive amplification out of 3 total wells).



Notes:
1. The waterbody classification will change to Inconclusive with one positive eDNA result. Verification Sampling should continue for 1 year of all negative results with no Northern Pike captured to be reclassified to Undetected/Negative. Sampling frequency should be determined by the involved entities based on the circumstances of the incident.
2. The waterbody classification will change to Suspect with two or more positive eDNA results and a Notification of Suspected Northern Pike should be sent to entities with fisheries management responsibilities. Verification Sampling should continue for 3 years of all negative results with no Northern Pike captured to be reclassified to Undetected/Negative.
3. The waterbody classification will change to Positive, and a Notification of Positive Northern Pike should be sent.

Figure 5. Overview of Northern Pike Detection Verification Process.

4.3.1 Verification of a Physical Specimen

1. Collect the following data from Northern Pike carcass (Northern Pike Capture worksheet in APPENDIX D):

    a. Photo
    b. Total length (mm)
    c. Weight (g)
    d. Sex
    e. Otolith
    f. DNA tissue sample

2. Verify species identification.

    a. Send photo to ais@dfw.wa.gov, upload to the WISC online AIS reporting form, and, if available, deliver fish carcass to the nearest WDFW office. Here, two independent fisheries experts shall:

        i. determine if the specimen is a Northern Pike using keying characteristics (APPENDIX E) and
        ii. ensure all fish data properly collected (APPENDIX D).

4.3.1.1 Verification of a Physical Specimen Decision Tree

- If both fisheries experts verify that the specimen is a Northern Pike, then initiate Rapid Response Activities (Section 5). In this instance, the waterbody will be classified as Positive and a Notification of a Positive Northern Pike waterbody will be sent by WDFW (Section 4.4).
- If the specimen is not verified to be a Northern Pike, then make an Unverified Detection Incident Report (Section 4.4). If no associated positive eDNA results, the waterbody would remain in an Undetected/Negative status because the collected specimen can be confirmed not to be a Northern Pike.
- If there is disagreement between fisheries experts, a third fisheries expert shall be consulted to make the conclusive determination.

4.3.2 Verification of a Detection without a Physical Specimen

- If a Northern Pike observation is reported to an entity other than WDFW or WISC, the recipient of the observation report shall ensure that the information is reported to WDFW or WISC (Section 4.1).
- Once a Northern Pike observation is reported to WDFW or WISC (Section 4.1), the WDFW AIS Coordinator will contact the person who made the report to verify:

    · Date of observation
    · GPS Location or, if unavailable, a description of the general location
    · That observation was of a Northern Pike versus commonly confused species (e.g., Redfin Pickerel *E. americanus americanus* or Tiger Muskellunge *E. masquinongy x E. lucius;* APPENDIX E)

    – If the report is deemed credible by the WDFW or WISC representative, coordinate the collection of an initial eDNA Sample (if not already collected by an eDNA station).

- If the initial eDNA sample returns a positive result, the entity who collected the sample shall complete the following steps:
  - If a control sample is available, confirm there was no evidence of contamination.
  - If no contamination is evident or there was no control, the entity shall conduct Verification Sampling (Section 4.3.3). If the entity cannot conduct Verification Sampling internally, WDFW should be notified via ais@dfw.wa.gov to coordinate Verification Sampling.
- If the initial eDNA sample returns a negative result, communicate Unverified Detection Incident (Section 4.4).

– If the report is not credible, no further action is required.

4.3.3 Verification Sampling (within 48 hours of indirect detection)

An overview of the Verification Sampling process is depicted in Figure 5. Verification Sampling should be executed within 48 hours of the positive eDNA result and occur within 250 m upstream and downstream (streams) or in opposing directions (lakes) of the reported detection location. Verification should always include eDNA sampling but may also include fish sampling depending on the habitat, environmental conditions, and available permits. The entity that collected the initial eDNA sample is responsible for conducting or coordinating Verification Sampling (e.g., coordinating support from WDFW).

4.3.3.1 eDNA Sampling Protocol

1. Using the standard protocol of the entity conducting the sampling, five eDNA samples should be collected from the immediate area.

   In streams or reservoirs with detectable flow, one sample from each of the following locations relative to the detection location:

   a. Site of detection
   b. 100 m upstream
   c. 250 m upstream
   d. 100 m downstream
   e. 250 m downstream

   In lakes or ponds with no detectable flow, samples should be collected in opposite directions away from the site of detection.

2. Samples should be preserved and shipped overnight to the eDNA processing lab used by the entity conducting the sampling.

4.3.3.2 Fish Sampling Protocol

- Fish sampling should include at least two of the sampling gear types listed in Section 7.1 for Verification Sampling. Appropriate gear types will vary depending on site conditions (e.g., water depth, flow, substrate) and other constraints such as presence of ESA-listed species or permit availability at the detection location.
  – Ideally, sampling would occur within 500 m of the detection location. However, if habitat attributes, land access, or permitting are restrictive in the detection location, sampling

should be conducted in preferred-type Northern Pike habitat as close to the detection location as feasible.
  - Expected effort is annotated in Section 7 and the data collection worksheets in APPENDIX D.

4.3.3.3 Verification Sampling Decision Tree

- If Verification Sampling produces all negative eDNA results and no observations of Northern Pike during fish sampling, make an Unverified Detection Incident Report (Section 4.4). Verification Sampling should be repeated for 1 year with all negative results and no Northern Pike captured to reclassify the waterbody as Undetected/Negative. Sampling interval should be determined by the involved entities based on the circumstances of the incident.
- If Verification Sampling produces at least one positive eDNA result (1/3, 2/3, or 3/3) but no Northern Pike specimens are collected, report detection results (Section 4.1) and conduct or coordinate monthly Verification Sampling at the site for a minimum of 3 years. At this point, the waterbody would be classified as Suspect and a Notification of Suspected Northern Pike should be sent by WDFW (Section 4.5).
  - The waterbody will remain in Suspect status until a Northern Pike is collected (changes to Positive) or after 3 years of negative testing with no Northern Pike collected (changes to Undetected/Negative; Section 2.2.1).
- If a Northern Pike is captured, conduct Verification of a Physical Specimen (Section 4.3.1).

4.4 Unverified Detection Incident Reports

Unverified Detection Incident Reports provide an opportunity to identify trends and patterns that might indicate presence of Northern Pike at low abundance that might otherwise be missed (e.g., increased frequency of unverified detections, spatial patterns that suggest presence at low abundance). Thus, it is recommended that every Unverified Detection Incident be declared to the WDFW AIS Coordinator (ais@dfw.wa.gov).

Critical information to include in an Unverified Detection Incident Report includes:

- Date of reported Unverified Detection
- Method(s) of Unverified Detection (e.g., eDNA, angler report, sighting)
- Location of Unverified Detection (waterbody name and GPS coordinates)
- Summary of Verification Sampling conducted
- Declaration of unverified detection

4.5 Notification of Suspected Northern Pike

Should a waterbody classification change to Suspect from either Undetected/Negative or Inconclusive, a notification will be sent out to all (i.e., tribal, state, federal, non-governmental, private, and other) entities with fisheries management responsibilities in state of Washington waterbodies (APPENDIX A). A Notification of Suspected Northern Pike template is provided in APPENDIX F to assist with communications. Critical information to include in the Notification of Suspected Northern Pike includes:

- Date of first positive detection
- Method(s) of detection (e.g., eDNA)
- Dates of subsequent positive detections

- Locations of all positive detections (waterbody name and GPS coordinates)
- Summary of Verification Sampling conducted
- Summary of planned monitoring, to include type of sampling, entity conducting sampling, and a point of contact

4.6 Notification of Positive Northern Pike Waterbody

Should a waterbody classification change to Positive (i.e., a verified Northern Pike is captured), a notification will be sent out to all entities with fisheries management responsibilities in state of Washington waterbodies (APPENDIX A). A Notification of Positive Northern Pike template is provided in APPENDIX F to assist with communications. Critical information to include in the Notification of Positive Northern Pike is:

- Date of first positive detection
- Method of detection(s) (e.g., capture, eDNA, observation)
- Date Northern Pike captured
- Location where Northern Pike was captured (waterbody name and GPS coordinates)
- Picture(s) of specimen
- Attestation that two independent fisheries experts identified specimen as a Northern Pike
- Attestation that ICS has been requested and that rapid response is being coordinated

In addition, a public notice will be generated by the WDFW Public Information Officer. All verified detections of AIS are reported to the national U.S. Geological Survey (USGS) aquatic invasive database (https://nas.er.usgs.gov/) by WDFW.

5 Rapid Response Activities

The intent of the Rapid Response Activities is to identify Northern Pike colonization or range expansion events within a short period of time (as soon as possible, but no longer than 6 weeks). The following sampling schemata were developed to confirm the presence of one or more Northern Pike in a new waterbody and to determine if Northern Pike are localized or expanding into connected waterbodies. Understanding the extent of a newly discovered invasion will be essential to determine requirements for Extended Response Activities.

The 6-week Rapid Response Activities include the following steps (Figure 1):

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)
    e. Conduct Initial Scoping (Section 5.2)
2. Weeks 2–6
    a. Conduct Range Delimitation and update ICS Type, as required (Section 5.3)
3. Week 6 (or sooner contingent on range delimitation effort required)
    a. Data Collation (Section 5.4)
    b. MAC Group meeting (Section 5.5)

5.1 Requesting ICS 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 the verification of a captured Northern Pike specimen. 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 captured the Northern Pike specimen.
- Names and contact information for the entities that verified the specimen to be a Northern Pike.
- Date of Northern Pike capture.
- Location of Northern Pike capture (waterbody name, county, and GPS coordinates).
- Date of initial Northern Pike detection if different than capture date.
- Location of initial Northern Pike detection if different than capture location.
- A description of any Verification Sampling conducted and associated results.

Once received, the WDFW AIS coordinator will verify the information and, if appropriate, elevate the request to the AIS Unit Manager 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 1.4.1). 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 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 F to assist with communications.

Simultaneously, the WDFW Communications Division will generate a press release to notify the public of Northern Pike presence, the initiation of Rapid Response Activities, and other associated information. Suggested information about a new invasion includes:

- Information about Northern Pike
- The current understanding of its new distribution
- When it was first detected in the affected waterbody
- Likely origin, if known
- The risks it poses to local fisheries
- Potential control options in consideration
- Likelihood of success of control options
- Potential interruptions to local 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 1.4.2) and designate General and Command Staff according to Section 1.3.2. 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 (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 6).

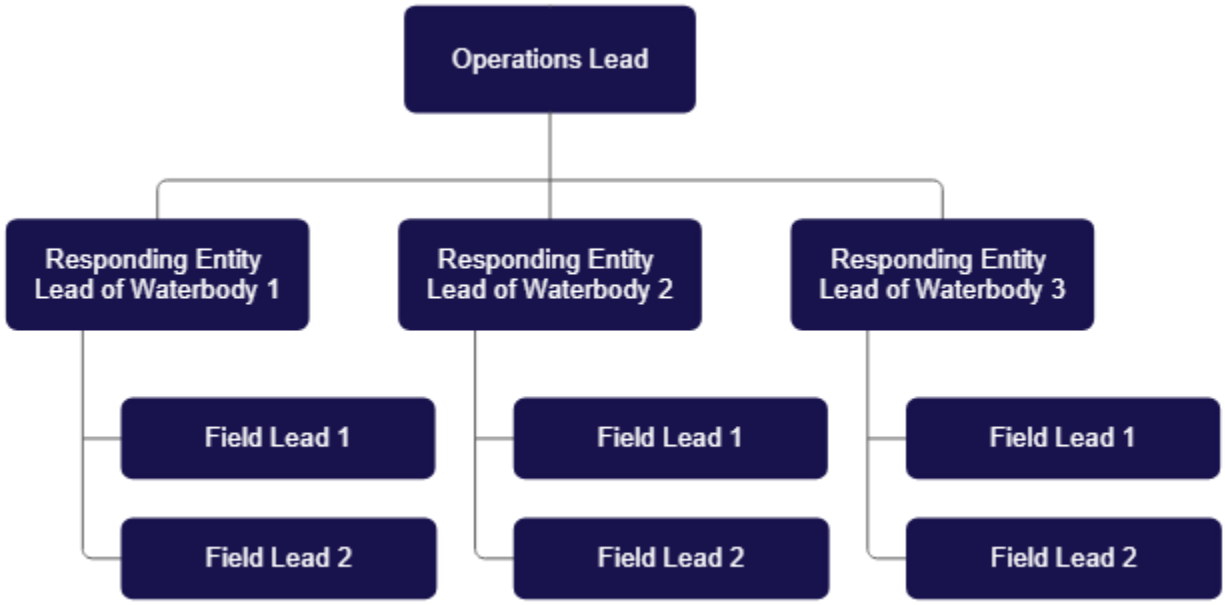


Figure 6. An example Rapid Response organizational chart for the scenario where there are detections in waterbodies spanning three jurisdictions.

5.1.3.1 Operations Lead Responsibilities

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

- Assure 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 1.3.2).

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.
- Participate in the stakeholder meeting discussion.

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 using data collection worksheets provided in APPENDIX D.
- 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 Initial Rapid Response Scoping

Initial scoping activities (Figure 7) should begin within 7 days of a verified Northern Pike capture, preferably sooner. These activities include a combination of eDNA sample collection, review of fish count videos (as applicable), and fish sampling for Northern Pike within preferred-type habitats. Sampling gear (Section 7) utilized will depend on the habitat, season, sampling permit stipulations, and professional knowledge of the Field Lead.

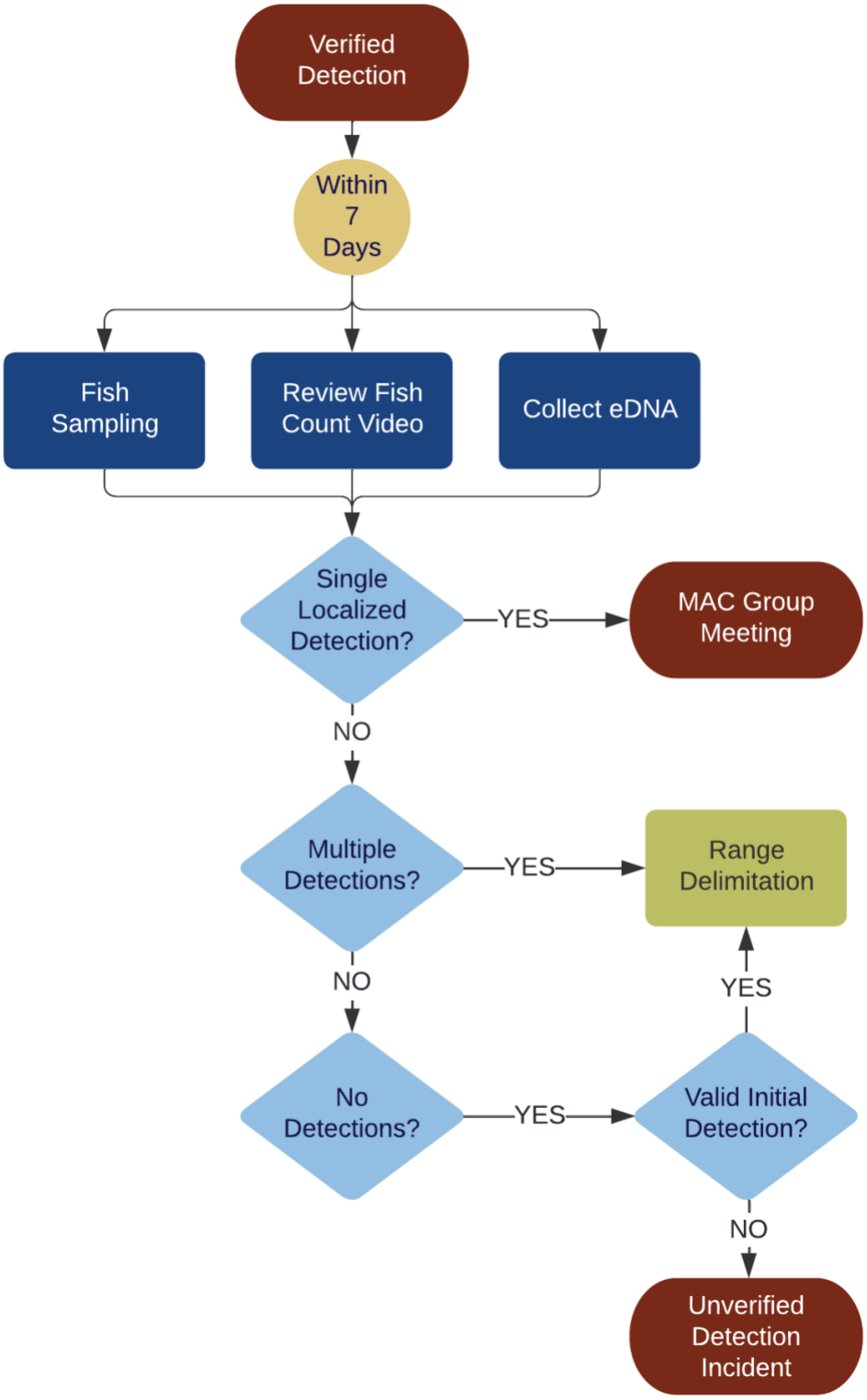


Figure 7. Overview of Initial Scoping Process Flow.

5.2.1 Initial Rapid Response Scoping Process

1. Conduct eDNA Sampling

    a. Rivers:

        i. Collect 3 samples (one from each shoreline and the middle of the river) at five locations using the Responding Entity's standard protocol.

        · Site of detection
        · 1 km upstream
        · 4 km upstream
        · 1 km downstream
        · 4 km downstream

    b. Lakes:

        i. Collect 2 samples at five locations using the Responding Entity's standard protocol.

        · Site of detection
        · 1 km away (both sides of detection site)
        · 4 km away (both sides of detection site)

        If lake is smaller than 1 km, four locations evenly dispersed from the site of detection should be sampled.

2. Review fish count video from previous 7 days at all count windows, as applicable.
3. Conduct fish sampling in preferred-type habitat within 4 km of detection location as permit stipulations allow (Section 7).
4. Inform Operations Lead of future sampling permits or take authorizations that may be required for further Range Delimitation activities.

5.2.2 Initial Rapid Response Scoping Decision Tree

- Single, Localized Detection
    – If the boundaries of the current range extent are clear after Initial Rapid Response Scoping, further Range Delimitation efforts are unnecessary. Proceed directly to Data Collation (Section 5.4) in preparation for the MAC Group Meeting (Section 5.5).
- Multiple Detections
    – Each positive detection should be recorded as a presence location to demarcate the centroid(s) of follow-on Range Delimitation efforts (Section 5.3).
- No Detections
    – Re-verify and validate the data from the initial detection.
        · If the initial detection is valid, continue to Range Delimitation (Section 5.3).
        · If the initial detection is deemed unverified, initiate an Unverified Detection Incident Report (Section 4.4).

5.3 Range Delimitation

If the Initial Rapid Response Scoping effort results in ambiguous information about the range occupied by Northern Pike (e.g., no positive detections after a verified Northern Pike specimen captured) or positive detections to the outer geographic limits of where sampling was conducted, Range Delimitation efforts should be conducted (Figure 8). Range Delimitation efforts should be initiated during Week 2 of Rapid Response Activities and continue, as necessary, through Week 6, for a maximum of 5 weeks of sampling. This timeline provides sufficient time to garner a general understanding of the limits of the current invasion and relative abundance (i.e., single fish, multiple fish, established population with confirmed reproduction) while minimizing the cost and burden to involved entities prior to the establishment of a regional monitoring, suppression, and/or eradication plan. Range Delimitation efforts may be discontinued sooner than Week 6 if the limits of the current invasion are determined earlier.

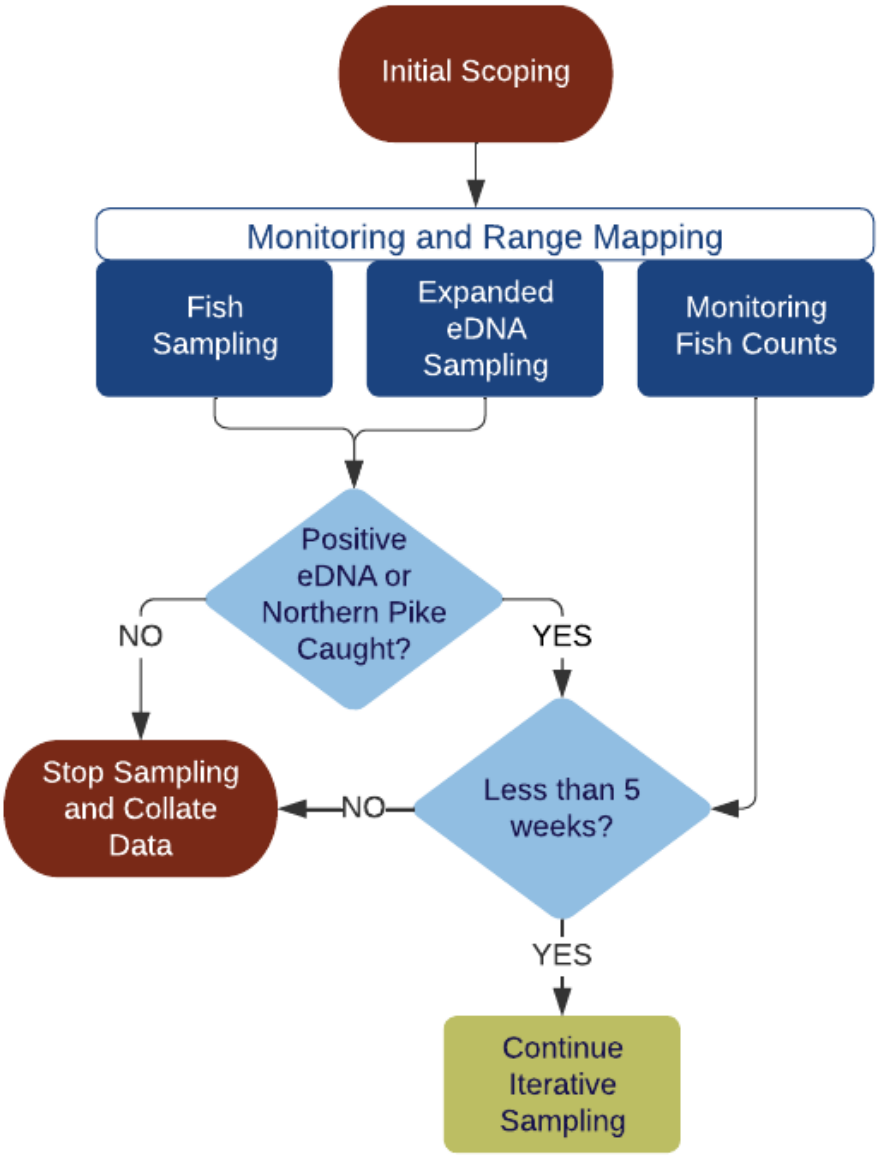


Figure 8. Overview of Range Delimitation Process Flow.

5.3.1 Range Delimitation Process Flow

If jurisdictional boundaries are met at any point during Range Delimitation efforts, the Operations Lead should be informed, and an additional Responding Entity Lead designated for the proximate waterbody to conduct additional sampling (Figure 6).

1. Expand eDNA sampling outward from nearest presence point at 4 km increments until range is delimited or water boundaries are met.
2. As permits allow, expand fish sampling in preferred-type habitats outward from nearest presence point at no more than 4 km increments until range is delimited or water boundaries are met (Section 7).
    a. If a Northern Pike is captured, collect fish data (APPENDIX D) and verify species identification (Section 4.3.1).
3. Continue daily monitoring of fish count videos, as applicable, for Northern Pike detections.

5.3.2 Range Delimitation Decision Matrix

Iteratively sample until

1. Week 6 of Rapid Response Activities; or
2. presence is detected across 3 or more proximate waterbodies (i.e., broad invasion); or
3. current spatial extent of presence points is reasonably identified (i.e., no detections bounding presence points or in proximate waterbodies).

5.4 Data Collation

All field teams conducting eDNA sampling, fish sampling, or review of fish count window data in association with Rapid Response Activities should use the data collection worksheets in APPENDIX D. Once complete, all data collection worksheets 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 1.3.2), 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. 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:

- A map depicting sampling and detection information, and
- Summary of detection, verification, initial rapid response scoping, and range delimitation efforts (Data Summary Form provided in APPENDIX G)
    - Initial detection date

  - Dates of sampling
  - Gear used
  - Effort
  - 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 the Data Summary Form to provide an overview of the Rapid Response effort (APPENDIX G)
- Map review to describe invasion range and relative abundance (e.g., localized fish, multiple fish with potential for reproduction, established population with confirmed reproduction)
- Public outreach information
- Future monitoring
- Roles
- Available gear and gear procurement needs
- Trained personnel and training requirements
- Funding resources
- Permit requirements
- Transition to suppression/eradication plans
- Emergency Declaration Request status

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 Invasive Northern Pike Situation Assessment (APPENDIX H) 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 Northern Pike 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 the use of the piscicide rotenone and complete de-watering of waterbodies.

6.1.1 Rotenone

Rotenone is currently available and registered by the U.S. Environmental Protection Agency (EPA) as a restricted-use pesticide for fish management (EPA 2007). Rotenone is a product of the Legume (bean) family and is the only piscicide currently approved for use in the state of Washington (Hisata 2002; Finlayson et al. 2018). When used at recommended concentrations for invasive fish eradications, rotenone is expected to be lethal to fish, zooplankton, many macroinvertebrates, and frog tadpoles, but not harmful to birds, mammals, or adult stages of most amphibians (Vinson et al. 2010; Finlayson et al. 2018; Dunker et al. 2022).

If it is determined that rotenone will be required to meet the eradication objectives, applicators must adhere to product label restrictions and follow the protocols and procedures specified in the Rotenone Standard Operating Procedures (SOP) Manual 2nd Edition (Finlayson et al. 2018), as well as laws and regulations of all jurisdictions. Pesticide applications to waters of the state must also meet the terms and timelines identified by the Clean Water Act which is administered by ECY via a National Pollutant Discharge Elimination System (NPDES) pesticide general permit.

ECY is currently developing a new Aquatic and Invasive Species Control (AISC) general permit[6] for the control of fish, animals, and insects, which is anticipated to be issued in 2023. This new permit combines previous NPDES permits issued to WDFW, including the AIS Management[7] and Fisheries Resource Management permits.[8] The new 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

[6] https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/aquatic-invasive-species-control-general-permit; https://fortress.wa.gov/ecy/ezshare/wq/permits/AISC-GeneralPermit-Draft.pdf
[7] https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Aquatic-invasive-species-management
[8] https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits/Fisheries-resource-management

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 EPA pesticide General Permit.[9]

6.1.2 De-watering and Drawdown

Complete de-watering of a waterbody is a potential alternative to rotenone treatments, allowing for eradication of Northern Pike via desiccation. Incomplete drawdowns may also be used to lower the water level, reducing the amount of rotenone required to treat the waterbody. Impacts to non-target species should be considered and managers must ensure that all requisite permits are acquired prior to drawdown.

6.1.3 Other Pesticides

Currently, rotenone is the only piscicide approved for use in controlling Northern Pike. If another pesticide is deemed necessary, it would be considered a "New Use" of a currently registered pesticide and 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.[10] Alternatively, if it is assessed that there are inadequate tools to address the Northern Pike incident (including a New Use application), an application for a FIFRA Section 18 emergency exemption from federal registration may be submitted to WSDA.[11]

6.2 Containment

To prevent or slow the spread of Northern Pike, it may be necessary to mobilize a quarantine or emergency closure of an affected waterbody. Under RCW 77.135.050, WDFW is authorized to implement a quarantine against a waterbody, property, or region within the state. Here, options could be explored to eliminate illegal transport of Northern Pike to other waterbodies, including instituting closures or controlling access to an affected waterbody until an acceptable management plan has been implemented.

Containment of Northern Pike may also be necessary to prevent volitional movement into connected waterbodies. In some situations, construction of a barrier to prevent or slow the movement of Northern Pike outside the infested waterbody may be warranted. Effectiveness of movement barriers is contingent on the complexity and connectivity of the infested waterbody, barrier design, and whether there is a requirement to allow for passage of other fish species. Furthermore, it is difficult to prevent downstream passage with barriers due to the propensity for downstream movement during high water events and potential larval drift. Recent research on the swimming and leaping performance capabilities of Northern Pike found that the likelihood of successful passage was influenced by Northern Pike size,

[9] https://www.epa.gov/npdes/pesticide-permitting
[10] https://agr.wa.gov/services/licenses-permits-and-certificates/summary-descriptions/special-local-need; https://www.epa.gov/pesticide-registration/guidance-fifra-24c-registrations
[11] https://agr.wa.gov/departments/pesticides-and-fertilizers/pesticides/section-18-emergency-exemption-from-registration

barrier height, and pool depth, but did not vary with flow rates (Cubbage 2022). Here, higher barriers, more shallow pool depths, and smaller body sizes were associated with reduced passage success. While more research is still required to fully understand the effectiveness of barriers in containing Northern Pike, the Alaska Invasive Species Partnership has developed gear recommendations and methods for potential use of barriers for Northern Pike containment (Dunker et al. 2022 [SOP 11]). Managers must ensure all requisite permits are acquired prior to barrier installation.

6.3 Long-Term Management

Although eradication may be the foremost goal of any rapid response plan, it may not always be feasible in aquatic systems. In these cases, ICS staff and the MAC Group will likely 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 to fish communities and slow the rate of spread) or development of other strategies to minimize the impact of an established population of Northern Pike. Suppression techniques include (but are not limited to) fish removal via gill nets, electrofishing, beach seining, trap/pound nets, angling, baited set lines, and targeted drawdowns during spawning to disrupt spawning or during the egg and larval life-history stages to negatively impact recruitment (CTCR et al. 2018; Dunker et al. 2022). 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.

7 Fish Sampling Guidelines

Selection of gear type for Northern Pike sampling is at the discretion of the Field Lead and is dependent on gear availability, training of personnel, physical habitat conditions, season, and available permits. For all field sampling activities, the Responding Entity Lead is responsible for ensuring that the gear and timing of activities are authorized by the appropriate sampling permits and ESA take authorizations. The ICS Logistics Lead should assist Responding Entity Leads in coordinating gear and permits required for sampling.

Habitat attributes of water depth and bottom slope are useful predictors of where Northern Pike are likely to occur. Suppression and monitoring efforts from Lake Roosevelt capture Northern Pike at greatest efficiency in habitats with depths ≤12.2 m and slopes ≤23.9° (CTCR et al. 2018).

7.1 Sampling Gear Types for Rapid Response

This section provides a summary of habitat and permitting considerations that should be evaluated prior to fish sampling and an overview of different gear types that are likely to be implemented during Rapid Response Activities. Data collection worksheets are provided for each gear type in APPENDIX D.

7.1.1 Gill nets

Gill nets are the preferred method to capture adult and sub-adult Northern Pike where Northern Pike are established in the state of Washington (Table 4), however may be restricted in some waterbodies due to bycatch concerns. Gill net type (monofilament and multifilament), mesh size, and set duration (e.g., 4-hour short-sets vs. overnight sets) can be adjusted to improve Northern Pike capture efficiency and reduce bycatch. Suppression efforts in the Upper Columbia River suggest that multifilament gill nets with 2-inch stretch mesh maximize Northern Pike catch while minimizing bycatch; however, low densities of Northern Pike compared to non-target species may reduce the efficiency of gill netting and result in complications clearing and repairing nets. Consideration should be given to using gill nets during periods when ESA-listed species are rare or absent in the waterbody. The Alaska Invasive Species Partnership also offers gill net procedures that may help inform early detection surveys or long-term suppression efforts (Dunker et al. 2022 [SOPs 2 and 13]).

For Detection Verification or Rapid Response Activities:

- It is recommended that 500 m of shoreline be sampled
- It is recommended that a multifilament or monofilament gill net with a variety of mesh sizes be used in order to capture all age classes of Northern Pike, including young of year fish. The net is recommended to be at least 30 x 1.8 m (100 x 6 ft)
- Northern Pike are active during the day, therefore short (4-hour) daylight sets are appropriate and will reduce bycatch of non-target fish

- For reference, deployment methods used for Northern Pike suppression in Lake Roosevelt are available in CTCR et al. 2018 and Monitoring Resources Protocol No. 3354[12]

7.1.2 Boat Electrofishing

Boat electrofishing can be an effective tool to capture Northern Pike while minimizing bycatch mortality. Boat electrofisher settings and effort may be adjusted in real-time to minimize detrimental effects on observed non-target species in the area. Boat electrofishing can be used for all age-classes but is most effective at targeting juvenile Northern Pike. Boat electrofishing may be advantageous compared to other gear types during times of high debris loading or high abundance of aquatic macrophytes.

For Detection Verification or Rapid Response Activities:

- It is recommended that a 500 m sampling area be electrofished by boat with 10-minute, 100-m transects
- This effort should take at least 1 hour
- For reference, the following equipment and settings are used for Northern Pike suppression in Lake Roosevelt (CTCR et al. 2018):
  - Gear: An aluminum motorized Smith-Root electrofishing boat equipped with a 5.0 Generator Powered Pulsator (GPP)
  - Deployment:
    - Boat electrofishing follows standard methodologies described in Monitoring Resources Protocol No. 3355 and in Reynolds and Lawrence (2012)
    - Electrofishing settings are standardized to 340 volts DC, 40% duty cycle, 120 pulse/sec; 3-7.5 amps, and adjusted to maximize catch of Northern Pike

7.1.3 Snorkeling

Snorkeling may be an effective tool to survey shallow, non-turbid habitat for presence of Northern Pike during periods of time when mechanical sampling is restricted due to bycatch concerns. Benefits of snorkeling include limited coordination requirements (thus increasing response time), minimal impact on non-target species, an increased probability (compared to capture techniques) of observing a species at low abundance levels, and the ability to observe fish behaviors (e.g., spawning). However, there is a higher probability of misidentifying species and snorkeling does not provide the ability to measure, weigh, sex, and analyze the origin of the observed individual.

For Detection Verification or Rapid Response Activities:

- It is recommended that the entire 500 m sampling area be snorkeled in 100 m long sections
- If the sampling area cannot be observed by a single snorkeler due to width or physical obstructions impeding visibility, it may be necessary to have two snorkelers in adjacent lanes or multiple passes be conducted

[12] Elliott Kittel. TBD. Northern Pike Juvenile Suppression v1.0. MonitoringResources.org https://www.monitoringresources.org/Document/Protocol/Details/3355

- In rivers, snorkeling should occur from downstream to upstream with an observer walking along the shoreline to record data
- Each section should take a minimum of 20 minutes to snorkel

The Alaska Invasive Species Partnership also offers snorkel survey procedures that may help inform early detection surveys (Dunker et al. 2022 [SOP 5]).

7.1.4 Beach Seining

Beach seines may be an effective tool to target juvenile Northern Pike in shallow habitats during the late summer and early fall while minimizing lethal bycatch. Impacts to bycatch can be further minimized by providing coolers and battery-operated air bubblers to hold captured individuals while species are identified and sorted. Should juvenile salmonids be observed during sampling, beach seine efforts can be halted or moved to habitats where salmonids are not present.

For Detection Verification or Rapid Response Activities:

- It is recommended that a 500 m sampling area be divided into at least five 100 m seining transects, with a minimum of three tows per transect
- A variety of seine nets may be used depending on habitat type. For reference, the following are used for suppression efforts in Lake Roosevelt (CTCR et al. 2018):
  - Seine 1:
    - Used in large bays (≥183 m wide)
    - 91.4 x 1.83 m (300 x 6 ft)
    - ½ inch square #126 knotless nylon netting
    - Top rope is 3/8-inch braided ploy with SB-6 floats every 24 inches
    - Bottom rope is 3/8-inch braided poly with #10 leads every 12 inches
    - Breast line is 1/8-inch solid braid nylon
    - Hung using #15 twine
  - Seine 2:
    - Used in smaller bays (≤183 m)
    - 45.7 x 1.83 m (150 x 6 ft)
    - ¼ inch square #44 knotless nylon netting
    - Top rope is 3/8 braided poly with SB-6 floats every 24 inches
    - Bottom rope is 3/8 braided poly with #10 leads every 12 inches
    - Breast line is 1/8-inch solid braid nylon
    - Hung using #15 twine
  - Beach seines are deployed following the standard methods described in Monitoring Resources Protocol No. 3355 and in Hayes et al. (1996)

7.1.5 Fyke Nets (Or Other Trap/Pound Nets)

Fyke nets offer opportunities to target all age-classes of Northern Pike while minimizing lethal bycatch of non-target species. Fyke nets are generally deployed in shallow (<2 m) habitat. Consideration, however, should be given to macrophyte abundances and the likelihood of lethal bycatch of aquatic mammals (e.g., river otters, beavers) prior to deploying fyke nets.

For Detection Verification or Rapid Response Activities:

- It is recommended that a 500 m sampling area should be divided into at least five 100 m transects
- In each transect, a minimum of one fyke net with at least 15.2 x 1.2 m deep (50 x 4 ft) leads, 1.5 m opening, and mesh size less than 6.4 mm (¼-inch) stretched should be set for one night
- Sets should follow the methods detailed in Monitoring Resources Protocol No. 3355 and Hubert (1996)
- Nets should be checked at least twice daily to minimize lethal bycatch of aquatic mammals

7.1.6 Baited Set lines

Set lines may be effective at catching Northern Pike in deeper water relative to other methods. Set lines are typically fished over a 24- to 48-hour period. Line weight, material, hook size, and bait can be adjusted to target Northern Pike. Rigs that have been successful for capturing Northern Pike used sizes 6, 4, 2, and 1 treble hooks, and 2/0 and 4/0 circle hooks on 30-pound steel leaders with fish bait. Some hooks were fished on the bottom, and some were suspended with floats 3 m off the bottom. While effective at capturing Northern Pike, these setups would also likely target adult salmonids.

7.1.7 Angling

Angling may offer opportunities to sample key habitat during times of inclement weather, but it is not considered sufficiently robust for rapid response sampling. This method is considered a useful monitoring and potential future suppression tool.

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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
City of Woodland
Clallam County
Clark County
Confederated Tribes and Bands of the Yakama Nation
Confederated Tribes of the Chehalis Reservation

Water Body Entities
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
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

Water Body Entities
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	Entities
Admiralty Bay Pond East	Pond	N/A	48.164323	-122.63822	Island	4	Western	WDFW & WSPRC
Admiralty Bay Pond West	Pond	N/A	48.164365	-122.640212	Island	4	Western	WDFW & WSPRC
Aeneas Lake	Lake	N/A	48.678856	-119.511161	Okanogan	2	Eastern	WDFW
Albright Lake	Lake	N/A	48.542119	-119.608755	Okanogan	2	Eastern	WDFW
Alder Lake	Reservoir	Alder	46.7984	-122.2926	Pierce	6	Western	WDFW & Tacoma Power
Aldrich Lake	Lake	N/A	47.432625	-123.08225	Mason	6	Western	WDFW & WDNR
Alkali Lake	Lake	N/A	47.528527	-119.488081	Grant	2	Eastern	WDFW & WSPRC
Alta Lake	Lake	N/A	48.0275	-119.9355	Okanogan	2	Eastern	WDFW & WSPRC
Amber Lake	Lake	N/A	47.3479	-117.7146	Spokane	1	Eastern	WDFW & WDNR
American Lake	Lake	N/A	47.1220092	-122.5693366	Pierce	6	Western	WDFW & City of Lakewood
Ancient Lake South	Lake	N/A	47.148509	-119.943755	Grant	2	Eastern	WDFW
Anderson Lake	Lake	N/A	48.015881	-122.800699	Jefferson	6	Western	WDFW, Skokomish Indian Tribe, PNP Treaty Council, Jefferson County, Kalispel Tribe
Angle Lake	Lake	N/A	47.427512	-122.286785	King	4	Western	WDFW, City of SeaTac & KCWLR
Antilon Lake Lower	Lake	N/A	47.967512	-120.157567	Chelan	2	Eastern	WDFW, WDNR & LCRD
Antilon Lake Upper	Lake	N/A	47.97575	-120.160764	Chelan	2	Eastern	WDFW, USFS & LCRD
Apex Lake	Lake	N/A	48.2418	-118.213	Ferry	2	Eastern	WDFW
Ashes Lake	Lake	N/A	45.673526	-121.914129	Skamania	5	Western	WDFW
Asotin Headgate County Park Pond	Pond	N/A	46.325859	-117.212087	Asotin	1	Eastern	Asotin County
Aspen Lake	Lake	N/A	48.409144	-120.212161	Okanogan	2	Eastern	WDFW
Badger Lake	Lake	N/A	47.3423418	-117.6369987	Spokane	1	Eastern	WDFW
Baker Lake	Reservoir	Baker	48.7266	-121.6555	Whatcom	4	Western	WDFW & USFS
Ballinger Lake	Lake	N/A	47.782021	-122.326817	Snohomish	4	Western	WDFW & City of Mountlake Terrace
Banks Lake	Reservoir	Banks	47.8634586	-119.1178923	Grant	2	Eastern	WDFW & Reclamation
Barclay Lake	Lake	N/A	47.784586	-121.426684	Snohomish	4	Western	WDFW & USFS
Baseline Lake	Lake Manmade	N/A	47.0893	-119.8442	Grant	2	Eastern	Private
Bass Lake	Lake	N/A	47.254853	-121.995621	King	4	Western	WDFW & KCWLR
Battle Ground Lake	Lake	N/A	45.804756	-122.494045	Clark	5	Western	WDFW & WSPRC
Bay Lake	Lake	N/A	47.244207	-122.757943	Pierce	6	Western	WDFW
Bayley Lake	Lake	N/A	48.420209	-117.662316	Stevens	1	Eastern	WDFW & USFWS
Bead Lake	Lake	N/A	48.288824	-117.110072	Pend Oreille	1	Eastern	WDFW & USFS

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

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

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

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

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	Entities
Deep Lake	Lake	N/A	47.5886	-119.3238	Grant	2	Eastern	WDFW & WSPRC
Deep Lake	Lake	N/A	46.909	-122.9157	Thurston	6	Western	WDFW & WSPRC
Deep Lake	Lake	N/A	47.273605	-121.939852	King	4	Western	WDFW, WSPRC & KCWLR
Deep River	River	N/A	46.3141	-123.7132	Wahkiakum	5	Western	WDFW
Deer Lake	Lake	N/A	48.108274	-117.6052139	Stevens	1	Eastern	WDFW
Deer Lake	Lake	N/A	46.305305	-117.652497	Columbia	1	Eastern	WDFW
Deer Lake	Lake	N/A	47.974244	-122.384032	Island	4	Western	WDFW & Island County
Deer Springs Lake	Lake	N/A	47.473034	-118.617065	Lincoln	1	Eastern	WDFW & Private Entities
Depression Lake	Lake	N/A	48.659828	-121.694718	Whatcom	4	Western	WDFW & USFS
Desert Lake Chain	Lake	N/A	47.009833	-119.485882	Grant	2	Eastern	WDFW & Reclamation
Devereaux Lake	Lake	N/A	47.405965	-122.848095	Mason	6	Western	WDFW
Diablo Lake	Reservoir	Diablo	48.69006	-121.09527	Whatcom	4	Western	WDFW, NPS & SCL
Diamond Lake	Lake	N/A	48.1293	-117.1869443	Pend Oreille	1	Eastern	WDFW
Dibble Lake	Lake	N/A	48.432904	-120.170624	Okanogan	2	Eastern	WDFW
Dickey Lake	Lake	N/A	48.110702	-124.507741	Clallam	6	Western	WDFW & Quileute Nation
Dickinson Lake	Reservoir	N/A	48.6815	-122.6443	San Juan	4	Western	WDNR & LISECC
Dog Lake	Lake	N/A	46.657375	-121.359731	Yakima	3	Eastern	WDFW & USFS
Doheny Lake	Lake	N/A	48.585219	-119.664681	Okanogan	2	Eastern	WDFW
Dohman Reservoir	Reservoir	Dohman	46.3468	-123.9964	Pacific	6	Western	Pacific County Public Works
Domke Lake	Lake	N/A	48.1774	-120.588	Chelan	2	Eastern	WDFW & USFS
Donnie Lake	Lake	N/A	46.236285	-117.700049	Columbia	1	Eastern	WDFW & USFS
Downs Lake	Lake	N/A	47.279381	-117.808298	Spokane	1	Eastern	WDFW & Private Entities
Dream Lake	Lake	N/A	48.5796	-123.0839	San Juan	4	Western	WDFW
Drunken Charlie Lake	Lake	N/A	47.763881	-121.813686	King	4	Western	WDFW, WDNR & KCWLR
Dry Falls Lake	Lake	N/A	47.603663	-119.359123	Grant	2	Eastern	WDFW & WSPRC
Dry Lake	Lake	N/A	47.911558	-120.173843	Chelan	2	Eastern	WDFW & LCRD
Duck Lake	Lake	N/A	46.997423	-124.147699	Grays Harbor	6	Western	WDFW, QIN & City of Ocean Shores
Duley Lake	Lake	N/A	48.1655	-119.4938	Okanogan	2	Eastern	CTCR
Dusty Lake	Lake	N/A	47.139093	-119.949076	Grant	2	Eastern	WDFW
Duwamish River	River	N/A	47.5196	-122.3069	King	4	Western	WDFW, USACE, Muckleshoot Indian Tribe, Suquamish Indian Tribe, WRIA 9 SRC, USEPA & KCWLR
Easton Ponds	Pond	N/A	47.234701	-121.168984	Kittitas	3	Eastern	WDFW
Echo Lake	Lake	N/A	47.992356	-121.796537	Snohomish	4	Western	WDFW & USFS

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

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

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

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

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

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

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	Entities
Lake Sammamish	Lake	N/A	47.564913	-122.057068	King	4	Western	WDFW, Muckleshoot Indian Tribe, Suquamish Indian Tribe, Snoqualmie Indian Tribe, WRIA 8 SRC, WA State Parks, WDNR & KCWLR
Lake Sawyer	Lake	N/A	47.340915	-122.038936	King	4	Western	WDFW, City of Black Diamond & KCWLR
Lake Scanewa	Reservoir	Scanewa	46.474736	-122.090887	Lewis	5	Western	WDFW & Tacoma Power
Lake Serene	Lake	N/A	47.869861	-122.285584	Snohomish	4	Western	WDFW
Lake Shannon	Reservoir	N/A	48.562399	-121.734075	Skagit	4	Western	WDFW & PSE
Lake Sherry	Lake	N/A	48.605045	-117.543446	Stevens	1	Eastern	WDFW & USFS
Lake Shoecraft	Lake	N/A	48.1258	-122.307	Snohomish	4	Western	WDFW
Lake Stevens	Lake	N/A	48.01307	-122.06682	Snohomish	4	Western	WDFW & Snohomish County Parks
Lake Sutherland	Lake	N/A	48.078623	-123.715003	Clallam	6	Western	WDFW, Lower Elwha Klallam Tribe & NPS
Lake Swano	Lake	N/A	46.95336	-123.8004	Grays Harbor	6	Western	WDFW & QIN
Lake Symington	Reservoir	William Symington	47.5961	-122.8299	Kitsap	6	Western	WDFW, Lake Symington HOA & Ft. Wm. Symington HOA
Lake Tapps	Reservoir	Tapps	47.2409	-122.1743	Pierce	6	Western	WDFW, Pierce County, City of Bonney Lake
Lake Terrell	Lake	N/A	48.86171	-122.68919	Whatcom	4	Western	WDFW
Lake Thomas	Lake	N/A	48.622108	-117.540915	Stevens	1	Eastern	WDFW & USFS
Lake Umatilla	Reservoir	Umatilla	46.2441047	-119.2054862	Benton	3	Eastern	WDFW, ODFW & USACE
Lake Union	Lake	N/A	47.6445	-122.3346	King	4	Western	WDFW, Muckleshoot Indian Tribe, Suquamish Indian Tribe, WRIA 8 SRC, USACE, WDNR & KCWLR
Lake Wallula	Reservoir	Wallula	46.238556	-119.2190711	Benton	3	Eastern	WDFW, ODFW, USFWS, USACE, Yakama Nation & CTUIR
Lake Washington	Lake	N/A	47.647609	-122.276007	King	4	Western	WDFW, Muckleshoot Indian Tribe, Suquamish Indian Tribe, WRIA 8 SRC, USACE, WDNR, USEPA & KCWLR
Lake Washington Ship Canal	Canal	N/A	47.6596	-122.3769	King	4	Western	WDFW, Muckleshoot Indian Tribe, Suquamish Indian Tribe, WRIA 8 SRC, USACE, WDNR & KCWLR
Lake Wenatchee	Lake	N/A	47.807847	-120.7261069	Chelan	2	Eastern	WDFW, WSPRC & USFS
Lake Whatcom	Lake	N/A	48.67356	-122.31585	Whatcom	4	Western	WDFW & City of Bellingham

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	Entities
Lake Whitman	Lake	N/A	46.963023	-122.257368	Pierce	6	Western	WDFW
Lake Wooten	Lake	N/A	47.467303	-122.981581	Mason	6	Western	WDFW
Langendorfer Lake	Lake	N/A	47.75404	-121.852075	King	4	Western	WDFW, WDNR & KCWLR
Langlois Lake	Lake	N/A	47.635	-121.8847	King	4	Western	WDFW & KCWLR
Larsen Lake	Lake	N/A	47.6059	-122.1401	King	4	Western	WDFW, City of Bellevue & KCWLR
Lavender Lake	Lake	N/A	47.2179	-121.1274	Kittitas	3	Eastern	WDFW
Lead King Beaver Pond	Pond	N/A	48.93873	-117.35603	Pend Oreille	1	Eastern	WDFW, Riley Creek Timber & USFS
Leadbetter Lake	Lake	N/A	48.917498	-117.355362	Pend Oreille	1	Eastern	WDFW & USFS
Leader Lake	Lake	N/A	48.359905	-119.678267	Okanogan	2	Eastern	WDFW & WDNR
Leech Lake	Lake	N/A	46.6447	-121.383	Yakima	3	Eastern	WDFW & USFS
Leland Lake	Lake	N/A	47.896676	-122.881788	Jefferson	6	Western	WDFW, Skokomish Indian Tribe & PNP Treaty Council
Lemna Lake	Lake	N/A	46.942577	-119.229909	Grant	2	Eastern	WDFW & USFWS
Lenice Lake	Lake	N/A	46.84088	-119.834982	Grant	2	Eastern	WDFW
Leroy Burns Pond	Pond	N/A	46.2323	-123.3241	Wahkiakum	5	Western	WDFW
Lewis River	River	N/A	45.8686	-122.731	Clark	5	Western	WDFW & PacificCorp
Liberty Lake	Lake	N/A	47.653852	-117.084098	Spokane	1	Eastern	WDFW & Spokane County
Lilly Lake	Reservoir	Lilly	47.294792	-120.308571	Chelan	2	Eastern	WDFW & Stemilt Irrigation District
Lincoln Park Pond 1	Pond	N/A	48.115624	-123.476152	Clallam	6	Western	WDFW, Jamestown S'Klallam Tribe & Clallam County
Lions Park Pond	Pond	N/A	46.040982	-118.375655	Walla Walla	1	Eastern	WDFW
Little Ash Lake	Lake	N/A	45.669287	-121.910478	Skamania	5	Western	WDFW
Little Beaver Lake	Reservoir	N/A	48.849776	-118.961988	Okanogan	2	Eastern	WDFW & USFS
Little Falls Reservoir	Reservoir	Little Falls	47.8352	-117.9104	Stevens	1	Eastern	WDFW & Avista Utilities
Little Goose Lake	Lake	N/A	48.275	-119.5171	Okanogan	2	Eastern	CTCR
Little Green Lake	Lake	N/A	48.437093	-119.62953	Okanogan	2	Eastern	WDFW
Little Lost Lake	Lake	N/A	48.821436	-117.439076	Pend Oreille	1	Eastern	WDFW & Riley Creek Timber
Little Spokane River	River	N/A	47.7901	-117.4003	Spokane	1	Eastern	WDFW & WSPRC
Little Twin Lake	Lake	N/A	48.449225	-120.189797	Okanogan	2	Eastern	WDFW
Little Twin Lake	Lake	N/A	48.572653	-117.642592	Stevens	1	Eastern	WDFW & USFS
Lois Lake	Lake	N/A	46.950488	-119.165685	Grant	2	Eastern	WDFW
Lone Lake	Lake	N/A	48.021126	-122.461805	Island	4	Western	WDFW & Island County
Long Lake	Lake	N/A	46.6899	-118.2381	Franklin	3	Eastern	Harder Farms & WDNR
Long Lake	Lake	N/A	47.4852	-122.5921	Kitsap	6	Western	WDFW & Kitsap County

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

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	Entities
McCabe Pond	Pond	N/A	46.924453	-120.507147	Kittitas	3	Eastern	WDFW & WSPRC
McDaniel Lake	Lake	N/A	46.807241	-121.110328	Yakima	3	Eastern	WDFW & USFS
McDowell Lake	Lake	N/A	48.465029	-117.676345	Stevens	1	Eastern	WDFW & USFWS
McGinnis Lake	Lake	N/A	48.036	-118.8928	Okanogan	2	Eastern	CTCR
McIntosh Lake	Lake	N/A	46.866594	-122.76761	Thurston	6	Western	WDFW
Medical Lake	Lake	N/A	47.563044	-117.690143	Spokane	1	Eastern	WDFW & City of Medical Lake
Melbourne Lake	Lake	N/A	47.500781	-123.127541	Mason	6	Western	WDFW & WDNR
Menzel Lake	Lake Manmade	N/A	48.04018	-121.92037	Snohomish	4	Western	Private
Mercer Slough	Slough	N/A	47.582	-122.1858	King	4	Western	WDFW, Muckleshoot Indian Tribe, Suquamish Indian Tribe, City of Bellevue, WRIA 8 SRC & KCWLR
Merrill Lake	Lake	N/A	46.094333	-122.324233	Cowlitz	5	Western	WDFW & WDNR
Mesa Lake	Lake	N/A	46.567828	-119.037891	Franklin	3	Eastern	WDFW
Methow River	River	N/A	48.04575	-119.91168	Okanogan	2	Eastern	WDFW & USFS
Meyers Falls Reservoir	Reservoir	Myers Falls	48.596	-118.0584	Stevens	1	Eastern	WDFW
Milk Lake	Lake	N/A	46.984977	-120.996136	Kittitas	3	Eastern	WDFW
Milk Pond	Pond	N/A	46.986693	-121.06156	Kittitas	3	Eastern	WDFW & USFS
Mineral Lake	Lake	N/A	46.7203	-122.182	Lewis	5	Western	WDFW
Mint Lake	Lake Manmade	N/A	45.89392	-122.50722	Clark	5	Western	Private
Mission Lake	Lake	N/A	47.532294	-122.825118	Kitsap	6	Western	WDFW
Mission Pond	Pond	N/A	48.271142	-120.240592	Okanogan	2	Eastern	WDFW & USFS
Mitchell Pond	Pond	N/A	46.06271	-118.951675	Benton	3	Eastern	WDFW & USFWS
Molson Lake	Lake	N/A	48.988026	-119.206914	Okanogan	2	Eastern	WDFW
Moses Lake	Lake	N/A	47.1055272	-119.326228	Grant	2	Eastern	WDFW & Reclamation
Moss Lake	Lake	N/A	47.694115	-121.850073	King	4	Western	WDFW & KCWLR
Mound Pond	Pond	N/A	46.028572	-118.965528	Benton	3	Eastern	WDFW & USFWS
Mountain Lake	Lake	N/A	48.660119	-122.816263	San Juan	4	Western	WDFW & WSPRC
Mountain Meadows Lake	Lake	N/A	48.1946	-117.23082	Pend Oreille	1	Eastern	WDFW
Mud Lake	Lake	N/A	46.772144	-120.834993	Yakima	3	Eastern	WDFW
Mudgett Lake	Lake	N/A	48.038976	-118.219205	Stevens	1	Eastern	WDFW
Munn Lake	Lake	N/A	46.985028	-122.879391	Thurston	6	Western	WDFW
Muskegon Lake	Lake	N/A	48.7977	-117.0381	Pend Oreille	1	Eastern	WDFW & USFS
Myron Lake	Lake	N/A	46.622131	-120.556064	Yakima	3	Eastern	WDFW
Mystic Lake	Lake	N/A	48.327843	-117.143753	Pend Oreille	1	Eastern	WDFW & USFS

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

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

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

Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	Entities
Sammamish River	River	N/A	47.7543	-122.2506	King	4	Western	WDFW, Muckleshoot Indian Tribe, Suquamish Indian Tribe, WRIA 8 SRC, USACE & KCWLR
Sandy Shore Lake	Lake	N/A	47.890814	-122.767617	Jefferson	6	Western	WDFW, Skokomish Indian Tribe & PNP Treaty Council
Schalow Pond	Pond	N/A	48.600548	-119.677246	Okanogan	2	Eastern	WDFW
Scooteney Reservoir	Reservoir	Scooteney	46.7046801	-119.0249045	Franklin	3	Eastern	WDFW & Reclamation
Scott Lake	Lake	N/A	46.9189	-122.9324	Thurston	6	Western	WDFW
Scriber Lake	Lake	N/A	47.820505	-122.307294	Snohomish	4	Western	WDFW & City of Lynnwood
Shadow Lake	Lake	N/A	47.405695	-122.086397	King	4	Western	WDFW & KCWLR
Shady Lake	Lake	N/A	47.429321	-122.106794	King	4	Western	WDFW & KCWLR
Shaw Lake	Lake	N/A	47.93291	-121.693691	Snohomish	4	Western	WDFW & WSPRC
Shelley Lake	Lake	N/A	47.6515	-117.1847	Spokane	1	Eastern	WDFW & Private Entities
Shiner Lake	Lake	N/A	46.878383	-119.300263	Adams	2	Eastern	USFWS
Shoveler Lake	Lake	N/A	46.942446	-119.228153	Grant	2	Eastern	WDFW & USFWS
Sidley Lake	Lake	N/A	48.990656	-119.22308	Okanogan	2	Eastern	WDFW
Silcott Pond	Pond	N/A	46.411902	-117.19155	Asotin	1	Eastern	WDFW
Silent Lake	Lake	N/A	47.790192	-122.770777	Jefferson	6	Western	WDFW, Skokomish Indian Tribe, PNP Treaty Council & WDNR
Silver Lake	Lake	N/A	47.571576	-117.655332	Spokane	1	Eastern	WDFW
Silver Lake	Lake	N/A	46.31	-122.776667	Cowlitz	5	Western	WDFW
Silver Lake	Lake	N/A	46.884852	-122.365583	Pierce	6	Western	WDFW
Silver Lake	Lake	N/A	47.892498	-122.208828	Snohomish	4	Western	WDFW & City of Everett
Silver Lake	Lake	N/A	48.978457	-122.069853	Whatcom	4	Western	WDFW & Whatcom County
Silver Nail Lake	Lake	N/A	48.993217	-119.464077	Okanogan	2	Eastern	WDFW
Silverado Lake	Lake Manmade	N/A	46.63515	-123.05031	Lewis	5	Western	Private
Sixteen Lake	Lake	N/A	48.344219	-122.288796	Skagit	4	Western	WDFW
Skagit River	River	N/A	48.490016	-122.206718	Skagit	4	Western	USFS & SCL
Ski Park Lake	Lake Manmade	N/A	47.10107	-122.14768	Pierce	6	Western	Private
Ski View Lake	Lake Manmade	N/A	46.96416	-122.96434	Thurston	6	Western	Private
Skookumchuck Reservoir	Reservoir	Skookumchuck	46.785449	-122.699039	Thurston	6	Western	WDFW
Skykomish River	River	N/A	47.9988	-122.1781	Snohomish	4	Western	WDFW, Tulalip Tribes, King County & WDNR
Smelling Lake	Lake	N/A	48.059194	-121.876985	Snohomish	4	Western	WDFW

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

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

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

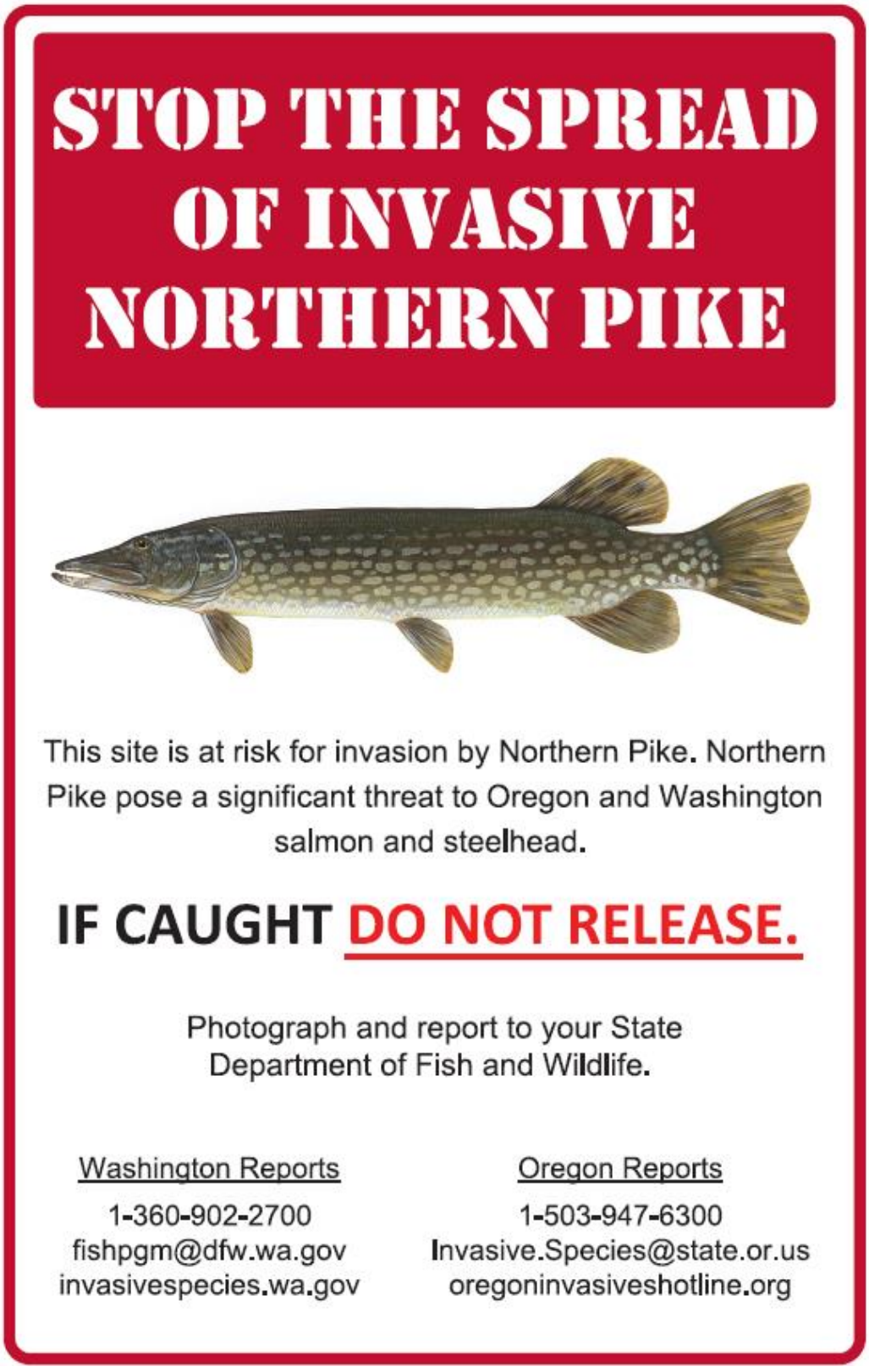
Water Body Common Name	Water Body Category	Reservoir Name	Latitude	Longitude	County	WDFW Region #	Mountain Range	Entities
Wanapum Lake	Reservoir	Wanapum	47.2151551	-119.9940088	Grant	2	Eastern	WDFW & Grant PUD
Wannacut Lake	Lake	N/A	48.869072	-119.517267	Okanogan	2	Eastern	WDFW
Wapato Lake	Lake	N/A	47.9128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

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

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, Recreation & Tourism
Snohomish PUD: Public Utility District No. 1 of Snohomish County
SPU: City of Seattle, Seattle Public Utilities
Tacoma Power: City of Tacoma, Tacoma Public Utilities
Thurston County Parks: Thurston County Parks & Recreation
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 Services
WHRD: Wenatchee Heights Reclamation District
WRIA 8 SRC: Water Resource Inventory Area 8 Salmon Recovery Council
WRIA 9 SRC: Water Resource Inventory Area 9 Salmon Recovery Council
WSPRC: Washington State Parks and Recreation Commission
Yakama Nation: Confederated Tribes and Bands of the Yakama Nation

APPENDIX B Public Outreach Signs



Appendix Figure B-1. Example public outreach sign provided by Washington Invasive Species Council. This sign is being phased out and replaced with Figure B-2.

Appendix Figure B-2. Example of a new public outreach sign provided by Washington Invasive Species Council and Washington Department of Fish and Wildlife that will replace the older sign depicted in Figure B-1.

THE PROBLEM

Background

Northern pike are illegally introduced, highly invasive predators in the Columbia River. These voracious fish feed on juvenile salmon and are currently spreading downstream, threatening crucial salmon and steelhead populations.

Why Care?

Washington has invested billions of dollars in the Columbia River region in salmon recovery. If Northern Pike become established further down the Columbia River, the vital salmon runs of the river and its surrounding tributaries, and all the resources invested in their recovery are in jeopardy.


Adam Sepulveda, US Geologic Survey

Salmon fishing is also a big business in Washington. Recreational anglers spend over $1 billion in Washington State on trip-related expenses, such as restaurants, motels, gas, convenience and sporting goods stores, creating more than 14,600 jobs. Further, tribal fisheries, both commercial and ceremonial, would suffer if Northern Pike decreased salmon numbers.

Stocking and introductions of illegal fish species, such as Northern Pike, jeopardize jobs and costs hundreds of thousands of taxpayer dollars to remove.

DO YOUR PART

Catch. Kill. Report.

If found or caught, kill the Northern Pike. **DO NOT** release. There are no catch limits on Northern Pike.

IT'S THE LAW

It is **ILLEGAL** to leave Washington waters with live Northern Pike.
You **CANNOT** transport live fish without a permit.

REPORTING

To report a catch and/or location:

WASHINGTON

☎ 1-360-902-2700
✉ fishpgm@dfw.wa.gov
Create a report at invasivespecies.wa.gov
Use the 'WA Invasives' app on iOS or Android

OREGON

☎ 1-866-INVADER
✉ invasive.species@state.or.us
Create a report at oregoninvasiveshotline.org

Report releasing or transport of pike to the police or your local county sheriff's department.

STOP THE SPREAD OF INVASIVE NORTHERN PIKE


Alaska Department of Fish and Game

Northern Pike pose a significant threat to Oregon and Washington salmon and steelhead.

IF CAUGHT DO NOT RELEASE.

Photograph and Report to your state Department of Fish and Wildlife.

IMPACTED AREAS

In Washington, Northern Pike were illegally introduced into the Pend Oreille River and have spread from there. They are currently known to be established above the Grand Coulee Dam. They are negatively affecting the upper reaches of the Columbia River watershed and surrounding tributaries in Washington, Idaho, Montana and Canada. They are only two dams away from vital spawning habitat, where they would threaten valuable fisheries, native species, and the ecosystem.

Recreation and Conservation Office

Native American tribes, public utility districts and state agencies are working together to prevent further downstream spread of Northern Pike.

IDENTIFICATION

Everyone can help by learning how to identify Northern Pike and reporting them if found.

Pattern: lateral rows of white to yellow, bean-shaped spots.
Shape: Typically longer and have a snake like look compared to other native fish species.


Shay Wolvert, Confederated Tribes of the Colville

Dorsal (top) fin: extends far back, much closer to the tail than on many other fish species. Fins have black blotches and are usually yellow, orange or red in color.
Turn it on its head: there are up to five pairs of sensory pores on the underside of a pike's jaw, meant for picking up vibrations in the water.

University of Wisconsin SeaGrant, John Lyons

KNOW THE DIFFERENCE

A native fish often confused with Northern Pike due to their similar names is the Northern Pikeminnow. While considered a nuisance fish, Northern Pikeminnow are native to the Pacific Northwest. While the two fish share similar names, they differ greatly in appearance.

Northern Pike

- Olive green color
- Horizontal, bean- shaped spots
- 1-5 sensory pores
- Duck-bill shaped snout
- Sharp teeth
- Average 26 inches and 4 pounds

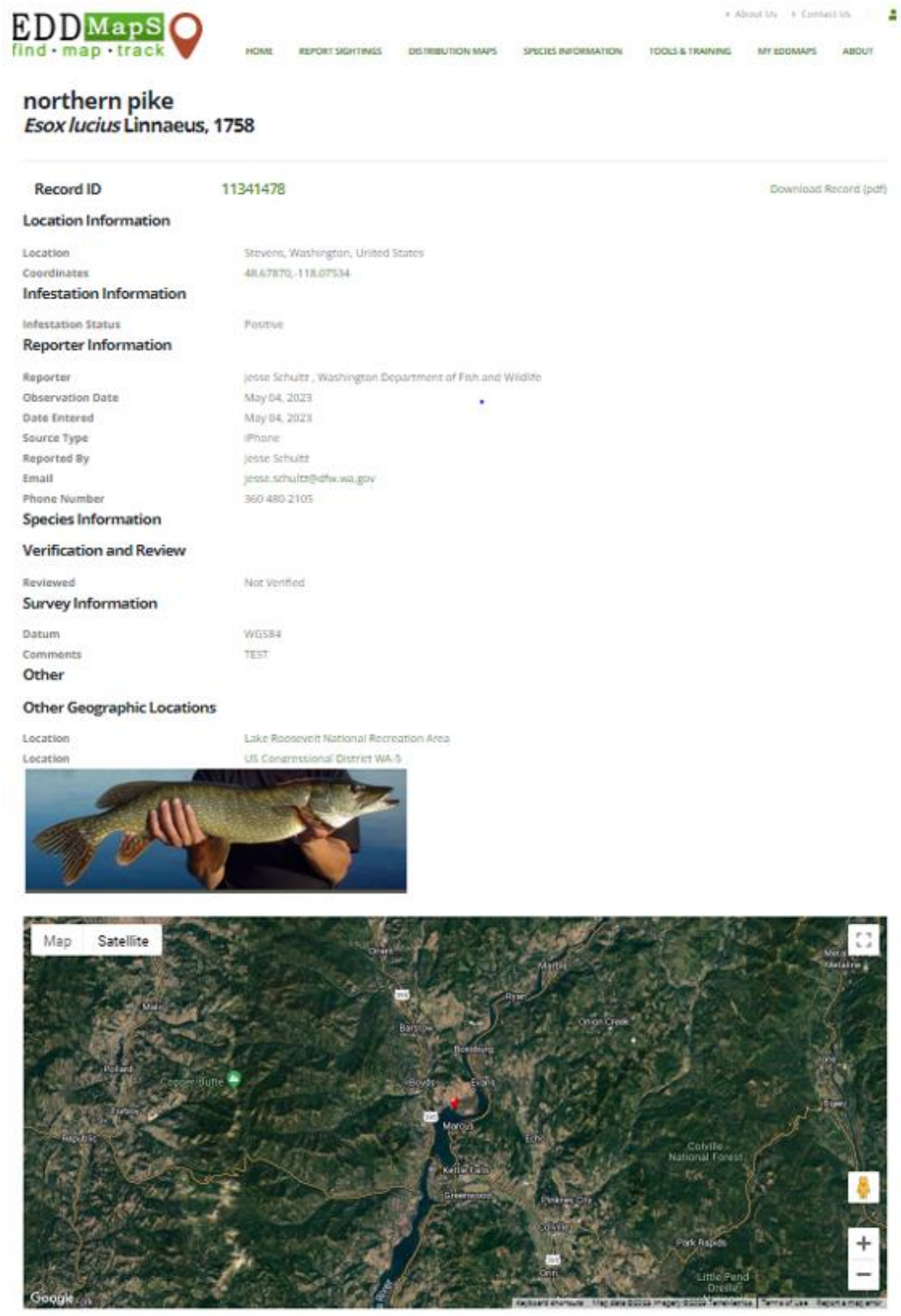
United States Fish and Wildlife Service, Timothy Knepp

Northern Pikeminnow

- Silver color (darker depending on habitat)
- No spots
- No sensory pores
- Long mouth, ends below its eye
- No teeth
- Average 15 inches and 1 pound

Washington Department of Fish and Wildlife

Appendix Figure B-3. Northern Pike brochure provided by the Washington Invasive Species Council.



Appendix Figure B-4. Example of an aquatic invasive species report.

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

Appendix Figure B-6. Example public outreach sign provided by Washington Invasive Species Council.

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

APPENDIX C Environmental DNA (eDNA) Index Sites

The following data represent the best-known data as of the publication of this Response Plan. Changes to these index sites should be communicated to WDFW (ais@dfw.wa.gov) to ensure these data remain current.

Appendix Table C-1. List of locations where eDNA samples are collected at a minimum of an annual basis to monitor for Northern Pike.

Entity	Waterbody	Site Name	Latitude	Longitude
CTCR	Banks Lake	Inlet Osborne Campsite	47.92376	-119.06030
	Banks Lake	West Bank Ankey Boat Launch	47.62818	-119.32777
	Banks Lake	Mid Highway at Dam	47.61981	-119.30811
	Banks Lake	Steamboat Campground Bay	47.85346	-119.12748
	Banks Lake	Coulee City Boat Launch	47.61977	-119.29652
	Columbia River	Rufus Woods, near Nespelem River North	48.13003	-119.04355
	Columbia River	Rufus Woods, near Nespelem River South	48.12393	-119.04322
	Columbia River	Rufus Woods, Bridgeport State Park Boat Launch	48.01430	-119.60708
	Columbia River	Rufus Woods, Willow Flats Fish Dock	47.99374	-119.62310
	Columbia River	Rufus Woods, Seatons Grove Boat Launch	48.03567	-118.97119
	Columbia River	Rufus Woods, Coyote Creek	48.14607	-119.11182
	Columbia River	Rufus Woods, Gravel Boat Launch	48.14164	-119.07202
	Columbia River	Rufus Woods, Timms' Ranch Boat Launch	48.10223	-119.32572
	Columbia River	Wells Pool, Washburn Island 1	48.09312	-119.66639
	Columbia River	Wells Pool, Washburn Island 2	48.09512	-119.66765
	Okanogan River	Mosquito Park West Bank	48.10287	-119.71017
	Okanogan River	Malott Bridge East Bank	48.28014	-119.70447
	Okanogan River	Malott Bridge West Bank	48.28082	-119.70486
	Okanogan River	Monse Bridge East Bank	48.14045	-119.67211
	Okanogan River	Monse Bridge West Bank	48.14047	-119.67441
	Okanogan River	Mosquito Park East Bank	48.10306	-119.70863
Douglas PUD	Columbia River	Lake Pateros, Starr Ramp Upriver from Azwell (9 Right)	47.98077	-119.88876
	Columbia River	Lake Pateros, across from Starr Ramp East (10 Left)	47.98147	-119.87442
	Columbia River	Lake Pateros, Bridgeport Conklin Landing West (7 Left)	48.02389	-119.69213
	Columbia River	Lake Pateros, Bridgeport Conklin Landing East (8 Right)	48.02418	-119.68786
	Columbia River	Lake Pateros, Wells Wildlife Area Side Channel (1 East)	48.07483	-119.68604
	Columbia River	Lake Pateros, Wells Wildlife Area Side Channel (2 West)	48.07532	-119.68695
	Okanogan River	Mosquito West (4 Right)	48.10197	-119.71122
	Okanogan River	Mosquito East (3 Left) Mouth HWY 97 Park	48.10252	-119.70883
	Okanogan River	Wakefield West (5 Right)	48.20743	-119.71259
	Okanogan River	Wakefield East (6 Left)	48.20816	-119.71244
Grant PUD	Columbia River	Priest Rapids Lake, Buckshot Wildlife Area	46.71180	-119.95320
	Columbia River	Priest Rapids Lake, Crab Creek Mouth	46.81510	-119.92270
	Columbia River	Wanapum Lake, Crescent Bar Marina	47.21516	-119.99401
	Columbia River	Wanapum Lake, Sunland Estates Ramp	47.06890	-120.02570
	Columbia River	Wanapum Lake, Wanapum State Park	46.90540	-119.98770
WDFW	Banks Lake	Ankeny Ramp #1	47.62820	-119.32765
	Banks Lake	Ankeny Ramp #2	47.64045	-119.32169
	Banks Lake	Coulee City Marina	47.61714	-119.29415
	Banks Lake	Coulee Playland/Electric City	47.93590	-119.03090
	Banks Lake	Steamboat Rock State Park #1 Main	47.86331	-119.11810
	Banks Lake	Steamboat Rock State Park #2 Northrop	47.87233	-119.09833
	Banks Lake	Steamboat Rock State Park #3 Osborne	47.92350	-119.06030
	Banks Lake	Osborne Bay Ramp	47.91750	-119.05320
	Banks Lake	Sunbanks Resort	47.92630	-119.05780
	Columbia River	Lake Entiat, Lincoln Rock State Park	47.54041	-120.28048
	Columbia River	Lake Entiat, Orondo River Park	47.65681	-120.21651

Entity	Waterbody	Site Name	Latitude	Longitude
	Columbia River	Lake Entiat, Chelan Falls Park	47.79708	-119.98483
	Columbia River	Lake Entiat, Entiat City Park	47.66572	-120.21935
	Columbia River	Lake Entiat, Ramp across from Entiat City Park	47.66530	-120.20780
	Columbia River	Lake Entiat, Beebe Bridge Park	47.80817	-119.97440
	Columbia River	Lake Entiat, Daroga State Park	47.71135	-120.20863
	Columbia River	Lake Pateros, Pateros City Park	48.05510	-119.89560
	Columbia River	Lake Pateros, Brewster Columbia Cove Park	48.09023	-119.78617
	Columbia River	Lake Pateros, Bridgeport Marina Park	48.01480	-119.67810
	Columbia River	Lake Pateros, Conklin Landing Ramp	48.01850	-119.68560
	Columbia River	Lake Pateros, Chicken Creek Ramp	48.09390	-119.66800
	Columbia River	Priest Rapids Lake, Buckshot Wildlife Area	46.71180	-119.95320
	Columbia River	Priest Rapids Lake, Crab Creek Mouth	46.81510	-119.92270
	Columbia River	Priest Rapids Lake, Lake Geneva Middle	46.73770	-119.96580
	Columbia River	Priest Rapids Lake, Desert Air Park	46.68360	-119.93270
	Columbia River	Priest Rapids Lake, Wanapum Tailrace Ramp	46.86440	-119.96790
	Columbia River	Priest Rapids Lake, Priest Rapids Forebay Ramp	46.64330	-119.92540
	Columbia River	Elochoman/Cathlamet Marina Kalama Marina Willow Grove Ramp Beacon Rock State Park Port of Camas/Washougal Marina Marine County Park Hamilton Island Ramp	46.20682	-123.38733
	Columbia River	Kalama Marina	46.00948	-122.84855
	Columbia River	Willow Grove Ramp	46.17313	-123.08403
	Columbia River	Beacon Rock State Park	45.62240	-122.01990
	Columbia River	Port of Camas/Washougal Marina	45.57706	-122.38273
	Columbia River	Marine County Park	45.61200	-122.63350
	Columbia River	Hamilton Island Ramp	45.63370	-121.96520
	Columbia River	Rock Island Lake, Wenatchee Riverfront Park	47.42506	-120.30569
	Columbia River	Rock Island Lake, South Wenatchee/Kirby Billingsley Hydro Park	47.38751	-120.26607
	Columbia River	Rock Island Lake, Wenatchee Confluence State Park	47.46231	-120.32155
	Columbia River	Rufus Woods, Bridgeport State Park	48.01410	-119.60720
	Columbia River	Rufus Woods, Seatons Grove Ramp	48.03580	-118.97150
	Columbia River	Wanapum Lake, Vantage Ramp	46.94125	-119.98392
	Columbia River	Wanapum Lake, Quilomene Yacht Club	47.06890	-120.03160
	Columbia River	Wanapum Lake, Crescent Bar Marina	47.21516	-119.99401
	Columbia River	Wanapum Lake, Sunland Estates Ramp	47.06890	-120.02570
	Columbia River	Wanapum Lake, Wanapum Forebay Ramp	46.88290	-119.95680
	Columbia River	Wanapum Lake, Vantage Docks	46.94190	-119.98398
	Columbia River	Wanapum Lake, Wanapum State Park	46.90540	-119.98770
	Columbia River	Lake Bonneville, Bingen Ramp	45.70852	-121.45740
	Columbia River	Lake Bonneville, Drano Lake Ramp	45.71078	-121.63889
	Columbia River	Lake Bonneville, Sailboard Park	45.69410	-121.87750
	Columbia River	Lake Bonneville, Wind River Ramp	45.71790	-121.78910
	Columbia River	Lake Celilo, Avery Ramp	45.66240	-121.03540
	Columbia River	Lake Celilo, Maryhill State Park East	45.68287	-120.82049
	Columbia River	Lake Celilo, Maryhill State Park West	45.67980	-120.83600
	Columbia River	Lake Roosevelt, China Bend Ramp	48.81041	-117.95099
	Columbia River	Lake Roosevelt, Evans Campground	48.69923	-118.01988
	Columbia River	Lake Roosevelt, Gifford Campground	48.28547	-118.14393
	Columbia River	Lake Roosevelt, Hunters Park	48.12960	-118.22550
	Columbia River	Lake Roosevelt, Keller Ferry Ramp	47.92727	-118.69338

Entity	Waterbody	Site Name	Latitude	Longitude
	Columbia River	Lake Roosevelt, Kettle Falls Marina	48.59914	-118.12364
	Columbia River	Lake Roosevelt, Marcus Island Campground	48.66644	-118.06514
	Columbia River	Lake Roosevelt, North Gorge Campground	48.78696	-118.00135
	Columbia River	Lake Roosevelt, Northport City Ramp	48.92210	-117.77155
	Columbia River	Lake Roosevelt, Jones Bay Campground	47.92080	-118.58215
	Columbia River	Lake Roosevelt, Seven Bays Marina	47.85390	-118.34158
	Columbia River	Lake Roosevelt, Spring Canyon Campground	47.93630	-118.93420
	Columbia River	Lake Roosevelt, Bradbury Ramp	48.51443	-118.14911
	Columbia River	Lake Roosevelt, Crescent Bay Ramp	47.94780	-118.98680
	Columbia River	Lake Roosevelt, Daisy Ramp	48.37546	-118.16785
	Columbia River	Lake Roosevelt, Hansen Harbor Ramp	47.92160	-118.62570
	Columbia River	Lake Roosevelt, French Point Rocks Ramp	48.49455	-118.19749
	Columbia River	Lake Roosevelt, Snag Cove Campground	48.73294	-118.05873
	Columbia River	Lake Roosevelt, Lincoln Mill Ramp	47.82984	-118.40606
	Columbia River	Lake Roosevelt, Hawk Creek Campground	47.81454	-118.32489
	Columbia River	Lake Umatilla, Crows Butte Park	45.85660	-119.85350
	Columbia River	Lake Umatilla, Plymouth Park Ramp	45.92944	-119.35217
	Columbia River	Lake Umatilla, Railroad Island/Upper John Day Dam Ramp	45.72414	-120.69794
	Columbia River	Lake Umatilla, Roosevelt Ramp	45.73110	-120.22513
	Columbia River	Lake Umatilla, Sundale Park	45.71920	-120.31430
	Columbia River	Lake Wallula, Columbia Park East	46.22200	-119.13820
	Columbia River	Lake Wallula, Columbia Park Marina Island View	46.23868	-119.21898
	Columbia River	Lake Wallula, Columbia Point Park Marina	46.26450	-119.25110
	Columbia River	Lake Wallula, Howard Amon Richland South Ramp	46.27961	-119.27062
	Columbia River	Lake Wallula, Snyder Ramp Leslie Groves Park Richland North	46.31428	-119.26024
	Columbia River	Lake Wallula, McNary Ramp	45.94360	-119.29730
	Columbia River	Lake Wallula, Clover Island Marina	46.21675	-119.11588
	Columbia River	Lake Wallula, Walla Walla Yacht Club	46.02661	-118.93624
	Columbia River	Lake Wallula, Chiawana Park	46.24411	-119.20551
	Columbia River	Lake Wallula, Columbia Park West Pasco	46.23380	-119.19060
	Columbia River	Lake Wallula, Wahluke Bend	46.72359	-119.53169
	Columbia River	Lake Wallula, South Slough Ruth	46.65235	-119.42343
	Columbia River	Lake Wallula, White Bluffs Ramp	46.67664	-119.45084
	Columbia River	Lake Wallula, Hanford Reach North Trailhead	46.67976	-119.44669
	Conconully Lake	Conconully Lake State Park Ramp	48.56424	-119.73050
	Conconully Reservoir	Liar's Cove Resort	48.54909	-119.74776
	Cowlitz River	Castlerock Ramp	46.27816	-122.91119
	Cowlitz River	Mayfield Lake, Mayfield Lake Resort	46.50350	-122.57200
	Cowlitz River	Mayfield Lake, Ike Kinswa State Park	46.55408	-122.53686
	Cowlitz River	Mayfield Lake, Washington State Park (old county)	46.53160	-122.55910
	Curlew Lake	Curlew State Park	48.72135	-118.66256
	Curlew Lake	Tiffany's Resort	48.74839	-118.66949
	Diamond Lake	WDFW Ramp	48.12950	-117.18720
	Eloika Lake	WDFW Ramp & Private Dock North	48.01887	-117.36768
	Fan Lake	WDFW Ramp	48.05420	-117.40350
	Horseshoe Lake	WDFW Ramp	48.11149	-117.41657
	Lake Chelan	25 Mile Creek State Park	47.99376	-120.26177
	Lake Chelan	Old Mill Park (Manson)	47.87746	-120.12842
	Lake Chelan	Chelan River Park	47.83510	-120.01420
	Lake Chelan	Lakeshore Marina	47.84138	-120.02515
	Lake Chelan	Lake Chelan State Park	47.87521	-120.19614
	Lake Chelan	Sunset Marina public dock between two private co. that have boat ramps	47.83689	-120.03633

Entity	Waterbody	Site Name	Latitude	Longitude
	Lake Chelan	Lake Chelan Yacht Club	47.92004	-120.20904
	Lake Chelan	Cove Marina	47.90825	-120.21537
	Lake Washington	Factoria 40th St Ramp	47.57494	-122.19039
	Lake Washington	Gene Coulon Park	47.50595	-122.20310
	Lake Washington	Kirkland Ramp	47.67324	-122.20788
	Lake Washington	Atlantic City Park	47.52270	-122.26280
	Lake Washington	Stan Sayres Park	47.57138	-122.27551
	Lake Washington	Magnuson Park	47.67654	-122.24831
	Lake Washington	North Lake Marina	47.75670	-122.25910
	Lake Washington	Leschi South Moorage Craig manager 206 391-6431	47.60070	-122.28430
	Lake Washington	I-90 Bridge Frontage Rd Ramp	47.57790	-122.20190
	Lake Washington	520 Bridge	47.64761	-122.27601
	Lake Whatcom	Bloedal-Donovan Park	48.76147	-122.41699
	Lake Whatcom	WDFW Ramp	48.67398	-122.31422
	Little Spokane River	Pine River Park	47.78962	-117.40020
	Little Spokane River	Public Ramp	47.79010	-117.40030
	Moses Lake	Montlake Park	47.10860	-119.28500
	Moses Lake	Cascade Valley Park	47.13630	-119.31850
	Moses Lake	Lower Peninsula Park	47.09051	-119.31079
	Moses Lake	Blue Heron Park	47.10670	-119.32720
	Moses Lake	Pier 4 Sunrise Resort	47.10137	-119.32538
	Moses Lake	WDFW Ramp North	47.22954	-119.42899
	Moses Lake	Connelly Park	47.18621	-119.34992
	Moses Lake	Cascade Marina	47.13630	-119.31850
	Osoyoos Lake	Veterans Memorial Park	48.94963	-119.43008
	Osoyoos Lake	Deep Bay Park	48.96429	-119.44185
	Palouse River	Lyons Ferry State Park	46.59340	-118.21747
	Pend Oreille River	Boundary Reservoir, Box Canyon Dam Ramp	48.78157	-117.41792
	Pend Oreille River	Boundary Reservoir, Metaline City Park	48.85282	-117.38582
	Pend Oreille River	Boundary Reservoir, Boundary Dam Campground (Pee Wee Falls Campground)	48.98241	-117.35049
	Pend Oreille River	Box Canyon Reservoir, Ione Town Park	48.74040	-117.41386
	Pend Oreille River	Box Canyon Reservoir, Old American Kampground	48.18745	-117.03837
	Pend Oreille River	Box Canyon Reservoir, Usk Ramp	48.31630	-117.27690
	Pend Oreille River	Box Canyon Reservoir, Cusick Ramp	48.33760	-117.29280
	Pend Oreille River	Box Canyon Reservoir, Skookum Creek Ramp	48.29362	-117.24998
	Pend Oreille River	Box Canyon Reservoir, Pioneer Park	48.21010	-117.05480
	Potholes Reservoir	Potholes State Park	46.98136	-119.34732
	Potholes Reservoir	Mar Don Resort	46.96760	-119.32010
	Potholes Reservoir	Glenn Williams Ramp	46.98360	-119.25626
	Potholes Reservoir	Blythe Ramp	46.96961	-119.33255
	Potholes Reservoir	Lind Coulee West Bridge Ramp	46.98895	-119.21038
	Skagit River	Ross Lake, Winnebago Flats	48.98670	-121.07310
	Skagit River	Ross Lake, NPS Old Dock South	48.97530	-121.08300
	Skagit River	Ross Lake, Ross Lake Resort	48.73926	-121.06100
	Snake River	Lake Bryan, Almota/Illia Landing Ramp	46.69690	-117.47060
	Snake River	Lake Bryan, Little Goose Airport Ramp	46.58550	-118.00310
	Snake River	Lake Bryan, Willow Landing Ramp	46.68260	-117.74950
	Snake River	Lake Bryan, Boyer Park and Marina	46.68420	-117.44930
	Snake River	Lake Bryan, Garfield County Port Ramp	46.61641	-117.79681
	Snake River	Lake Herbert G West, Lyons Ferry Marina	46.58710	-118.22250
	Snake River	Lake Herbert G West, Devil's Bench Campground	46.56706	-118.53657
	Snake River	Lake Herbert G West, Ayer Boat Basin Ramp	46.58690	-118.37030
	Snake River	Lake Herbert G West, Texas Rapids Park	46.56380	-118.09970

Entity	Waterbody	Site Name	Latitude	Longitude
	Snake River	Lake Sacajawea, Fishhook Park	46.31772	-118.76666
	Snake River	Lake Sacajawea, North Shore Recreation Area Ramp (Columbia Plateau Trail Park)	46.25280	-118.87640
	Snake River	Lake Sacajawea, Windust Park	46.53330	-118.57700
	Snake River	Lake Sacajawea, Charbonneau Park	46.25680	-118.84690
	Snake River	Lower Granite Lake, Chief Timothy State Park	46.41570	-117.19610
	Snake River	Lower Granite Lake, Offield Landing/Ferry Road Ramp	46.65190	-117.41770
	Snake River	Lower Granite Lake, Swallows Park	46.38660	-117.04660
	Snake River	Lower Granite Lake, Nisqually John Landing Ramp	46.47619	-117.23605
	Snake River	Lower Granite Lake, Blyton Landing Ramp	46.55950	-117.27175
	Snake River	Lower Granite Lake, Greenbelt Ramp	46.42140	-117.03820
	Snake River	Lower Granite Lake, Crum/Wawawai Landing Ramp	46.62900	-117.38090
	Snake River	Lower Granite Lake, HWY 128 Bridge Ramp	46.42230	-117.07200
	Snake River Arm	Sacajawea State Park	46.20173	-119.03745
	Snake River Arm	Hood Park (Burbank Slough)	46.21481	-119.01890
	Spokane River	Long Lake/Spokane Lake, Spokane Lake Campground	47.83360	-117.76130
	Spokane River	Long Lake/Spokane Lake, Riverside State Park	47.79410	-117.56730
	Spokane River	Long Lake/Spokane Lake, Willow Bay RV Resort and Marina	47.88000	-117.65780
	Spokane River	Long Lake/Spokane Lake, Confluence of Little Spokane River	47.78870	-117.53270
	Spokane River	Long Lake/Spokane Lake, Suncrest Park	47.81330	-117.60770
	Spokane River Arm	A Frame Cornelius Campground	47.94218	-118.19360
	Spokane River Arm	Fort Spokane Campground	47.90982	-118.31155
	Spokane River Arm	Two Rivers Marina	47.90544	-118.32320
	Spokane River Arm	Porcupine Bay Campground reopened	47.89740	-118.17470
	Willapa River	Wilson Creek Ramp in Willapa	46.67790	-123.67120
	Yakima River	Roza Park	46.76430	-120.45650
	Yakima River	Harlin Landing	46.63192	-120.52192
	Yakima River	Farrand Park	46.20490	-119.77960
	Yakima River	Union Gap Century Landing	46.53040	-120.47026
	Yakima River	Mabton Bridge Ramp	46.23165	-119.99815

APPENDIX D Rapid Response Data Collection Worksheets

Northern Pike Capture

Agency:	Crew:

DNA tissue samples should be preserved on Whatman paper. Contact Dr. Todd Seamons (todd.seamons@dfw.wa.gov) Ship the sample overnight to the WDFW Genetics Laboratory. Attention: Todd Seamons, WDFW Genetics Laboratory, 1111 Washington St SE, Olympia, WA 98501

Site ID	GPS Point		Capture Method	Date (MM/DD/YYYY)	Total Length (mm)	Weight (g)	Sex (M/F/U)	Photo (Y/N)	Otolith ID	Tissue ID
	Lat (XX.XXXX)	Long (XXX.XXXX)							(DDMMYY-SITEID-001)	(DDMMYY-SITEID-001)

Page ___ of ___	
Site Description:	Agency:
	Crew:
	Data Recorder:

Distance (m) relative to site of detection	Filter #	Volume filtered (ml)	GPS Point		Notes
			Lat (XX.XXXX)	Long (XXX.XXXX)	

Northern Pike: Gill Nets

Page ___ of ___

Site ID:	Initial Detection Location:	Location relative to last positive detection (circle one):
Date (MM/DD/YYYY):		
Time (Military):	Initial Detection Date (MM/DD/YYYY):	Upstream / Downstream

Waterbody:	Start Lat (XX.XXXX):	Start Long (XXX.XXXX):
Agency:	End Lat (XX.XXXX)	End Long (XXX.XXXX):

Water Temp (°C):	Crew:	
Number of Nets:	Data Recorder:	

Comments:

Gill Net Details							
Net #	Set Time (Military)	Pull Time (Military)	Net Type (Mono/Multi)	Net Dimensions LxH (m)	Mesh Size(s) (mm)	Net Depth	
						Min (m)	Max (m)

Catch Details				
Species ID	Fin Clips (Y/N)	Tagged? (PIT, floy, acoustic)	Tag ID	Comments

BBH	Brown Bullhead	COHO	Coho Salmon	LND	Longnose Dace	PMO	Peamouth	TNC	Tench
BC	Black Crappie	COT	Sculpin Spp.	LNS	Longnose Sucker	PS	Pumpkinseed	TT	Tiger Trout
BLC	Bull Trout	CP	Carp	LRS	Largescale Sucker	RBT	Rainbow Trout-all	WAL	Walleye
BRS	Bridgelip Sucker	CT	Cutthroat Trout	LT	Lake Trout	RS	Redside Shiner	WF	Mountain Whitefish
BT	Brown Trout	EB	E Brook Trout	LW	Lake Whitefish	SMB	Smallmouth Bass	WS	White Sturgeon
BUR	Burbot	GS	Green Sunfish	NP	Northern Pike	SOCK	Sockeye	YP	Yellow Perch
CK	Chinook Salmon	K	Kokanee	NPM	Northern Pikeminnow	SPD	Speckled Dace		
CMO	Chiselmouth	LMB	Largemouth Bass	PL	Pacific Lamprey	STH	Steelhead		

Northern Pike: Boat/Backpack Electrofishing (circle one)	Page ___ of ___

Site ID:	Initial Detection Location:	Location relative to last positive detection (circle one): Upstream / Downstream
Date (MM/DD/YYYY):		
Time (Military):	Initial Detection Date (MM/DD/YYYY):	

Waterbody:	Start Lat (XX.XXXX:	Start Long (XXX.XXXX):	Crew:
Agency:	End Lat (XX.XXXX):	End Long (XXX.XXXX):	Data Recorder:
Transect #:	Weather:		Efish Time (sec):

Water Temp (°C):	Pulses:	Volts:
Conductivity:	Duty Cycle:	Amps:

Comments:

Catch Details				
Species ID	Fin Clips (Y/N)	Tagged? (PIT, floy, acoustic)	Tag ID	Comments

BBH	Brown Bullhead	COHO	Coho Salmon	LND	Longnose Dace	PMO	Peamouth	TNC	Tench
BC	Black Crappie	COT	Sculpin Spp.	LNS	Longnose Sucker	PS	Pumpkinseed	TT	Tiger Trout
BLC	Bull Trout	CP	Carp	LRS	Largescale Sucker	RBT	Rainbow Trout-all	WAL	Walleye
BRS	Bridgelip Sucker	CT	Cutthroat Trout	LT	Lake Trout	RS	Redside Shiner	WF	Mountain Whitefish
BT	Brown Trout	EB	E Brook Trout	LW	Lake Whitefish	SMB	Smallmouth Bass	WS	White Sturgeon
BUR	Burbot	GS	Green Sunfish	NP	Northern Pike	SOCK	Sockeye	YP	Yellow Perch
CK	Chinook Salmon	K	Kokanee	NPM	Northern Pikeminnow	SPD	Speckled Dace		
CMO	Chiselmouth	LMB	Largemouth Bass	PL	Pacific Lamprey	STH	Steelhead		

Northern Pike: Snorkel Survey

Page ___ of ___

Site ID:	Initial Detection Location:	Location relative to last positive detection (circle one):
Date (MM/DD/YYYY):		
Time (Military):	Initial Detection Date (MM/DD/YYYY):	Upstream / Downstream

Waterbody:	Weather:	Snorkelers(s):
Agency:	Water Temp (°C):	Data Recorder:

Visibility (m):	Snorkeling Method:
Section length (m):	

Start Time:	Start Lat (XX.XXXX):	Start Long (XXX.XXXX):
End Time:	End Lat (XX.XXXX):	End Long (XXX.XXXX):

Comments:

Species ID	Count	Habitat Type	Substrate	Vegetation Type	Notes

BBH	Brown Bullhead	COHO	Coho Salmon	LND	Longnose Dace	PMO	Peamouth	TNC	Tench
BC	Black Crappie	COT	Sculpin Spp.	LNS	Longnose Sucker	PS	Pumpkinseed	TT	Tiger Trout
BLC	Bull Trout	CP	Carp	LRS	Largescale Sucker	RBT	Rainbow Trout-all	WAL	Walleye
BRS	Bridgelip Sucker	CT	Cutthroat Trout	LT	Lake Trout	RS	Redside Shiner	WF	Mountain Whitefish
BT	Brown Trout	EB	E Brook Trout	LW	Lake Whitefish	SMB	Smallmouth Bass	WS	White Sturgeon
BUR	Burbot	GS	Green Sunfish	NP	Northern Pike	SOCK	Sockeye	YP	Yellow Perch
CK	Chinook Salmon	K	Kokanee	NPM	Northern Pikeminnow	SPD	Speckled Dace		
CMO	Chiselmouth	LMB	Largemouth Bass	PL	Pacific Lamprey	STH	Steelhead		

Northern Pike: Beach Seining

Page ___ of ___

Site ID:	Initial Detection Location:	Location relative to last positive detection (circle one): Upstream / Downstream
Date (MM/DD/YYYY):	Initial Detection Date (MM/DD/YYYY):	
Time (Military):		

Waterbody:	Start Lat (XX.XXXX):	End Lat (XX.XXXX):
Agency:	Start Long (XXX.XXXX):	End Long (XXX.XXXX):

Water Temp (°C):	Crew:
Max Depth:	Data Recorder:

Number of Tows:	Transect length (m):	Seine height (m):
Water depth (m):	Seine mesh size (mm):	Seine width (m):

Comments:

Catch Details				
Species ID	Fin Clips (Y/N)	Tagged? (PIT, floy, acoustic)	Tag ID	Comments

BBH	Brown Bullhead	COHO	Coho Salmon	LND	Longnose Dace	PMO	Peamouth	TNC	Tench
BC	Black Crappie	COT	Sculpin Spp.	LNS	Longnose Sucker	PS	Pumpkinseed	TT	Tiger Trout
BLC	Bull Trout	CP	Carp	LRS	Largescale Sucker	RBT	Rainbow Trout-all	WAL	Walleye
BRS	Bridgelip Sucker	CT	Cutthroat Trout	LT	Lake Trout	RS	Redside Shiner	WF	Mountain Whitefish
BT	Brown Trout	EB	E Brook Trout	LW	Lake Whitefish	SMB	Smallmouth Bass	WS	White Sturgeon
BUR	Burbot	GS	Green Sunfish	NP	Northern Pike	SOCK	Sockeye	YP	Yellow Perch
CK	Chinook Salmon	K	Kokanee	NPM	Northern Pikeminnow	SPD	Speckled Dace		
CMO	Chiselmouth	LMB	Largemouth Bass	PL	Pacific Lamprey	STH	Steelhead		

Northern Pike: Fyke Nets

Page ___ of ___

Site ID:	Initial Detection Location:	Location relative to last positive detection (circle one):
Date (MM/DD/YYYY):	Initial Detection Date (MM/DD/YYYY):	Upstream / Downstream
Time (Military):		

Waterbody:	Start Lat (XX.XXXX):	End Lat (XX.XXXX)
Agency:	Start Long (XXX.XXXX):	End Long (XXX.XXXX):

Water Temp (°C):	Crew:
Number of Traps:	Data Recorder:

Comments:

Fyke Net Details					
Trap #	Deployment Time (Military)	Retrieval Time (Military)	Net Dimensions LxWxH (m)	Mesh Size(s) (mm)	Set Depth (m)

Catch Details				
Species ID	Fin Clips (Y/N)	Tagged? (PIT, floy, acoustic)	Tag ID	Comments

BBH	Brown Bullhead	COHO	Coho Salmon	LND	Longnose Dace	PMO	Peamouth	TNC	Tench
BC	Black Crappie	COT	Sculpin Spp.	LNS	Longnose Sucker	PS	Pumpkinseed	TT	Tiger Trout
BLC	Bull Trout	CP	Carp	LRS	Largescale Sucker	RBT	Rainbow Trout-all	WAL	Walleye
BRS	Bridgelip Sucker	CT	Cutthroat Trout	LT	Lake Trout	RS	Redside Shiner	WF	Mountain Whitefish
BT	Brown Trout	EB	E Brook Trout	LW	Lake Whitefish	SMB	Smallmouth Bass	WS	White Sturgeon
BUR	Burbot	GS	Green Sunfish	NP	Northern Pike	SOCK	Sockeye	YP	Yellow Perch
CK	Chinook Salmon	K	Kokanee	NPM	Northern Pikeminnow	SPD	Speckled Dace		
CMO	Chiselmouth	LMB	Largemouth Bass	PL	Pacific Lamprey	STH	Steelhead		

Northern Pike: Baited Set lines

Page ___ of ___

Site ID:	Initial Detection Location:	Location relative to last positive detection (circle one):
Date (MM/DD/YYYY):	Initial Detection Date (MM/DD/YYYY):	Upstream / Downstream
Time (Military):		

Waterbody:	Start Lat (XX.XXXX):	End Lat (XX.XXXX):	Crew:
Agency:	Start Long (XXX.XXXX):	End Long (XXX.XXXX):	Data Recorder:

Water Temp (°C):	Deployment Time (Military):	Bait Type:
Weather:	Retrieval Time (Military):	

Line Weight:	Number of Hooks:	Hook Suspension Location:
Line Material:	Hook Type:	
Ganoin Length:	Hook Size(s):	

Comments:

Catch Details				
Species ID	Fin Clips (Y/N)	Tagged? (PIT, floy, acoustic)	Tag ID	Comments

BBH	Brown Bullhead	COHO	Coho Salmon	LND	Longnose Dace	PMO	Peamouth	TNC	Tench
BC	Black Crappie	COT	Sculpin Spp.	LNS	Longnose Sucker	PS	Pumpkinseed	TT	Tiger Trout
BLC	Bull Trout	CP	Carp	LRS	Largescale Sucker	RBT	Rainbow Trout-all	WAL	Walleye
BRS	Bridgelip Sucker	CT	Cutthroat Trout	LT	Lake Trout	RS	Redside Shiner	WF	Mountain Whitefish
BT	Brown Trout	EB	E Brook Trout	LW	Lake Whitefish	SMB	Smallmouth Bass	WS	White Sturgeon
BUR	Burbot	GS	Green Sunfish	NP	Northern Pike	SOCK	Sockeye	YP	Yellow Perch
CK	Chinook Salmon	K	Kokanee	NPM	Northern Pikeminnow	SPD	Speckled Dace		
CMO	Chiselmouth	LMB	Largemouth Bass	PL	Pacific Lamprey	STH	Steelhead		

Catch Details				
Species ID	Fin Clips (Y/N)	Tagged? (PIT, Floy, Acoustic)	Tag ID	Comments

BBH	Brown Bullhead	COHO	Coho Salmon	LND	Longnose Dace	PMO	Peamouth	TNC	Tench
BC	Black Crappie	COT	Sculpin Spp.	LNS	Longnose Sucker	PS	Pumpkinseed	TT	Tiger Trout
BLC	Bull Trout	CP	Carp	LRS	Largescale Sucker	RBT	Rainbow Trout-all	WAL	Walleye
BRS	Bridgelip Sucker	CT	Cutthroat Trout	LT	Lake Trout	RS	Redside Shiner	WF	Mountain Whitefish
BT	Brown Trout	EB	E Brook Trout	LW	Lake Whitefish	SMB	Smallmouth Bass	WS	White Sturgeon
BUR	Burbot	GS	Green Sunfish	NP	Northern Pike	SOCK	Sockeye	YP	Yellow Perch
CK	Chinook Salmon	K	Kokanee	NPM	Northern Pikeminnow	SPD	Speckled Dace		
CMO	Chiselmouth	LMB	Largemouth Bass	PL	Pacific Lamprey	STH	Steelhead		

APPENDIX E Northern Pike Taxonomic Keying Characteristics

Northern Pike Taxonomic Keying Characteristics

Northern Pike *Esox lucius* can be readily identified by examining anatomical features (morphological and meristic characteristics) and coloration patterns. For the Northern Pike Rapid Response Plan, an abbreviated list of distinguishing characteristics has been assembled to differentiate Northern Pike from 1) common Columbia River species that are frequently misidentified as Northern Pike and 2) other members of the pike family (Esocidae) that are less common but closely resemble Northern Pike in appearance. The use of a regional dichotomous key is recommended for definitive identification and information from Scholz and McLellan (2009) has been relied upon here.

Identification Process

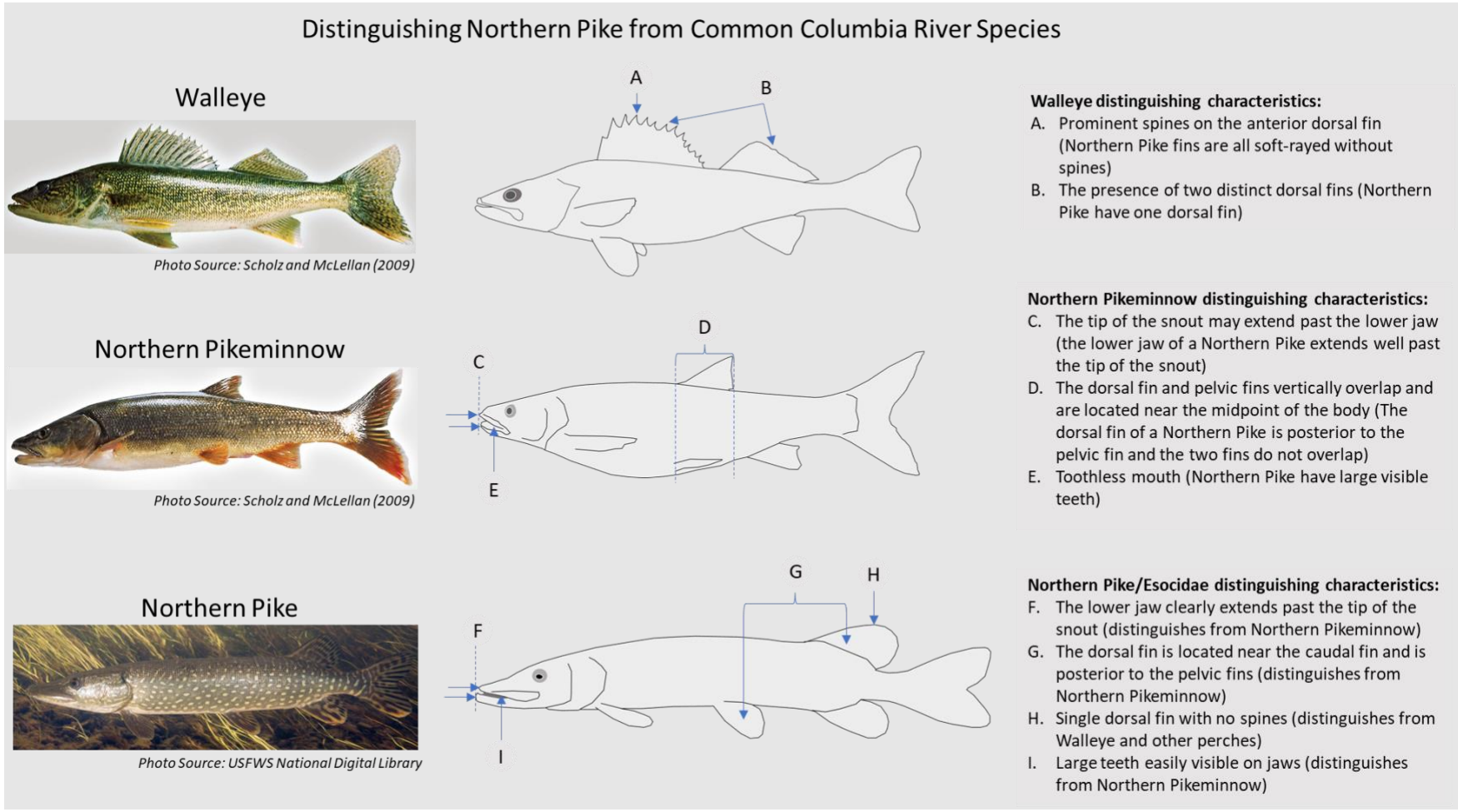
The identification process and information presented here assume that the individual making the identification has a general understanding of fish anatomy and can preliminarily rule out species that differ greatly in appearance and anatomy from Northern Pike. The identification process focuses first on anatomical characteristics that quickly distinguish Northern Pike from other common Columbia River species and then focuses on anatomical characteristics that distinguish Northern Pike from other members of the pike family (Esocidae).

Step 1. Distinguishing Northern Pike from Common Columbia River Species

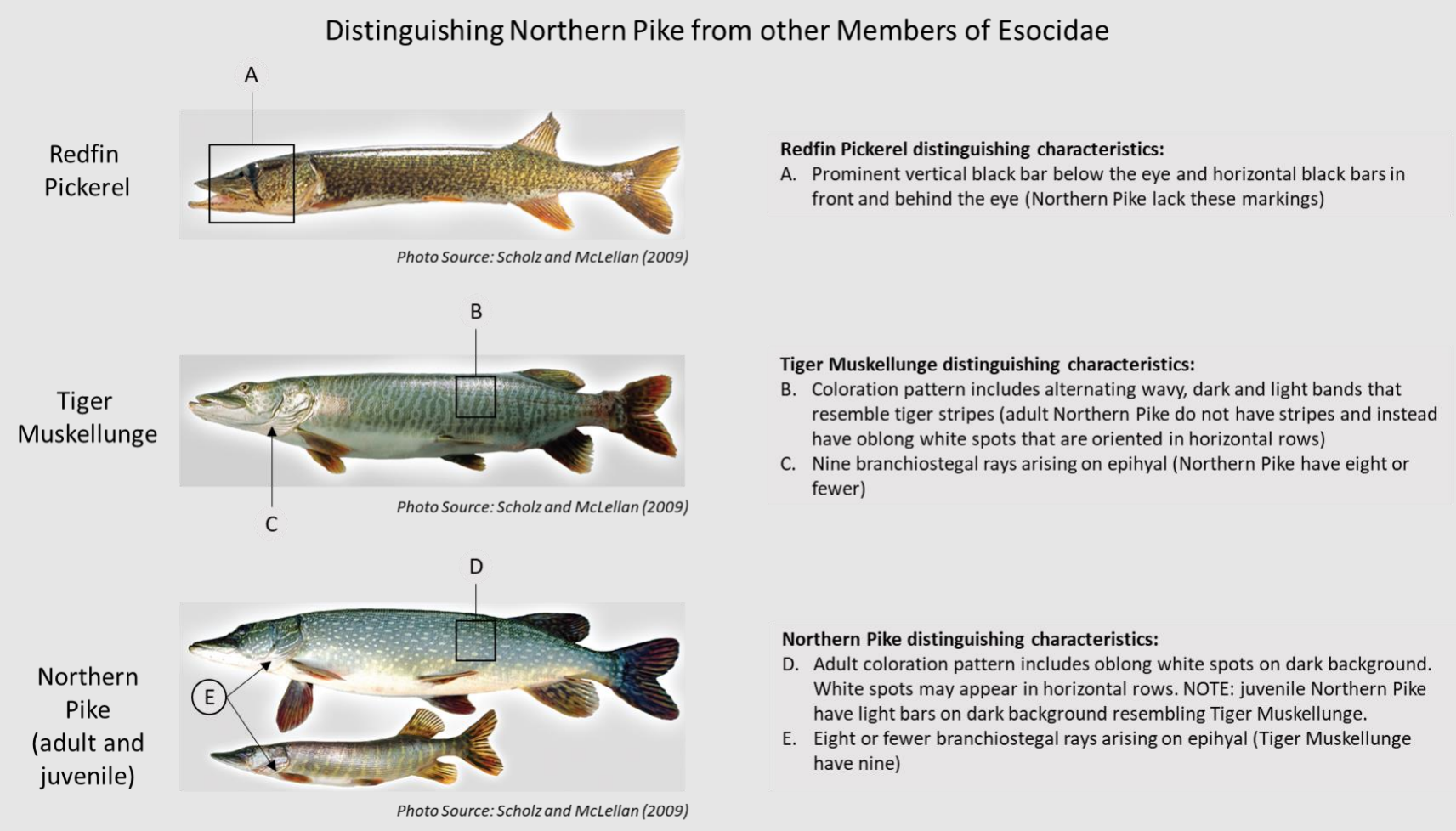
Northern Pike are superficially similar in appearance to several fish species that are commonly found in the Columbia River. These other species include Northern Pikeminnow (*Ptychocheilus oregonensis*) and Walleye (*Sander vitreus*) and are frequently misidentified as Northern Pike. Northern Pikeminnow and Walleye can be easily distinguished from Northern Pike (and all members of Esocidae) based on dorsal fin number and morphology, relative location of dorsal and pelvic fins, dentition, and snout length relative to lower jaw length (Appendix Figure E-1).

Step 2. Distinguishing Northern Pike from other Members of Esocidae

Redfin Pickerel and Tiger Muskellunge are found in habitats that are adjacent to or potentially drain into the Rapid Response Plan Area and should therefore be considered when identifying a putative Northern Pike. Moreover, these species closely resemble Northern Pike in body form and general appearance. Adults of each species may be differentiated from one another based on external coloration patterns (Appendix Figure E-2.). However, juvenile Northern Pike closely resemble the coloration patterns of Tiger Muskellunge and should be definitively identified using meristic branchiostegal counts (Scholz and McLellan 2009).



Appendix Figure E-1. Distinguishing anatomical characteristics used to differentiate between Northern Pike and other common Columbia River species that are frequently misidentified as Northern Pike. Distinguishing characteristics are adapted from Scholz and McLellan (2009).



Appendix Figure E-2. Distinguishing anatomical characteristics used to differentiate between Northern Pike and other members of the Esocidae family that may occur in the Rapid Response Plan area. Distinguishing characteristics are adapted from Scholz and McLellan (2009).

APPENDIX F Notification Templates

Date

RE: **Notification of Suspected Northern Pike Waterbody**

Dear Stakeholder,

This letter is to notify you that there has been a verified detection of a Northern Pike *Esox lucius* in WATERBODY NAME in COUNTY NAME (GPS COORDINATE). No Northern Pike specimen has been collected thus WATERBODY NAME is now classified as "Suspect." The first detection occurred on Date, detected via DETECTION METHOD by Entity. The detection was verified by Select Sampling Method on Date by Entity. As a result, monthly sampling (SPECIFY METHODS) will occur in WATERBODY NAME conducted by Entity (PhoneNumber, EmailAddress) for a minimum of 3 years of negative testing and no Northern Pike capture. If a Northern Pike is captured 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 Positive Northern Pike Waterbody**

Dear Stakeholder,

This letter is to notify you that there has been a verified capture of a Northern Pike *Esox lucius* in WATERBODY NAME in COUNTY NAME (GPS COORDINATE). Pictures are attached. WATERBODY NAME is now classified as "Positive" for Northern Pike. The first detection occurred on Date, detected via DETECTION METHOD. The date of capture occurred on Date and was verified by FISHERIES EXPERT 1 (name and organization) and FISHERIES EXPERT 2 (name and organization). As a result, a Rapid Response effort is being initiated by Entity and Incident Command System (ICS) has been requested. Once ICS has been approved, you will receive a Notification of Rapid Response with more information.

Sincerely,

YourName
Title

Date

RE: **Notification of Northern Pike Rapid Response**

Dear Stakeholder,

This letter is to notify you that a Rapid Response effort has been initiated in response to the verified capture of a Northern Pike *Esox lucius* in WATERBODY NAME in COUNTY NAME (GPS COORDINATE) on Date. As a reminder, the first detection in WATERBODY NAME occurred on Date, detected via DETECTION METHOD. The date of capture occurred on Date and was verified by FISHERIES EXPERT 1 (name and organization) and FISHERIES EXPERT 2 (name and organization). 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. Initial scoping efforts are planned to begin Date and the initial Rapid Response efforts will be completed no later than 6 weeks from today, 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 G Multi-Agency Coordination Group Meeting Data Summary Form

Northern Pike Rapid Response MAC Group Meeting Data Summary Form

Initial detection date: _____

Initial detection location (lat/long and description): _____

Rapid Response Lead name: _____

Table 1. Field Lead name(s)

Name	Waterbody

Table 2. Verification efforts

Sampling date	Gear	Effort	Lat	Long	Present?
					Yes
					Yes
					Yes
					Yes

Table 3. Initial scoping efforts

Sampling date	Gear	Effort	Lat	Long	Present?
	eDNA				Yes
	eDNA				Yes
	eDNA				Yes
	eDNA				Yes
	eDNA				Yes

	Fish count video review				Yes
					Yes
					Yes
					Yes
					Yes

Table 4. Range delimitation efforts

Sampling date	Gear	Effort	Lat	Long	Present?
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes
					Yes

APPENDIX H Invasive Northern Pike Situation Assessment Form

Invasive Northern Pike Situation Assessment

Baseline Information

Date	
Waterbody Name	
Have Northern Pike ever been eradicated here?	Yes or No
Is a bathymetric map available?	Yes or No
Acres	
Max Depth	
Means to access waterbody?	

Scoring

Question	**Score**
How difficult is the waterbody to access (Scale 1-5)?	Select One
Transportation costs to site?	Select One
Is the waterbody open or closed? *(Regular status, not during flood stage)*	Select One
If open, on a scale of 1-5 how expansive is the connectivity?	Select One
On a scale of 1-5, how complex is the habitat?	Select One
Are Northern Pike isolated or dispersed?	Select One
Can temporary barriers be used to contain the Northern Pike population?	Select One
Are there conservation concerns in the waterbody?	Yes or No
Are native fish present?	Yes or No
Cost to eradicate?	Select One
Post-eradication, is fishery restoration needed?	Yes or No
Calculate Score	0