



Permanent Removal of California Sea Lions at Bonneville Dam

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Seals and sea lions -- collectively known as pinnipeds -- that prey on at-risk stocks of salmon and steelhead, especially at choke points in rivers below dams, have been a persistent problem along the entire West Coast for a decade or more. The problem is particularly nettlesome because the populations of most salmon and steelhead are depleted and the populations of pinnipeds generally are robust, with California sea lions, for example, currently at about 238,000 animals coast-wide. In the past five years or so California sea lions below Bonneville Dam on the lower Columbia River have become especially troublesome.

Although the dam is almost 150 miles from the Pacific Ocean, California sea lions have been showing up earlier and staying longer every spring. They've been consuming increasing numbers of adult salmon and steelhead congregating just below the dam in preparation for swimming further up the Columbia to spawn.

NOAA Fisheries Service, and other state and federal agencies and tribal entities, have been aggressively testing and using hazing techniques on these Bonneville animals for three years, using rubber buckshot, firecrackers, noisemakers and other deterrents, but with little success. Last year, for example, in spite of months of hazing, California sea lions ate an estimated 3,900 adult salmon and steelhead, more than four percent of the returning population. Because those figures reflect only what was officially observed within a small area immediately downstream from the dam, it's likely that predation at Bonneville was considerably higher, but took place unobserved.

Background: In late 2006, Washington, Oregon and Idaho applied to NOAA Fisheries Service, under a provision of the Marine Mammal Protection Act, for authority to "lethally remove individually identifiable California sea lions that are having a significant negative impact on at-risk salmon." The marine mammal law lays out an extensive process, including requirements for public notice and comment, on the application process, as well as the empanelling of a task force to make recommendations to the agency.

- **December 2006:** The states submitted their application to remove individually identifiable California sea lions preying on salmon at Bonneville Dam.
- **January 2007:** NOAA Fisheries Service officially accepted the application, saying it contained sufficient information to move forward and requested public comment on the application for a 60-day period.
- **September 2007:** NOAA Fisheries Service convened a task force, which held three public meetings to discuss the application and relevant information.

- **November 2007:** The task force submitted its report to NOAA Fisheries. It recommended (with one dissenting opinion) that the agency approve the states' application and provided two options for lethal removal. The report was posted on the agency's web site.
- **January 2008:** NOAA Fisheries released a draft environmental assessment for public comment. It outlined four alternatives, including the agency's proposed one: lethal removal of a limited number of California sea lions at Bonneville Dam. NOAA Fisheries also evaluated the effects of its proposal on threatened or endangered species in the area.

Summary: On Mar. 18, 2008, NOAA Fisheries Service authorized the three states to use lethal removal only on individual sea lions that are highly identifiable (natural markings or man-made ones like branding), and that continue to eat salmon, after deterrence methods are unsuccessful. Authorization is for as many as 85 nuisance animals annually, but the agency estimates the actual number will be closer to 30 a year.

The states have the option of killing qualified sea lions directly or capturing and holding them for a brief period to see if they can be placed in a public display facility. NOAA Fisheries and representatives of zoos and aquariums have compiled a list of pre-approved permanent holding facilities interested in receiving a limited number of captured sea lions as an alternative to euthanasia. It's highly unlikely, however, that such facilities would be able to accept more than one or two dozen animals during the five-year period when the states are authorized to remove sea lions.

In addition, the states will form an animal-care committee, approved by the agency, to advise on standards for humanely capturing, holding and killing predatory sea lions. The states will implement specific safety standards to protect the public if any firearms are used.

NOAA Fisheries Service is the federal agency, under the [U.S. Department of Commerce](#), with responsibility for protecting marine mammals and endangered marine life. NOAA Fisheries Service works to conserve, protect, and recover species under the [Endangered Species Act](#) and the [Marine Mammal Protection Act](#)