

National Academies deliver mixed message on Calif. delta dilemma

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A highly anticipated study of water diversions in California's Sacramento-San Joaquin Delta has found federal efforts to protect endangered fish "scientifically justified" but added that problems facing delta smelt and chinook salmon are not entirely caused by thirsty farms south of the estuary.

With release of the study today, the National Academy of Sciences stepped into a battle over a pair of federal biological opinions that limit water for farmers to protect the fish. But what many had hoped would clear up controversy over water restrictions has been greeted as another mixed analysis of the region's overlapping environmental stressors.

The National Academies' National Research Council said the diversions ordered under the bi-ops from the National Marine Fisheries Service and the Fish and Wildlife Service are sound, but the timing of methods to protect fish from pumps on the south end of the delta -- the water source for many farmers in the San Joaquin Valley -- is "less well-supported" by science.

The study, which was ordered by the Obama administration at the urging of Sen. Dianne Feinstein (D-Calif.) and others, emphasizes the complexity of problems facing the delta and its endangered fish.

"The committee concluded that in winter, high reverse river flows from high levels of pumping probably adversely affect smelt. Therefore, reducing the high reverse flows to decrease mortality of smelt is scientifically justified," the NAS report says. "However, the data do not permit confident identification of when to limit reverse flows of the rivers or a confident assessment of the benefits fish receive by reducing reverse flows. ... As a result, the implementation of this action needs to be accompanied by careful monitoring, adaptive management and additional analyses."

The NAS panel found the same muddled situation for chinook salmon, steelhead and green sturgeon. The committee said water restrictions under the bi-op for these species are justified but added that "specific environmental triggers, thresholds and flows should receive additional evaluation that is integrated with the analyses of similar actions for delta smelt."

"The committee also found it difficult to ascertain the extent to which the collective watershed and tributary actions will appreciably reduce risks to the fishes within the watershed ... and recommended a quantitative framework be created to assess survival," the report says.

Stakeholders on both sides of the issue claimed the report as a kind of victory today.

Rep. Dennis Cardoza (D-Calif.), whose district is home to many farmers whose water has been limited, said the study proves the agricultural industry is not exclusively to blame for the demise of the fish. He focused on one section of the report that says non-native striped bass are partly responsible for crowding out smelt and salmon.

"These predator fish have been allowed to flourish while cuts have continued in the deliveries of irrigation water to the San Joaquin Valley," Cardoza said. "This makes absolutely no sense, and we deserve more from our government agencies."

On the other side of the debate, Zeke Grader, executive director of the Pacific Coast Federation of Fishermen's Associations, said the study backs up the bi-ops' fundamental assertion: Water flow and pumping indeed affect endangered species in the delta.

"The study confirms much of what we've been saying over the years and backs up the scientists with NMFS and USFWS who were finally allowed to do their thing after we sued the agencies," Grader said. "While there are a number of factors affecting salmon productivity, it is clear that the foundation for rebuilding these stocks is flow, and from there, other actions can be taken."

Grader added, "It backs up what many in the fishing and conservation community have been saying for decades and should now give us the impetus to push for a comprehensive program for restoring the most important estuary on the West Coast."

The study comes during a wet winter in Northern California that has seen the Interior Department increase water flows for farms as reservoirs crest near capacity. Interior Secretary Ken Salazar this morning seemed hesitant to make too much of the NAS study, saying he has directed staff "to review carefully the report we have just received and to determine how we might most effectively take advantage of the National Academy's hard work."

The NAS panel is composed of 15 scientists and led by Robert Huggett, a professor at the College of William and Mary. The research team expects to continue studying the delta and issue more detailed evaluations through November 2011.

In the end, the council appears to be asking stakeholders to calm down and exercise patience as the process unfolds.

"Reversing or even slowing the declines of the listed species cannot be accomplished immediately," the study says. "Even the best-targeted methods of reversing the fish declines will need time to take effect."