



2030 Scoping Plan Update
California Air Resources Board

12/12/16

Thank you for the opportunity to comment on the 2030 Scoping Plan Update for the California Global Warming Solutions Act of 2006 ([AB 32](#)) and for presenting on this process in Orleans, which we understand is one of the first meetings on this issue north of Sacramento. We hope that the state continues to reach out to coastal communities in Northern California, as they are already suffering from the serious impacts of climate change and drought through lack of water supply, and food, and the loss of fishing industry jobs.

The Pacific Coast Federation of Fishermen's Association (PCFFA) is the largest organization of commercial fishing men and women on the West Coast. For 40 years, PCFFA has led the industry in assuring the rights of individual fishermen and fighting for the long-term survival of commercial fishing as a productive livelihood and way of life. The Institute for Fisheries Resources (IFR) is dedicated to the protection and restoration of fish resources and the human economies that depend on them. By establishing alliances among fishing men and women, government agencies, and concerned citizens, IFR unites resource stakeholders, protects fish populations, and restores aquatic habitats. A critical component of both organizations'

missions is robust protections for surface water quality that supports salmon and the protection of California's ocean fisheries and fishing jobs.

PCFFA and IFR appreciate the opportunity to engage on the Scoping Plan Update, and are specifically concerned about the following issues with regard to climate change resiliency: water management and savings; economic impacts from climate change; cold water supply for salmon; short lived pollutants such as methane; ocean warming and acidification; dam management; agricultural pollution; toxic algae in water supplies; fossil fuel development; water rights; and mitigations that deal with the current impacts of climate change.

The California industry is already suffering from the impacts of climate change. Fisheries and fishery-dependent California coastal communities are suffering through back-to-back-to-back resource crises, with a poor salmon season in 2015, loss of half of the crab season, and another poor salmon season in 2016. California's Chinook salmon resource has been on a downward abundance trend since at least the year 2000, with rapid acceleration of that trend in the last few years. While much of this decline can be attributed to the state's historic drought, whose persistence and severity may have been influenced by climate change, more specifically, the California Central Valley Chinook abundance decline is due to drops in river productivity, which in turn has been directly caused or exacerbated by the politicization and over-allocation of finite water resources coupled with increasing water pollution, both factors which are likely to be exacerbated by climate change.

In 2014-15, commercial crab vessels landed 17 million pounds of Dungeness crab in California, worth nearly \$60 million. Dungeness crab is now the main driver of the state's fishing economy. In 2015-16, this important fishery was shut down for over half of the season because of a biotoxin in crabs that is related to warm ocean temperatures, which are likely to have been strongly driven by climate change. Fishing communities already suffering from the impact of drought will have a hard time surviving if both salmon and crab are in rotating crises.

Given these scenarios, and the increasing likelihood that similar and more severe versions of the same could result from changing climate conditions, PCFFA and IFR urge the Board to add fisheries as a "key sector" in the scoping plan, and to address the socioeconomic impacts to seafood harvesters and the ecological impacts to fishery and habitat resources in the scoping plan. Fisheries are a critical "canary in the coalmine" for climate change, existing at the confluence of water and habitat resources, food security policy, and coastal community resiliency. Specifically, our organizations ask that the Board analyze the impacts of climate change on:

- Changing ocean temperatures on existing and future fishery viability and productivity, including discussion of temperature-driven species migration changes and the need to manage new or different fisheries;
- Increasing demand for an increasingly limited water supply on the future availability and productivity of anadromous fishery aquatic habitat resources, with specific discussion of prospective changes to the cold water supply for fisheries, changes necessary to dam management, and the need for statewide water conservation;
- Ocean acidification vis-a-vis both mariculture operations and wild-catch fisheries;
- The need for sea-level rise mitigation measures for fishery-dependent coastal communities, including infrastructure such as harbors, hoists and fuel docks, and economic or physical displacement;
- The need for land and water right retirement of heavily polluting agricultural lands which do not have reliable water supplies or soils that can continue to support farming without public subsidization.

Despite the economic impacts to this industry and coastal communities, fisheries impacts are rarely included in economic analyses done by the state of California, nor are mitigation measures employed in EIRs created by California to protect the fisheries and clean water on which we depend. We ask that our issues be addressed in this process and that it be clarified that some of the economic impacts to other industries from this process can be offset by the benefits of restored fisheries and the restoration of fishery-dependent communities. California's fishing industry provides a significant economic benefit to the state and has survived without the subsidies and pollution impacts that characterize the agriculture industry. It is important as we look forward that we promote sustainable food systems and phase out unsustainable farms and farming practices.

We applaud many of the state's efforts to fight climate change. We welcome the fact that this process looks beyond CO₂ and includes short-term environmental pollutants such as methane. We also support the fact that this effort addresses water supply issues and includes polluters such as the agriculture industry, timberland holders, frackers, and reservoirs which have been not been held accountable for their actions until this point.

We are concerned that a presenter at the Orleans scoping meeting expressed the belief that we cannot impact the agricultural industry with this plan. The assumption that agriculture is "untouchable" is not only false, but deeply insulting to rural communities that are suffering from the lack of fish due to excessive river water diversions which all too often go to arid and unproductive lands. California's agricultural industry uses an estimated 80% of the state's developed water supply and is also heavily subsidized. It also pollutes our limited supply of clean water and air, and then sends many of their crops to countries like China, thus causing

much more pollution, in addition to exporting what could be many American jobs. Not only is the reduction of agricultural lands and wasteful water use key to securing clean water supplies within the state, it would greatly help reduce and mitigate the impacts of climate change, and these lands could be used for solar and wind generation in the same way that other retired lands in the Western San Joaquin Valley have been.

Along with protections to fisheries and our water supply we request that this plan address divestiture from fossil fuel production and transportation in California to protect air and water resources. The fracking boom in California has not only released a huge amount of methane gas into the atmosphere, but has also in many places polluted the state's groundwater, surface water and oceans. Natural gas is mostly methane (CH₄), a super-potent greenhouse gas, which traps 86 times as much heat as CO₂ over a 20-year period. Fracking is not only polluting our air and water but it also is a huge water waster, and fracking near communities has caused huge environmental disasters in places such as Porter Ranch in Southern California, where over 100,000 tons of methane was released into the environment, and situations where whole aquifers were rendered unusable through illegal fracking waste injection.

Over 70 million gallons of water was used in California in 2014 for fracking, which was the worst year of the drought, and over 9 million gallons of fracking wastewater is dumped into California's oceans every year. Various proposed LNG pipelines also threaten our water supply and fisheries. California's recent fracking controversies and disasters have undone years of effort to protect our water and climate. We see no place for expanded oil exploration, development and transport in a state that is committing to fighting climate change.

PCFFA and IFR suggest that that National, State and private forests within the California be managed to not only offset global climate change but also to protect our dwindling water supplies from sedimentation and pesticide run-off. The Air Resources Board should work with Regional Water Boards to create Waste Discharge Requirements that protect older carbon sequestering forests and riparian areas. Permits issued by these agencies should require regular review to ensure that they continue to serve the purposes of water and air quality protections in light of complications from climate change on ambient conditions.

We reiterate the need to work with the Water Rights Division of the State Water Resources Control Board to prioritize public trust responsibilities such as water for mitigation to protect instream flows and to protect water quality and drinking water. We encourage your agency to work with Regional Water Boards to protect water quality, and to work with the the U.S. Bureau of Reclamation, the Federal Energy Regulatory Commission and the State Water Resources Control Board to manage dams in a way that pollutes less and provides benefits to rivers and anadromous fish.

We also support air quality permits that allow for prescribed burning to protect forests from out of control stand-replacing fire. Using controlled fire selectively to better protect water supplies in the long run, and avoid more heavily impacting major fires is often a sound air and water quality protection strategy.

Thank you for the opportunity to comment,

Regina Chichizola

Pacific Coast Federation of Fishermen's Association and Institute for Fisheries Resources.