



CITY OF FORT BRAGG

Incorporated August 5, 1889
416 N. Franklin St.
Fort Bragg, CA 95437
Phone: (707) 961-2823
Fax: (707) 961-2802
ci.fort-bragg.ca.us

DIVISION OF WATER RIGHTS
SACRAMENTO

2006 AUG 31 AM 11:30

STATE WATER RESOURCES
CONTROL BOARD

E10/KM

August 25, 2006

Ms. Victoria A. Whitney, PE
Chief, Division of Water Rights,
State Water Resources Control Board
1001 I Street, 14th Floor
Sacramento, CA 95814

Attn: Karen Niiya or Eric Oppenheimer

Subject: Comments from City of Fort Bragg on Notice of Preparation of North Coast Instream Flow Policy Substitute Environmental Document and referenced documents.

Dear Ms. Whitney:

The City of Fort Bragg has the following comments on the North Coast Instream Flow Policy Substitute Environmental Document and on documents referenced in the Notice of Preparation and on the project website:

Substitute Environmental Document

Although the California Environmental Quality Act provides for substitute environmental documents to an Environmental Impact Report or negative declaration, for any certified program, the substitute document shall include at least the following items:

1. Either alternatives to the activity and mitigation measures to avoid or reduce significant or potentially significant effects the project may have on the environment; or
2. A statement that the Agency's review of the project showed that the project would not have any significant or potentially significant effects on the environment, and therefore no alternatives or mitigation are proposed. (CEQA Guidelines, Section 15252.)

Thus, the State Water Resources Control Board Substitute Environmental Document must still determine whether there are any significant or potentially significant effects that the North Coast In-Stream Flow Policy may have on the environment. Such potential significant environmental effects should include not only those provided in the July 19, 2006 Environmental Checklist, but also the following impacts. The potential restriction on development within the North Coast area, which is likely to result in greater development in other parts of the state. Restricting the available water supply as contemplated by the policy

will directly hamper the ability of water purveyors to supply water to potential new development. With the projected increase in population in California, this will result in development that could occur within the North Coast area to be forced to other parts of the state.

At page 14 of the Environmental Checklist, it is concluded that adoption of the policy in itself will not cause direct impacts to biological resources. However, as expressed below, minimizing flushing flows in sediment-impaired and nutrient-impaired coastal streams which will be the result of implementation of the policy, could have a significant effect on biological resources. This potential significant impact should be fully analyzed in the Substitute Environmental Document.

At page 24 of the Environmental Checklist, the narrative response indicates adoption of the policy in itself will not cause direct impacts to hydrology and water quality. As more fully set forth below, this conclusion is incorrect. Adoption of the policy itself will cause direct impacts to both hydrology and water quality.

The Environmental Checklist at Section 9, page 26, indicates that the policy will not cause direct impacts to existing land uses, nor will it conflict with applicable land use plans, policies, regulations, habitat conservation plans, or natural community conservation plans. The policy as currently proposed by the fishery agencies applies to new diversions from the North Coast area. As discussed during the scoping meeting, the State Water Board is considering applying the policy to existing water rights. Applying the policy to existing water rights could directly impact existing land uses and conflict with the applicable land use plans, policies, regulations and water management plans that water purveyors rely upon to project supply and demand 20 to 25 years into the future. Such impact to existing water supplies should be analyzed in the Substitute Environmental Document. This same comment applies to Section 13, page 32 of the Environmental Checklist.

The Environmental Checklist concludes that there will be no direct impact to utilities and service systems and adoption of the policy would not require new or expanded water supply entitlements. (Environmental Checklist at pp. 36-37.) Adoption of the policy as indicated above will directly impact water supply, especially if applied to existing water rights. Such direct impact could result in the need for new or expanded water supply entitlements in order to meet the continued increased demand for water in California. This direct impact to the North Coast area's water supply should be analyzed in the Substitute Environmental Document.

Policy Considerations

The State Water Resources Control Board, as part of its evaluation of the North Coast In-Stream Flow Policy, should consider and balance an increase in water demand over the next 20 to 25 years. As projected by the Department of Water Resources, by the year 2025, the state will have a significant increase in water demand, yet there is no current planning to meet this demand. As indicated in the Project Description, the State Water Board is responsible for administering surface water rights, and the Board's mission is to ensure their proper allocation and efficient use for the benefit of present and future generations. The reasonable and beneficial use of the surface supplies should be balanced against the protection of public trust uses, including fish and wildlife habitat. The Public Trust Doctrine requires the protection of

public trust uses whenever feasible. Consequently, the State Water Board is placed in a unique position of balancing the protection of public trust uses against the increased need to efficiently use an increased amount of surface water in the future. As currently described, the North Coast In-Stream Flow Policy does not attempt to balance these conflicting obligations.

The State Water Board is also considering applying the policy to existing water rights. The methodology and application of applying this policy to existing rights is not described, analyzed or considered in the Environmental Checklist. Before the State Water Board can apply this policy to existing water rights, it must first develop the methodology under which it would apply to existing water rights, evaluate those potential environmental impacts, and consider whether such application of the policy could result in a takings of private property. It is also suggested that other alternatives to the policy could be recommended or considered by the State Water Board. Again, until such alternatives are fully described and analyzed in the Substitute Environmental Document, including an opportunity for public input, the State Water Board cannot adopt such alternatives. It is recommended that the State Water Board flesh out all feasible alternatives, describe such alternatives to the public, solicit public input to such alternatives, and then engage the CEQA process.

Potential policy conflicts:

The proposed action will set policy of limiting water diversion to periods of high flow. But within the policy area presented at the first Scoping Meeting, there are 12 watersheds with TMDL listings as "impaired by sediment" and 3 watersheds with TMDL listings as "impaired by (excessive) nutrients.

Sediment TMDLs exist for:

1. Albion River
2. Americano Creek & Estero
3. Big River
4. Estero de San Antonio
5. Garcia River
6. Gualala River
7. Mattole River
8. Navarro River
9. Noyo River
10. Russian River
11. Stample Creek
12. Ten Mile River

(Excessive) Nutrient TMDLs exist for:

1. Americano Creek & Estero
2. Estero de San Antonio
3. Laguna de Santa Rosa

The Substitute Environmental Document should present a map showing the twelve areas.

The long-term restoration of these impaired rivers and their watersheds can only be achieved by limiting the input of the constituents causing impairment (sediment and/or nutrients) and by allowing peak flows to flush out the entrained sediments or nutrients. Peak flows and the

energy associated with them must be allowed to scour the stream systems in the policy area from the ridge tops to the sea. It took a hundred or more years of continuously increasing watershed abuse to bring these watersheds to their presently impaired condition. With wise watershed stewardship, significant rain, abundant energy and good luck, it could take twice that long to restore these impaired systems. The energy available to a stream is a function of both mass and velocity. Diverting water during peak flow conditions will reduce both the mass and the velocity of the remaining water and will therefore reduce the amount of energy available to flush the impaired stream.

On page 24, the Environmental Checklist states that "Adoption of the policy in itself will not cause direct impacts to hydrology and water quality." That is not the case. The policy under consideration will set in place a series of actions that, at the most critical time of the hydrologic year, year after year and over a series of impacted watersheds, will systematically divert the water (and the energy) needed to flush sediment and nutrient accumulations from presently-impaired channels, will route that water into off-channel storage reservoirs, and will uselessly dissipate that much-needed energy.

The text of the Environmental Checklist then addresses "minimum bypass flows". "Minimum bypass flows" are desirable from a biologic viewpoint, but even more critical is the need to recognize and protect flushing flows in sediment-impaired and nutrient-impaired coastal streams.

Without modification, the proposed instream flow policy will conflict with the court-imposed requirements that led to the designation of sediment-impaired watersheds. The conflict between these policies must be resolved and the method of conflict resolution should be explained before the Instream Flow Policy is adopted.

Long-term results of implementing this policy:

Before adopting this policy, the Board should review the long-term operation of the Trinity River Diversion of the Central Valley Project. The operating principle is to divert snow melt runoff and high flows while allowing base flows and "safety of dams" releases to flow down the original channel. Minimum bypass flows have not been an issue. While robust "safety of dams" releases have occurred almost every year, the releases have not been sufficient to maintain salmonid habitat in the Trinity River below the dams. The Trinity River Restoration Program (TRRP) was begun in the mid-1970s by a consortium of cooperating Federal, State, local and tribal agencies. After approximately 28 years of study, the TRRP finally obtained a major release of flood water and natural channel restoration began.

The long-term impact of the Trinity River Diversion on the Trinity River downstream from the diversion has been documented in great detail. The following websites are recommended:

<http://www.trrp.net/>

<http://www.nced.umn.edu/TRRP.html>

The parallels between scores of smaller-scale diversions on rivers in the policy area and the Trinity River Diversion should be considered before the final details of the proposed Instream Flow Policy are adopted. The potential for reproducing a series of small-scale reproductions of the Trinity's loss of fish habitat must be considered. This is a potential direct biological

impact of adoption and implementation of the policy. This potential effect of the policy is in direct contravention of the purpose of the policy, which is to increase fish habitat.

Operational considerations:

Data or the lack thereof:

In the 2002 Guidelines, the concept of "winter 20 % exceedence flow" is presented. This assumes that we know something quantitative about streamflow in coastal California streams. But since 1980, both the state and federal governments have systematically stopped gathering streamflow information. Recent US Geological Survey (USGS), California Department of Water Resources and State Water Board budgets have all failed to provide adequate funding for the continued operation of stream-gauging stations.

The USGS website lists 775 water data sites for Mendocino County. Of those, only 53 contain data (some dating from 1911) that might (or might not) be useful in defining a "winter 20 % exceedence flow" at a given point of diversion. Of those 53 stations, only 12 are currently operating. None of the operating stations are representative of the water yield from small watersheds. When faced with increasing water demands and climate change that may well lead to long term reductions in available water supply, our institutional policy appears to be directed toward making complex quantitative decisions with decreasing amounts of information.

In the 2002 Guidelines, Page 2, paragraph 1, the concept of "maximum cumulative volume of water that can be diverted from a watershed" is introduced. This is a useful tool for regulating water diversions, but a "maximum cumulative volume" is a quantitative amount. How can this concept be employed with a diminishing amount of quantitative information?

Sources of data:

This policy sets out very specific guidelines for the operation of a diversion. It does not take much imagination to see those guidelines converted to terms for the operation of a diversion. But how is either a diverter or a regulator to know if restrictions on the operation of a diversion have been observed? Who provides that information? In 1879, the US Congress assigned (USGS) the task of providing reliable, third-party streamflow information. A principal reason for the creation of the agency was to allow water rights disputes to be judged on their merits and not on problems with the measurement of water volumes and rates of flow. Since 1879, the USGS has continued to do the job to the best of their abilities. But the annual budget cuts have taken their toll. We have had access to a steadily decreasing amount of quantitative hydrologic data for the last 25 years. Disputes based on this policy will almost certainly find their way to the State Water Board. How will those disputes be settled?

During the first Scoping meeting, a Water Rights staff person was asked "who will provide the data?" The answer was "it will be the applicant's responsibility. Presumably, that means "consultants". The Water Rights staff person then asked "What standards should be used?" Our staff hydrologist answered "The USGS Techniques Manual". The Water Rights staff person thought this was excessive and imposed too much cost on the applicant. Implementing this policy will bring us full circle, right back to the 1879 issue. Either USGS

should be made the data provider, or the State Water Board should develop and describe a feasible alternative.

To provide acceptable data, rainfall-measuring and stream-gauging stations must be constructed and operated to rigorous standards. The USGS Techniques Manual sets those standards. The cost of constructing a stream-gauging station is estimated to be between \$50,000 and \$100,000. And the cost of operating a standard USGS stream-gauging station is presently \$22,000 per year.

It is not necessary to gauge every stream in the policy area. It is necessary to maintain an adequate number of representative stations for long periods of time (50+ years). Such a task is beyond the capability of almost every applicant. It is reasonable that the applicants, permittees and licensees pay some reasonable fee. It is also reasonable to require that the beneficiaries of the Instream Flow policy pay a portion of the cost.

Agency responsibilities:

In the 2002 Guidelines, Page 5, Item 2, Seasonal limits on Additional Diversions, the second sentence states:

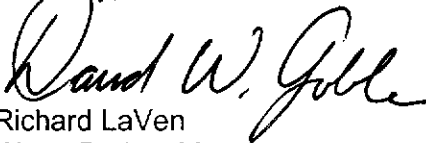
"From April 1 to December 14 instantaneous inflow to the point of diversion must equal the instantaneous outflow to downstream reaches past the point of diversion."

The theoretical concept of "quantifiable instantaneous flow" is just that, a theoretical concept. The term is much used by DFG staff, but in reality, it does not exist. All measurements of natural streamflow are averages of a series of velocities for a series of cells made over time. If done to accepted (US Geological Survey) standards, the process is laborious and is anything but "instantaneous". The best we can come up with is a reasonably accurate estimate.

Another portion of the 2002 Guidelines presents the requirement that "inflow to the point of diversion must equal the outflow to downstream reaches past the point of diversion". This demonstrates a lack of experience with the flow regimes of gravel bed coastal streams. Absent any diversion, streamflow may decrease from upstream to downstream reaches simply because of channel configuration and the nature of the channel substrate.

Thank you for your consideration of these comments.

Sincerely,



Richard LaVen
Water Project Manager

Cc: City Manager
Public Works Director