

# Species Fact Sheet

## Coastal Cutthroat Trout

### *Oncorhynchus clarkii*



#### **STATUS: SPECIES OF CONCERN**

#### **Southwestern Washington/Lower Columbia River Distinct Population Segment**

The Southwestern Washington/Lower Columbia River Distinct Population Segment of Coastal cutthroat trout potentially occurs in these Washington counties: Thurston, Lewis, Yakima, Mason, Pacific, Grays Harbor, Wahkiakum, Cowlitz, Clark, Skaminia, Klickitat, (Map may reflect historical as well as recent sightings)

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In 1999, the southwestern Washington/lower Columbia River Distinct Population Segment of coastal cutthroat trout, *Oncorhynchus clarkii clarkii*, was listed as threatened by National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

Subsequently, the Fish and Wildlife Service assumed sole regulatory jurisdiction. Based on changes in forest management regulation, the latest information indicating better than expected total populations in a large portion of the area, and an improved understanding of the ability of freshwater forms to produce anadromous progeny, the Fish and Wildlife Service withdrew the listing proposal in 2002. As a result of litigation, we were required to reconsider our withdrawal of the proposed rule with specific regard to the question of whether marine

and estuarine areas may constitute a significant portion of the range of the Southwestern Washington/Columbia River DPS of coastal cutthroat trout. In 2010, we determined that coastal cutthroat trout in the marine and estuarine areas of the DPS do not warrant listing as either threatened or endangered. We also considered any new information available regarding anadromous cutthroat trout or other life history forms outside of marine and estuarine areas that would suggest any significant change in status, trend, or threats for the remainder of the DPS. This withdrawal of the proposed rule is the result of our determination.

## ***Current and Historical Status***

This Distinct Population Segment (DPS) includes populations in the Columbia River and its tributaries downstream from the Klickitat River in Washington and Fifteenmile Creek in Oregon to the Columbia River estuary; and the Willamette River and its tributaries downstream from Willamette Falls, to its confluence with the Columbia River, as well as in tributaries of Gray's Harbor and Willapa Bay. The southwestern Washington-lower Columbia River region historically supported highly productive coastal cutthroat trout populations. Coastal cutthroat trout are well distributed in most river basins in this geographic region, although probably in lower numbers relative to historical population sizes. Analysis of new data received during a 12-month status review of coastal cutthroat trout, and close examination of earlier population trend estimates, indicated that this population of coastal cutthroat trout may be declining in some areas, but has not experienced the marked declines once suspected.

## ***Description and Life History***

Coastal cutthroat trout differ from all other trout by their profusion of small-to medium-sized spots of irregular shape. While at sea and during seaward migrations, this coloration and spotting are obscured by the silvery skin color common to anadromous salmonids. At maturity, freshwater life history forms of coastal cutthroat trout tend to be darker, with a "coppery or brassy" sheen.

The life history of coastal cutthroat trout may be one of the most complex of any Pacific salmonid. Three general life-history forms of coastal cutthroat trout have been recognized:

- ***Nonmigratory coastal cutthroat trout.*** This life history form includes fish generally found in small streams and headwater tributaries. These non-migratory coastal cutthroat trout, in general, appear to grow more slowly than other life-history forms of trout, are

smaller at maturity, and generally do not live as long as migratory forms.

- ***Freshwater-migratory coastal cutthroat trout.*** This freshwater, or potamodromous, life history form includes fish that migrate entirely within fresh water. This includes populations that migrate from large tributaries to small tributaries to spawn (fluvial-adfluvial), populations that inhabit lakes and migrate upstream to spawn in the lake's tributaries (lacustrine-adfluvial), and populations that live in lakes and migrate downstream to spawn in the lake outlet (allucustrine). These freshwater-migratory populations are best documented in rivers and lakes with physical barriers to anadromous fish, such as above Willamette Falls in the Willamette River.
- ***Saltwater-migratory coastal cutthroat trout.*** In most areas, this is the most familiar life history form of coastal cutthroat trout. The juvenile fish migrate from freshwater natal areas in the late winter and spring to feed in marine environments (estuarine or nearshore) during the summer. They then enter fresh water in the winter to feed, seek refuge, or spawn, sometimes returning to seawater in the spring.

Cutthroat trout typically spawn from December through June, with peak spawning in February. Eggs begin to hatch within six to seven weeks of spawning, depending on temperature; alevins emerge as fry between March and June, with peak emergence in mid-April.

## ***Habitat***

Coastal cutthroat trout use a large variety of habitat types, including lower and upper reaches of both large and small river systems, estuaries, sloughs, ponds, lakes, and nearshore ocean waters. They spend more time in the freshwater environment than do most other anadromous Pacific salmonids. In freshwater habitat these fish prefer deeper pool habitat and cover, such as that formed by woody debris.

Unlike other anadromous salmonids, the saltwater migratory form of coastal cutthroat trout does not overwinter in the ocean and only rarely makes extended migrations across large bodies of water. Their migrations in the marine environment are usually within 10 kilometers (6 miles) of land. These anadromous fish typically spend two to five years rearing in fresh water before making their initial seaward migration. Generally,

anadromous coastal cutthroat trout spend only brief periods offshore during summer months and return to estuaries and fresh water by fall or winter.

## ***Reasons for Decline***

The following activities or types of land use have the potential to affect coastal cutthroat trout habitat, including forest management, agriculture and livestock management, dams and barriers, urban and industrial development, mining, and estuary degradation. Of these, only forest management and estuary degradation were described as principal factors for declines across the range of coastal cutthroat trout in the subspecies-wide review in the proposed rule (64 FR 16402) and only estuary degradation was mentioned specific to the southwestern Washington/Columbia River DPS. However, despite the long term, widespread impacts to aquatic and riparian conditions, coastal cutthroat trout have survived in all portions of the DPS for many generations, and apparently remain at densities comparable to healthy-sized populations elsewhere, indicating that they are capable of surviving long periods under these conditions.

## ***Conservation Efforts***

The Fish and Wildlife Service continues to monitor the conditions of the coastal cutthroat trout in southwest Washington and the Columbia River. In the event that conditions or threats change and the species becomes imperiled, we could again propose to list the species as endangered or threatened under the Endangered Species Act. We continue to provide technical assistance to federal, state, and other entities and encourage them to address the conservation needs of the coastal cutthroat trout. We also continue to collect additional biological information, monitor the status of coastal cutthroat trout, and monitor the progress of conservation efforts for the DPS.

## ***References and Links***

[Withdrawal of Proposed Rule to List Coastal Cutthroat Trout 2010](#)

[Withdrawal of Proposed Rule to List Coastal Cutthroat Trout 2002](#)

[Proposed Rule to List Coastal Cutthroat Trout 1999](#)

[NMFS Status Review 1999](#)

[Movements of Coastal Cutthroat Trout in the Lower Columbia River 2008](#)

[USFWS Coastal Cutthroat Trout Initiative](#)

[WDFW Stock Inventory 2000](#)

[Coastal Cutthroat Trout Bibliography Database](#)