



**SHORELINE IMPACT ASSESSMENT &  
MITIGATION PLAN**

**309 N Lake Drive Medical Lake, WA**

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**Parcel #141182.2361**



ANDERSON ENVIRONMENTAL CONSULTING

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Prepared For:

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## LIST OF ACRONYMS AND ABBREVIATIONS

AEC	Anderson Environmental Consulting, LLC
CAO	Critical Areas Ordinance
DNR	Washington Department of Natural Resources
DOE	Washington Department of Ecology
FWHCA	Fish and Wildlife Habitat Conservation Area
GIS	Geographic Information Systems
HMP	Habitat Management Plan
IPaC	Information for Planning and Consultation
NWI	National Wetlands Inventory
OHWM	Ordinary High-Water Mark
PHS	Priority Habitat and Species
Project	Twohig Property Dock Installation Project
RCW	Revised Code of Washington
sf	Square Feet
SMP	Shoreline Master Program
WDFW	Washington Department of Fish and Wildlife

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# 1. INTRODUCTION

## 1.1 LOCATION AND ENVIRONMENTAL SETTING

The Project is located at 309 N. Lake Drive, Medical Lake, WA (Parcel No. 14182.2361) in the City of Medical Lake and the proposed dock would be located along the shoreline of Medical Lake which is listed by the Medical Lake Shoreline Master Program (SMP) as a Water of Statewide Significance. (see **Figure 1**). It is in WRIA 34, the Palouse Watershed.

**Legal:**

- Section 18, Township 24 North, Range 42 East

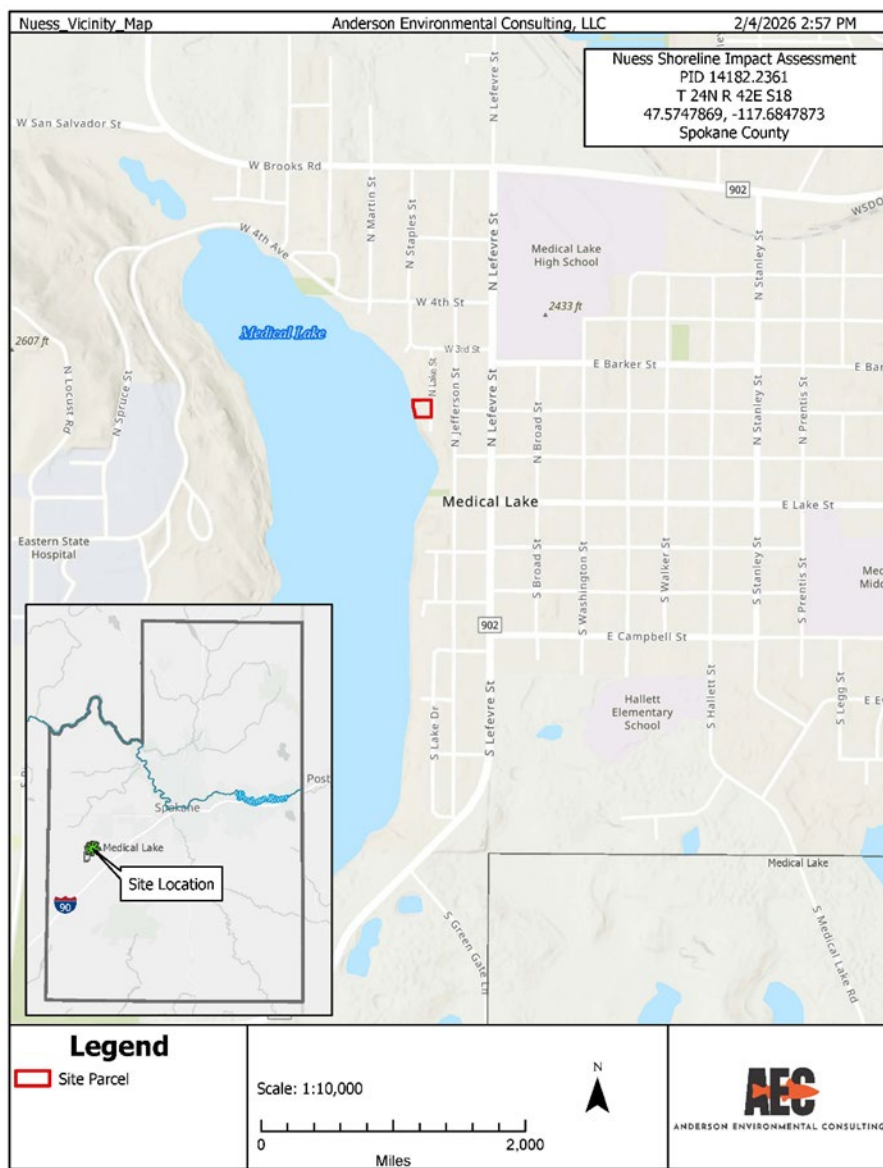


Figure 1 Vicinity Map

## 1.2 PROJECT DESCRIPTION

The landowner is working with the City of Medical Lake, Washington State Department of Ecology (Ecology) and Washington State Department of Fish and Wildlife (WDFW) to construct a private residential dock along the shoreline of Medical Lake. Anderson Environmental Consulting (AEC) LLC has been asked to conduct a Shoreline Impact Assessment (SIA) and Mitigation Plan for the work already completed (vegetation removal, excavation and installation of concrete forms) and for the remainder of the work yet to be completed for the proposed dock installation. See **Appendix A** for Site Map and Conceptual Project Plan.

## 1.3 BACKGROUND AND HISTORY OF AGENCY COMMUNICATIONS

The landowner has been working to construct a dock that was originally proposed to be an approximately 31 foot (ft) long by 27 inch tall bulkhead with a dock attached in the middle and concrete pad on both sides of the dock. The additional bulkhead proposed on either side of the dock was to provide access to step down to the shore. The dock was to be similar to other docks on adjacent properties on Medical Lake that Mr. Nuess had helped construct in previous years under a shoreline exemption.

The landowner communicated with the City of Medical Lake and various agencies regarding the proposed project and had begun construction during the Summer of 2025. Construction was stopped by the City of Medical Lake Building Department in response to a neighbor's complaint.

This initial construction resulted in an estimated 10-20 shrubs assumed to be primarily Nootka Rose (*Rosa nutkana*), Common snowberry (*Symphoricarpos albus*), Chokecherry (*Prunus virginiana*) and grass being removed from the shoreline (although this cannot be definitively determined) and excavation and framing (wood forms and rebar) for the proposed concrete bulkhead was initiated along approximately 30 ft of the shoreline. After work was stopped, the site was covered and fiber wattles were placed downslope during the winter, until the project can be brought into compliance in collaboration with the agencies.

During consultation with agencies, it was determined that while residential docks are exempt from Shoreline development permits, expanded pads, platforms for recreation and bulkheads are not allowed per the City of Medical Lake Shoreline Master Program (SMP) unless it is needed to protect a structure, which is not the case here. The agency coordination made available to the consultant are summarized in **Appendix C**.

The original project design was modified to only include a dock anchored on a concrete abutment and shifted further north. The bulkhead was eliminated from the design. After discussions with agencies, it was determined this report should address two separate actions. The two actions are:

- Impacts to the shoreline and proposed mitigation for the construction already started.
- Impacts to the shoreline and proposed mitigation to construct the remainder of the project (proposed dock and abutment).

## 1.4 MEDICAL LAKE SMP

The City of Medical Lake 2021 Periodic Update SMP outlines acceptable uses for properties located within 200 feet of water bodies classified as shorelines of the state. The project location lies within the shoreline of Medical Lake and the environmental designation of the property is Shoreline Residential. SMP Table 1, Use Compatibility Matrix indicates that Docks, Piers and Shoreline stabilization are exceptions to the Shoreline Development but have conditions. See **Table 1**.

**Table 1 Project Area Shoreline Uses**

Shoreline Activities	Use
Docks & Piers	Exempt
Shoreline Stabilization	Exempt

### Bulkheads

SMP Chapter 4, Section V, F(1)(o) states new structural stabilization measures shall not be allowed except to *protect existing primary structures*: 1) *New or enlarged structural shoreline stabilization measures for an existing primary structure, including residences, should not be allowed unless there is conclusive evidence, **documented by a geotechnical analysis** that the structure is in danger from shoreline erosion caused by tidal action, currents, or waves. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need.* 2) *The **erosion control structure will not result in a net loss of shoreline ecological functions.***

### Docks

SMP Chapter 6, Section I, (7)(a)(i)(4) states: *Private docks are an acceptable accessory use for shoreline property owners, however, they should be in a state of **good repair** for both **safety** and **aesthetic** purposes. New docks should be designed and located to **blend into the site as much as possible.***

Regulations for docks are further defined in Chapter 4 Section V (K)(1). The following are the relevant sections from the SMP that are pertinent to the proposed project.

#### K. Piers and Docks

##### 1. Regulations

- a. *Docks may be allowed in accordance with Table 1 and Table 2 [of the SMP] and only when the following conditions are met.*
- c. *The project, including any required mitigation, will result in **no net loss of ecological functions.***
- d. *The project is consistent with the state's interest in resource protection and species recovery.*
- e. *An inventory of the site and adjacent beach sections to assess the presence of critical habitats and functions is required. The methods and extent of the inventory*

*shall be consistent with accepted research methodology. Proposals will be evaluated using Department technical assistance materials for guidance.*

*g. Docks shall be constructed of materials that will not adversely affect water quality or aquatic plants and animals over the long term. Materials used for submerged portions of a dock, decking, and other components that may come in contact with water shall be approved by applicable state agencies for use in water to avoid discharge of pollutants from wave splash, rain, or runoff.*

*h. To minimize adverse effects on near shore habitats and species caused by overwater structures that reduce ambient light levels, the following shall apply:*

*i. The width of docks, floats, and lifts shall be the minimum necessary, and shall not be wider than eight (8) feet unless authorized by state resource agencies.*

*ii. Materials that will allow light to pass through the deck may be required.*

## 1.5 CITY OF MEDICAL LAKE CRITICAL AREAS

The SMP states that any action taken pursuant to Chapter 4, Section 6 [Critical Areas] shall result no net loss of ecological functions and values of the critical areas associated with the proposed action, as determined by the most current, accurate, and complete scientific and technical information available.

Critical areas regulated by this Section 6 include:

- Aquifer recharge areas as designated in Subsection H of this Section,
- Frequently flooded and flood hazard areas as designated in Subsection I of this Section,
- Fish and wildlife habitat conservation areas as designated in Subsection J of this Section,
- Wetlands as designated in Subsection K of this Section, and
- Geologically hazardous areas as designated in Subsection L of this Section.

Development within critical areas within shoreline jurisdiction, require:

- No net loss of ecological functions;
- Submittal requirements as specified in the critical area ordinances (CAO) and the shoreline regulations;
- Mitigation sequencing as specified in in WAC 173-26-201(2)(e);
- Mitigation plan; and
- Application of the most protective measures where jurisdictions overlap.

## 2. EXISTING CONDITIONS

The purpose of this report is to evaluate the impacts of the already completed construction and the proposed additional project construction, identify impacts to shoreline function, propose mitigation and determine if with mitigation, the actions will result in a loss of ecological functions. AEC consulted various resource maps, conducted site investigations and referenced SMP stated ecological function for this reach to document the following existing conditions.

The site consists of a single family residence, grass lawn, various native and ornamental trees, shoreline of Medical Lake, partially constructed bulkheads (concrete forms) and grassy slopes. Disturbed soils along the shoreline that have been temporarily covered and fiber wattles are placed at the base. Photos contained in Section 2.1 display the existing conditions surrounding the proposed dock installation.

### 2.1 SITE PHOTOS



Photo 1 Grassy area upslope of the dock and landing construction



Photo 2 Forms for Bulkhead/landings to the proposed dock



Photo 3 Wetland Area that was suggested as an alternate dock location by Ecology



Photo 4 OHWM and forms installed facing south west



Photo 5 OHWM and forms installed facing northwest



Photo 6 Early stage of construction



Photo 7 Secured site in 2025 prior to winter, with fiber wattles and tarps

## 2.2 VEGETATION

The study area consists of a mixture of native and non-native vegetation including lawn. The landowner indicated it was planted with bluegrass to create a lawn approximately 5 feet landward of the OHWM. In addition, there are non-native ornamental trees; Chokecherry, Nootka rose and snowberry along the south end of the shoreline. At the north end of the shoreline near the partially constructed landing is a thin strip of reed canary grass and cattail. Vegetation previously removed included lawn and 10-20 shrubs (likely Wood rose and Snowberry) and potentially a couple of saplings (chokecherry).

## 2.3 CRITICAL AREAS

The Medical Lake SMP Chapter 4, Section 6 outlines the need to address critical areas within shoreline jurisdiction. **Table 2** summarizes the presence or absence of critical areas within the project site and provides a brief description of findings relevant to the proposed development. Critical areas determined not to be present are not further evaluated in this report. Critical areas identified within or adjacent to the project area are addressed below.

**Table 2 Summary of Critical Areas**

Critical Area	Present (Yes/No)	Information Source	Finding
<b>Aquifer Recharge Area</b>	No	Spokane County Aquifer Susceptibility Map	According to the Spokane County Aquifer Susceptibility Map, areas surrounding Medical Lake are Low to Moderate Susceptibility which is not a Critical Aquifer Recharge Area per Medical Lake regulations; therefore, it is assumed that the project area is not an Aquifer Recharge Area and is not further evaluated in this report.
<b>Frequently Flooded and Flood Hazard Areas</b>	No	Spokane County Scout and Flood Emergency Management Administration (FEMA) database	FEMA National Flood Hazard Layer shows no mapped floodplains in the study area; therefore, floodplains are not further evaluated in this report. See Appendix C for the Floodplain map.
<b>Fish and Wildlife Habitats</b>	Yes	WDFW Priority Habitat and Species (PHS) Database	No ESA listed species present or impacted. PHS Species and Habitats are present. General wildlife habitat in riparian areas were already disturbed for the excavation and form construction (appx 414 sqft). Future proposed dock installation will be minimally impacting as no more shrubs or trees will be removed. The dock will be raised above the water and set on concrete footings with minimal footprint.
<b>Wetlands</b>	Yes	NWI and site visit	One potential wetland is located on the north side of the property shoreline. No wetland will be impacted.
<b>Geologic Hazard Areas</b>	No	Spokane County Geologic Hazard Maps	No Geologic Hazard Areas are mapped; therefore, Geologic Hazard Areas are not further evaluated in this report.

## 2.4 WETLANDS

The National Wetland Inventory (NWI) map classifies Medical Lake as a lacustrine system. AEC conducted a site visit to the property and identified a potential fringe wetland on the northern shoreline of the property. A formal wetland delineation was not conducted for this project as the project and the landowner intentionally sited the bulkhead and dock to avoid the wetland. The wetland and its buffer are still regulated under the SMP.

Since the wetland is located in the vicinity of the dock location, it is assumed that the project will impact the wetland buffer and will require mitigation at a 1:1 ratio per the SMP.

## 2.5 FISH AND WILDLIFE CONSERVATION AREAS

**Threatened and endangered species.** The US Fish and Wildlife Service Information Planning and Consultation (IPaC) report identifies potential federally listed, threatened or endangered species and designated critical habitats that could occur in the study area. **Table 3** summarizes species and effect determinations for the project.

**Table 3 IPaC Species**

Common Name	Scientific Name	Classification	Description	Determination of Effect
<b>Yellow-billed cuckoo</b>	<i>Coccyzus americanus</i>	Threatened	Not known to occur in Spokane County. Requires expansive contiguous deciduous riparian habitat which is not present.	<b>No effect</b>
<b>Monarch Butterfly</b>	<i>Danaus plexippus</i>	Proposed Threatened	Requires milkweed, an obligate host plant, or composite flowering species. None present and monarch butterfly is not anticipated to be present.	<b>No effect</b>
<b>Spalding's Catchfly</b>	<i>Silene spaldingii</i>	Threatened	Predominantly found in bunchgrass grasslands and sagebrush-steppe communities. The site is largely lawn and shoreline shrubs. This species was not observed during the site visit.	<b>No effect</b>
<b>Suckley's Cuckoo Bumble Bee</b>	<i>Bombus suckleyi</i>	Proposed Threatened	Obligate social parasites of other Bombus species. Bombus species require an abundance of flowering plants. Detected this species in only six localities of Washington, including one near far northeastern part of the state.	<b>No effect</b>

See **Appendix B** for the IPaC report.

**Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS)** database and mapping for the study area shows one mapped priority habitat in the project vicinity - wetland habitat. The wetland habitat is identified but not specified. The potential wetland identified is anticipated to be Lake Fringe Wetland. See **Appendix B** for the PHS report and **Appendix A** for a site map.

### 3. IMPACTS

This section discusses the potential impacts to shorelines and critical areas including shoreline buffers, PHS, wetlands, floodplain, streams and their riparian habitats that could be impacted. Since these resources overlap with and are within the shoreline jurisdiction and have shared ecological functions; this discussion focuses on shoreline ecological functions and the project's compliance with the SMP.

The proposed project involves the following impacts:

- Previous work already completed:
  - Previous Removal of approximately 10-20 shrubs, a couple of saplings, and grass within the shoreline buffer within an approximately 400 sf area.
  - Excavation of 30 linear feet of shoreline to construct concrete forms for slope retention and for the dock abutment.
- Work yet to be completed for dock installation:
  - Construct a new 8 ft wide x 30 ft long dock. The dock will be attached to an approximately 10-11 ft long concrete abutment on the shoreline. This will allow sufficient width to meet the recommendations for securing the dock. The portion of the dock extending over the water will be supported by two galvanized 3.5 inch diameter pipes, mounted in two concrete footing pads that roll into position onto the lakebed. The dock will be elevated above the normal water level slightly. The dock decking will be Trex or other similar synthetic decking materials and colors will be chosen to blend with the environment as practicable.
- Mitigation will:
  - Restore the shoreline and slope where the concrete forms for the bulkhead are currently installed by removing the wood, rebar and other manmade materials except in the area that the dock abutment would be located.
  - Restabilize the shoreline by replacing the rock that was previously removed from the slope and stockpiled during initial construction. The diameter of the rocks will not exceed 2 ft diameter and will be placed along the toe of the slope but outside of the waterline. The slope and soils above the rock will be backfilled to create a similar grade as the original slope and will blend into the surrounding slopes and reseeded or replanted with native species.
  - Clean washed rounded gravel (approximately 5/8-inch diameter) with no fines will be placed around the boulders to blend with the gravels that already exist along the shoreline. Geotextile or coir fabric may be used under the rocks and gravel if needed to contain the soil to prevent it from sloughing into the water.
  - Native trees and shrubs will be planted within the shoreline area to replace the impacted plants and area at an approximately 1:1.5 ratio and will be maintained. Although 1:1 replacement ration is required, the higher ratio will account for temporal loss and some mortalities. Disturbed areas will be reseeded with native grass species (see Site Map).

### 3.1 EFFECTS TO SHORELINE ECOLOGICAL FUNCTION

Standards for shoreline buffers require no net loss of ecological functions and preservation of the existing character of the shoreline consistent with the SMP which is demonstrated below.

#### **Existing Shoreline Functions**

Per the SMP Chapter 6, Medical Lake is naturally eutrophic and has high fecal coliform concentrations at the City Park on the south end of the lake, likely due to goose populations which congregate in grassy areas. Medical Lake is 303(d) listed for total phosphorus. The SMP also identifies residential development and the results in vegetation removal as disconnecting critical ecological linkages between the water and land environments and connectivity to the surrounding ponds and wetland habitat. Per the SMP, approximately 12% of the shoreline along Reach 7 (Medical Lake) is protected by shore protection structures. In addition, 20 docks are located along this reach. Medical Lake is already moderately impaired by residential development, primarily from riparian vegetation being replaced with lawn, increased roads and runoff, and extensive shoreline hardening that increases wave reflectivity affecting aquatic vegetation and fish habitat.

The existing shoreline in the subject area provides functions including natural shoreline stabilization through riparian vegetation, some naturally existing rock along the shore and habitat connectivity through riparian vegetation that connects the shoreline habitat. There are no significant nearby riparian or habitat corridors to connect to the property other than the riparian areas along Medical Lake. The existing vegetation, including grasses, also capture and filter sediment prior to entering the water benefiting water quality of the impaired lake.

#### **Impacts of the past construction**

Removing the turf and native vegetation along the shoreline affected the natural stabilization function of plants and rocks, removed riparian habitat connecting to other shoreline vegetation to the south. It also replaced slopes with concrete forms (concrete not yet poured). Soils immediately adjacent to the lake where construction has occurred are bare, potentially increasing silt and sediment discharge into the lake and impacting potential fish habitat.

#### **Impacts of proposed dock**

The proposed project would result in only minima temporary impacts with the exception of the installed dock that will be secured to a 10 ft long, 2 ft tall, and approximately 1 ft thick concrete abutment. This will require temporary soil disturbance and removal of some turf, but the abutment location is already disturbed, and no trees or shrubs will be removed to construct the dock. The installation of the piles on the concrete footings will have a minimal impact to the lakebed and aquatic life.

The total permanent impact area on the shoreline from both the past and future disturbance will be approximately 420 sqft (0.01 acres).

## 4. MITIGATION

Mitigation sequencing requires project design to avoid, minimize harm, restore or replace temporary impacts before compensatory mitigation is implemented. Due to vegetation removal and shoreline bank disturbances that occurred prior to permitting, compensatory mitigation will ensure that the shoreline aesthetic and ecological function are restored to preconstruction levels as much as practicable.

**Mitigation for previous construction**-The erosion and sedimentation potential of the bare slopes was offset by covering slopes and placing fiber wattles below the disturbed areas. Impacts will be mitigated by removing the concrete forms that are currently in place for bulkheads (not allowed), placing the rocks that were previously removed and stockpiled, back against the toe of the slope and backfilling the slope to match the pre-construction grade and blend with the surrounding slopes. This area will be replanted with native grass and shrub species to replace the impacted riparian plants and provide shoreline habitat connectivity. In addition, the area of lawn at the south end of the property will be revegetated as additional mitigation.

**Mitigation for proposed project**-Replanting native riparian shrubs along and upslope of the shoreline will reduce erosion and sedimentation, provide riparian habitat and connectivity, and provide a natural approach to shoreline stabilization. The grass that will be replanted will restore filtering and toxicant removal functions. The dock itself will be designed to be raised slightly above the water which will still allow light for aquatic species and will be colored to blend with the surrounding environment.

Mitigation is further detailed below:

### 4.1 AVOIDANCE MEASURES

The following measures have been taken to avoid impacts to the ecological functions of the shoreline and critical areas:

- Wetland areas on the northern end of the property will be avoided.
- No additional trees or shrubs will be removed.

### 4.2 MEASURES TO MINIMIZE HARM

The following lists measures that will minimize impacts to the shoreline and critical area:

- The design was revised to reduce impacts by shifting the dock location and avoiding wetland.
- The previously installed concrete forms that were to be for a 31 ft long bulkhead will be removed to reduce adding hardened banks.
- The dock abutment was reduced to a minimum width needed for a safe and secure dock installation.
- Native rocks will be used to back fill the shoreline around the dock rather than bulkheads.
- BMPs including covering exposed soils and installing fiber wattles were implemented to prevent erosion and limit sedimentation within Medical Lake during the winter and spring.
- Vegetation will be replanted/reseeded within identified mitigation areas in the shoreline buffer.

- Dock piers will be set on concrete footings rather than driven into the lakebed with an impact hammer which will have less noise and vibration impacts to aquatic species.
- The dock will be slightly raised above the water to allow light under the dock.
- The dock colors will be natural tones.
- The decking material will be Trex type material which is not toxic to fish and wildlife.

### 4.3 RESTORATION / REPLACEMENT OF FUNCTIONS

#### 4.3.1 Vegetation Replacement

Grasses and shrubs previously removed (estimated total of about 22 plants) will be replaced at a 1:1.5 ratio (approximately 33 plants over approximately 650 sf). Although the shoreline regulations only require a 1:1 ratio, the increased ratio for plants and area will help offset temporal loss of coverage since the plants will take several years to achieve the size and function of the plants that were removed. The plants will be placed along the shoreline no closer than 10 foot from the edge of the abutment and to prevent damaging plants due to the expected human access the shoreline and water. Although an area totaling 2490 sf is identified in the site plan the entire area is not intended to be mitigation, but plants should cover at least 650 sf within the restored site and mitigation area. Mitigation plantings will be concentrated on the south side of the property near the shoreline, while areas to be reseeded with grass. A native grass species such as Sandberg bluegrass or similar species should be seeded in all areas where ground is exposed. See **Table 4** for a list from which plants may be chosen and recommended spacings. Plantings will be irrigated but will not be fertilized to prevent nutrients from entering the lake and contributing to eutrophication.

**Table 4 Plants That May be Used**

Common Name	Scientific Name	Approximate Spacing (ft)	Area (sqft)	Note
<b>Ponderosa pine</b>	<i>Pinus ponderosa</i>	15	225	At least 3 trees must be planted and survive
<b>Quaking aspen</b>	<i>Populus tremuloides</i>	15	225	
<b>Chokecherry</b>	<i>Prunus virginiana</i>	10	100	
<b>Snowberry</b>	<i>Symphoricarpos albus</i>	5	25	
<b>Wood rose</b>	<i>Rosa woodsii</i>	5	25	
<b>Red-osier dogwood</b>	<i>Cornus sericea</i>	5	25	
<b>Golden currant</b>	<i>Ribes aureum</i>	5	25	
<b>Native grass species</b>	<i>Poa secunda</i>	NA	NA	
<b>Total</b>			650	

#### 4.4 SUCCESS CRITERIA, MAINTENANCE AND MONITORING

The long-term goal of the mitigation is to restore disturbed slopes to pre-construction conditions except where the dock is installed, enhance both upland and riparian areas to achieve a no net loss of ecological function for the project.

Success will be measured for 5 years or until success standards outlined in **Table 5** are met.

**Table 5 Monitoring Success Criteria**

Success Criteria	Monitoring Method	Success Metric/Documentation
<b>80% survival of planted trees and shrubs</b>	Stem count each live tree and shrub in the planted areas. Natural recruitment of native species also counts towards success.	20 trees and shrubs in the upland area should be alive annually and by year 5 (2031).  At least 3 of the planted trees and shrubs in the riparian area should survive annually and by year 5 (2031).
<b>Slope stability</b>	Visual observation of coverage in reseeded areas and note any signs of erosion or sloughing hillside.	75% ground covered by native grasses or other native plants.  May install a piece of rebar to annually measure changes in soil elevations if slope sloughing becomes evident.

##### 4.4.1 Maintenance

Weeds will be manually controlled to ensure the native plants become established. Additionally, spot application of herbicides to any non-native species per manufacturer's instructions will be done as needed throughout the five years of monitoring.

Additional seeding/planting may be done as needed following monitoring results and recommendations. Additional seeding/plantings should be done in late fall or early spring. Plant protectors may be used as needed if girdling or browsing by wildlife is evident during monitoring.

##### 4.4.2 Monitoring

Monitoring will be done by a qualified Biologist once annually in early summer for 5 years or until success criteria are met. Photos of the mitigation sites should be used to document success and issues.

An annual monitoring report will be shared with City of Medical Lake and Ecology and other permitting agencies by email at the end of the monitoring season and will include:

- Descriptions of success metrics
- Descriptions of any past maintenance, adaptive management or corrective actions taken
- Recommended future maintenance, adaptive management, or corrective actions
- Photos of the site
- Conclusion of whether the site is meeting success criteria.

## 5. CONSISTENCY WITH SMP AND CAO REGULATIONS

The Project includes the following elements to ensure compliance with SMP and the CAO:

- The area is zoned shoreline residential in the project area. The project location is currently a single-family residence, currently without a dock. The project will not preclude the use of the surrounding properties consistent with their zoning.
- The Project will enhance water-oriented uses for the property by allowing recreational access to the shoreline consistent with the SMP.
- The Project will protect the shoreline ecological functions by enhancing shoreline stabilization and planting native species along the shoreline to mitigate for vegetation that has previously been removed.
- The Project will restore the temporarily impacted shoreline by replacing existing vegetation to maintain habitat for the limited wildlife that use the area.
- The project will retain native plant communities and revegetate disturbed areas.
- Mitigation sequencing including avoidance, minimization and compensatory mitigation will be implemented.
- The project will not result in any fill of wetlands or fill within the 100-year floodplain.
- The removal of vegetation will be minimal and limited to grass and non-native species. Impacts are temporary and disturbed vegetation will be revegetated to provide soil stability, wildlife habitat and water quality treatment.
- Considering the past construction, proposed future construction and proposed mitigation, the project is expected to result in no net loss in ecological function.

## 6. CONCLUSION

Based on impacts of the past construction activities that will be restored, proposed future impacts to install the dock combined with the compensatory mitigation through plantings, the project is expected to result in **no net loss in ecological function**.

Additional permitting may be needed for the dock installation through the WDFW and a SEPA checklist through the City of Medical Lake may also be needed.

## 7. QUALIFICATIONS

Michelle Anderson, Senior Biologist/Environmental Planner and Steven Hutchinson, Environmental Planner are the primary staff preparing this report and are qualified in Wetland Delineation and Functional Assessment, Biological Assessments, Shoreline Processes, and the Regulatory Environment for Washington and Idaho.

This Shoreline Impact Assessment (SIA) is designed to comply with the Critical Area Report requirements as prescribed in City of Medical Lake SMP Chapter 4, Section 6 for both the Shoreline Master Program (SMP) and the Critical Areas Ordinance (CAO) of City of Medical Lake.

## 8. STATEMENT OF ACCURACY

*This firm certifies the document*

- *was prepared by qualified environmental practitioners;*
- *complies with applicable regulations, policies & procedures, and industry standards;*
- *and has received a Quality Control (QC) review prior to submittal.*



March 27, 2026

## 9. REFERENCES

City of Medical Lake. 2021. Shoreline Master Program. Effective March 1, 2022. <https://medical-lake.org/wp-content/uploads/2024/08/Medical-Lake-SMP-2021-Submitted-to-DOE-Final.pdf>

Federal Emergency Management Agency (FEMA), 2026. Flood Map Service Center <https://msc.fema.gov/portal/home> Accessed January 2026

U.S. Fish and Wildlife Service (USFWS). 2026a. Information for Planning and Conservation (IPaC). <https://ecos.fws.gov/ipac/> Accessed January 2026

U.S. Fish and Wildlife Service (USFWS). 2026b. The National Wetlands Inventory (NWI). <https://fws.gov/wetlands/>. Accessed January 2026.

Washington Department of Fish and Wildlife (WDFW). 2026. Priority Habitats and Species (PHS). <https://wdfw.wa.gov/species-habitats/at-risk/phs> Accessed January 2026.

## **APPENDIX A. VICINITY, SITE MAPS, AND CONCEPTUAL DESIGN PLAN**

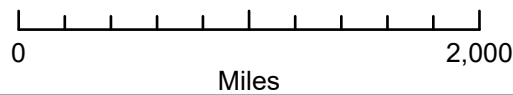
Nuess Shoreline Impact Assessment  
 PID 14182.2361  
 T 24N R 42E S18  
 47.5747869, -117.6847873  
 Spokane County



### Legend

 Site Parcel

Scale: 1:10,000














ANDERSON ENVIRONMENTAL CONSULTING

Nuess Shoreline Impact Assessment  
 PID 14182.2361  
 T 24N R 42E S18  
 47.5747869, -117.6847873  
 Spokane County

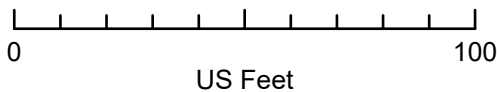


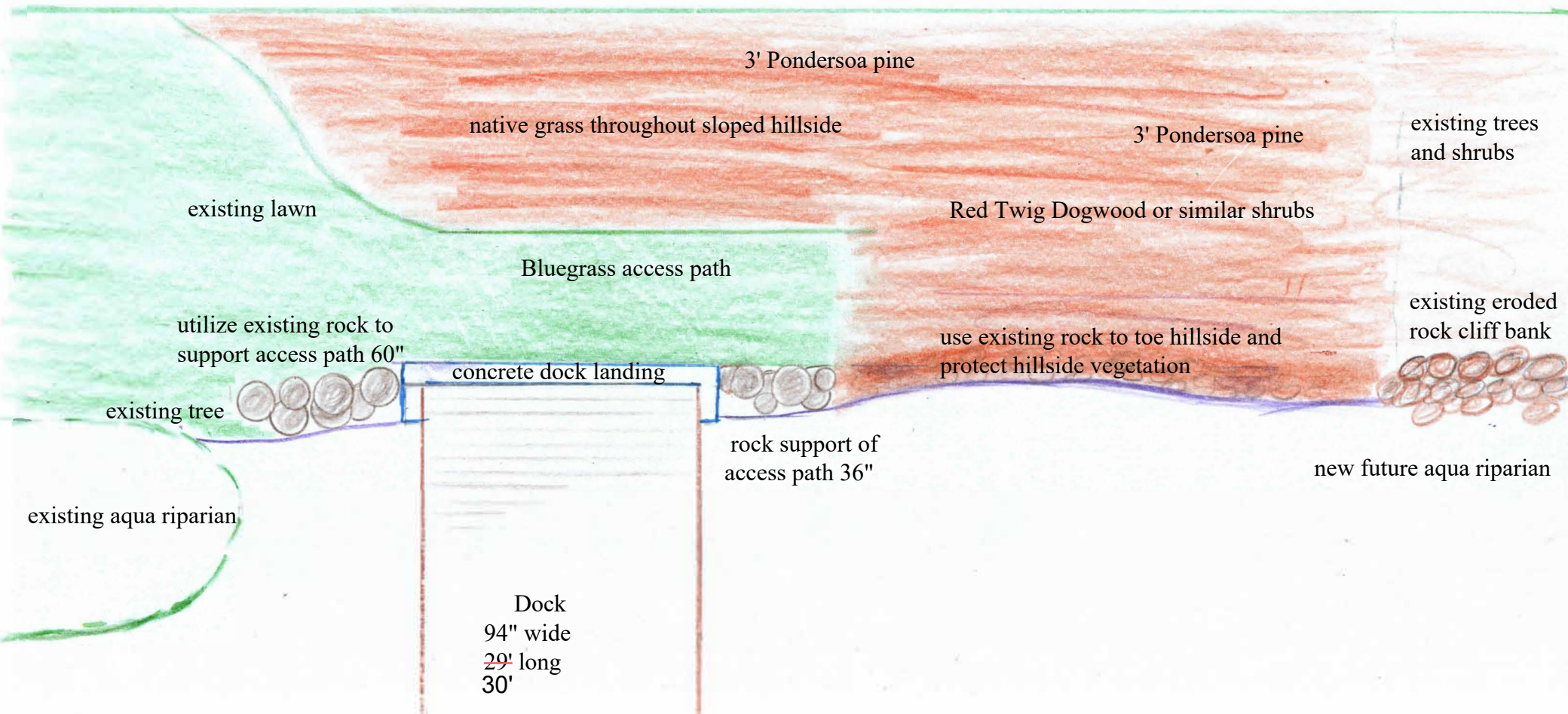
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Spokane Image Consortium, Microsoft, Vantor

**Legend**

-  Estimated OHWM
-  Estimated Wetland Boundary
-  200 ft Shoreline Jurisdiction
-  250 ft Cat. I Wetland Buffer
-  Cobble Placement
-  Dock
-  Abutment
-  Impact Area/Vegetation Removal
-  Mitigation Area
-  Property Line
-  Spokane County Parcels

Scale: 1:500





3' Ponderosa pine

native grass throughout sloped hillside

3' Ponderosa pine

existing trees and shrubs

existing lawn

Red Twig Dogwood or similar shrubs

Bluegrass access path

existing eroded rock cliff bank

utilize existing rock to support access path 60"

use existing rock to toe hillside and protect hillside vegetation

concrete dock landing

existing tree

rock support of access path 36"

new future aqua riparian

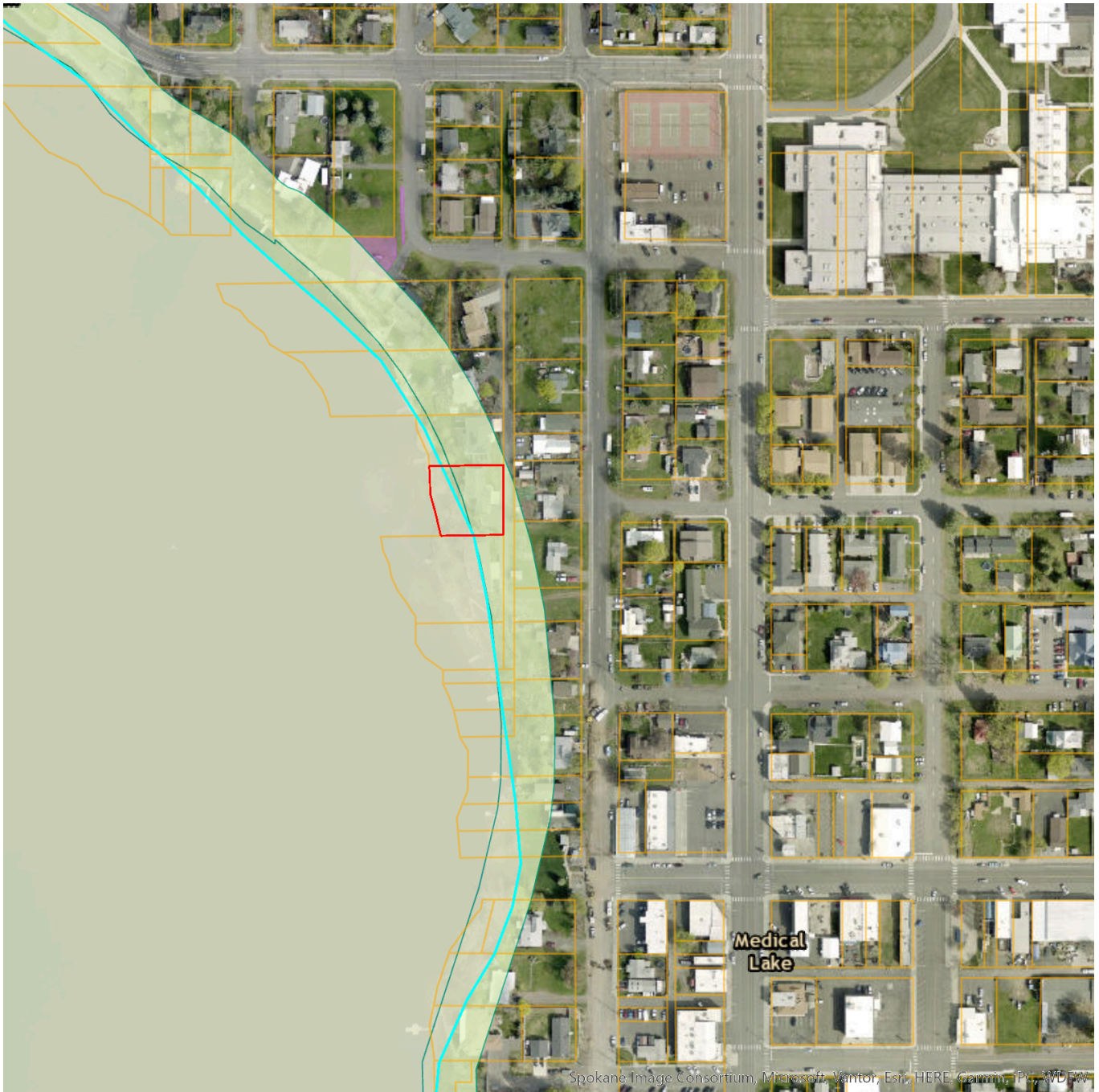
existing aqua riparian

Dock  
94" wide  
~~29'~~ 30' long

## **APPENDIX B. PHS AND IPAC REPORTS**



# Priority Habitats and Species on the Web



Report Date: 01/09/2026, Parcel ID: [14182.2361](#)

## PHS Species/Habitats Overview:

Occurrence Name	Federal Status	State Status	Sensitive Location
Wetlands	N/A	N/A	No

Riparian Management Zones, if present, are not included in the Overview table above or the Details below. For RMZ details, please visit [ripariandata.wdfw.wa.gov](http://ripariandata.wdfw.wa.gov).

## PHS Species/Habitats Details:

Wetlands	
Priority Area	Aquatic Habitat
Site Name	MEDICAL LAKE WETLANDS
Accuracy	1/4 mile (Quarter Section)
Notes	WATERFOWL CONCENTRATION AREAS ASSOCIATED WITH WETLANDS AND OPEN WATER USED DURING MIGRATION AND BREEDING. TIGER SALAMANDER OCCURENCE DOCUMENTED. GREAT BLUE HERON NESTING AND FORAGING. PAINTED TURTLE OCCURENCE DOCUMENTED. FURBEARER USE.
Source Record	903119
Source Dataset	PHSREGION
Source Name	HICKMAN, JERRY
Source Entity	WA Dept. of Fish and Wildlife
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
ManagementRecommendations	<a href="https://ecology.wa.gov/Water-Shorelines/Wetlands">https://ecology.wa.gov/Water-Shorelines/Wetlands</a>
Geometry Type	Polygons

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

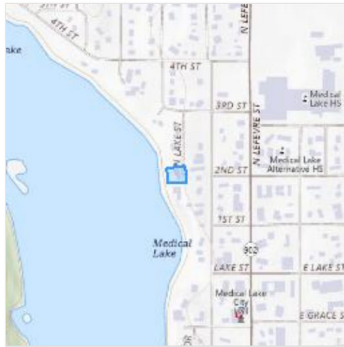
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Spokane County, Washington



## Local office

Washington Fish And Wildlife Office

☎ (360) 753-9440

📠 (360) 753-9405

1009 College St Se

Ste 215

Lacey, WA 98503-1249

<https://www.fws.gov/office/washington-fish-and-wildlife>

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened
Suckley's Cuckoo Bumble Bee <i>Bombus suckleyi</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/10885">https://ecos.fws.gov/ecp/species/10885</a>	Proposed Endangered

# Flowering Plants

NAME	STATUS
Spalding's Catchfly <i>Silene spaldingii</i> Wherever found There is <b>proposed</b> critical habitat for this species. <a href="https://ecos.fws.gov/ecp/species/3681">https://ecos.fws.gov/ecp/species/3681</a>	Threatened

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

## Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act <sup>2</sup> and the Migratory Bird Treaty Act (MBTA) <sup>1</sup>. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

### Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

### Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

### Review the FAQs

The FAQs below provide important additional information and resources.

**Bald Eagle** *Haliaeetus leucocephalus*

Breeds Dec 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

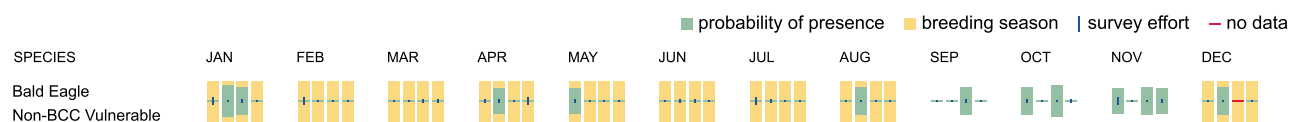
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



## Bald & Golden Eagles FAQs

### What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply).

### Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there,

and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

#### How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

#### Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

#### How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

#### Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

#### No Data ()

A week is marked as having no data if there were no survey events for that week.

#### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

## Migratory birds

The Migratory Bird Treaty Act (MBTA) <sup>1</sup> prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

#### Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases [birds of concern](#), including [Birds of Conservation Concern \(BCC\)](#), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the [Nationwide avoidance and minimization measures for birds](#) document, and any other project-specific avoidance and minimization measures suggested at the link [Measures for avoiding and minimizing impacts to birds](#) for the birds of concern on your list below.

#### Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles document](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

### Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
<b>American White Pelican</b> <i>pelecanus erythrorhynchos</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/6886">https://ecos.fws.gov/ecp/species/6886</a>	Breeds Apr 1 to Aug 31
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a>	Breeds Dec 1 to Aug 31
<b>Black Tern</b> <i>Chlidonias niger surinamensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3093">https://ecos.fws.gov/ecp/species/3093</a>	Breeds May 15 to Aug 20
<b>California Gull</b> <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
<b>Calliope Hummingbird</b> <i>Selasphorus calliope</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9526">https://ecos.fws.gov/ecp/species/9526</a>	Breeds May 1 to Aug 15
<b>Cassin's Finch</b> <i>Haemorhous cassinii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9462">https://ecos.fws.gov/ecp/species/9462</a>	Breeds May 15 to Jul 15
<b>Clark's Grebe</b> <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
<b>Forster's Tern</b> <i>Sterna forsteri</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Aug 15
<b>Northern Harrier</b> <i>Circus hudsonius</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/8350">https://ecos.fws.gov/ecp/species/8350</a>	Breeds Apr 1 to Sep 15
<b>Olive-sided Flycatcher</b> <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a>	Breeds May 20 to Aug 31
<b>Rufous Hummingbird</b> <i>Selasphorus rufus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8002">https://ecos.fws.gov/ecp/species/8002</a>	Breeds Apr 15 to Jul 15
<b>Western Grebe</b> <i>Aechmophorus occidentalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/6743">https://ecos.fws.gov/ecp/species/6743</a>	Breeds Jun 1 to Aug 31

# Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

## Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

## No Data (-)

A week is marked as having no data if there were no survey events for that week.

## Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





## Migratory Bird FAQs

**Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Avoidance & Minimization Measures for Birds](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the [Bald and Golden Eagle Protection Act](#) and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**Why are subspecies showing up on my list?**

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering, or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Bald and Golden Eagle Protection Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

**Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

**Proper interpretation and use of your migratory bird report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

#### **Interpreting the Probability of Presence Graphs**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

#### ***How is the probability of presence score calculated? The calculation is done in three steps:***

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

#### **Breeding Season ()**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### **Survey Effort ()**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

#### **No Data ()**

A week is marked as having no data if there were no survey events for that week.

#### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location did not intersect any wetlands mapped by NWI.

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

#### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

## **APPENDIX C. SUPPLEMENTAL MAPS AND DOCUMENTATION**

**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevations** shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 11. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov/> or contact the National Geodetic Survey at the following address:

NGS Information Services  
 NOAA, NNGS12  
 National Geodetic Survey  
 SSMC-3, #9202  
 1315 East-West Highway  
 Silver Spring, MD 20910-3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov/>.

**Base map** information shown on this FIRM was derived from multiple sources. Base map files were provided in digital format by Spokane County GIS and Washington State Department of Natural Resources. This information was compiled at various map scales during the time period 1995-2007.

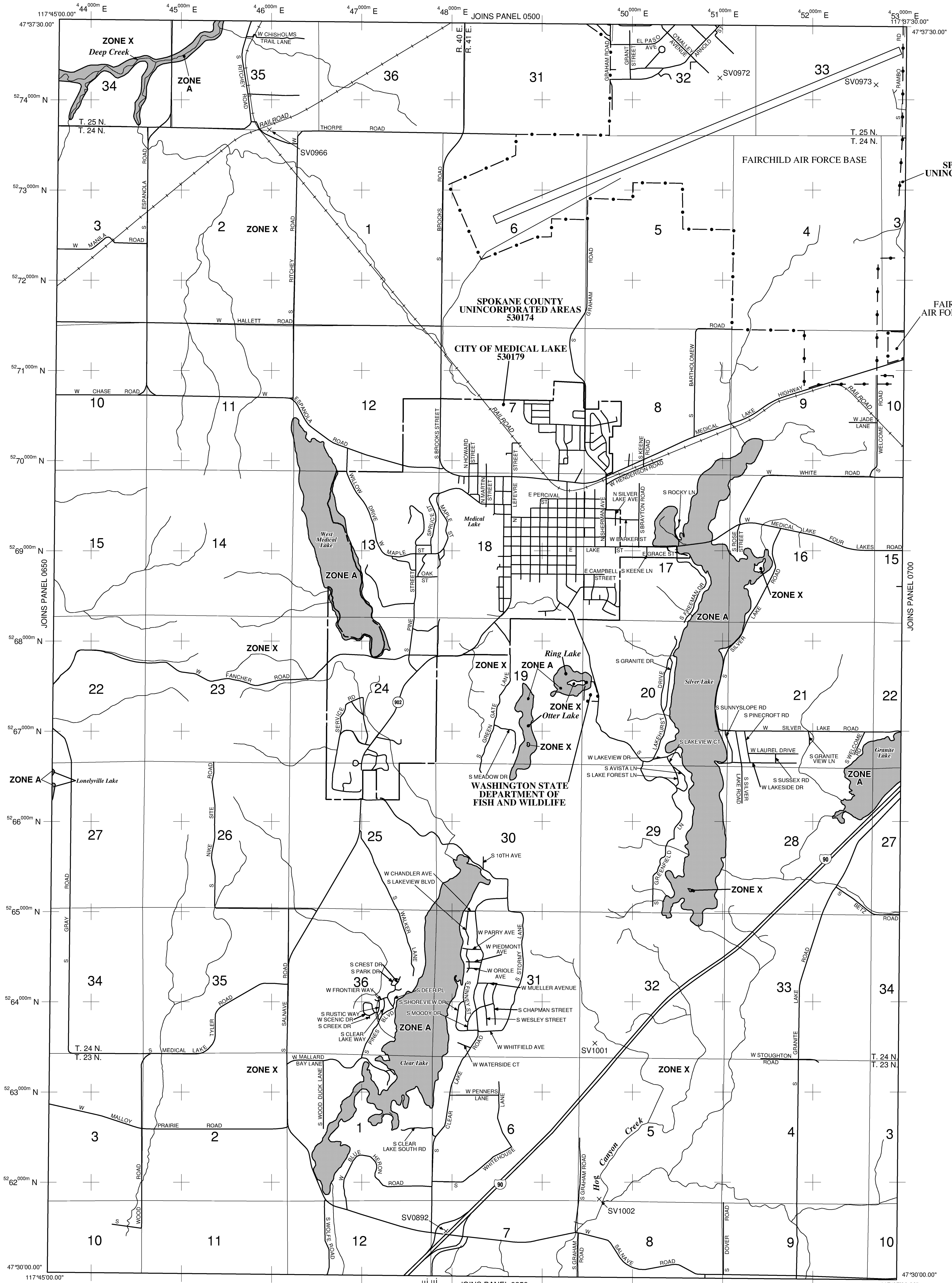
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at <http://www.msc.fema.gov/>.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/>.



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently derelict. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**

**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**

**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.

**ZONE D** Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**

- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

513 Base Flood Elevation line and value; elevation in feet\*  
 (EL 987) Base Flood Elevation value where uniform within zone; elevation in feet\*

\* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

(A) Cross section line

(2) Transsect line

97°07'30", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)

42°75'00"N 1000-meter Universal Transverse Mercator grid ticks, zone 11

6000000 M 5000-foot grid ticks: Washington State Plane coordinate system, north zone (FIPSZONE 4601), Lambert Conformal Conic

DX5510 Bench mark (see explanation in Notes to Users section of this FIRM panel)

M1.5 River Mile

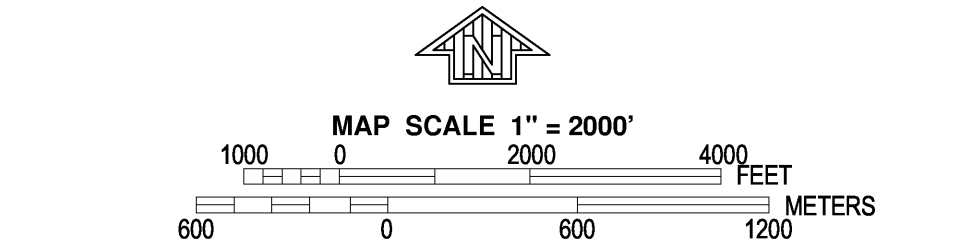
MAP REPOSITORIES Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP July 6, 2010

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



**PANEL 0675D**

**FIRM  
 FLOOD INSURANCE RATE MAP  
 SPOKANE COUNTY,  
 WASHINGTON  
 AND INCORPORATED AREAS**

**PANEL 675 OF 1150**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

COMMUNITY	NUMBER	PANEL	SUFFIX
SPOKANE COUNTY	530174	0675	D
MEDICAL LAKE, CITY OF	530179	0675	D

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER  
 53063C0675D**



**EFFECTIVE DATE  
 JULY 6, 2010**

Federal Emergency Management Agency



February 13, 2026

### Wetlands

- |   |                                |   |                                   |   |          |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland   |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |                                |  | Freshwater Pond                   |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

## APPENDIX D. SUMMARY OF AGENCY COORDINATION

The known agency coordination from emails is summarized below:

- May 29, 2025-Elisa Rodriguez City of Medical Lake emails Meagan Hayes, Senior Shoreline Management Planner Eastern Regions regarding the homeowner question about retaining walls being exempt from the SMP.
- May 29, 2025 – M. Hayes stated that it (retaining wall) is not exempt from review.
- June 2, 2025-E. Rodriguez asks for confirmation of the type of review, decision body and approval criteria as follows. Review Type: Substantial Development Permit (per section III.B); Decision body: Administrator (III.P.2.i.); Approval Criteria: Residential (V.E). She requested guidance on how to apply it to a retaining wall, and if review is required if the wall cost is less than the threshold.
- June 3, 2025-M. Hayes determines that the shoreline is in Shoreline Residential Shoreline Environmental Designation, with a 50 ft buffer for appurtenant structures. She states that development outside the buffer but in 200 ft jurisdiction require at a minimum a Substantial Development Permit but that cost exempts the SMP, but substantive requirements must still be met.
- July 3, 2025-E. Rodriguez emails Megan Hayes stating landowner cleared vegetation and built forms for a retaining wall at the water. This was reported by a community member and landowner was told to stop work and notes information provided by the landowner re: provision III.C, Exceptions for the Substantial Development Permit Requirements, c. Construction of a normal protective bulkhead common to single-family residences.
- July 9, 2025 – M. Hayes passes this on to Ryan McNair and Tess Cooper at Ecology as a permitting/compliance issue.
- July 9, 2025- Tess Cooper emails E. Rodriguez and provides detailed requirements including description of qualifications for protective bulkheads, that they must still meet requirements in III. Shoreline Development Review, Section E, they must have a Geotech recommendation for the wall is needed over bioengineered stabilization. She also lists other permits needed through Corps of Engineers and WDFW.
- Summer 2025- Washington State Department of Fish and Wildlife Habitat Biologist Kile Westerman, discussed the project with Mr. Nuess but declined a site visit deferring to DOE and the City of Medical Lake.
- Summer 2025-Medical Lake Planner, Elisa Rodriguez, visited the site and discussed design alternatives as the proposed design was determined not to comply with the SMP.
- Summer 2025-Washington State Department of Ecology (DOE), Biologist Tess Cooper, performed a site visit. During this site visit she suggested alternate locations for the dock

further north where there is a flatter slope and rocks or other bioengineering solutions for bank retention rather than concrete walls.

- August 15, 2025 - A Land Use Application dated August 15, 2025 was submitted to the City of Medical Lake requesting a Statement of Exemption from the Medical Lake Shoreline Master Program for the proposed project.
- October 2025 – Kile Westerman clarifies that talking to E. Rodriguez and reviewing the SMP that a traditional bulkhead for this situation is not permitted and states the need for a mitigation plan, City permitting and SEPA in addition to the HPA. He sent a consultant list.
- Fall 2025-Mr. Nuess began working on alternatives to the dock location, design and soil stabilization that would minimize impacts to wetlands and shorelines.

After discussions with agencies, it was determined this report should address two separate actions, their impacts and appropriate mitigation to ensure a no net loss of ecological function:

- Impacts to the shoreline and proposed mitigation for the construction already started, which is considered a non-compliance event.
- Impacts to the shoreline and proposed mitigation to construct the remainder of the project (proposed dock).