May 1, 2008

State Water Resources Control Board
Post Office Box 2000
1011 I Street, 14th Floor
Sacramento, CA 95814
Attention: Karen Niiya

Re: Comment Letter – AB 2121 Policy

Dear Ms. Niiya:

These comments on the Draft North Coast Instream Flow Policy are being submitted by the law firms of Kronick, Moskovitz, Tiedemann & Girard, P.C. and Ellison, Schneider & Harris, LLC, the hydrologic engineering firm of Wagner & Bonsignore Consulting Civil Engineers, all of whom regularly advise the water-using segment of California's economy, and on behalf of a diverse group of individuals and entities interested in the beneficial use of the water resources of the State: Wine Institute, California Farm Bureau Federation, Mendocino County Farm Bureau, Napa County Farm Bureau, Sonoma County Farm Bureau, City of Napa, Family Winemakers of California, California Association of Winegrape Growers, Western Growers Association and individual water right applicants including William and Janet Pauli, Mary Elke, Richard Savoy, Donnelly Creek Vineyards and Creekside Homes, Inc. ("Commenters").[1] The comment letter consists of five parts: this summary overview letter and four attached Memoranda commenting on Technical Issues, Biological Issues, Legal and Policy Issues, and Recommendations for an alternative approach to addressing the intertwined issues of environmental protection and water right administration.

In AB 2121 the California Legislature directed the State Water Resources Control Board ("Water Board") to "*develop principles and guidelines for maintaining instream flows in [north] coastal streams . . . for the purposes of water right administration.*" In response to this mandate, on December 28, 2007, the Water Board published a Draft North Coast Instream Flow Policy ("Draft Policy") that would impose new bypass flow requirements, water use limits and other restrictions on water right applications and petitions in coastal streams in Marin, Sonoma, Napa, Mendocino and Humboldt counties. Commenters appreciate the tremendous amount of effort that went into developing the Draft Policy. Unfortunately, this effort did not produce a functional Policy that satisfies the AB 2121 mandate: the Draft Policy will not improve the instream flow conditions needed by coho salmon and steelhead fisheries, nor will it improve the administration of water rights.

The Draft Policy fails because it attempts to develop a flow-habitat model that will prescribe the biologically appropriate bypass flow for every diversion in a five-county region without consideration of the challenges facing the region's fisheries or the disparate conditions prevailing at individual diversion sites. Our analyses show that the Draft Policy's one-size-fits-all approach does not work in the real world because the biological resources and water demands differ in every watershed, and no amount of modification of the Draft Policy will yield conditions that are fair and accurate in most circumstances. We present new principles and guidelines for a "watershed approach" that will produce a transparent, fair and timely water right process that supports scientifically sound decision-making and actually improves instream flows.

---

[1] / Commenters are described at the end of this letter.

Overview of Comments.

I. The Draft Policy is based on flawed assumptions, as explained in the attached Technical Review prepared by Wagner & Bonsignore (Attachment A).

Among the errors found in the underpinnings of the Draft Policy are:

- The Draft Policy greatly overestimates the amount and impact of unauthorized reservoirs on instream resources in the North Coast region. Wagner & Bonsignore's review of its own and Water Board files demonstrates that storage under pending applications has been overstated by at least 40% and storage by "non-filers" has been overstated by at least 33% and potentially as much as 1800% (a factor of 17.5). These pervasive errors provide an unsound foundation on which to base policy relating to water storage in the North Coast streams. (Wagner & Bonsignore 4.0-4.2.7.)

- Unpermitted reservoirs have no significant cumulative effect on the instream resources of the North Coast. The great majority are wet-season diversions in small watersheds above the limit of anadromy. The amount of water stored in these reservoirs is a small fraction of total wet-season streamflow. The Draft Policy's aggregation of these reservoirs' storage to demonstrate their cumulative effects in the Policy area as a whole, rather than by watershed, is meaningless. (Wagner & Bonsignore 4.4-4.6.)

- Reduction of wet season flows is not the limiting factor affecting salmonid viability in the Policy area. The Draft Policy acknowledges that the impairment of salmonid rearing habitat and quality, which is affected by a variety of factors including reduced late spring, summer and early fall streamflows and land use impacts, is the primary limiting factor affecting salmonid viability in the Policy area. (Wagner & Bonsignore 1.0.)

- The Draft Policy's proposed minimum bypass flow and maximum cumulative diversion restrictions are not supported by sound science and will not produce biological benefits in small watersheds. Bypass flows are not justified in streams where there is little, if any, spawning habitat under natural conditions – shown to be drainages less than 2.75 square miles (1760 acres). The vast majority of projects pending or indicated as non-filer have watersheds less than 420 acres. The median size is less than 53 acres. These small watersheds were not shown to support spawning habitat. (Wagner & Bonsignore 5-1, 5-2.)

- The Draft Policy improperly developed and applied a bypass flow requirement that incorporates drainage area in its computation. The improperly derived relationship was then extended well beyond the range of data studied. Drainage area was not established to be an adequate predictor of optimum flow. (Wagner & Bonsignore 6.0.)

- The Draft Policy applies a concept of channel forming flows improperly. The channel forming flow concept is not universally applicable. (Wagner & Bonsignore 7.4.)

- Evaluation of "fill and spill" operation for projects in small watersheds was not conducted. Streamflows in much of the Policy area are naturally sporadic and flashy. Changing the occurrence of flow peaks due to fill-and-spill operation does not necessarily translate into reduced channel width or a reduction in suitable gravel substrate. (Wagner & Bonsignore 7.7.)

- The Draft Policy's Scientific Basis failed to include an adequate habitat evaluation and ignored the importance of consecutive days for spawning. The Scientific Basis did not confirm that the changes in hydrology resulting from the restrictions imposed on specific projects would provide benefits to the anadromous salmonids in the affected streams. Further, the Scientific Basis did not perform any type

of trade-off analysis that compared the benefits and impacts to fisheries and irrigation associated with different diversion restrictions. (Wagner & Bonsignore 8.3, 8.4.)

- The Draft Policy did not evaluate specific flow conditions that would have indicated the relative impacts associated with most diversions. The hydrographic analysis by Wagner & Bonsignore clearly indicates the severe reductions in yield for various projects despite their negligible impact on streamflow. (Wagner & Bonsignore, 8.5.)

- The direct cost of compliance with the Draft Policy was not adequately evaluated. The estimated direct cost of compliance for projects within the Policy area is far greater than estimated in the Draft Policy. It would range from $250 million to $1.8 billion (Wagner & Bonsignore, 10.0, 10.7.)

II. The Draft Policy exceeds the limits of the data used as its foundation and imposes unjustified restrictions on water diversion.

As explained in the attached Technical Memorandum prepared by HDR/SWRI (Attachment B), the development of the Draft Policy's minimum bypass flows equations is based on incomplete and incompatible data, using flawed analytical methods. The result is a Draft Policy that significantly restricts water use without necessarily improving instream habitat values. Some of the problems explained in the attached fisheries memorandum include:

- The range and number of validation sites used (13) is too limited for the development of a uniform flow bypass standard for the entire Policy area. Fish passage ability varies by stream-specific conditions (e.g., channel depth, channel morphology, hydrology), and an adequate number of stream samples is required to fully represent the approximately 3,400 diverse streams in the region, which contain varying degrees of habitat complexity.

- The analysis used to develop the bypass flow equation MBF3 is flawed and is questionable for use as a predictor of flow requirements for fish passage. The analysis combined two inconsistent sets of data; used flow as an *input* to predict flow as an *output* of the analysis. Further, when adjusting the results to encompass more of the validation sites, only one of the two correlated outputs (intercept, but not slope) was adjusted. Finally, because the analysis cannot confidently predict flow-passage relationships outside of its range of data, even if MBF3 is valid there is no statistical basis for applying the MBF3 flows to approximately 66% of all drainages in the Policy area -- watersheds of less than 1 square mile.

- Application of bypass flow requirements to drainage areas smaller than 1.19 square miles is not technically supported. The Scientfic Basis acknowledges that flow duration of three to five consecutive days is required for successful spawning; spawning is not furthered by requiring bypass of flows in small streams that have too few consecutive days of sufficient flow to allow successful spawning activity. Further, based on the results from the validation site streams analyzed, streams located in drainage areas of less than 2.75 square miles (1760 acres)(Dunn and Carneros creeks) may provide no, or very limited, steelhead spawning opportunities. Finally, no consideration has been given to the flow characteristics needed for successful incubation of eggs in these small flashy streams.

- The compounding of restrictions imposed for each separate Draft Policy element results in a cumulative effect that significantly limits diversion without demonstration that the actual protection of instream resources will be correspondingly enhanced. The Scientific Basis itself acknowledges that the regional approach "inherently results in overprotecting some streams" by assuming that "all other [non-flow] population regulating factors are non-limiting." [Scientific Basis at D-6.] The determination that passage or maximum flows are

needed in all streams above the limit of anadromy to ensure recruitment of nutrients, gravel or woody material for downstream reaches is not supported by any data.

- Removal of onstream dams may adversely affect stream biological productivity. Policy elements or enforcement actions potentially requiring removal of un-permitted or out-of-compliance onstream dams may adversely impact instream productivity in upper reaches by eliminating the retention capability of the reach, limiting the stream's ability to maintain the organic matter and macroinvertebrate communities that accumulate with the dam in place.

- Habitat values may be enhanced by "fill and spill" of onstream reservoirs. Allowing upstream reservoirs to fill early in the diversion season, could provide spill later in the season to sustain habitat later into the dry season, which may be more beneficial than constraining early season filling opportunities, as proposed by the Draft Policy.

III. The Draft Policy is inconsistent with legal requirements binding on the Water Board.

Even if the Draft Policy were technically sound – which it is not – its adoption would pose serious legal questions. These are more fully explored in the Legal and Policy Memorandum (Attachment C to this comment letter), but are summarized below:

- The Draft Policy's failure to consider the public need for and benefits from water diversion is inconsistent with Constitutional, statutory and judicial mandates. The Draft Policy fails to consider the public need for and benefits of water diversion. Without balancing of competing needs, the Draft Policy cannot satisfy the mandate of Article X, Section 2 of the California Constitution that all uses, even instream uses, adhere to the standard of reasonableness. Reasonableness of use cannot be determined without consideration of all competing uses. Statutory directives to the Water Board, including Water Code sections 1257 and 13141, as well as the state's public trust doctrine, require the Water Board to consider the relative benefit of all competing uses of water in the administration of water rights.

- Some applications of the Draft Policy are arbitrary and unjustified. Requiring bypass flows in stream reaches above impassible fish barriers or in streams with no appreciable spawning potential is not logically justified. Limitations that unduly restrict wintertime diversions inhibit shifts by riparians from summertime diversions that are more harmful to instream resources. Requiring costly preparation by pre-approved paid professionals, of mitigation plans for non-native species eradication, gravel and woody debris enhancement, even where a proposed water project will have no impact on these attributes of fish habitat, raises due process issues.

- Notice and the opportunity to comment on the Draft Policy were procedurally inadequate and have been inconsistent with the California Administrative Procedure Act. Multiple errors in the Draft Policy, inadequate response to requests for data used to support the Draft Policy development, and insufficient explanation of the Draft Policy's provisions and application have compromised the public's ability to fully understand and comment on the Draft Policy.

- The Draft Policy and its documents do not provide the Water Board with sufficient information on which to make an informed decision concerning the Draft Policy or any policy for the north coast streams. Nowhere in the documentation is it revealed that over 66% of all drainages, where roughly 90% of all pending applications are located, are less than 1.19 square miles with essentially no spawning potential. No analysis is presented demonstrating the benefits to the fishery resources resulting from the proposed restrictions,

nor the cost, in reduction of yield, that the restrictions impose on diversions. The impact of the Draft Policy on the availability or reliability of water needed for the economy or health of human communities in the north coast region is not analyzed, as required by Water Code section 13141. Without such essential information concerning benefits and trade-offs, the Water Board is unequipped to evaluate the Draft Policy.

- The Draft Policy circumvents statutory procedures for declaration of fully appropriated streams. The season of diversion restrictions in the Draft Policy have the effect of making unavailable for appropriation all streamflow in the five-county North Coast area for over eight months of every year. This consequence is effectively a declaration by the Water Board that every stream in the affected area is fully appropriated, but achieves this result without the procedural due process mandated by the Legislature.

- The Substitute Environmental Document offered in support of the Draft Policy does not meet the requirements of CEQA.

    - The existing environment was not adequately described. The existing environment of the North Coast is described in broad brush strokes at the regional level of detail, instead of by watershed and stream where the Draft Policy will be applied. Without at least a watershed-level description of the existing environment, the reader cannot determine either the efficacy or the impacts of the Draft Policy and the Water Board will lack sufficient information to make an intelligent decision on the Policy.

    - Potentially significant impacts of the Draft Policy were not identified. Direct effects caused by the Draft Policy's requirements, such as breach of existing dams, loss of pond habitat, construction of bypass channels (with the concomitant loss of productive agricultural land) and eradication of some resident animal and plant species are not discussed.

    - Discussion of indirect environmental impacts of the Draft Policy was impermissibly deferred. The Substitute Environmental Document concludes (without any analysis) that the Draft Policy will have no direct impacts, and impermissibly defers all analysis of its indirect impacts to future project level review. The potentially significant environmental impacts of the Draft Policy and the alternatives to the Draft Policy are therefore not sufficiently evaluated, and cumulative impacts not acknowledged.

    - Feasible alternatives and mitigation measures are not considered. Because no impacts of the Draft Policy are identified, no feasible mitigation measures and project alternatives are considered that could minimize these impacts.

    - The practical consequences of the Draft Policy are not disclosed. The Substitute Environmental Document does not assess impacts of the Draft Policy on actual applications and petitions pending before the Water Board. For example, the construction of bypass channels as described in the Draft Policy will likely result in loss of riparian vegetation, significant erosion problems and water quality degradation due to the Franciscan geology of the north coast area. That information, easily available to the Water Board staff, was not included in the environmental baseline or considered in the assessment of the potential impacts of the Draft Policy.

IV. We Recommend that the State Board reject the Draft Instream Flows Policy in favor of a watershed management-based policy

Commenters urge that the Water Board reject the Draft Policy and adopt a policy founded upon a watershed management-based approach for investigating and mitigating impacts, processing water right applications, and managing water diversions. Our proposed approach proposes the following elements, described in more detail in the attached Recommendations (Attachment D).

- The policy should be based upon a set of goals and objectives broader than protection of anadromous fishes. AB 2121 directed the Water Board to adopt a policy for maintaining instream flows "for the purposes of water right administration." The Water Board accordingly must undertake the balancing mandated by the Constitution and Water Code and consider all competing uses for water as required in its role as administrator of water rights.

- Practical impact assessment guidelines should replace the Draft Policy's rigid criteria. The Regional Criteria of the Draft Policy are not workable. A workable policy must include practical resource impact and water availability guidelines to enable water users to assess actual environmental impacts. The guidelines should include narrative criteria (as opposed to the Draft Policy's numerical bypass flow and cumulative diversion criteria) for bypass flow, cumulative diversion, and onstream dam limitations. These criteria should be tailored to address the specific features of projects within the region and the potential impacts caused by those projects. The narrative criteria will screen smaller projects with lesser impacts into an expedited review process and guide larger projects with greater effects into a more involved evaluation process.

- Our watershed management-based approach will produce better science and result in equivalent or greater environmental benefit than the current system and the Draft Policy criteria. The new watershed approach will support on-the-ground scientific and technical evaluations of actual streams rather than blanket application of a generic one-size-fits-all screening formula. The watershed management approach will also provide incentives to implement alternative actions that provide equivalent or better resource protection than the default standards. Examples include fish passage improvements, stream shading, and shifting of existing spring, summer and fall diversions to the winter rainy season. This more holistic approach to restoration and management is discouraged by the current system.

- The policy should allow small projects with negligible effects to proceed without unnecessary studies and diversion restrictions. Minimum bypass flow requirements, cumulative diversion limitations, and other flow and habitat mitigation are not necessary for small projects in small watersheds (generally less than 2 square miles), because they have negligible effect on the streamflow characteristics of their watersheds. By streamlining the processing of this large group of environmentally benign projects, Water Board staff and protestants can appropriately focus on the larger, more difficult projects.

- The Board must "re-engineer" the water right process by establishing clear guidelines for conducting impact evaluations and water availability analyses and for providing decisions within a reasonable time-frame. The recommendations above cannot succeed without improving the water right administrative system. The Water Board Members have asked the Division of Water Rights to "re-engineer" the water right process. Re-engineering the water right process is a crucial component of a functional policy. Essential elements of re-engineering the water right process include establishment of the practical impact assessment guidelines, rescission of the CEQA MOU requirement, agreement between Water Board staff and applicants/petitioners on the assessment methodologies early in the process, establishment of processing time targets, and a process to obtain decisions with an opportunity for appeal on key issues before final action on the applications and petitions is taken.

Conclusion.

Commenters urge that the Draft Policy, as proposed by the Water Board staff, be rejected. We suggest that a watershed management-based approach for investigating and mitigating impacts, transparent and timely processing water right applications, and managing water diversions be the foundation of the Policy.[2] The Draft Policy should be recast as a process and approach for analyzing and considering water right petitions and applications on a watershed basis. Our watershed management-based approach would take into account the specific factors limiting the fishery in each watershed, and address the hydrology and environmental issues specific to that watershed. The Draft Policy's one-size-fits-all minimum bypass flow equations and bypass facility requirements should be replaced by clear policy guidance for conducting environmental and hydrologic studies that take into account actual stream and watershed factors, including weighing the environmental and economic benefits of leaving onstream dams in place.

Our proposal differs from the "watershed approach" in the Draft Policy in that our proposal is a feasible and effective policy alternative that will actually improve the administration of water rights and the management of natural resources. Our watershed approach will provide incentives for positive resource outcomes. It will also improve the water right process in a manner that produces scientifically and technically sound decisions, is efficient, and is fair and transparent process for both applicants/petitioners and protestants. It will also enable the Water Board to act on applications and petitions within a reasonable time frame and in a productive manner.

The 2002 draft Guidelines, and their screening approach, have greatly contributed to the Water Board's permitting logjam. The proposed Draft Policy is essentially just another screening approach. Almost no pending application will make it through the "screen". The Water Board's Draft Policy would compound the already extremely frustrating situation. Our Watershed Approach should be adopted instead. Our extensive efforts to work on this issue are evidence of our firm commitment to find and implement a policy that is workable, as well as effective.

Sincerely,
KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD, P.C.

Janet K. Goldsmith

Becky D. Sheehan

ELLISON, SCHNEIDER & HARRIS, LLP

Peter J. Kiel

WAGNER & BONSIGNORE CONSULTING CIVIL ENGINEERS

Robert C. Wagner, P.E.

---

[2] / In March 2007, Trout Unlimited and Ellison, Schneider & Harris LLP submitted a joint recommendation to the Water Board to include a Watershed Management Alternative in the Draft Policy.