



Chinook Salmon: Designatable Unit 21 (East Coast Vancouver Island, Ocean, Fall Population)

Consultations on listing under the Species at Risk Act

Information summary and **survey** for engagement related to potentially adding Chinook salmon designatable unit 21 (East Coast Vancouver Island, Ocean, Fall Population) to the List of Species at Risk as Special Concern – **Please provide input by March 25, 2024.**

Engagement

Let your opinion be heard

Canada's *Species at Risk Act* (SARA) provides legal protection for wildlife species at risk to conserve biological diversity. It also acknowledges that all Canadians have a role to play in the conservation of wildlife species. Before deciding whether to add Chinook salmon (*Oncorhynchus tshawytscha*) designatable unit (DU) 21 (East Coast Vancouver Island, Ocean, Fall population; hereafter 'DU 21 Chinook') to the List of Species at Risk as Special Concern, we would like to hear your opinion, comments, and suggestions regarding the possible ecological, cultural, social, and economic impacts of listing or not listing this species under SARA.

Adding a species to the List of Species at Risk

The process of listing a species under SARA consists of several steps. It begins with a status assessment by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and ends with a Governor in Council decision on whether or not to add the species to the List of Species at Risk. Public engagement is conducted to gather the opinions of Canadians, and is an important step in this process.

Facts about DU 21 Chinook

- DU 21 Chinook are part of the Lower Strait of Georgia population aggregate, or stock management unit (SMU), of Chinook salmon which exhibit similar life history characteristics and return timing.
- Adults return to their natal rivers from late August through October and spawn through mid to late fall. DU 21 Chinook inhabit multiple rivers along the east coast of Vancouver Island, British Columbia (BC), from the Goldstream River near Victoria north to Campbell River (Figure 2).

- Eggs incubate in gravel over the winter before emerging as alevins (newly hatched salmon still attached to the yolk sac) in the spring, and shortly after migrate downstream to rear in estuary and marine environments (ocean-type life history). This DU is known to spend up to four months feeding and growing in estuaries before dispersing to nearby coastal areas.
- DU 21 Chinook have a local distribution during their marine phase and mainly reside in the Strait of Georgia, west coast of Vancouver Island and coastal Washington. However, a small portion migrates farther northward along the BC coast and into southeast Alaska. After spending three full winters in the marine environments, adult DU 21 Chinook migrate back to their natal streams as three and a half year old fish.



Figure 1. Spawning Chinook Salmon (Credit: Shane Kalyon)

DU 21 Chinook are supported by numerous enhancement programs such as the large-scale Big Qualicum Hatchery. The Cowichan, Puntledge, and Qualicum river systems are the largest contributors to overall population abundance. Hatchery-origin DU 21 Chinook from the Cowichan River are the primary coded-wire-tagged indicator stock used to assess fisheries exploitation rates, distribution, and marine



survival for this SMU. Chinook salmon is a target species for recreational and commercial fisheries and are highly significant to Indigenous peoples, both for cultural and subsistence purposes.

Who assigned the Special Concern status to DU 21 Chinook?

COSEWIC is an independent committee of experts that assesses the status of each wildlife species it considers to be in some danger of disappearing from Canada and identifies existing and potential threats to the species. It conducts its assessments based on the best available information including scientific data, community knowledge, and Indigenous Knowledge. COSEWIC assessed this DU as Special Concern in 2020, initiating the current SARA listing process. This is the first assessment of this DU by COSEWIC and it is currently not listed under SARA. Under SARA, a Special Concern species is defined as one that “may become a threatened or an endangered species because of a combination of biological characteristics and identified threats”.

that limited productivity. Marine survival is estimated to have declined by 90% overall from 1973-2010. Currently, the most significant threats to this DU are ecosystem modifications and water management. Total exploitation of Chinook salmon has been reduced substantially since the mid-1970s, but DU 21 Chinook still experience the highest exploitation rates in British Columbia. Recovery continues to be limited by poor marine survival and potential competition and gene flow from hatchery-origin individuals.

If a species is listed under the *Species at Risk Act*

If this DU is listed as Special Concern, the SARA prohibitions (for example, prohibitions against killing, harming, and capturing) would not apply. However, listing would result in the development of a SARA management plan for the DU and its habitat that would include appropriate conservation measures. Regardless of the SARA listing decision, DU 21 Chinook will continue to receive protection under the *Fisheries Act*.



Figure 2. Freshwater extent of occurrence of DU 21 Chinook along the east coast of Vancouver Island

Why are DU 21 Chinook at risk?

DU 21 Chinook were overfished through the 1970s and early 1980s and extensive hatchery programs were initiated to supplement production from naturally spawning adults. However, abundance was also impacted by changes in the marine environment

We would like to receive your comments on the potential impacts of adding or not adding DU 21 Chinook to the List of Species at Risk under SARA, designated as Special Concern.

Please fill out the **survey** by March 25, 2024: we want to hear from you.

Before completing this survey, you may wish to review the following background information found at the links below:

- [COSEWIC Assessment and Status Report \(2020\)](#)
- [Southern Salmon Integrated Fisheries Management Plan 2023/2024](#)
- Other information can be found on the [Species at Risk Public Registry](#).

Thank you for completing this **survey**

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