Public Comment
Dry Year Report
Deadline: 10/15/14 by 12:00 noon

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404-4731

October 15, 2014

RECEIVED
10-15-14
SWRCB Clerk

Michael Buckman
Chief of the Hearings Unit
State Water Resources Control Board
P.O. Box 100
Sacramento, California 95812

Dear Mr. Buckman

Thank you for the opportunity to comment on the implementation and enforcement of the State Water Resources Control Board's (SWRCB) water rights priority system in future dry years. This letter transmits the information and recommendations developed by the North-Central Coast Office of NOAA's National Marine Fisheries Service, West Coast Region (NMFS) in response to your notice of solicitation on September 10, 2014. SWRCB included NMFS in its planning and implementation of water right curtailments as part of its 2014 drought response, and this afforded us the unique opportunity to observe the successes of the curtailment process as well as aspects that would benefit from changes.

NMFS, a division of the Department of Commerce, is the federal agency responsible for the stewardship of the nation's living marine resources and their habitat. This responsibility includes administration of the federal Endangered Species Act (ESA) as it applies to anadromous salmonids and other marine resources. The ESA also declares that federal agencies, such as NMFS, shall cooperate with state and local agencies to resolve water resource issues in concert with conservation of endangered species (ESA Section 2(c)(2)). Our interest in water right curtailments relates to the potential for this process to affect aquatic habitat in California streams with listed anadromous salmonids.

The enclosed comments include recommendations to prioritize watersheds, model in-stream flows, develop drought-based flow criteria for aquatic resources, integrate administrative controls over all forms of water rights, increase the SWRCB's capacity for complaints investigations, and help water users find solutions that fit for them and for aquatic public trust resources.

We look forward to partnering with SWRCB and the many other stakeholders involved in managing water through the current drought period and in future dry years. We support SWRCB's objective to utilize the best available technical tools and analysis to make determinations on water availability and sustainable management of California's water resources. We encourage you to contact us, via David Hines at david.hines@noaa.gov, with any questions concerning these comments.

Sincerely,

Alecia Van Atta
North-Central Coast Office Supervisor
California Coastal Area Office

Enclosure

cc: Chuck Bonham, Director, CDFW
Maria Rae, Assistant Regional Administrator, NMFS Central Valley Area Office
Copy to Chron file

Enclosure

Comments on Future Curtailment Planning
Submitted to the State Water Resources Control Board on October 15, 2014
North-Central Coast Office
NOAA's National Marine Fisheries Service

The State Water Resources Control Board's (SWRCB) notice of September 10, 2014, requested input on seven questions. Our comments address each of these questions as they relate to the SWRCB's obligation to consider public trust resources. In addition to describing each issue, we have included practical suggestions to address each issue in the near term.

Improving Information and Analysis

Prioritize Watersheds
Watersheds are discrete hydrologic units and, therefore, represent a logical scale by which to assess water availability. NOAA's National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife (CDFW), and the U.S. Fish and Wildlife Service (USFWS) supported the SWRCB's curtailment process in 2014 by collectively agreeing on spatial priorities (at the watershed scale) for in-stream flow-dependent natural resources at greatest risk from the drought in California. The structured decision-making model that emerged from this process would be a useful resource for future drought curtailment planning efforts. We recommend SWRCB re-establish this process and continue to develop it for future curtailment planning needs. Recovery plans for listed anadromous salmonids developed by NMFS also utilize watersheds as the spatial scale for discrete populations, and these recovery plans may be a useful resource in the prioritization process.

Hydrologic Modelling
Because the decision to curtail water use involves an assessment of water availability, accurate quantification of surface water in streams over space and time is an important consideration. Many stream reaches, particularly those that provide habitat for salmonids, lack the long-term flow records necessary for this purpose. We, therefore, suggest applying hydrologic modelling, calibrated with empirical flow measurements, to estimate year-round flow patterns across the entire stream network in priority watersheds. This will allow for estimation of natural (*i.e.*, unimpaired) flow conditions with the spatial and temporal resolution needed to inform the decisions you need to make. In addition, the development of a comprehensive stream gauging network in priority watersheds would be an important step in supporting the modelling. An immediate action SWRCB could take to implement improved hydrologic analysis would be to dedicate staff and/or contract hydrologists to model priority watersheds with existing data.

Environmental Flow Criteria
In the early stages of the 2014 curtailment process, efforts were made by SWRCB to identify drought-specific minimum flows to provide for salmonids and other in-stream resources. This special allocation of water for public trust was removed from the general curtailment analysis in favor of an estimate based solely on water right priority. However, there was subsequently

consideration of environmental flows to protect specific fisheries as determined by the adoption of watershed-specific emergency regulations (CCR Title 23 §877 for Mill, Deer, and Antelope creeks, tributaries to the Sacramento River).

The use of the emergency regulation was an effective means of protecting stream flow for specific fisheries and should, therefore, remain a viable mechanism to protect in-stream flows. However, this approach does not constitute due consideration of in-stream flows in all areas where potential curtailments and salmonids overlap. We, therefore, recommend including in-stream flow criteria for salmonids in future estimates of water demands.

Given that curtailments are in response to the drought emergency, we acknowledge that flow criteria for fish must necessarily be set at the minimum necessary to reasonably ensure survival through the drought period. Such thresholds should also be tailored to the life-stage-specific habitat requirements of each species and should be applied to the appropriate seasonal periodicity of each life stage. Under some circumstances other metrics, such as temperature or dissolved oxygen, may be more important indicators of suitable habitat than flow per se and should, therefore, be used. As an immediate action to address flow criteria, we recommend SWRCB coordinate with CDFW and NMFS to apply, compile and analyze rapid flow assessment techniques in priority watershed. This would establish a strong technical basis for defining environmental flow demands. CDFW has published a series of standard operating procedures for assessing flow-related habitats that may be a useful starting point (*e.g.*, CDFW-IFP-004, 2013).

Partnership and Collaboration

Much of the information and expertise needed to plan and execute curtailments efficiently already exists, but is distributed across many different organizations in addition to your own. We, therefore, encourage SWRCB to partner with other state (*e.g.*, CDFW, DWR), federal (NMFS, USFWS, BOR), and local entities (county governments, water agencies, irrigation districts, *etc.*). This collaboration should include any acquisition of data, expertise, labor, and/or funding that may expand your ability to utilize the best available information. For example, many county programs oversee land-use decisions that include water dependent activities. Tapping into these resources could represent important opportunities to leverage unique assets. We suggest SWRCB convene and interagency working group to identify partners and resources to be leveraged for curtailment planning purposes.

Improved Communications

For the 2014 drought, CDFW, with the support of NMFS, developed a method to target to water users in highly sensitive areas, communicate our agencies' concerns, and provide information regarding resources available to conserve water. Informational letters were distributed to key landowners in Green Valley Creek, tributary to the Russian River regarding stream flow and water use in reaches critical to rearing juvenile coho salmon. A map of estimated subterranean stream flows and parcel boundaries to identify hydrologically connected properties was used to identify parties suitable to receive these letters. SWRCB could expand on this work to encourage voluntary water conservation as a means to increase water availability.

The West Coast Region of NMFS may also have resources to support the communication of drought information to a wider audience via our West Coast Region Communications Team. This Team has the capacity to provide relevant information via multiple media fora to a wide range of constituencies, and NMFS staff is experienced in articulating the information and rationale used to shape decision-making. To the extent SWRCB's decisions support the achievement of our common goals and responsibilities, we would have an interest in helping SWRCB communicate shared messages to better explain the actions and their rationale.

Improvements to the Curtailment Process

Increased prioritization of SWRCB enforcement programs would support curtailment planning by mitigating the urgency of water shortages in some instances and potentially avoiding the need for curtailment in other situations. Similarly, the limited ability of SWRCB to govern water users with claims to riparian or pre-1914 rights, or who use groundwater, is particularly problematic for the protection of in-stream public trust resources. Legislative remedies, such as the new groundwater management law, that move the state toward more comprehensive and standardized administration of water uses would go a long way toward improving SWRCB's efforts in the curtailment process and management of water resources in general.

Improvements to the Complaint Process

The SWRCB's complaints process is a valuable mechanism for resolving many grievances related to water rights. However, complaints based on alleged impacts to public trust are often ineffective because successful complaints require a high degree of evidence to prosecute. The few individuals or organizations that file complaints on behalf of the public trust often lack the resources or expertise to adequately pursue the challenge of making an adequate case. Recent changes in the SWRCB's Complaints Unit have increased the investigative capacity of the unit, and this has allowed for more effective resolution of complaints. Increasing support to the Complaints Unit would continue to improve the capacity of the agency to compile, analyze and prosecute complaints and would be a welcomed improvement to resolving complaints more expeditiously.

Additional Authorities to Pursue

See our comments in the Improvements to the Curtailment Process section above for discussion related to SWRCB, or other, authorities.

Assisting Water Users

We understand the importance of finding solutions to water resource issues that work for water users. No solution to protect environmental flows will last unless it water demand concerns are addressed as well. NMFS, therefore, supports the SWRCB's development and communication of best management practices for water conservation. The Natural Resource Conservation Service and county Resource Conservation Districts are already active in most areas and represent logical partners for SWRCB to leverage their limited resources. In addition, the SWCRB's ability to provide up to date and comprehensive information on the regulatory

requirements and curtailment procedures to all potentially affected water users, via your list-serve, internet site, or other means, appear to provide effective access to interested parties. Building on the success of these platforms may be beneficial.