

Puget Sound/WA Coast Update on Pacific Lamprey Activities

What we know about Pacific Lamprey in the Puget Sound and along the Coast:

Limited data exists for Pacific Lamprey in these areas. Where demographic and threat data exist, abundance of Pacific Lamprey was characterized as ‘rapidly declining’. Threats include adult and juvenile passage, stream and floodplain degradation, and reduced stream flows.

What are the next steps for Pacific Lamprey conservation in Puget Sound and along the WA Coast?

- Complete the compilation of currently available threat data in these areas (drafts are underway based upon salmon recovery plans and limited factor analyses).
- Continue outreach efforts with our partners. Outreach has begun with a number of partners, including the Northwest Indian Fisheries Commission, Nisqually National Wildlife Refuge, the Nisqually Tribe, and WDFW.
- Schedule meetings to develop step-down regional action plans for implementation (we hope to schedule these meetings to begin the Regional Implementation Plans (RIPs) in summer/fall of 2015).
- Complete the RIPs with our partners and, most importantly, begin implementing the highest priority projects for assessment and restoration.

Meeting with the NWIFC

- We (FWS) met with the NWIFC staff in early April and discussed the Pacific Lamprey Conservation Initiative efforts, described the upcoming lamprey assessment and planning opportunities, and encouraged the NWIFC and/or Tribes to participate in developing the Regional Implementation Plans.

Partner participation in Pacific Lamprey Conservation Initiative efforts:

The following tribes have participated directly in Pacific Lamprey Conservation Initiative activities: the Lower Elwha Klallam Tribe, The Chehalis Tribe, and the Squaxin Island Tribe. Promisingly, these and other tribes have just recently begun to work with the Service and our partners through outreach efforts, and by beginning to look for lamprey, documenting their presence, and sharing their data. In addition, USGS and WDFW have been working on lamprey distribution and abundance within our area. The following is a brief description of some of the more recent lamprey activities undertaken.

- The Lower Elwha Klallam Tribe received funds under the USFWS Tribal Wildlife Grants Program in 2007 to conduct surveys on lamprey within Elwha Basin. The Tribe also partnered with USGS and the Service to collect data for investigating the use of electrofishing techniques for detecting the presence of juvenile lamprey.
- WDFW and Squaxin Island Tribe collect lamprey information while assessment smolt outmigration.
- WDFW has been collecting information on lamprey redds and spawners in the Chehalis basin. FWS funded extended spawner surveys in this basin for 2 years.
- Our office has been coordinating with the Chehalis Tribe and others on Pacific Lamprey outreach efforts through a geocaching challenge. The geocaching challenge has been a huge success to date, with hundreds of cache visits.

- The Chehalis Tribe has also carried out lamprey spawner surveys in the Chehalis Basin in the past and has shared this data with WDFW and the Service.
- Mike Hayes (USGS) was awarded a Science Support Partnership Program grant to determine lamprey distribution in Puget Sound and contacted or worked directly with many federal, state, tribal, and NGO partners to complete this work.
- Jeff Duda (USGS) and others have begun evaluating fish recolonization, including lamprey, following the removal of the Elwha River dams using eDNA.

Future Projects

The following are projects underway or proposed to occur in the near future:

- Fish occupancy surveys (including lamprey) in the upper Chehalis River basin (WDFW is the lead) (funded).
- Pacific lamprey occupancy surveys in a Puget Sound basin (FWS funded, basin TBD).
- Evaluation of the use of eDNA as a tool to assess lamprey distribution in Puget Sound basins (proposed).