



COMMITTEE ON THE  
STATUS OF ENDANGERED  
WILDLIFE IN CANADA

COMITÉ SUR LA SITUATION  
DES ESPÈCES EN PÉRIL  
AU CANADA

## **Emergency Assessment of Chinook Salmon, *Oncorhynchus tshawytscha* (Okanagan population) - May 4, 2005**

On March 26, 2005 the Committee on the Status of Endangered Wildlife in Canada received a request for an Emergency Assessment of the Okanagan Population of Chinook Salmon from Mr. Howie Wright on behalf of the Okanagan Nation Alliance Fisheries Department. The request was accompanied by a submission which included elements integrating substantial Aboriginal Traditional Knowledge. The Chair of COSEWIC, Dr. Marco Festa-Bianchet, established an Emergency Assessment Subcommittee in accordance with COSEWIC operations and procedures and notified the Minister of the Environment on April 4.

The Emergency Assessment Subcommittee held two teleconferences, evaluated the available evidence, and contacted appropriate people to obtain further information, which was received from several sources. The Emergency Assessment Subcommittee agreed to refer all the available documentation to COSEWIC in plenary. All available information was circulated to all members three weeks before the plenary, although additional information continued to become available right up to the week of May 1 when COSEWIC met.

At the plenary, held on May 4, 2005, COSEWIC members were provided with the 2005/2006 Washington Department of Fish and Wildlife 'Sport Fishing Rules' which outline that the Chinook fishery in summer 2005 will not be selective for hatchery fish and will allow harvest of wild Chinook. This is a significant departure from previous practice which only allowed the retention of hatchery-born (fin-clipped) Chinook salmon. COSEWIC members were also provided with information regarding expected changes to Treaty Fisheries in Washington State which will result in substantial increases in the harvest of wild Chinook. Its deliberations proceeded as follows:

First, COSEWIC agreed that the Okanagan population of Chinook salmon is a Designatable Unit because it is the only population of Columbia River Chinook in Canada. Therefore it meets the definition of 'Wildlife Species' under The Species at Risk Act.

Then, COSEWIC considered that the number of mature individuals in the population justifies the designation of Chinook salmon - Okanagan Population as Endangered. The approved criterion applied is that of 'Very small population'. The number of anadromous spawners has rarely exceeded 50 salmon a year since 1935. A recent estimate of non-sea-going spawners was less than 150 fish, of which 99% were males.

Other elements listed in the submission were also discussed, including the effects of the introduced Mysis shrimp. They were not judged to pose a significant imminent threat.

Then, COSEWIC considered the implications of changes in salmon fishing regulations in Washington State, commencing June 16, 2005. These changes are expected to lead to a substantial increase in the exploitation of all salmon migrating into the upper Columbia Basin Chinook salmon, including the Chinook salmon – Okanagan population. COSEWIC is of the opinion that a substantial increase in the exploitation of this very small population poses a new and imminent threat to its survival.

COSEWIC concluded that the immigration of salmon from downstream in the Columbia River is highly unlikely. Therefore there is a very low probability that Chinook salmon of US origin will reoccupy the area if the current population were to be eliminated.

The available evidence clearly indicates that the conservation status of the Okanagan population of Chinook salmon warrants an Emergency Listing under Section 29(1) of SARA.

Consequently, on May 4, 2005, COSEWIC passed the following motion: 'The Okanagan Chinook salmon is facing an imminent threat to its survival, such that an Emergency Listing of the Species as Endangered is warranted'.

As requested under Section 28 (4) of SARA, COSEWIC has provided the applicant, the Minister and the Canadian Endangered Species Conservation Council with a copy of this assessment, in addition to this copy included on the Public Registry.

In addition, COSEWIC has issued a Press Release on May 6, 2005, summarizing the results of its Species Assessment Meeting, including the Emergency Assessment of the Chinook Salmon (Okanagan population).

**TO NOTE:** A COSEWIC Status Report on the Chinook Salmon (Okanagan population) will be completed during the coming year and its status will be reviewed by COSEWIC at its next Species Assessment Meeting in April 2006.

COSEWIC Emergency Assessment results:

Chinook Salmon Okanagan population	Oncorhynchus tshawytscha	Endangered
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#### Reason for Designation

The Chinook salmon (Okanagan population) are the only remaining Columbia Basin population of Chinook salmon in Canada, and are distinct from all other Canadian Chinook salmon populations. They consist of anadromous salmon that migrate to and from the Pacific Ocean through the Columbia River, and also individuals that remain in Osoyoos Lake. The Chinook salmon (Okanagan population) once occupied the area from Osoyoos Lake to Okanagan Lake, but McIntyre Dam has limited access to only the area below the dam and in Osoyoos Lake. As well as this habitat loss, the population was depleted by historic overfishing in the Columbia River and juvenile and adult mortality due to dams downstream on the Columbia River. Fisheries exploitation in the ocean, deterioration in the quality of the remaining Canadian habitat, and new predators and competitors such as non-native fishes also contributed to the current depleted state of the population. Hatchery projects in the Columbia system may be having detrimental genetic impacts on the current population. With spawning numbers as low as 50 adults, the population faces many stochastic risks. It is unlikely that fish from elsewhere in the Columbia River Basin will contribute to recovery of the Canadian Okanagan population, because these populations are also far below their historic abundances. Already severely depleted, the Chinook salmon (Okanagan population) is now at imminent risk of extinction due to the impending increased exploitation in Columbia River fisheries in 2005.

Range BC

#### Status History

Designated Endangered in an emergency assessment on May 4, 2005.