



**Questions and Answers about  
California North Coast &  
Central Valley Chinook  
February 26, 1998**



**Q:** *How healthy are California Chinook?*

**A:** The most recent findings show that chinook are dramatically depleted from large areas of their former range, and that the remaining groups of chinook in California are depleted to varying degrees. These distinctive groups of chinook, called Evolutionarily Significant Units, or ESUs, are the building blocks of chinook as a species. The NOAA Fisheries Service has been evaluating the condition and prospects of these ESUs to determine whether they are in danger of extinction, or likely to become endangered within the foreseeable future.

**Q:** *What information must NOAA Fisheries consider when deciding whether to list a species?*

**A:** The agency considers the best available information on past and present abundance, threats to the species' continued existence and likely future abundance to determine whether a species is threatened or endangered. Before deciding whether protection under the ESA is necessary to save a species from extinction, NOAA Fisheries also considers any conservation plans or efforts underway, such as the Central Valley Project Improvement Act's Anadromous Fish Restoration Program, the Category III Program, and the CALFED Bay-Delta Accord. Tailor-made conservation initiatives that are biologically sound and have local support are the keys to successful chinook conservation. Such initiatives have a central role in ESA decisions.

**Q:** *How does the Bay-Delta Water Accord fit into this chinook listing proposal?*

**A:** A key provision of the Accord specifies that additional listings of species under the state and federal endangered species acts shall result in no additional water allocation or cost relative to the Bay-Delta protections in the interim agreement. If NOAA Fisheries determines that proposed or listed Central Valley chinook require additional water for protection, prior to the expiration of the Accord in December, 1998, water needs will be provided by the federal government on a willing-seller basis financed by federal funds, not through reallocations of water within the Bay-Delta.

**Q:** *Why have chinook populations declined so dramatically?*

**A:** Wild stock Chinook are at low levels throughout the West Coast because of a combination of human activities and poor natural conditions. Habitat degradation, hatchery production, and over-harvest have reduced the fish's ability to cope with variable environmental conditions.

**Q:** *What role do ocean conditions play in chinook health?*

**A:** Poor ocean conditions have certainly contributed to chinook declines. These fish, however, have remained productive and have survived natural fluctuations in environmental conditions for thousands of years. Both common sense and fundamental biology tell us that the accumulation of human-related impacts has reduced the chinook's ability to survive poor environmental conditions.

**Q:** *What happens next if chinook do eventually become listed? How does the ESA protect threatened or endangered species?*

**A:** The ESA contains a number of requirements that contribute to the conservation of threatened or endangered species. Requirements take effect 60 days after a final listing decision is published in the Federal Register.

First, the ESA requires all federal agencies to ensure that their activities do not jeopardize a listed species. If a Federal agency is planning to do something that may jeopardize the fish, it must change its plans to avoid that result. Federal agencies must "consult" with NOAA Fisheries on any activities that may affect the fish to determine if they are likely to jeopardize them, and if so, to identify how to change their plans to make them more fish-friendly.

Second, the ESA prohibits anyone from directly killing an endangered species or harming the species or its habitat -- activities known collectively as "take." This prohibition against take of endangered chinook will apply to everyone: Federal, state and local agencies and the private sector. People who violate this prohibition are subject to penalties enumerated in the ESA. For threatened chinook, NOAA Fisheries will apply the take prohibitions through what is known as a Section 4(d) rule, customizing these rules where there are state and local initiatives that conserve chinook.

The ESA also allows people who would otherwise take listed species to obtain a permit under Section 10 of the ESA. The permit allows take so long as it is not intentional, and the impacts of the activity causing the take are properly mitigated.

**Q:** *How would listing chinook under the ESA affect agricultural and municipal water supplies in California?*

**A:** The ESA prohibits activities that kill or cause harm to endangered species. To the extent that management of water resources is likely to harm these listed fish, they should be modified to minimize that harm. Municipal and agricultural water diversions may incidentally impact chinook by entraining juveniles, interfering with the upstream or downstream migration of adults and juveniles, or by depleting or modifying instream flows. In those cases where juvenile chinook are at risk of being caught in a diversion, screening of the diversion will be necessary to protect the species, avoid the take of fish, and allow the diversion of water. In those cases where water diversion facilities interfere with or otherwise impede the migration of adult and juvenile chinook, it will be necessary to operate or modify the facility to ensure

adequate conditions for passage are provided for fish.

For federally operated or permitted facilities, NOAA Fisheries will be able to use the interagency consultation process of the ESA with the Corps of Engineers, Bureau of Reclamation or other federal agencies to develop agreeable operating conditions and to permit the diverter some level of incidental take. Finally, where depletion or modification of instream flows are a problem within a river or watershed, the problem is often cumulative in nature which makes it difficult to directly assign responsibility. Therefore, NOAA Fisheries intends to work closely with the State, federal agencies, and local watershed stakeholders to identify and implement instream flows which are adequate to protect and recover chinook while at the same time providing for the needs of water supply users.

***Q: How do hatchery fish factor into today's Proposal?***

**A:** Hatchery fish are included in an ESU if they are biologically similar to the native population. However, hatchery fish are listed and protected from take only if they represent a substantial part of the remaining ESU, and are essential to its recovery. Under today's proposal, only wild stock are being proposed for listing.

Hatchery fish can be used as a conservation tool to help sustain and recover natural populations, but they don't indicate the health of those populations. Moreover, the production of hatchery fish alone, without efforts to reduce other important human-caused risk factors, cannot be the sole basis for recovering these populations. The true measure of a population's condition is its sustainability in nature, so listing and delisting decisions depend solely on the abundance of natural wild stock fish.

***Q: How will a potential listing affect timber harvest and agricultural activities on private lands?***

**A:** Timber harvest and agricultural practices can harm or kill listed fish. After a listing, landowners can either avoid actions that harm the fish or its habitat, or they can apply for an incidental take authorization from NOAA Fisheries if they develop conservation programs that meet the requirements of Section 10 of the ESA.

***Q: Does compliance with existing state regulations equate to compliance with the ESA to protect threatened or endangered species?***

**A:** Not necessarily. If existing state regulations had been adequate for protecting chinook, they would not now be threatened or endangered. NOAA Fisheries will continue to work with state and local authorities on tailor-made initiatives that build on efforts to conserve chinook.

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