

**STATE WATER BOARD STAFF RESPONSES TO
COMMENTS RECEIVED FROM
BRIAN JOHNSON OF TROUT UNLIMITED
ON NOVEMBER 23, 2009 AND DECEMBER 11, 2009**

**STATE WATER BOARD STAFF RESPONSES TO COMMENTS RECEIVED
FROM BRIAN JOHNSON OF TROUT UNLIMITED ON NOVEMBER 12, 2009.**

11/12/09

Memorandum to Karen Niiya

From Brian Johnson

Subject: Clarification of AB 2121 Proposal

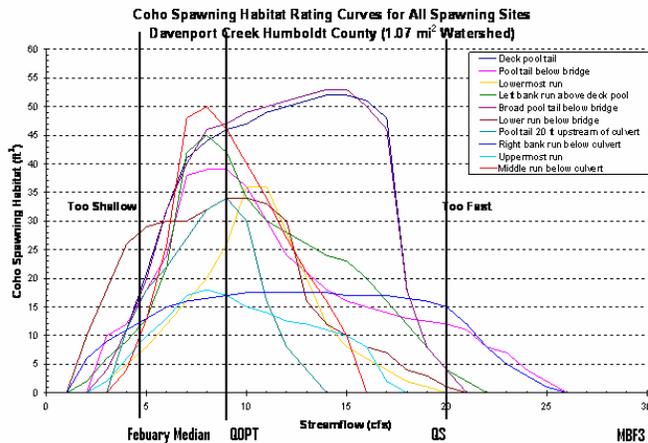
Thank you for meeting with us a few days back and for speaking with me briefly by phone after that. This email is the follow up I promised. It is not intended to touch on all of the issues in play with AB 2121. Instead, it is a follow up on two ideas that we consider central to a successful policy: the need to articulate an overarching cumulative effects framework and the need to define the purposes of key terms. I also included a quick clarification of why we chose the path we did.

Definition of Bypass Flow and other Terms. I believe you heard this comment loud and clear at our meeting and tend to agree with the basic point, but I'll state it again for your files and clarify why we think our recommendation makes sense as a starting point. The Draft Policy does not really define what the bypass flow is supposed to accomplish, or what methods would be acceptable for calculating it via a site specific study.

The final Policy needs to define the terms to avoid years of wrangling over site specific studies after it is adopted. Especially if the formula (replacement for MBF3) is as conservative as it sounds it may be, applicants will have a strong incentive to do site specific work; if we fail to define terms we will be right back where we started in 1997 with endless delays.

State Water Board Staff Response: *Comment noted. Staff is developing revisions to the site specific studies language based on consideration of comments received.*

Consider again our example (pasted below). The particular numbers are less important than the ideas behind them.



In some places, the Draft Policy indicates that the bypass flow must be large enough to protect all biological functions by itself.

State Water Board Staff Response: The combination of a minimum bypass flow and cumulative maximum diversion rate together are meant to protect all biological functions of a stream channel. The minimum bypass flow should protect the biological functions of passage, spawning, incubation, and rearing. The maximum cumulative diversion rate puts a cap on the amount of water removed from the stream above the minimum flow in order to protect the natural flow variability and the various biological functions of that variability within the stream. Protection of the natural flow variability assures habitat maintenance is achieved. Preservation of functions such as the movement of woody debris and spawning gravels, the flushing out of fine sediment, and removal of channel overgrowth through the occurrence of high flows maintains fishery habitat. The intent of the Policy is to limit diversions with both a MBF and a MCD in order to protect salmonid upstream passage, spawning, and rearing, and to maintain natural flow variability and the various biological functions that are dependent on that variability. Protection of these functions cannot occur unless both diversion limitations are achieved together.

But this was accomplished with MBF3 (31 cfs) by calculating Q_{OPT} (which does not protect all biological functions by itself) and then adjusting the line to the right by a couple standard errors.

State Water Board Staff Response: The MBF3 alternative was developed to protect instream resources on a regional scale using data that would not be expensive for applicants to obtain as they assess water availability as part of their planning. In order to be protective on a regional scale, the regional criteria are of necessity conservative and err on the side of resource protection. To be regionally protective, MBF3 was designed to limit water diversions so that adequate flows are available for spawning, passage, and rearing at sites with the most restrictive instream flow needs. At some sites, therefore, more than adequate flows will be provided by MBF3. MBF3 should not be considered to

have site specific accuracy, and it was not intended to be used to predict the site specific minimum bypass flow needs accurately for every stream.

The intent of the regionally protective criteria approach is to provide the applicant an avenue for quicker processing of pending applications while still being protective of fishery resources. Applicants willing to accept a bypass term based on MBF3 will be able to proceed through application processing much quicker because the acceptance of the regional criteria reduces the amount of environmental review needed when processing the pending application. The regionally protective criteria provide the applicant the opportunity to show that operation of their project will not cause impacts to fishery resources without the need for conducting expensive site specific fishery studies. If the applicant finds that implementation of the regional criteria according to the Policy's Cumulative Diversion Analysis shows the proposed diversion may cause impacts to fishery resources, or if the applicant is convinced that more water is available for diversion than under the regional criteria, the applicant may conduct site specific studies to identify more accurately the fishery resource instream flow needs of a particular location.

What happens if an applicant wants to do a site specific study? If the policy defines the bypass as that necessary to protect all biological functions, it needs to yield a number to the right of the spawning habitat. If the policy defines the site specific study as Q_{OPT} (9 cfs) then it needs a cumulative diversion test that also protects habitat.

State Water Board Staff Response: The Task 3 Report did not assign all of the biological function to the minimum bypass flow. Biological functions are also protected with the maximum cumulative diversion criterion. The maximum cumulative diversion protects natural flow variability, which protects biological functions that are dependent on that variability. In addition, the Task 3 Report analyzed the protectiveness of the minimum bypass flow and maximum cumulative diversion alternatives in combinations because the functions needed to be evaluated together in order to assess the protectiveness of the criteria and the impact to habitat. The Policy's provisions, including the site specific study provisions, have been revised to provide clarification regarding the biological functions protected by the minimum bypass flow and the maximum cumulative diversion. The minimum bypass flow protects flows needed for upstream passage, spawning, and juvenile rearing. The maximum cumulative diversion protects natural flow variability and the various biological functions dependent on that variability.

The Policy uses the maximum cumulative diversion criterion that limits cumulative diversions to a 5% change to a channel maintenance flow as an indicator for protection of natural flow variability. The limiting of the cumulative effect to the channel maintenance flow will also limit impacts to stream flow

variability. The maintenance of natural flow variability results in protection and maintenance of salmonid habitat.

Additionally the Policy's Daily Flow study is a cumulative water diversion test that assesses the effects of the proposed diversion and senior diversions on flows needed for fishery resources. The Policy will be revised to clarify this. The Daily Flow study assessment looks at the number of days flow is above the minimum bypass flow and the percent change to the 1.5 year flood flow. The study must assess the unimpaired condition, impaired condition with all senior diverters, and the impaired condition with all senior diverters and the proposed project. The Policy's default threshold is zero days change to the existing condition.

For example if the Daily Flow Study shows that in the unimpaired case for a particular water year there are 50 days where the daily flow was above the MBF and 40 days where flow was above the MBF when flows are impaired by senior diverters, then the impairment with senior diverters and the proposed project must also stay at 40 days in order to demonstrate the project will not contribute to cumulative impacts and therefore water is available for diversion. If the proposed project gets approved, the next applicant to apply for water within this example watershed will also have to demonstrate that the impaired condition with senior diverters (this includes the first proposed project) and their proposed project keeps the number of days flow is above the MBF at 40. Any change to the existing condition is not allowed in this assessment.

A similar assessment of the change to the 1.5 year flood flow is also required. Up to a 5% change is allowed to occur relative to the estimated unimpaired flood level. The percent change is determined using cumulative diversion information for senior diverters and the proposed diversion. If the percent change is greater than 5% based on the cumulative diversion of all senior right holders then a proposed project cannot increase the percent change when its impairment is added to the cumulative diversion. For example if the percent change to the 1.5 year flood flow based on all senior diverters above a point of interest is 7% then the percent change to the 1.5 year flood flow must remain at 7% when the impaired flow includes the proposed project. Again like the example in the paragraph above, all additional proposed projects must also show that the percent change with their project remains at 7% or water may not be available for diversion.

The intent of the Daily Flow Study's threshold of zero change to the existing condition is to preserve the existing condition and to not allow the approval of a new project to make the impairment worse. This is a cumulative water diversion test that needs to be passed in order for a water availability determination to be made. The threshold of zero change to the existing condition applies for the approach used in this methodology, and is conservative by nature because it needs to apply to an entire region.

The revisions to the Draft Policy's site specific studies language may allow the applicant to use the cumulative diversion methodology and thresholds contained in the policy or propose alternatives. Regardless of the methodology or thresholds used, generally the applicant would need to show that the implementation of the site specific criteria with the proposed project, and with considering the water withdrawals of senior diverters, would not adversely affect instream flows needed for fishery resources.

We defined Q_S as that which protects all individual sites except those which are smaller than 15 ft² for coho and 10 ft² for steelhead (20 cfs). There are other ways to define the term: it could mean all the habitat (26 cfs), or a percentage of the habitat, or it could be a reference to a physical variable such as depth. (In this stream, the flow that gets a Median Riffle Crest Thalweg depth of 0.8' is about 20.5 cfs. We suggested that this approach might be useful as an alternative to habitat mapping, as a fast way to do a site survey that yields a consistent number. Similarly, the median RCT that inundated the D_{84} rocks yielded a number similar to the February Median.)

State Water Board Staff Response: The analysis in "Review of TU/WB/ESH Proposal", Stetson Engineers and R2 Resource Consultants, November 2009, shows that the habitat mapping approach and the median RCT approach do not provide equivalent outcomes when applied to the validation sites within the policy area. The analysis also shows that the February median flow is much higher than the winter low flow associated with the median RCT that inundates the D_{84} rocks at the validation sites. It appears the assumption that the inundated D_{84} yields a number similar to the February Median flow is not true for the Policy region. Furthermore, justification for the 15 ft² and 10 ft² criteria was not provided, where it appears that they are inconsistent with characteristic biological differences between the two species.

Again, the important point is that the Policy needs to define its terms.

State Water Board Staff Response: Comment noted. Staff is developing revisions to the Policy based on consideration of the comments received.

The second important observation is that any definition of bypass flow that does not yield a number to the right of all potential habitat needs to be paired with a cumulative rate of diversion criterion that protects biology (not just geomorphology). Otherwise, the final policy will not be supported by the analysis that went into it.

State Water Board Staff Response: The Task 3 Report did not assign all of the biological function to the minimum bypass flow. Biological functions are also protected with the maximum cumulative diversion criterion (see Appendix D). The maximum cumulative diversion protects natural flow variability, which protects biological functions that are dependent on that variability. In addition,

the Task 3 Report analyzed the protectiveness of the minimum bypass flow and maximum cumulative diversion alternatives in combinations because the functions needed to be evaluated together in order to assess the protectiveness of the criteria and the impact to habitat. Section 4 of the Task 3 Report discusses the evaluation of the effects of Policy criteria restricting flow diversion on anadromous salmonid habitat needs. On page 4-1 the Task 3 Report states “Whether or not a specific Policy element alternative criterion, or combination of alternative criteria (i.e. a Flow Alternative Scenario), could be considered protective depended on the extent to which each habitat need was adversely affected by the reduction in daily flows resulting from the allowed impairment.” The allowed impairment used in the assessment of fish habitat was based on a cumulative rate of diversion restriction. The report found that a maximum cumulative diversion restriction based on 5% of the 1.5 year flood flow in combination with a minimum bypass flow that protects the optimal amount of habitat was protective.

The Policy’s regional criteria are to be implemented in combination and are protective of biology and the natural flow variability needed for protecting biological functions on a regional scale. Applicants performing site specific studies will need to demonstrate that a site specific minimum bypass flow in combination with a maximum cumulative diversion limitation are protective of biology and the natural flow variability needed for protecting biological functions. The revisions to the site specific studies language are based on this concept.

In the next section, I'll explain why I think you need to do this regardless of how you define the bypass.

Cumulative Effects. In our recommendations, the “management objectives” (0.05’/0.10’ changes in depth at various thresholds) and small projects rule are central to the cumulative effects framework. We recognize that there are many ways to establish a cumulative effects framework.

We also recognize that our recommendations are still in draft form and are not fully defined. However, the draft policy and evolving staff rewrite suffer from the same flaw, to the extent it is a flaw. If all diversions had a bypass flow large enough to fully protect all biological functions, then it might be possible to define rates of diversion only in terms of geomorphic functions. In the real world, this is not the case: (1) some lawful diversions already exist without bypass flows, and the evolving staff recommendation would permit others through either a small projects test that allows for (2) no bypasses or (3) a February Median bypass. You may be considering allowing for (4) site specific studies (such as those based on Q_{OPT}) that do not protect all possible spawning habitat. Therefore, the Policy needs to define a cumulative rate of diversion test or similar cumulative effects test that accounts for potential harm to fish and wildlife, as well as geomorphology. Otherwise, we’ll never know when enough is enough.

State Water Board Staff Response: As stated in previous responses above, the Policy's maximum cumulative diversion limitation when combined with an appropriate minimum bypass flow, protects both biology and the natural flow variability needed for the protection of biological functions as demonstrated in the Task 3 Report. The Policy has always defined a cumulative diversion analysis that evaluates the effects of the proposed diversion and senior diversions on fishery resources. It is the required Daily Flow Study.

As described in the response above, the Daily Flow Study is a cumulative diversion analysis that evaluates cumulative reductions in stream flow caused by diversions, and whether those cumulative reductions affect the maintenance of the minimum bypass flow and natural flow variability at a point of interest (POI). The test threshold is zero days change to the number of days flow is above the MBF and no more than a 5 percent change to the 1.5 year flood flow if the existing change is less than 5 percent. This test takes into account the fact that not all diversions have a MBF or MCD. This is why the test measures the change against the existing condition.

The number of days flow is above the MBF after considering senior diverters is what all pending projects will be measuring against. All pending projects will need to demonstrate they do not affect the existing condition that exists at the time the Policy is adopted. As additional pending projects get permitted, their bypass flows will be set assuring they meet the zero days change threshold. Once a pending project is permitted and becomes part of the senior demand, the next pending project to follow will need to pass the same test and will have an appropriate bypass that preserves the condition that existed at the time of Policy adoption. This is why the revised policy allows for situations in which no bypass or only a February median bypass can be used if there will be no change to the existing condition. If a project is located above anadromy and is far enough from the location where anadromy exists, or is tributary to a large anadromous watershed, it is possible that the amount of accretion flows in the watershed contribute enough flow that the regional MBF and MCD thresholds are not affected by the diversion.

Similarly if the existing condition at the time of Policy adoption demonstrates the 1.5 year flood flow for a particular watershed has experienced greater than a 5% change, then all pending projects within that watershed will need to keep the change at that existing percentage. If the change to the 1.5 year flood flow is 7% in the existing condition, all pending projects will need to demonstrate the change to the 1.5 year flood flow will stay at 7% if their project is approved. This is why the revised policy includes exemptions for projects above anadromy. If a pending project can demonstrate through the cumulative diversion analysis (Daily Flow Study) that they can operate without a MBF and MCD limitation at their point of diversion and make no change to the existing condition, then it's reasonable to allow them to operate without restrictions.

Applicants must pass the cumulative diversion analysis for both the MBF and the MCD in order to demonstrate the project, in combination with senior diversions, does not affect instream flows needed for fishery resources. Both tests need to be passed because the MBF and MCD limitations in combination are protective of biology and natural flow variability.

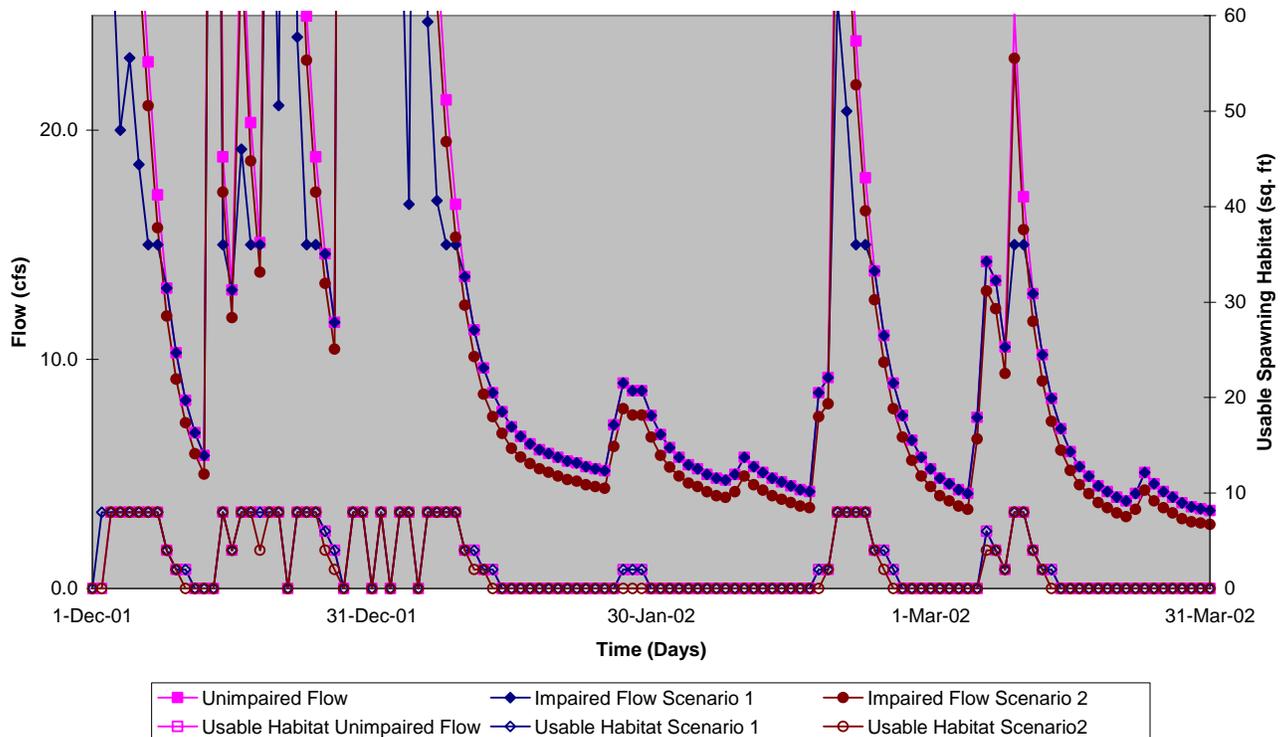
You should know by now that we do not consider it an insurmountable flaw that this cumulative effects test will necessarily rely on both policy judgments and expert opinion regarding science, and will not be answered strictly in the literature. Inevitably, we are dealing with a mixed question of policy and science, and using considerable professional judgment. *This is OK.* In a sense, the question of “how much is enough” is as much a policy judgment as a scientific judgment anyway. But the policy should be up front about its judgments and its rationale, so the policy can be implemented and evaluated five years from now for its effectiveness. What is not OK (in my humble opinion) is to fail to state what the policy is trying to accomplish in terms of cumulative effects on the grounds that the science is uncertain. A reasoned judgment call is better than no judgment call at all.

State Water Board Staff Response: The Draft Policy contains a Daily Flow Analysis which is a cumulative diversion analysis to evaluate whether the proposed diversion, in combination with senior diversions, affects instream flows needed for fishery resources. It is a test that needs to be passed in order for a water availability determination to be made. The methodology for this analysis was described in responses to earlier comments in this document. A threshold of zero change to the existing condition is used in this methodology. The cumulative effects of all known and foreseeable diversions will be addressed on a case by case basis during the processing of water right applications. Staff will consider revisions to the policy to provide clarification.

Why We Structured Our Recommendations As We Did. We solved this “problem” by defining QS in a way that put it toward the right side of the habitat curves, but not to the right of all habitat. Critically, it is *not* a hard and fast bypass flow below which no diversions can take place. Instead, it is a threshold against which to evaluate cumulative diversions. Diversions below QS are greatly restricted and diversions above this threshold are less restricted. We suggested as a starting place a rule that would not artificially change depth by more than 0.05’ or 0.1’ respectively. Other rules could be devised. (Incidentally we do not consider it a fair criticism to note that the 0.05’ rule could be modeled but would be hard to measure in real life. That is true of many of the other decision making rules in the Draft and the Joint Guidelines, and it will be true of the final Policy as well. In any case, the reason this became a hot topic back in the late 1990s is because it is hard to observe the incremental effect of numerous small changes. We knew that already; it was the premise behind the legislation.)

State Water Board Staff Response: This comment refers to the flow management objectives from the Joint Recommendations. The analysis in "Review of TU/WB/ESH Proposal", Stetson Engineers and R2 Resource Consultants, November 2009 provides an evaluation of this recommendation. In summary, the report finds that the flow management objectives described in the Joint Recommendations were mostly incomplete and that Stetson Engineers and R2 Resource Consultants were unable to determine the protectiveness of the recommendation. Staff is not opposed to the two tier approach to managing cumulative diversions. However it must be demonstrated that this approach will be protective of instream resources. While the proposed Qs in the Joint Recommendations may be a bypass that protects the right side of the habitat curve, the Stetson/R2 analysis shows that allowing diversion to occur when flows are below Qs will have effects on habitat starting at the left side of the curve. The Stetson/R2 analysis indicates that the Joint Recommendations have not demonstrated what level of cumulative diversion below Qs can be allowed and still be protective of the habitat. Using site specific information from one of the validation sites used in development of the Policy, staff developed the following graph as a direct comparison of the use of the flow management objectives from the Joint Recommendations using the site-specific methods provided versus the use of the site-specific spawning flow used in the MBF3 regression with an MCD.

Comparison - Flow vs. Habitat vs. Time
 Huichica Creek Dec. 1 to March 31
 2002 Water Year



The hydrographs are impaired based on the maximum allowed diversion under the Draft Policy and the maximum allowed under the Joint Recommendations using the site-specific methods for calculating the minimum bypass flow. For the purposes of this analysis scenario 1 represents the effects of diversion based on the use of the site-specific spawning flow used in the MBF3 regression (defined as the lowest flow which provided the maximum spawning habitat availability based on a minimum suitable depth criterion for spawning steelhead equal to 0.8 ft) as a minimum bypass flow and a maximum cumulative diversion not exceeding 5% of the 1.5 year flood flow. Scenario 2 represents the Joint Recommendations flow management objectives, with Qs calculated by the habitat mapping method, winter low flow calculated by the RCT particle depth method, and diversions allowed up to a change in depth of 0.5 feet when flows were above the winter low flow and a 0.1 foot change in depth when flows were above Qs. The site specifics of this location were used to obtain the bypass flows and cumulative diversion limitations for each scenario.

In this comparison, both scenarios appear to provide for the natural flow variability needed to maintain fishery habitat. However during the period shown, there are 14 days where scenario 2 made less habitat available for use than scenario 1. This happens because scenario 2 allows diversion to occur at lower flow levels. Additionally the maximum cumulative diversion criterion of scenario 1 makes an additional 177 acre-feet of water available for diversion than scenario 2 in this particular water year. In this example it appears the scenario 2 approach, which allows diversion to occur at lower flow levels, does not make more water available to the diverter over the entire season while making less habitat available for use by the fishery. The scenario 1 approach to limiting the maximum cumulative diversion in combination with maintaining a minimum bypass flow that protects the optimal amount of habitat has been shown to be protective through evaluation in the Task 3 Report, and provides a balance between protecting instream resources and allowing water diversion.

Our recommendations thus rely more on maximum cumulative rates of diversion and less on bypass flows than does the Draft. And it requires the Division to establish a cumulative effects test (i.e. MCD) that includes consideration of biology. We believe this makes sense for a number of reasons.

1. You have to do this anyway. In real life, there are already diversions that have no MBF-level bypass flow. You are preparing to permit more with a small projects rule that allows some new permits with no bypass flow or a February Median bypass flow. *If you do not define this test, how will you ever know when there are too many?*

State Water Board Staff Response: As can be seen in the graph above, allowing diversion at lower flows has an effect on habitat availability at that particular location. As stated in previous responses the Draft Policy relies on the combination of a minimum bypass flow (MBF) and a maximum cumulative

diversion (MCD) limitation to protect biology and the natural flow variability needed for the protection of biological functions. The two must be used in combination to achieve protection of biology, as the bypass flows below which no diversion is allowed makes habitat available for use while a maximum cumulative diversion limitation maintains the habitat through the maintenance of natural flow variability.

As stated in previous responses above, the Policy's maximum cumulative diversion limitation when combined with an appropriate minimum bypass flow, protects both biology and the natural flow variability needed for the protection of biological functions as demonstrated in the Task 3 Report. The Policy has always defined a cumulative diversion analysis that evaluates the effects of the proposed diversion and senior diversions on fishery resources. It is the required Daily Flow Study. As described in the response above, the Daily Flow Study is a cumulative diversion analysis that evaluates cumulative reductions in stream flow caused by diversions, and whether those cumulative reductions affect the maintenance of the minimum bypass flow and natural flow variability at a point of interest (POI). This allows the Division to consider allowing small projects to operate without a minimum bypass flow or maximum cumulative diversion because the cumulative diversion analysis (Daily Flow Study) will indicate when there are too many projects within a watershed. As explained in previous responses, the Daily Flow Study conservatively defines the regional baseline of "too many projects" as the number of authorized permits and licenses that exist at the time of Policy adoption. This takes into account the fact there are permitted and licensed projects that currently exist without MBF and MCD limitations. The conservative baseline is aimed at conserving the existing condition and preserving the watersheds with less impairment. Applicants unable to pass the cumulative diversion analysis using the regional criteria will need to demonstrate through site specific studies and a site specific cumulative diversion analysis that their proposed diversion, in combination with senior diversions, does not adversely affect fishery resources.

2. A cumulative rate of diversion test makes more sense as way to manage cumulative effects than a bypass-based policy. The point is to protect the integrity of the natural hydrograph. A rate of diversion orientation is a more elegant solution. Moreover, cumulative rates of diversion are the thing that ultimately matters in the long run. (I don't know if it's even possible to articulate a bypass based cumulative effects test, and it would be murder to try to measure it.) If the Policy cannot define a cumulative effects test, the policy cannot serve its conservation function. Again, if we don't have such a test, how will we ever know when enough is enough?

State Water Board Staff Response: Please see the responses above. Also refer to the graph above. The integrity of the natural hydrograph is protected by the combination of the Policy's minimum bypass flow and maximum cumulative diversion criteria.

3. A policy that makes the bypass term cover all biological functions results in a really high bypass term. This will make it very hard for applicants to get water, and I expect them to oppose it fiercely. (This is critically important to diverters, but it is also important for everyone who wants an implementable policy or a path for shifting diversions from the dry season to off stream ponds.)

State Water Board Staff Response: The Task 3 Report did not assign all of the biological function to the minimum bypass flow. Biological functions are also protected with the maximum cumulative diversion criterion. The maximum cumulative diversion protects natural flow variability, which protects biological functions that are dependent on that variability.

Although the proposed MBF 3 bypass level is out of necessity conservative in order to be protective on a regional scale, staff is proposing revisions to the Policy allowing for small project exemptions that will make more water available to applicants above anadromy. Cumulative effects to anadromy should be evaluated at anadromous locations and the revised Policy more clearly defines that intent. Applicants with projects above anadromy that are in watersheds with lower levels of stream flow impairment may be able to operate with no bypass flow or a low bypass flow and no MCD at their point of diversion, thus making more water available for diversion.

4. A policy that relies on bypass alone for biology is unnecessary. The bypass and rate of diversion terms will usually exist side by side in permits, so the scientific review should evaluate the effect of both of them together on both biology and geomorphology.

State Water Board Staff Response: Chapter 4 and Appendices F, G, H, and I of the Task 3 Report analyzed the protectiveness of the minimum bypass flow and maximum cumulative diversion alternatives in combinations because the functions needed to be evaluated together in order to assess the protectiveness of the criteria to salmonid habitat. For further discussion, see the responses above. In addition, the State Water Board performed a sensitivity analysis using the proposed policy criteria that involved both habitat analysis and evaluation of effects to natural flow variability. The analysis showed the proposed policy criteria were protective

Generally speaking, the Wine Industry cares most about 3 and TU cares most about 1 and 2. But there is much more to it than that.

I'd like to make a personal point about the politics of the policy. I get the feeling that some Division staff and stakeholders view the TU/Wine recommendations as the product of a political compromise, as if TU watered down our views on what "we really think" in order to find something farmers can both accept. That's not it.

Bill and I genuinely believe that the orientation of our recommendations can do a better job of managing 1 and 2 than the Draft Policy or a revised policy that maintains the same general orientation as the Draft. We're genuinely worried that we'll end up with something that does not adequately address cumulative effects.

Conversely, if we can find a better way to manage cumulative effects that also works better for applicants, we should do that. I think our orientation does that, and there is plenty of room to work out the details in a scientifically meaningful way. All paths toward a final policy will have a considerable amount of science and experience behind them, but there will always remain a considerable amount of policy and professional judgment too. Again, that's OK.

State Water Board Staff Response: *Staff believes that the analysis in the Daily Flow Study adequately provides a cumulative diversion analysis of the effects of the proposed diversion and senior diversions on fishery resources. The use of the existing condition at the time of Policy adoption as a baseline for measurement of impacts to the MBF and MCD and allowing for zero change to existing conditions, or up to a 5% change to the MCD if the existing change is less than 5%, conserves the existing condition and preserves watersheds with lower impairment levels.*

It should be made clear that staff is not opposed to a two tiered approach to managing the cumulative effects of diversions. However, protectiveness of the flow management objectives described in the Joint Recommendations has not been demonstrated. Additional development of this approach would be needed before it can be seriously considered as a regional Policy. The methods outlined in the Joint Recommendations may be proposed as a site specific study, but in order to apply the flow management objective thresholds at the site specific level, it will have to be demonstrated that they are protective of the resources at that location.

I don't mean to sound hostile or overly pessimistic. Since you're still working on the revised draft, we may be closer than I fear. But I'm worried that to some extent we're still talking past each other.

Brian

**STATE WATER BOARD STAFF RESPONSES TO COMMENTS RECEIVED
FROM BRIAN JOHNSON OF TROUT UNLIMITED ON DECEMBER 11, 2009**

From: "Brian Johnson" <BJohnson@tu.org>
To: "Karen Niiya" <KYNiiya@waterboards.ca.gov>, "Vicky Whitney" <VWHITNEY@wa...>
Date: 12/11/2009 11:34 AM
Subject: AB 2121 - Small Domestic Use Registrations (Mattole-style projects)

Karen, Vicky, Steve,

As you finish up the next draft of the AB 2121 policy I'd like to put in a special 'reminder' plea for a topic we haven't discussed much in our obsession with vineyard diversions: incentives for stewardships in general and the small domestic use registration section in particular.

I continue to believe that one of the best things the Policy could do is create momentum for beneficial streamflow enhancement projects.

You may remember that one of the small comments we submitted (along with several other groups) had to do with a slight addition to the Small Domestic Use Registration section in order to continue to allow the Mattole tank project and similar projects, which are among the best instream flow enhancement projects in existence.

The language was worked out with DFG and Sanctuary Forest (with help from Rob Donlan, who has done work with them in the past completely separate from Ellison, Schneider's work with the wine industry and TU).

Since that time, we have become aware of (or helped launch) several other projects in other coastal basins that will use a similar model. It's really important that the Policy support and not thwart these programs. (The draft would have inadvertently made it very difficult.)

The language follows. (It appeared with the other incentives for stewardship in our comments.)

Thanks a million.

Brian

Stewardship Incentives for Small Domestic Registrations

[This probably goes with the Policy sections on Small Domestic Registrations, but for now we put it here.]

The State Water Board shall extend the season of diversion of a Small Domestic Registration beyond March 31 if the Department of Fish and Game concurs that (1) the purpose of the appropriation is to allow the registrant the flexibility to divert water for beneficial use in a manner that improves conditions for fish and wildlife, and (2) the registration would allow the registrant to forgo or reduce diversions under other valid basis of right during periods of the year that are most critical to fish and wildlife. This exception does not limit or expand DFG's authority to condition the registration pursuant to Water Code section 1228, et seq.

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STATE WATER BOARD STAFF RESPONSE:

Staff considered these comments in the development of modifications to the policy provisions regarding small domestic use and livestock registrations.