

**POLICY FOR MAINTAINING INSTREAM FLOWS IN
NORTHERN CALIFORNIA COASTAL STREAMS**

**RESPONSE TO CEQA COMMENTS MADE AT AND AFTER
THE APRIL 27, 2010 STATE WATER BOARD MEETING**

MAY 2010

Policy for Maintaining Instream Flows in Northern California Coastal Streams

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Comment Number 1: The many redline changes to the policy represent significant changes to the project description. A revised SED assessing the impacts of this revised project is required.

Response: The redline changes have not made any fundamental changes to the proposed policy as described generally in the draft SED. More importantly, the policy has not been changed in a manner that would result in a new, significant environmental impact, or an increase in the severity of any of the environmental impacts disclosed in the draft SED.

Comment Number 2: The description of the regulatory baseline is inadequate. The current baseline includes the fact that the Board has not, for many years, and is not approving many, if any, water right applications that propose to reduce stream flow in the policy area. Adoption of the policy will change that state of affairs, leading to significant adverse effects on salmonids and their habitat. The SED ignores this fact.

Response: For purposes of CEQA, the project is the adoption of the proposed policy, not the approval of individual water development projects. Accordingly, any environmental impacts attributable to approval of future water development projects are not attributable to the adoption of the policy, except to the extent that the policy would authorize projects to be approved that would not otherwise be approved, or would authorize projects to be approved subject to different conditions than would otherwise be imposed, and those changes in the number of projects approved, or the manner in which they are approved, would result in environmental impacts. The policy will not, however, authorize more projects to be approved, or authorize projects to be approved in a manner that is more harmful to the environment in general, or salmonids in particular.

The contention that the policy will lead to more project approvals is based on sheer speculation. In the absence of the policy, the potential impacts of individual projects on fishery resources would continue to be evaluated using the DFG-NMFS Draft Guidelines, on a case-by-case basis, or site-specific information, and some projects likely would be approved. For example, in 2008, the State Water Board approved 14 projects, and in 2009, the State Water Board approved 12 projects. There is no basis for concluding that the number of projects approved would increase if the policy is adopted.

Although the number of projects approved would not necessarily increase, it is possible that projects that are consistent with the regionally protective criteria contained in the proposed policy would be approved more quickly if the policy is adopted. As stated above, there is no basis for concluding that those projects would not be approved in the

absence of the proposed policy, so if anything the policy would only change the timing of any impacts associated with their approval. Moreover, the record supports the conclusion that projects that are consistent with the regionally protective criteria will not adversely affect the instream flows needed to protect salmonids and their habitat (or other instream beneficial uses). Such projects could result in significant environmental impacts if they entail removing an onstream dam, or constructing an offstream storage reservoir, but the environmental benefits of storing water offstream instead of onstream outweigh the environmental impacts of dam removal or offstream storage reservoir construction. In addition, those impacts are evaluated in the SED.

Finally, it merits note that approving many individual development projects will have no impact from a CEQA standpoint because the projects already exist. (See Cal. Code Regs., tit. 14, 15301; see also *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1452-1453; *Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1280-1281.) Approval of existing projects in accordance with the principles and guidelines established by the policy will serve to lessen any ongoing impacts of those projects on instream flows and fishery resources, which are part of existing environmental conditions, and will result in an overall benefit to the environment.

Comment Number 3: The regionally protective criteria do not err on the side of resource protection. The Policy's reliance on "nearby" reference streams to provide data for calculating regionally protective criteria is not scientifically valid.

Response: As stated above in response to comment number 2, any environmental impacts attributable to approval of future water development projects are not attributable to the adoption of the policy, except to the extent that the policy would authorize projects to be approved that would not otherwise be approved, or would authorize projects to be approved subject to different conditions than would otherwise be imposed, and those changes in the number of projects approved, or the manner in which they are approved, would result in environmental impacts. The policy will not, however, authorize projects to be approved in a manner that results in significant environmental impacts that would not otherwise occur.

In 2004, the State Water Board, in cooperation with USGS, evaluated the techniques that were being used by the State Water Board to estimate flow in ungaged streams (USGS Scientific Investigations Report 2004-5068). The report concluded that the adjustment of streamflow records method would overpredict streamflows with standard errors of about 40 percent, which appears consistent with the information presented by the commenter. The State Water Board had planned subsequent phases of investigation to develop improved estimation techniques, however, inadequate resources prevented additional work in this area.

With or without the policy, the State Water Board has a need for determining water availability and evaluating instream flow requirements, which requires utilizing methods for estimating flow in ungaged streams. The adjustment of streamflow records method is a standard method appearing in textbooks for estimating flows in ungaged streams,

and would be used by the State Water Board regardless of whether the policy is adopted. The State Water Board recognizes the method may not be accurate, and will consider including in the policy effectiveness program a study for evaluating the effectiveness of the use of reference streams for estimating flows in ungaged streams.

Comment Number 4: The policy does not propose to apply the regional criteria to points above anadromy. This could potentially lead to impacts to fish.

Response: As stated above in response to comment number 2, any environmental impacts attributable to approval of future water development projects are not attributable to the adoption of the policy, except to the extent that the policy would authorize projects to be approved that would not otherwise be approved, or would authorize projects to be approved subject to different conditions than would otherwise be imposed, and those changes in the number of projects approved, or the manner in which they are approved, would result in environmental impacts. The policy will not, however, authorize more projects to be approved, or authorize projects to be approved in a manner that is more harmful to the environment in general, or salmonids in particular. To the contrary, the policy will ensure that water right projects are evaluated and approved in a manner that is protective of the instream flows needed to protect fishery resources and other instream beneficial uses.

Appendix E, page E-20 of the Scientific Basis Report (R2 Resource Consultants and Stetson Engineers, 2007) indicates that the minimum bypass flow in non-anadromous habitat should be limited to the flow that meets the MBF requirement for a stream at its upstream point of anadromy. This science was peer reviewed. The December 2007 Draft Policy applied this science with the use of a prorated bypass flow based on the drainage area at the upper limit of anadromy. Public comments on the December 2007 draft asked for a reconsideration of this method of implementation. Staff then developed the approach presented in the February 2010 Draft Policy, which continues to provide the minimum bypass flow needs of anadromous fish at points of anadromy, and allows more water for diversion than the previous draft. The approach evaluates whether or not a proposed diversion is contributing to reductions in flows needed to maintain the minimum bypass flow at point of anadromy and below. Stetson Engineers and R2 Resource Consultants reviewed the approach and found it was likely to be protective.

Comment Number 5: The conditions of Sections A.1.8.1.1 do not demonstrate that allowing construction of onstream reservoirs for qualifying projects will be protective of the fishery resource. Allowing onstream dams on Class III streams is likely to decrease the caliber of sediment transported down to Class II and Class I streams which will reduce the delivery of spawning gravel and adversely impact habitat.

Response: As stated above in response to comment number 2, any environmental impacts attributable to approval of future water development projects are not attributable to the adoption of the policy, except to the extent that the policy would authorize projects to be approved that would not otherwise be approved, or would authorize

projects to be approved subject to different conditions than would otherwise be imposed, and those changes in the number of projects approved, or the manner in which they are approved, would result in environmental impacts. The policy will not, however, authorize more projects to be approved, or authorize projects to be approved in a manner that is more harmful to the environment in general, or salmonids in particular. To the contrary, the policy will ensure that water right projects are evaluated and approved in a manner that is protective of the instream flows needed to protect fishery resources and other instream beneficial uses.

The 2002 DFG-NMFS draft Guidelines allow approval of onstream dams on class III streams if the following criteria are met: 1) The on-stream dam will not dewater a Class II stream; and 2) The on-stream dam will cause less than 10% cumulative instantaneous flow impairment at locations where fish are seasonally present.

The Scientific Basis Report (R2 Resource Consultants and Stetson Engineers, 2007) analyzed the protectiveness of different policy alternatives regarding the permitting of onstream dams and water storage for streams in the policy area. It identifies several factors involving onstream dams that could result in impacts to salmonids. It recommended that if onstream dams were allowed on Class III streams, mitigation measures should be implemented in order to be fully protective. These mitigation measures include a gravel and wood augmentation plan or bypass system. Section 2.4.3 of the policy requires a bypass system and mitigation plans that include gravel and wood augmentation. Policy Section A.1.8.1.1 has been corrected to reflect this requirement.

The policy allows an onstream dam to operate without diversion restrictions if the dam is on a Class III stream and the applicant demonstrates it can be operated without significantly changing the stream flows needed for maintaining spawning, passage, rearing, and natural flow variability at downstream Class I streams. The Policy has selected a regional MCD in consideration of these functions that is expected to result in negligible effect on fine sediment transport in Class I streams. The only streams where fine sediment transport may be affected measurably could be in the Class III streams themselves, and most likely immediately downstream of the diversion. Appendix D of the Scientific Basis report includes additional discussion of fine sediment.

With respect to bedload transport and gravel supply to Class I streams, the cumulative effects restriction will limit the reduction in gravel transport capacity to Class I streams from Class III streams, but the net effect to delivery to Class I streams is expected to be minor to negligible under the Policy. This is because, first, only a subset of Class III streams would be permitted to affect bedload transport rates and cumulative annual volumes in their respective channels. Second, the Policy does not cut off all bedload transporting flows in those streams, hence the requirement to provide a gravel augmentation plan. The resulting net delivery to Class I streams will certainly be less than 100% of the unimpaired level because of limiting of some peak hydrographs as storage facilities fill, but it is unlikely to be less than 70-80% based on professional judgment. Thus, for a first order of magnitude estimate, roughly 10% of Class III

streams draining to a point in a Class I stream will be affected, and of that the effect is on the order of 20-30% reduction in each Class III channel. Carried through, this indicates that the net effect on bedload supply reduction will be no more than about 2-3% (first order of magnitude estimate). While this calculation grossly simplifies the actual process, its order of magnitude estimation of the net level of effect should be approximately correct. The important point is that sediment transport within an affected Class III stream will not be affected 100% under the Policy. Therefore, because of this, and given that diversions on Class III streams that are able to meet Policy requirements are likely very high in the watershed, the percentage reduction of sediment from all of the affected diversions contributing to a Class I stream is likely to be very small and insignificant under the Policy.

Comment Number 6:

Arbitrarily allowing a 10 percent reduction in the number of days that the winter low flow (February median discharge) is exceeded on Class II streams does not err on the side of resource protection.

The State Water Board does not appear to have considered that the reduction in the number of days that the winter low flow is exceeded will be concentrated in the drier years, thereby adding more stress to the aquatic habitat of Class II streams during a stressful period. Section B.5.3.6 does not err on the side of resource protection.

The State Water Board has offered no proof that reducing the number of days that the minimum bypass flow is equaled or exceeded by 10 percent is protective of the resource. Allowing the flow to be reduced below the MBF flies in the face of the very concept of the MBF and clearly does not err on the side of resource protection.

Response:

As stated above in response to comment number 2, any environmental impacts attributable to approval of future water development projects are not attributable to the adoption of the policy, except to the extent that the policy would authorize projects to be approved that would not otherwise be approved, or would authorize projects to be approved subject to different conditions than would otherwise be imposed, and those changes in the number of projects approved, or the manner in which they are approved, would result in environmental impacts. The policy will not, however, authorize more projects to be approved, or authorize projects to be approved in a manner that is more harmful to the environment in general, or salmonids in particular. To the contrary, the policy will ensure that water right projects are evaluated and approved in a manner that is protective of the instream flows needed to protect fishery resources and other instream beneficial uses.

The 2002 DFG-NMFS Draft Guidelines recommends that adequate flow be maintained in Class II streams such that dewatering does not occur. Because of the natural variability of the hydrograph, allowing a 10% reduction in the number of days that

unimpaired flow exceeds the February median flow on a Class II stream will likely not result in significant reduction in the natural hydrograph.

The Proposed Policy also requires all diversions on a Class II stream to have at a minimum a bypass set equal to the February median flow. The 10 percent change in the number of days the February median flow is exceeded is a test for diversions on Class III streams. Accretion flows between a POD on a Class III stream and the Class II stream will aide in maintaining the Class II stream. The further the Class III POD is from the Class II stream the lesser the impact. The closer the Class III POD is to the Class II stream the harder it will be to pass the test. If the test is failed the Class III POD will need to bypass a minimum flow. The test is evaluated on a monthly basis and must not fail in any month of the diversion season in order to operate without a minimum bypass flow.

The use of a threshold of 10% cumulative reduction in number of days of opportunity for spawning, rearing, and passage was included in the proposed policy upon the recommendation of National Marine Fishery Services. Dick Butler's letter dated March 25, 2010, states that "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." Appendix D of the Scientific Basis report includes a discussion of the importance of wet years to salmonid population sustainability.

The Proposed Policy also requires all diversions on a Class I stream to have a minimum bypass flow that is protective of flows needed for fish spawning, rearing, and passage. The 10 percent change to the number of days the unimpaired flow needed for spawning, rearing and passage occurs is a test for diversions above anadromy. Accretion flows between a POD above anadromy and a Class I stream will aide in maintaining the Class I stream. The further the POD is from the Class I stream the lesser the change to streamflow. The closer the POD is to the Class I stream the harder it will be to pass the test. If the test is failed the POD above anadromy will need to bypass a minimum flow for the protection of fish spawning, rearing, and passage. The test is evaluated on a monthly basis and must not fail in any month of the diversion season.

It should also be noted that projects above anadromy, particularly those on Class III streams not only have to pass the test demonstrating minimal affects to the stream flow on a Class II stream, but they also have to pass the test demonstrating minimal affects to the stream flow needed for protection of fish spawning, rearing, and passage. Projects on Class III streams need to pass both of these tests before it can be permitted.

Comment Number 7: No mitigation measures were identified. No showing has been made that mitigation infeasible.

Response: In response to comments that the draft SED did not adequately describe mitigation measures, staff described some examples of potentially significant indirect

impacts of the policy and the regulatory requirements and mitigation measures for these impacts that may be incorporated at a project-specific level in volume II of the Response to Public Comments document dated January, 2010. (See response to comment number 23.7.1 at pages 137-145.) As explained in that response, the regulatory requirements and mitigation measures identified are likely to reduce many, but not all, of the potential indirect impacts of the policy to less than significant levels. Some indirect impacts may not be identified or mitigated because it is impossible to predict who will take action in response to the policy, or what action they will take. In some cases, it may not be feasible to fully mitigate for the indirect impacts of the policy. For example, it may not be possible to fully mitigate for the loss of wetland habitat as a result of onstream dam removal. In addition, the State Water Board, Regional Water Quality Control Boards, and Department of Fish and Game may not have the resources to fully enforce the regulatory requirements described.