

# Pacific Lamprey Conservation Initiative

## Pacific Lamprey in Decline

Pacific Lamprey (*Entosphenus tridentatus*) belong to a group of ancient fishes that have been around for ~400 million years and inhabit freshwater and ocean habitats from Southern California through the Pacific Northwest and Alaska, across the Bering Sea to Japan. Pacific Lamprey are a native species that historically returned to rivers and streams to spawn in large numbers. Current populations have declined in abundance and are impacted by misperceptions and lack of awareness. Threats to Pacific Lamprey occur in much of the species' range and include artificial obstructions that restrict access to spawning and rearing habitats, reduced flows and dewatering of streams, stream and floodplain degradation, degraded water quality, and changing marine and climate conditions.



## Cultural Significance

Pacific Lamprey are vitally important to Indigenous people throughout their range and play key cultural and ecological roles in these communities and ecosystems. Long considered an important source of food for tribal communities - Pacific Lamprey are prized for their rich, fatty meat and appreciated as a medicinal and nourishing food.



In 2004, a petition to list Pacific Lamprey under the Endangered Species Act (ESA) was deemed "not warranted" by the U.S. Fish & Wildlife Service (USFWS) due to a lack of information and defined distinct population segments. This decision and the cultural importance of Pacific Lampreys sparked a collaborative effort to restore this important species.

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### WESTERN STATES

The historical range of Pacific Lamprey spans the U.S. West Coast including Alaska, California, Idaho, Oregon, and Washington. Partners from across this region are active in PLCI, and projects are being implemented in all 5 states.

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### SIGNATORIES TO THE CONSERVATION AGREEMENT

There were 33 signatories and 12 supporting partners to the first iteration of the Agreement in 2012. New and existing partners are invited to recommit to the updated Agreement in 2022.

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### REGIONAL MANAGEMENT UNITS (RMUS)

Pacific Lamprey distribution is divided into 18 RMUs that implement the actions outlined in the Conservation Agreement and provide opportunities for collaboration on conservation and restoration activities.

## A Collaborative Solution

In 2007, an effort was initiated to conserve and restore Pacific Lamprey outside of the ESA-listing process. The result was the formation of the Pacific Lamprey Conservation Initiative (PLCI) in 2008 - a diverse collaboration of Native American tribes, federal, state, municipal and local agencies, non-profits, and others working together to achieve long-term persistence of Pacific Lamprey and their habitats, and to support their traditional tribal uses across their historical range. There are three components to PLCI: the Pacific Lamprey Assessment, Pacific Lamprey Conservation Agreement, and Regional

Implementation Plans.

### Lamprey Summit V

Since Lamprey Summit I in 2004, partners have convened every 4 to 5 years to revisit the science and current status of Pacific Lamprey and recommit to working collaboratively to preserve this culturally and ecologically important species. In December 2022, PLCI will convene Lamprey Summit V where parties will come together to present and learn about the five-year update to the Pacific Lamprey Assessment and recommit to the updated Conservation Agreement. Participants will discuss ongoing and completed research and restoration activities, and strategize on collaborative opportunities on behalf of Pacific Lamprey conservation for the next 5 years.

### Assessment

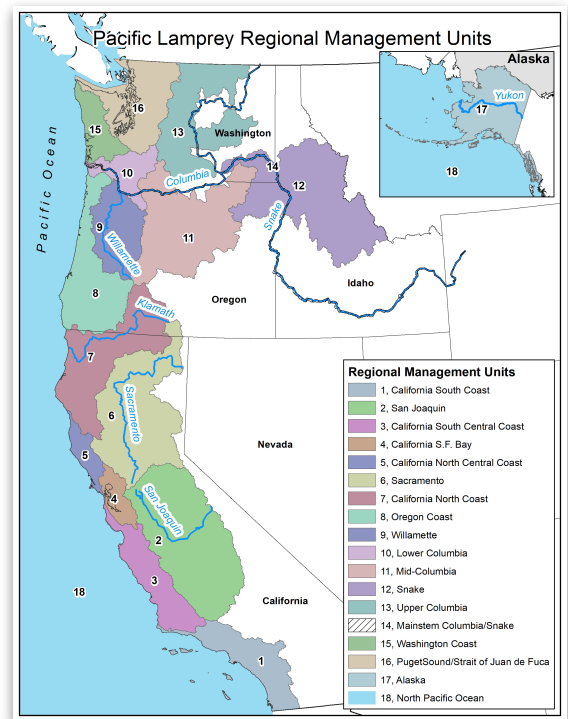
Every five years PLCI and its partners evaluate Pacific Lamprey habitat conditions, population demographics, distribution, and threats. This information is used to inform NatureServe, a diagnostic tool that characterizes conservation risks of Pacific Lamprey across their historical range.

### Conservation Agreement

First signed in 2012, the Conservation Agreement is a voluntary commitment by signatories and supporters to leverage available resources (human and capital) to reduce threats to Pacific Lamprey in the face of climate change, and to improve their habitats, population status, and support traditional tribal use.

### Regional Implementation Plans

Each of the 18 Regional Management Units (RMUs) develops a Regional Implementation Plan (RIP) to identify, prioritize, and implement key conservation actions with the goal of restoring Pacific Lamprey. The RIPs are updated annually and incorporate current information, building on other restoration activities in the RMUs.



## Information Sharing

Since 2017, the Lamprey Technical Workgroup has hosted an annual Lamprey Information Exchange bringing together lamprey enthusiasts from around the world to share research and conservation information and techniques. Participation has grown exponentially, even with the need to move to a virtual monthly webinar series in 2021, which continues in [2022](#).

### NATIONAL FISH HABITAT PARTNERSHIP

PLCI is one of 20 nationally recognized fish habitat partnerships in the United States. Through its work, PLCI seeks to advance its own goals, and those of the National Fish Habitat Partnership (NFHP) which are to protect, restore, and enhance the nation's fish and aquatic communities through partnerships that foster fish habitat conservation and improve quality of life for all Americans.

Learn more about the work of NFHP and the other Fish Habitat Partnerships at [www.fishhabitat.org](http://www.fishhabitat.org)

