



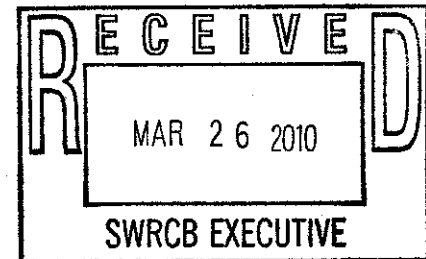
UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 NATIONAL MARINE FISHERIES SERVICE

Southwest Region
 777 Sonoma Ave., Room 325
 Santa Rosa, CA 95404-4731

March 25, 2010

In response refer to:
 SWR/F/SWR3:WH

Karen Niiya, Senior Engineer
 State Water Resources Control Board
 Division of Water Rights
 1001 I Street, 2nd Floor
 Sacramento, California 95814



Subject: Comment letter — AB2121 Policy

Dear Ms. Niiya:

NOAA's National Marine Fisheries Service (NMFS) thanks the State Water Resources Control Board (SWRCB) for the opportunity to comment on your Draft Policy for Maintaining Instream Flows in Northern California Streams (revised February 2010). This draft policy was developed under the authority of Assembly Bill (AB) 2121 and §1259.4 of the Water Code.

NMFS Basis for Interest

Several fish species known to be present in the policy area have been listed under the Federal Endangered Species Act (ESA). The Central California Coast Evolutionarily Significant Unit (ESU) of coho salmon (*Oncorhynchus kisutch*) was listed as endangered on June 28, 2005 (70FR37160). The Northern California Distinct Population Segment (DPS) of steelhead trout (*O. mykiss*) was initially listed as threatened on August 18, 1997 (69FR43937), and the California Coastal ESU of Chinook salmon (*O. tshawytscha*) was initially listed as threatened on September 16, 1999 (64FR50394). NMFS administers the ESA as it relates to these species.

Stream dewatering and loss of habitat due to water diversions is a contributing factor in the decline of several populations of steelhead and coho salmon in central and southern California coastal streams (Busby *et al.* 1996¹; Titus *et al.* 1999²; DFG 2002³). The manner in which a state approves appropriative water rights has the potential to promote the "take" of listed salmonid species; however, it also has the potential to reduce and greatly limit the take of those species.

¹ Busby, P.J. T. Wainwright, G. Bryant, L. Lierheimer, R. Waples, F. Waknitz, and I. Lagomarsino. 1996. Status review of west coast steelhead from Washington, Idaho, Oregon, and California. NMFS, NOAA Tech. Mem. NMFS-NWFSC-27, 261 pp.

² Titus, R.G., D. Erman, and W. Snider. 1999. History and status of steelhead in California coastal drainages south of San Francisco Bay. CDF Game, Fish Bulletin. Draft manuscript, 261 pp + apps.

³ DFG. 2002. Status review of California coho salmon north of San Francisco. Report to the California Fish and Game Commission. CDF Game, Candidate Species Status Review Report 2002-3, Sacramento, CA 231 pp + apps.



"Take" as defined in the ESA, includes, in part, to harm or harass the species. Protective regulations describe certain activities that may adversely affect coho salmon, Chinook salmon, or steelhead and result in legal liability. These activities include, in part:

Unauthorized destruction/alteration of the species' habitat, such as removal of large woody debris or riparian shade canopy, dredging, discharge of fill material, draining, ditching, diverting, blocking, or altering stream channels or surface or ground water flow.

NMFS Comments on the Proposed Measures to Protect Instream Flow

We are highly supportive of the SWRCB's efforts to provide new regulations that protect surface flows in streams that provide habitat for Federally listed threatened and endangered salmonid species. On page 2 of the new draft policy, SWRCB identifies five guiding principles that are, with one exception, similar to the underlying principles of California Department of Fish & Game (DFG) and NMFS's Draft Guidelines for Maintaining Instream Flows to Protect Fisheries Resources Downstream of Water Diversions in Mid-California Coastal Streams (DFG and NMFS 2002).⁴ Your stated principles are:

1. Water diversions shall be seasonally limited to periods in which instream flows are naturally high to prevent adverse effects to fish and fish habitat;
2. Water shall be diverted only when stream flows are higher than the minimum instream flows needed for fish spawning and passage;
3. The maximum rate at which water is diverted in a watershed shall not adversely affect the natural flow variability needed for maintaining adequate channel structure and habitat for fish;
4. Construction or permitting of new onstream dams shall be restricted. When allowed, onstream dams shall be constructed and permitted in a manner that does not adversely affect fish and their habitat; and
5. The cumulative effects of water diversions on instream flows needed for the protection of fish and their habitat shall be considered and minimized.

The implementation and enforcement of a policy that achieves these objectives would minimize take of listed salmon and steelhead and substantially promote the recovery of these species. We fully support rules that limit the approval of new appropriative water rights to only periods when flows are naturally high. We agree that minimum bypass flows should be required for all projects that affect flow in reaches that support salmonid habitats, including seasonal streams that may not support fish but do support aquatic

⁴ DFG and NMFS. 2002. Draft Guidelines for maintaining instream flows to protect fisheries resources downstream of water diversions in mid-California coastal streams. June 17, 2002 (errata note, dated 8-19-02). DFG, Sacramento, CA and NMFS, Santa Rosa, CA. 19 pp.

biological production that sustains fisheries (*e.g.*, the growth and transport of fish food items such as aquatic macroinvertebrates). Without minimum bypass flows (MBF), water diversions have the potential to dewater streams or otherwise degrade salmonid habitats, thereby exposing salmon and steelhead to stranding, desiccation, reduced growth, or increased predation. We also agree that the construction of new on-stream dams must be restricted, and that cumulative adverse effects of diversions on stream functions must be considered and limited.

NMFS provided the SWRCB with comments on the previous draft AB2121 policy in a letter dated April 30, 2008. In our previous comment letter we identified two basic principles which the previous draft AB2121 policy differed from the NMFS/DFG policy. We specifically disagreed with SWRCB's initial policy to extend the season of diversion to the period October 1 to March 31. We commend the SWRCB for modifying this timeline in the most recent draft policy (*i.e.*, returning it to the period December 15 to March 31).

Monitoring and Reporting.

We disagree with the monitoring and reporting requirements described in Section 5.0 through 5.2 of the new draft policy. The policy's provision for monitoring and reporting varies depending on whether the diversion is passive or automated. If the diversion is passive, the policy simply requires diverters to provide the SWRCB with an annual certification that verifies the diversion structure has not changed from the design the SWRCB had originally permitted. If the diversion is an automated-computer controlled bypass system, the policy requires the applicant to monitor and report stream flow on an hourly basis using automated flow measuring devices. We believe the new draft policy should require instantaneous monitoring and reporting of stream flow and water use for all types of diversions for the following reasons:

1. Without stream flow and diversion monitoring reports submitted by diverters; the SWRCB has no ability to evaluate the compliance with not only the terms and conditions of the permit or license; but also effectiveness of the policy itself.
2. Section 4.5 of the Watershed Approach described in the policy requires "special terms designed to assess the effectiveness of the watershed management plan in meeting the requirements of this policy," which are terms that would require watershed participants to monitor and report stream flow and water use. Since the new draft policy does not require effectiveness monitoring of individual permits, it could be a disincentive for a group of diverters to collaborate with the SWRCB on the Watershed Approach.

3. In order to evaluate the effects of diversions that have acute but significant effects on stream flow (e.g., frost protection), SWRCB staff need to analyze stream flow and water use data that is collected on relatively frequent intervals (i.e., less than one hour intervals).

Cumulative Effects and Bypass flows

Section 2.3 of the draft policy requires applicants to conduct a cumulative effects assessment by evaluating whether their proposed project would, in combination with existing diversions in a watershed, affect instream flows needed for fishery resources protection. To achieve this goal we believe the cumulative effects analysis should ensure conservation of diverse, genetically-based life history strategies (e.g., maintaining variability of timing of downstream and upstream migration). In order to recover salmonid populations, salmonid species need to successfully express a diverse portfolio of life history strategies.

A sound policy to protect fishery resources should also seek to protect all life stages of salmonids. In the policy area, flow and potential water supply is relatively abundant only during winter months. The current draft policy provides for exceptional protection of flows that facilitate spawning and migration of salmonids in small (Board of Forestry defined) "class 1" streams. However, some minimal *cumulative* loss of opportunity for spawning or migration due to winter water diversions should be preferable to significant loss of summer rearing habitat due to summer diversions or significant fish mortality due to stream flow reductions during springtime diversions for frost protection. Minimal cumulative loss of spawning opportunity would conserve spawning opportunity for fishes migrating at diverse times (e.g., late running as well as early running fishes). For example, the number of salmonid spawning and passage days probably should not be reduced from estimated unimpaired conditions by more than about 10% during any given month. The SWRCB's draft policy provides reasonable criteria for establishing what constitutes a salmonid spawning or passage day. Any additional reduction (e.g., 15% within a given month) should only be allowable if there is clear and substantial reduction of impacts from recent historic water diversions during the non-diversion season of April 1 to December 14.

Section B. 5.3.4 outlines a process that would determine if the proposed project reduces the number of days providing flow that supports spawning or migration as compared to a hydrograph that is already impaired by senior diverters, rather than comparing the cumulative impacts to the stream's estimated unimpaired hydrograph. Through that proposed process, several new projects, each causing an incremental decrease of a half day of spawning opportunity, will eventually result in a significant reduction in the number of days that support spawning. Therefore, to avoid true *cumulative* loss of flow supporting spawning and migration, the policy should evaluate impacts to spawning and migration flows relative to conditions provided by the estimated unimpaired hydrograph.

Thank you for the opportunity to support and comment on your draft water rights policy. We look forward to continued opportunities for NMFS and the State Water Resources Control Board to cooperate in the conservation of listed species. If you have any questions or comments concerning the contents of this letter, please contact Dr. William Hearn at (707) 575-6062.

Sincerely,



Dick Butler
Santa Rosa Area Office Supervisor
Protected Resources Division

cc: C. Yates, NMFS, Long Beach, CA
S. Edmondson, NMFS, Santa Rosa, CA
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