

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

DESCRIPTION OF FISH AND WILDLIFE STANDARD DIGITAL DATA STRUCTURES

INTRODUCTION

This document is a brief synopsis of selected digital fish, wildlife and habitat data available from the Washington Department of Fish and Wildlife (WDFW) which support the Department's Priority Habitats and Species. ***More detailed information about each dataset, including information on data compilation methods, data organization, structure, and details on using the digital data, are available in formal metadata maintained for each dataset and distributed with the data.*** This document provides links to other sources of information and contacts at WDFW for further assistance.

Data described here are developed and maintained by WDFW using Geographic Information System (GIS) software. Databases covered in this document contain WDFW's knowledge of fish and wildlife resources and occurrences based on research and field surveys conducted over the past 30 + years. It is important to note, however, that habitats and species may occur on the ground 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 species or habitat types.

Digital data currently distributed from the Priority Habitat and Species (PHS) Section include fish and wildlife species requiring protective measures and/or management actions to ensure their survival. A species identified and mapped as priority fit one or more of the following criteria. They are state Endangered, Threatened, Sensitive and Candidate species; vulnerable aggregations of species; and species of recreational, commercial and/or tribal importance. Other species occurrences, such as state Monitor, which contain species of local concern and all federally listed species are included as well.

Also, some species and habitats are excluded from some of the datasets, such as data records older than 1977, historic species, museum specimens, species locations that are no longer considered viable for a variety of reasons and species locations that are less accurate. If more complete datasets are needed than a special request must be made at the time you place your order.

The PHS distribution dataset structures described below are organized by 'collection', which to a large degree reflects the major business areas of the Department:

DISTRIBUTION DATASETS

Wildlife Survey Data Management (WSDM)

Datasets containing species site observations from field surveys to reports from reputable sources.

- **ws_occurpoint_dr/ws_occurpolygon_dr** - This data represents a subset of WSDM and includes information for WDFW designated priority species
- **ws_murreletobs_v** - A table showing marbled murrelet observation attributes. Spatial geometry for sites are contained in ws_occurpoint_dr.
- **ws_mmdetsect** - Public land survey sections containing marbled murrelet detection locations, this layer is used in the forest practices permit process.
- **ws_mmadj8sects** – Marbled murrelet detection and surrounding public land survey sections which fall within a 3/4 mile buffer around the detection section, this layer is used in the forest practices process.
- **baldeagle_bf** – 330 and 660 foot buffers of bald eagle nests and communal roosts. WDFW is no longer directly involved in Bald Eagle management planning. US Fish and Wildlife Service (USFWS) is the lead authority on protecting eagles and their habitats under the Bald and Golden Eagle Protection Act and are the primary contact to implement bald eagle management plans in Washington. For further information and USFWS contacts visit our web site at http://www.wdfw.wa.gov/conservation/bald_eagle/. WDFW will continue to support our customers planning and permitting needs by maintaining and distributing our corporate Bald Eagle datasets.
- **ws_owlsitecenters_sv** - Locations of spotted owl sites.
- **ws_owlstatus_buf** – Territorial, non-territorial and historic spotted owl sites.
- **haulouts** - Seal and sea lion haulout sites.

Priority Habitats and Species Areas

An inventory of priority species use areas and habitats based on WDFW biologist knowledge and surveys.

- **phsregion_sv** – Overlapping polygons that describe occurrences of priority habitats and species.
- **phspts_sv** – Information on documented priority habitat sites.
- **phssrc** – Data source records for phsregion_sv and phspts_sv.
- **sbirdcat_sv** - Locations surveyed for breeding seabirds and listed in 'Catalog of Washington Seabird Colonies' by Steven M Speich, et al. published August 1989.
- **nwipoly_sv** – National Wetlands Inventory. An inventory identifying wetland and deep water habitats based on data derived from high altitude color infrared aerial photographs. This layer was compiled from NWI digital data available in approximately 1990.

Statewide Washington Integrated Distribution (SWIFD)

A statewide fish distribution (presence) dataset.

- **SWIFD_SV** - Spatial representation of the distribution of anadromous and resident salmonids and various game fish based on the line work in the National Hydrography Dataset (NHD).

Salmonid Stock Inventory (SaSI)

Salmonid fish stock inventory on all wild stocks.

- **sasi_sv** - A standardized, uniform approach to identifying and monitoring the status of Washington's salmonid fish stocks. The inventory is a compilation of data on all wild stocks and a scientific determination of each stock's status.

Marine Environment

A collection of marine and shellfish data resources.

- **geoduck** – Locations of documented Subtidal Geoduck clams (*Panope abrupt*) for areas in Washington’s inside marine waters. Spatial features in this layer match those in the shellfish_summary layer, but have extended attributes.
- **herrhold** - Locations of documented Pacific herring (*Culpa harengus*) adult holding areas through 2003.
- **herrspwn** - Locations of documented Pacific herring (*culpa harengus pallasi*) spawning areas through 2012.
- **shellfish_summary** - Locations of shellfish from WDF Tech Report 79. The shellfish include abalone (generalized to the township level), hardshell clam, subtidal clam, dungeness crab, geoduck clam, manila clam, native oysters, pacific oyster, razor clam, pandalid shrimp, and red urchin. Like the other species in this layer geoduck clams are represented as absence/presence. For additional attribute information see the geoduck layer.
- **doc_sand_lance_spawning** - Documented intertidal spawning habitat for Pacific sand lance (*Ammodytes hexapterus*) in western Washington's marine waters.
- **doc_smelt_spawning** - Documented intertidal spawning habitat for surf smelt (*Hypomesus pretiosus*) in western Washington's marine waters.

DISTRIBUTION FORMATS

PHS datasets are distributed in commonly supported format:

- ESRI Personal Geodatabase (v9.3) – Spatial data, associated attributes, and tables are contained in a Microsoft Access database.
- ESRI Shapefile – Spatial data is contained in standard shape files. Associated attributes and tabular data are stored as Dbase “.dbf” files. Column names may be truncated and have not been mapped to aliases.

All spatial data is provided in Washington State’s standard spatial reference, Washington State Plane South Feet, North American Datum of 1983 (1991 Adjustment – HARN).

XML and HTML formatted metadata files for all distributed datasets are provided in the metadata content standard specified by the Federal Geographic Data Committee (FGDC).

A typical distribution package may include empty datasets indicating that features contained in the statewide layer did not overlap the geographic area for which data was requested. The features representing the geographic area requested and the buffer used to clip the statewide datasets are included in the distribution package as “projectbdry” and “projectbdryclip” respectively.

OTHER DATA

Information on kelp beds, oak stands, eelgrass, turf algae and township /section data are available from the Washington Department of Natural Resources. For information on these data in a digital format visit their GIS Data Center web stie at: http://www.dnr.wa.gov/BusinessPermits/Topics/Data/Pages/gis_data_center.aspx.

USE OF THE DATA

Digital data products are supported by documents titled *Management Recommendations for Priority Habitats and Species*. These management recommendations are developed with a thorough review of the best scientific literature available. They provide important background information on each species or habitat type and recommendations for conducting land uses that consider the needs of fish and wildlife. When a priority habitat or species occurs in or near a project site, these management recommendations should be consulted to determine how to modify the project in consideration of fish and wildlife needs.

Your project may require further field inspection or you may need to contact our field biologists or others in WDFW to assist you in interpreting and applying this information. Generally, for assistance on a specific project, you should contact the WDFW Habitat Program Manager for your county and ask for the area habitat biologist for your project area. Refer to the enclosed directory for those contacts. Contact information is also available on line at:

<http://www.wdfw.wa.gov/about/regions>.

These databases do not represent exhaustive inventories. They are compilations of existing knowledge from field biologists that are updated as knowledge improves. Because these fish and wildlife data are not exhaustive and subject to change, project review for fish and wildlife should not rest solely on mapped priority habitats and species. Instead, they should also consider new information gathered from field investigations.

Information on specific locations of selected fish and wildlife is considered sensitive by the Director of WDFW and will be released in standard formats only. This format may be either digital or displayed on a 1:24,000 scale map. WDFW standard map format consists of fish, wildlife, and habitat information displayed for an individual section with a one square mile buffer (nine square miles total).

Washington State Law exempts sensitive fish and wildlife information from public inspection and copying. WDFW employees shall only release sensitive fish and wildlife information to the following entities and their agents (e.g., Consultants) for fish, wildlife, land management purposes, or scientific research needs:

- A. Government agencies.
- B. Tribes.
- C. Accredited colleges or universities.
- D. The owner, lessee, or right-of-way or easement holder of private land to which the data pertain or who initially provided the data.
- E. Public utilities.

The release of sensitive fish and wildlife data may be subject to a confidentiality agreement by means of a WDFW Sensitive Fish and Wildlife Information Release Agreement. The agreement must indicate that the signatory (person or organization) recognizes the appropriate guidelines and criteria for species listed in Appendix A, of Releasing Sensitive Fish and Wildlife Information Policy – 5210, for disseminating sensitive fish and wildlife information and has agreed to the provisions of this policy.

For additional information or questions contact WDFW at (360) 902-2543 or e-mail phsproducts@dfw.wa.gov.

Generalized and non-sensitive fish and wildlife information may be provided to those who do not meet policy guidelines.

For more information on WDFW please visit our web site at: <http://www.wdfw.wa.gov> or visit the Priority Habitats and Species site at: <http://www.wdfw.wa.gov/conservation/phs>.

PHS ON THE WEB

WDFW has developed a web-based interactive tool that puts our fish and wildlife information online. You can access it from <http://www.wdfw.wa.gov/mapping> and then click on the **PHS on the Web** box. The specific locations of some fish and wildlife species are not available on the web, they have been generalized. These are species deemed “sensitive” (e.g., confidential) by WDFW and are not displayed on the web beyond a certain resolution. For some projects the information provided by **PHS on the Web** may be adequate but for others you may still need to go through the formal process, of filling out an Order Form, available at http://www.wdfw.wa.gov/conservation/phs/maps_data, to get more site-specific information.

RARE PLANT INFORMATION

For information on the state’s Endangered, Threatened, and Sensitive plants as well as high quality wetland and terrestrial ecosystems, please contact the Washington Department of Natural Resources, Natural Heritage Program at PO Box 47016, Olympia Washington 98504-7016, by phone (360) 902-1667 or visit their web site at:

http://www.dnr.wa.gov/ResearchScience/Topics/NaturalHeritage/Pages/amp_nh.aspx.

**WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
REGIONAL CONTACTS**

For assistance with Priority Habitats and Species information, contact the appropriate regional office, listed below.

County...	Contact...
Asotin, Columbia, Ferry, Garfield, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	Eastern Office - Region 1 2325 North Discovery Place Spokane Valley, WA 99216-1566 Phone: (509) 892-1001 E-mail: TeamSpokane@dfw.wa.gov
Adams, Chelan, Douglas, Grant Okanogan	North Central Office - Region 2 1550 Alder Street NW Ephrata, WA 98823-9699 Phone: (509) 754-4624 E-mail: TeamEphrata@dfw.wa.gov
Benton, Franklin, Kittitas, Yakima	South Central Office - Region 3 1701 South 24 th Avenue Yakima, WA 98902-9651 Region 3 Phone: (509) 575-2740 E-mail: TeamYakima@dfw.wa.gov
Island, King, San Juan, Skagit, Snohomish, Whatcom	North Puget Sound Office - Region 4 16018 Mill Creek Boulevard Mill Creek, WA 98012-1296 Phone: (206) 775-1311 E-mail: TeamMillCreek@dfw.wa.gov
Clark, Cowlitz, Klickitat, Lewis, Skamania, Wahkiakum	Southwest Office - Region 5 2108 Grand Boulevard Vancouver, WA 98661 Phone: (360) 696-6211 E-mail: TeamVancouver@dfw.wa.gov
Clallam, Grays Harbor, Jefferson, Kitsap, Mason, Pacific, Pierce, Thurston	Coastal Office - Region 6 48 Deveonshire Road Montesano, WA 98563-9618 Phone: (360) 249-4628 E-mail: TeamMontesano@dfw.wa.gov