Hatchery Review (HSRG) Populations

Introduction

The U.S. Congress funded the Puget Sound and Coastal Washington Hatchery Reform Project in Fiscal Year 2000. The Hatchery Reform Project was a comprehensive hatchery reform effort to: conserve indigenous salmonid genetic resources, assist with the recovery of naturally spawning salmonid populations, provide for sustainable fisheries, and improve the quality and cost-effectiveness of hatchery programs.

In 2005, Congress directed NOAA Fisheries to replicate the Puget Sound and Coastal Washington Hatchery Reform Project in the Columbia River Basin. The Hatchery Scientific Review Group (HSRG) was expanded to 14 members in 2006 with funding for a second year provided by Bonneville Power Administration (BPA) under the auspices of the Northwest Power and Conservation Council's (NPCC) Fish and Wildlife Program. The review was to formulate a procedure ("Solution") to change the focus of the Columbia River hatchery system from a primarily user- based approach, to an ecosystem-based approach.

The HSRG review not only included hatchery programs but took into account natural populations and survival conditions in the mainstems of the Columbia and Snake rivers and the Columbia River estuary. The HSRG work products include four preliminary species reports, annual reports to Congress, the final report and its appendices, and a set of web-accessible analytical tools and data sets. This spatial dataset represents the population boundaries, hatcheries and satellite facilities involved in the programs for each existing population reviewed by the HSRG. The HSRG also modeled future programs/populations these are not included in the spatial data. Also of note, the spatial data includes all populations described in the HSRG population reports even if the population (natural) was not included in the final modeled population set. For the website and full report go to http://www.hatcheryreform.us/hrp/welcome_show.action.

Most of the original data was collected and prepared by hatchery managers in HGMPs and HSRG staff for reports. Data on populations, hatcheries and their associated facilities was mined from these reports to create a spatial dataset by CRITFC staff Denise Kelsey (keld@critfc.org) and David Graves (grad@critfc.org). Where possible this data was confirmed with hatchery program staff.

The data set for the Crosswalk Project displays only the population information.

Use Constraints: ⬦

Population distribution was collected from the text in the reports and mapped to HUC6 and watersheds. If a weir was described in the report as blocking hatchery fish from the watershed then the information was mapped accordingly. However not all Hatchery Review reports were as detailed as others in the description of population distribution or spawning areas – in these cases CRITFC mapped the hatchery review population identical to the populations in the Subbasin Plan data set.

Maintenance and Update Frequency:

Updated as needed when population information is changed or as contact is made with program biologists or managers.

Attributes and Definitions:

The Hatchery Populations attributes contain information on each hatchery and natural population modeled for the Hatchery Reform process. Below is a list of the attributes:

Data Associated with the HUC6 Boundary

Subwatershed Name – Official name for the HUC 6 in the national Watershed Boundary Data set (WBD).

Fish Unit - Name used for the population for the hatchery review. Name usually indicates location of population by subbasin and tributary. This name may or may not be similar to other agency names for the population.

Source- Acronym for the source of the dataset. See Intro web page of project for information on the source.

Attribute Report Link - Link to the information/attributes for each population provided by the source.

Comments - Comment on the HUC6, pertaining to the population/fish unit.

Data Associated with the Pop/Fish Unit

HSRG ID - Unique identifying number assigned to each population by the HSRG group. This number matches the PopID number in the modeled datasets.

Province - The Columbia Basin has ten ecological provinces. The units used for the hatchery review may or may not match those of the regionally recognized provinces in name or spatial location. Province in this dataset was used to roll-up populations and hatchery programs for salmon and steelhead into an ecological level.

Subbasin - Name of the subbasin in which the salmon or steelhead population is located. A Columbia River Subbasin is a major watershed. Several subbasins are located within a province.

ESU - The name of the evolutionary significant unit of salmon or steelhead in which the hatchery population is located.

Part of ESU - Indicates if the hatchery population is a part of the ESU.

HSRG Report - Title of the population report produced by the HSRG. The reports can be found in Appendix E of the final report.

Program Type - Indicates the type of hatchery program. Segregated - management intent is to create a distinct population that is reproductively isolated from naturally spawning populations. Integrated - management intent is to create a composite hatchery/natural population for which the dominant selective pressure is the natural environment. None – natural population. Not modeled - these are populations that have reports produced by the HSRG which were dropped from analysis.

Designation - Primary, Contributing, and Stabilizing refer to the population designation for biological significance of the natural population. Designation does not apply (NA) to segregated hatchery programs. Primary - populations that have to achieve high viability, Contributing - populations that have to achieve medium viability, Stabilizing - populations that need to maintain current viability.

Purpose - Purpose for fish production in the hatchery program. Harvest – fish produced for one or more of the following; commercial ocean and river fisheries, sport fisheries, and tribal fisheries. Conservation – supplementation and preservation of natural populations. None - natural population.

Historic Brood - Very brief history of population, which may include habitat conditions, broodstock history, escapement notes, etc.

Spawning Reaches - Comment on spawning location and hatchery influence.

Comments - Comment on population, which does not fit in to other fields.