

California's Salmon Crisis

Hearing Before the California Assembly Committee on Water, Parks and Wildlife
March 10, 2009

Statement of
Holly Doremus

Professor of Law, UC Berkeley and UC Davis
Faculty Co-Director, Center for Law, Environment, and Energy, Berkeley Law

Richard Frank

Lecturer in Residence, UC Berkeley School of Law
Executive Director, Center for Law, Environment and Energy

Chairman Huffman and members of the Committee, thank you for inviting us to participate in this hearing.

As Dr. Moyle and his colleagues have clearly demonstrated, there is a salmon crisis in California. This crisis is not new. As early as 1983, the California Legislature directed that an advisory committee look into salmon and steelhead spawning declines. In 1988, as a result of that study, the Legislature created a salmon and steelhead program intended to significantly increase natural spawning by the end of the century. The Sacramento winter run chinook were the first salmon to be listed under the California Endangered Species Act (CESA) in 1989, and under the federal Act (ESA) in 1990. By 1991, a high-profile survey by the American Fisheries Society found that 106 Pacific salmon runs were already extinct and 101 more were at high risk of extinction. By 1994, Dr. Moyle wrote in *Conservation Biology* that the state's anadromous fishes were uniformly in decline. As of 2009, those declines continue. With global climate change already affecting river and ocean conditions, the outlook for the future looks gloomy.

The salmon crisis cannot be blamed on any shortage of government authority or responsibility. Rather, it is due in significant part to regulatory overlap, regulatory fragmentation, inertia, and—most critically--lack of necessary fiscal and staff resources and political will.

Management of the state's salmon resources is in many ways typical of today's natural resource and environmental management challenges. Responsibility is shared between federal and state governments. It is fragmented among a number of agencies at each of those levels. Because concern for the environment post-dates establishment of many of the activities that threaten it, conservation measures typically must push against historical pressures and an entrenched status quo. As a result, conservation is typically reactive, and its goals are often limited by the desire to maintain those historic uses. Each of these factors makes effective conservation difficult.

Shared Responsibility

Like fish and wildlife conservation generally, salmon protection is a task shared between the state and federal governments. Traditionally, the states have been primarily responsible for management of the fish and wildlife within their borders. That remains true today, but with a

significant additional federal role. Virtually every state authority now has a parallel in federal law, many state environmental protection requirements are modeled on federal law, and in many cases the state implements its laws in the shadow of federal requirements. In general, federal responsibility increases and state autonomy decreases as populations of salmon (or other native fish or wildlife) decline.

California holds its fish and wildlife resources in trust for the people of the state, with the Department of Fish and Game (DFG) acting as the trustee. Fish & Game Code § 711.7(a). The contours of the Department's duties as trustee are established primarily by statute. *EPIC v. Cal. Dept. of Forestry*, 44 Cal. 4th 459 (2008). The Department has long been responsible for regulating harvest of fish and wildlife through fishing and hunting licenses and regulations.

More recently, the Legislature has declared that it is the policy of the state to conserve, protect, restore, and enhance endangered and threatened species and their habitats. Fish & Game Code § 2052. The CESA implements that policy, calling on the Fish & Game Commission to develop a list of endangered and threatened species, and prohibiting the take of listed species without a permit issued by DFG. The state list includes 4 salmon groups.

CESA is modeled on, and in many respects parallels, the federal ESA. The federal Act directs the U.S. Fish and Wildlife Service (for most species) or National Marine Fisheries Service (for marine and anadromous species) to identify species that are endangered or threatened. Currently, 10 California salmon and 4 trout are federally listed. Like CESA, the ESA forbids the take of most listed animal species without a permit, although the federal law includes a more expansive definition of "take." ESA also includes requirements with no current analogue in CESA, mandating that all federal agencies develop programs for the conservation of listed species, and insure that their actions do not jeopardize the continued existence of listed species or adversely modify designated critical habitat.

California also has a voluntary conservation planning process under the Natural Communities Conservation Planning Act, Fish & Game Code §§ 2800 – 2835. The NCCP process is in progress to develop a Bay-Delta Conservation Plan covering aquatic species including salmonids.

Overlapping regulatory authority might seem like a good thing for conservation, but that does not always turn out to be true. By diffusing the sense of responsibility, it may have precisely the opposite effect. Where conservation requires the adoption or enforcement of politically difficult measures, each regulator may be tempted to leave the job to the other. To some extent, the Legislature has reinforced this natural tendency by providing that a federal incidental take statement or incidental take permit is sufficient to authorize take under CESA unless the Director of DFG specifically finds that the federal document is not consistent with the requirements of CESA. Fish & Game Code § 2080.1.

Fragmented authority

Salmon strikingly illustrate the problem of fragmented conservation authority. Their life cycle takes them from ocean waters to inland spawning areas, across the divide between federal and

state jurisdiction. Their need for high-quality water and clean gravel river beds implicates activities subject to a wide variety of regulatory programs implemented by a number of agencies.

Not surprisingly, salmon and the activities that threaten their survival are subject to a variety of state and federal regulatory programs. Among other things, the Pacific Fishery Management Council and NMFS regulate salmon fishing in areas more than 3 nautical miles from California's coast, while DFG regulates coastal and inland fisheries. Private hydropower projects on navigable waterways are licensed by the Federal Energy Regulatory Commission. Public water projects are operated by the Bureau of Reclamation and Department of Water Resources. Water quality standards are set by, and primarily implemented by, the State Water Resources Control Board. SWRCB is also responsible for overseeing water diversions. Timber harvest rules are under the jurisdiction of the Department of Forestry and Fire Protection. The federal Bureau of Land Management and U.S. Forest Service regulate a variety of activities potentially affecting salmon on the federally-owned lands they manage. DFG regulates activities such as streambed alterations and suction dredging, and manages the state's hatcheries.

Regulatory fragmentation complicates conservation. It can create coordination problems if the various regulatory agencies (or even offices within a single agency) do not effectively share information. It can increase the political barriers to regulatory action, if no one agency is confident it can solve the problem, no matter how strongly it acts. Finally, it can mean that no one ever gets a clear, broad view of the scope of the problem or the steps needed to resolve it.

Fighting history and the status quo

Conservation, although it is a well-established state goal, is newer than other goals with which it comes into conflict. As a result, conservation often has to compete with entrenched expectations and change the status quo. That is never politically easy.

Salmon conservation illustrates the difficulties. Among the problems facing salmon in California are operation of the state's major water projects; ocean fishing; and traditional grazing and timber practices. People have come to depend, economically and emotionally, on the ability to continue those established resource uses and practices. Yet effective conservation requires that those uses change. Not surprisingly, those negatively affected by change typically fight it. Established uses have their own social benefits, and simply because they are established the political process may shy from disturbing them. The fact that conservation must routinely battle entrenched uses and goals makes political insulation and strong leadership essential to effective conservation.

Reactive conservation policy and limited goals

One product of the power of the status quo is that conservation efforts are often delayed until a crisis can no longer be ignored, and that they often try to balance conservation and exploitation. The goal of federal and state fishing regulation, for example, is "optimum yield," meaning the largest possible sustainable harvest. Hatcheries were historically seen as an acceptable substitute for the loss of spawning habitat above dams. Today, endangered and threatened species only gain special regulatory protections when their numbers have drastically dwindled, and they are

managed primarily to stave off extinction rather than to promote recovery. To adopt an analogy from the medical profession, CESA- and ESA-based efforts to preserve California's salmon fisheries are the functional equivalent of a hospital emergency room performing triage, as opposed to a system of proactive conservation measures tantamount to a functioning and effective system of preventive medicine.

A related problem is that waiting to impose necessary conservation measures until salmon or other species are threatened or endangered may actually impede, rather than promote, independent societal objectives such as a reliable water supply for California residents. Delaying such conservation responses may well place environmental statutes such as CESA into irreconcilable conflict with other state laws or contractual obligation. By contrast, an earlier, proactive regulatory response generally provides more and better options for accommodating potentially diverse resource objectives. (The Governor's Delta Vision Task Force recently made this general point when it stressed in its final report that restoring the California Delta ecosystem and maintaining a reliable water supplies for 38 million Californians are co-equal and interdependent goals.)

Some Observations on the Department of Fish & Game

As referenced above, DFG—at times in concert with the California Fish & Game Commission (the Commission)—performs a variety of regulatory duties under California law:

- It establishes and administers a detailed state hunting and fishing system, regulating both commercial and recreational interests;
- It regulates the waterways of the state through a variety of programs, including streambed alteration “agreements” (Fish & Game Code § 1602 ff.); pollution control (Fish & Game Code § 5650); limitations on vacuum and suction dredging of California waterways (Fish & Game Code § 5653); and the requirement that dams on California rivers incorporate safe and effective passageways for migrating fish species (Fish & Game Code § 5937).
- It oversees a system of protections for threatened and endangered species under CESA; and
- It administers an extensive state system of oil spill prevention and response under the landmark Lempert-Keene-Seastrand Oil Spill Prevention & Response Act (Public Resources Code § 8750 et seq; Government Code § 8574.1 et seq.; Government Code § 8670.1 et seq.).

Through each of these programs, to varying degrees, DFG possesses the regulatory authority to affect and protect California salmon populations.

Significantly, DFG's funding in carrying out these regulatory responsibilities varies dramatically. For example, DFG's general administration of state hunting and fishing laws has been traditionally financed through a system of hunting and fishing license fees imposed on the regulated community. And DFG's oversight of California's oil spill and response programs is financed through an Oil Spill Response Trust Fund, and the imposition of a per-barrel fee on petroleum products transported to or through the state.

By contrast, DFG's regulatory responsibilities over California waterways and to administer the CESA—perhaps most relevant to the ongoing conservation and restoration of state salmon populations—have been largely dependent upon annual appropriations from the General Fund. Those appropriations, especially in recent years, have been inadequate to permit satisfactory implementation and enforcement of those regulatory responsibilities. (Recent bond acts, such as Proposition 84, have attempted to augment these General Fund deficiencies on an ad hoc basis.)

This disparity in DFG's funding schemes is similarly reflected in the human resources DFG has available to administer its various regulatory responsibilities. The contrast is thus quite stark between the relatively abundant staff resources DFG is able to allocate to its oil spill prevention and response program, for example, versus the number of staff deployed to carry out its CESA and waterway regulatory responsibilities. A few facts about the latter underscore the point: currently, we have been told, California's Department of Water Resources employs more fishery biologists than does DFG. And, since the 1970's, the administrations of both political parties have steadily reduced the number of DFG staff available to monitor and assess fishery populations in the state, thus seriously compromising the ability of DFG and the Commission to assess salmon and other at-risk fish populations. Finally, DFG simply lacks the personnel resources to effectively enforce key provisions of the Fish and Game Code such as CESA, state streambed alteration requirements, etc. DFG similarly lacks the staff necessary to investigate and refer to appropriate prosecutors (the Attorney General and local district attorneys) violations of California's Fish and Game Code.

The funding and staffing deficiencies have a direct and deleterious effect on the Department's ability to use its considerable, existing legal authority to protect, conserve and enhance California's salmon populations.

Specifically, the lack of adequate funding and personnel has generally deprived DFG of the capacity to manage and preserve state salmon fisheries on a proactive basis. Instead, DFG has been reduced in recent years to a reactive role:

- It responds to ESA/CESA mandates emanating from third party listing petitions and state and federal court decrees;
- DFG comments on environmental impact reports/statements prepared by other government agencies concerning potential adverse effects of proposed state and federal projects on salmon and other wildlife species.
- If it sets minimum stream flow requirements for fish populations at all, it does so only at the direction of the Legislature or the courts.
- To the extent staff resources permit, DFG participates in the regulatory processes of other state or federal agencies (such as the Federal Energy Regulatory Commission, U.S. Bureau of Reclamation and the State Water Resources Control Board) in an effort to see that wildlife values are considered and addressed by those other agencies.

With respect, these reactive efforts—which are themselves necessarily ad hoc in nature—are no substitute for a proactive system of fisheries management, using the considerable legal authority currently available to DFG. While vigorous enforcement of California wildlife laws would not guarantee that California's salmon populations would be restored to their once-abundant levels,

it would be a major improvement over the status quo. The key point is that transforming DFG from a largely reactive to a proactive regulatory presence is likely impossible, in the absence of fundamental changes in the way the Department is funded and staffed.

The California Fish & Game Commission

Under existing state law, responsibility for the management and preservation of California fisheries is actually divided between DFG and the California Fish & Game Commission. The five-member Commission is responsible, among other things, for setting annual fishing and hunting seasons in California, and for making decisions on whether to designate particular plant and animal species as threatened or endangered under CESA. (See, e.g., Cal. Const., Art. IV, § 20; Fish & Game Code § 101 ff.) As noted above, however, the Legislature has largely delegated responsibility for the administration and enforcement of state wildlife laws to DFG.

It may be that this division of authority between DFG and the Commission was historically based on a perceived desire to place certain, key wildlife management decisions within the purview of a public, deliberative body. In practice, however, the existence of the Commission has not appeared to have significantly improved the regulatory process. In particular, many observers believe that the CESA listing process overseen by the Commission is unduly politicized, untimely and ineffective.

Accordingly, one alternative the Legislature may wish to consider is abandoning this bifurcated system of California wildlife management by merging some or all of the responsibilities currently assigned to the Commission into the DFG. Particularly with respect to CESA, this would allow for a unitary system of CESA administration akin to that currently existing under the federal ESA. (Any such legal restructuring would be complicated somewhat by the fact that the Commission—though not most of its functions—finds its origin in the state Constitution.)

Suggested Revisions to California Statutes to Address Salmon Fishery Declines

As noted above, we believe that California wildlife laws are robust and legally adequate. The largest problem is a lack of adequate fiscal and personnel resources at DFG to administer and enforce those existing laws.

Nevertheless, there are several revisions to California statutes—and, in particular, CESA—that the Legislature may wish to consider as part of any comprehensive effort to address the alarming decline in California's salmon populations:

First, restoring the consultation requirement that was included in CESA in 1984 but allowed to sunset in 1999 could help battle the tendency to wait too long and then do too little for dwindling species. Consultation is the most pro-active provision of the federal ESA, requiring analysis of the impacts on listed species before a federal agency commits to action. Consultation rarely halts federal projects, but it frequently results in modifications that make them more conservation-friendly. It is always politically easier, and often both less costly and more effective, to make those changes at the outset, rather than trying to retrofit a project after its construction or implementation. Consultation could also help address the regulatory fragmentation problem,

ensuring that staff at DFG is aware of, and overseeing, actions and approvals of other state agencies that may affect listed salmon.

Second, incorporating a recovery planning provision in CESA like that of the federal ESA, which requires that FWS and NMFS develop and implement recovery plans for listed species, could address both regulatory fragmentation and the tendency to delay politically difficult steps. Recovery plans provide a comprehensive overview of the threats facing listed species and of actions that might address those threats. They can become the foundation of coordinated and proactive multi-agency conservation efforts. Recovery planning is likely to become more important in the future, as climate change complicates conservation efforts.

Third, effective enforcement of CESA and other, key wildlife protection laws such as Fish and Game Code sections 1602, 5650, 5653 and 5937 could be enhanced by the addition of a “citizen suit” provision similar to that existing under federal environmental laws. As noted above, DFG currently lacks the resources to maintain a satisfactory level of public enforcement of the Fish and Game Code. Conversely, private citizens and groups currently dissatisfied with DFG’s enforcement efforts are generally limited to mandate actions brought against DFG itself that seek to prod the Department into taking certain regulatory actions. Allowing private parties to bring actions directly against those third parties who, e.g., violate CESA or illegally despoil salmon spawning habitat would augment existing enforcement options. (The addition of such a citizen suit provision could be coupled with appropriate, prophylactic measures such as a “gatekeeper” role for government officials, like that currently administered by the Attorney General under Proposition 65, the Safe Drinking Water and Toxic Enforcement Act.)

We thank the Committee for the opportunity to testify today, and would be happy to answer any questions you may have.