Ms. Karen Niiya Mr. Eric Oppenheimer State Water Resources Control Board PO Box 2000 1001 I Street, 14th Floor Sacramento, CA 95812-2000

#### Re: Scoping Comments of Wagner & Bonsignore Consulting Civil Engineers, James C. Hanson Consulting Civil Engineer, and Ellison, Schneider & Harris L.L.P on the State Water Resources Control Board North Coast Instream Flows Policy

Dear Ms. Niiya and Mr. Oppenheimer:

Assembly Bill 2121 (Stats. 2004, ch. 943, § 3) added Water Code section 1259.4 requiring the State Water Resources Control Board (Board or State Board) to adopt principles and guidelines for maintaining instream flows in coastal streams from the Mattole River to San Francisco and in coastal streams entering northern San Pablo Bay (North Coast streams), for purposes of water right administration. The State Board is proposing a North Coast Instream Flows Policy to satisfy AB 2121, and has solicited comments in the scoping process. To assist the Board in defining the scope of this proposed policy, Wagner & Bonsignore Consulting Civil Engineers, James C. Hanson Consulting Civil Engineer, and Ellison, Schneider & Harris L.L.P. submit comments on behalf of numerous landowners and water rights holders in the North Coast region.

Our recommendations have grown out of our active participation with a diverse group of stakeholders in the AB 2121 North Coast Water Rights Working Group, which has not yet made final recommendations for this Policy. Although many if not all of the comments and proposals in this letter have been discussed at the Working Group, these comments are our own and do not represent the consensus of the Working Group. We will continue working on these issues with the Working Group.

#### I. Purpose and Scope of Policy

#### A. AB 2121 and Water Code Section 1259.4

AB 2121 and Water Code section 1259.4 specify few requirements for this Policy. The State Board shall adopt "principles and guidelines for maintaining instream flows in coastal streams from the Mattole River to San Francisco and in coastal streams entering northern San Pablo Bay, as part of state policy for water quality control adopted pursuant to Article 3

(commencing with Section 13140) of Chapter 3 of Division 7, for the purposes of water right administration." The Board may consider the Draft "Guidelines for Maintaining Instream Flows to Protect Fisheries Resources Downstream of Water Diversions in Mid-California Coastal Streams," which were developed in 2002 by the National Marine Fisheries Service (NMFS) and the California Department of Fish and Game (DFG), with input from the State Board (NMFS-DFG Draft Guidelines). Under the Water Code, state policy for water quality control shall consist any of the following:

> (a) Water quality principles and guidelines for long-range resource planning, including ground water and surface water management programs and control and use of recycled water.

(b) Water quality objectives at key locations for planning and operation of water resource development projects and for water quality control activities.

(c) Other principles and guidelines deemed essential by the state board for water quality control.

The principles, guidelines, and objectives shall be consistent with the state goal of providing a decent home and suitable living environment for every Californian.

Water Code § 13142. Two specific water quality control policy requirements are relevant for this Policy: (1) This water quality control policy shall be periodically reviewed and may be revised, so the Board should build in flexibility and opportunities for reconsideration of the Instream Flows Policy; (2) to the extent the Policy includes agricultural water quality control measures, the Board must estimate the total cost of such measures and potential sources of funding prior to implementation of such measures. *Id.* § 13141.

#### B. State Board Objectives for and Project Description of Proposed Policy

The primary objective of the proposed project is to develop a State Board policy that provides, through the State Board's administration of water rights, for the maintenance of instream flows in North Coast streams. The policy may address the State Water Board's administration of water right applications, including small domestic use and livestock stockpond registrations, existing permits and licenses, change petitions, including transfers, time extensions, and wastewater change petitions, and enforcement. The only topic the Board has committed to consider is a policy based on the NMFS-DFG Draft Guidelines.

At the Policy scoping meeting in Santa Rosa, Board staff indicated that the State Board will be preparing a "water quality control policy" pursuant to the Porter-Cologne Water Quality Control Act for the purpose of maintaining instream flows through the "administration of water rights". Board staff later stated that the Policy may include regulations based on the NMFS-DFG Draft Guidelines that will be incorporated as terms and conditions into existing and future water rights permits. Staff further stated that the Policy will function in a manner similar to the Water Quality Control Plan for the Bay-Delta.

#### C. Limitations on the Scope of the Policy

The Board is assessing the potential environmental impacts of the policy under the California Environmental Quality Act in a "substitute environmental document" (SED) pursuant to CEQA Guidelines section 15251(g), a certified regulatory program established for water quality planning ("The Water Quality Control (Basin)/208 Planning Program of the State Water Resources Control Board and the Regional Water Quality Control Boards"). While this certified regulatory program is exempt from the CEQA requirement to prepare a formal EIR or Negative Declaration, the Board must prepare a functionally equivalent document that satisfies CEQA's policies and substantive mandates for all of the activities it may propose to take. Public Resources Code § 21080.5, Cal. Code Regs. tit. 14 §15250. Proposed activities that are not covered by this certified regulatory program are not exempt from preparing a Negative Declaration or EIR. Citizens for Non-Toxic Pest Control v. Department of Food & Agric. (1986) 187 Cal.App.3d 1575, 1588. The legal authority for this Instream Flows Policy is derived from the Porter-Cologne Act water quality planning provisions, and not the water rights provisions in Division 2 of the Water Code. Water Code § 1294.5; see also 63 Op. Atty Gen. 95 (1980) (stating that the Board lacks authority under Division 2 to determine instream flow standards). Accordingly, this policy is limited to activities described in the Water Quality Control (Basin)/208 Planning Program of the State Water Resources Control Board and the Regional Water Quality Control Boards.

We are concerned that the Board proposes to use *water quality* authorities to adopt a water quality control policy for the maintenance of instream flows through the administration of *water rights*. Although related, there are fundamental substantive and procedural legal differences between a Porter-Cologne Act water quality control policy governed by Water Code section 13000 *et seq.* and the administration of water rights governed by Water Code section 1200 *et seq.* The State Board has not addressed the adequacy of the FED to cover the full scope of actions the Board may be taking. From both a CEQA and due process perspective, it is not at all clear that the proposed Water Quality Control Policy and Porter-Cologne authority provides the proper vehicle for modifying the water rights process and water rights.

If the Board proposes changes to water rights and the water rights system, it must do so with proper notice to the public and water rights holders and opportunity for hearing, and it must analyze those impacts in a formal EIR.

#### C. The NOP Must be Revised and Recirculated

The certified regulatory program for Basin Planning does not address water rights administration. Accordingly, the Board must either revise the scope of the Policy to be limited to water quality policy elements covered by the certified regulatory program, or the scope of the SED must be expanded to a full EIR. Either change requires that the Notice of Preparation be recirculated to apprise the public of the nature of the proposed action. This is a very complicated area of law, and the State Board's scoping notice has not fully and clearly spelled out how it proposes to proceed to adopt a water quality policy, and to implement that policy through its water rights jurisdiction. Until and unless that process, and the legal foundation for the process, is made crystal clear, the Board's scoping notice is inadequate.

#### II. General Recommendations for Scope of Policy

# A. The Board Should Focus on High Priority Actions within its Authority that are Feasible and Likely to Provide Substantial Benefit to the Environment

Notwithstanding our concern that the Policy description is not sufficiently developed to apprise the public of its scope and legal authority, the Board can and should develop a policy to address problems in the North Coast streams that are affected by water rights administration. The State Board policy should focus on priority activities within its authority that are both feasible and likely to provide substantial benefit for the environment, water users and other stakeholders.

To accomplish real improvement to the system, the Board must not simply add new layers of bureaucracy that it lacks resources to administer. For example, this Instream Flows Policy is not the proper venue to develop stream-specific instream flow standards. However, development and implementation of stream-specific instream flow requirements can feasibly be accomplished at the specific stream or watershed level with input from stakeholders and regulators within a reasonable time frame, and we suggest the Policy adopt our recommended procedures for the "watershed approach" articulated in section V of this letter. The development of watershed specific standards is feasible; a one-size-fits-all application screening tool like the NMFS-DFG Draft Guidelines, which is not equipped to consider site-specific resource requirements. A Draft Guidelines-type approach may be useful as a tool to help the Board to decide whether to reject water rights applications or for potential protestants to decide whether or not to protest an application, but it will do nothing to accomplish actual improvements for instream flow, and it certainly has proven to seriously impact the Board's ability to process water rights applications and petitions.

A pressing task for the Board is to remedy the backlog of pending applications and enforcement actions. Very few applications in the North Coast region have been processed in recent years. According to data provided by Victoria Whitney, up to 77% of pending water rights applications in the AB 2121 area were filed for existing facilities. Many of these actions were filed in response to State Board informal enforcement inquiries or formal enforcement actions. Even where facilities have valid water rights, when faced with a potential enforcement action, water users will often file an application. We believe that the water rights process functioned adequately before this backlog began to mount in the mid-1990's, but the Legislature's reduced funding of the Board and imposition of statutory mandates on the Board, such as fee collection, have placed the Board in an impossible situation. At this point, even substantial general fund allocations and a significant staff increase would be unlikely to yield results within even a decade. Alleviating the backlog will permit the State Board to employ new approaches to water rights administration, as further defined below, without which no instream flows policy can progress.

#### **B.** Specific Recommendations

We have been participating in the AB 2121 North Coast Water Rights Working Group with the common goals of developing solutions that address the myriad problems in the North Coast facing the Board. Our following recommendations have been discussed at a general level as part of the Working Group efforts, but the group has not reached consensus. We present three complementary recommendations for the Board to include as components of a comprehensive Instream Flows Policy. These recommendations may also be treated as a separate alternative to the Policy under CEQA.

The first recommendation is a package of improvements to the existing water rights system, including application procedures, and compliance and enforcement issues. These improvements include recommendations related to the Draft Guidelines. Although improvements to the existing system are necessary and will likely facilitate processing of new applications, these improvements will do little to address the large backlog of pending applications or to address core watershed and fishery problems.

The second is a proposed alternative to the existing water rights appropriation process that would apply only to AB 2121 North Coast streams; a "North Coast Permit Process" would require statutory authorization, and would bring many existing diverters into the water rights system, substantially reduce the backlog of pending applications and enforcement actions, and would require very significant financial and practical contributions by the "North Coast Permit" holder to efforts such as stream gauging, fish biology studies, construction of bypass facilities, and meeting flow bypass requirements developed for a stream or watershed, and development of offstream storage.

The third is a Watershed Management Approach, which emphasizes cooperative landowner efforts on a watershed scale. This approach, combined with the North Coast Permit process, is an alternative to the existing water rights system in watersheds within the AB 2121 area.

# III. Improvements to Existing Water Rights System

# A. Water Rights Permitting

We believe that modest changes to the water rights permitting system may produce substantial improvements for new water rights applications and the administration of existing permits and licenses, without additional legislation and with only slight realignment of priorities. The following recommended changes may largely be implemented by rule or policy under the existing Water Code and other statutes.

# 1. Recommendations to Expedite and Reduce the Backlog in the Permitting System

• Prioritize compliance and enforcement activities until the backlog is resolved.

- Approve all pending petitions for time extensions.
- Implement "triage" on the backlog.
- **Recognize insignificant changes and process those changes administratively.** Many petitions are for changes in place of use or point of diversion where there is no meaningful change or potential impact. For example, places of use were often depicted decades ago on old USGS quad maps, and are now being compared to coordinates obtained by a Global Positioning Satellite system. Inconsequential changes should be approved.
- Direct staff to make draft Initial Studies and Negative Declarations available for public review in a timely manner. If a State Board CEQA consultant is not providing competent work product, the opportunity for public review of draft work will greatly help applicants (who pay for the CEQA consultant's work) to determine if a CEQA consultant is not competent.
- **Do not require MOU's for all pending applications and petitions.** The staff is not able to effectively handle the current backlog of environmental processing for active MOU's. The State Board's directive that all pending applicants and petitioners enter into an MOU means that the staff's work load for administering MOU's will expand even more. Until such time as the State Board has its present backlog resolved, we believe it should *rescind its requirement* for new MOU's, and instead give pending applicants *the option* of entering into an MOU.
  - 2. Recommendations to Improve Efficiency of the Permitting System
  - **Improve the noticing of water right applications.** Expedite issuance and use of notices to let all interested regulatory agencies and parties know that an application is being processed.
  - Adopt procedures to facilitate the coordination of water rights permit proceedings with all permitting and trustee agencies with an interest in a pending water right application. The goal is to reduce agency staff time and to provide early and effective coordination between the applicant, protestants, and agencies with jurisdiction and permitting authority.
  - For private applications, coordinate the development of the CEQA document with all responsible agencies. The CEQA document should cover all approvals related to the water rights application.
  - Adopt minimum threshold standards for accepting protests to applications and set standards for fortification or substantiation of protests within the CEQA compliance schedule.

- Adopt a target schedule for completion of water rights permitting proceedings.
- Revise the MOU process and define staff's role as independent reviewers of documents.

#### B. Substantive Standards and Guidelines

There are a range of approaches to protect fish and other resources in the context of the water rights permitting process. The NMFS-DFG Draft Guidelines represent one option, although the Draft Guidelines were created as a screening tool for fish agencies to decide whether or not to protest an application, and not as a mechanism to set flow standards. Other approaches for protection of listed fish and other resources include programs to move diversions to offstream storage (e.g., assistance and expedited processing of permits for offstream storage of winter water as an alternative to onstream storage, riparian diversions, or groundwater pumping). These programs could include development of standard designs that work from the standpoint of economics, fish, and ability to ensure performance. These types of alternative programs should be fully considered in the Board's FED.

# 1. NMFS-DFG Draft Guidelines

The State Board held a 2000 workshop to solicit comments on instream flow assessment protocols for granting new water rights applications. Methodologies considered included: the Board's proposal to limit new diversions between December 15 and March 31 with a requirement to bypass 60% of the mean annual impaired flow; NMFS's similar proposal but with a bypass requirement based on the February median daily unimpaired flows and with a diversion cap of 20% of the 20% exceedence flow, and Trout Unlimited's proposal for a bypass requirement of the 10% exceedence of the daily unimpaired flow, minimum passage depth of 0.8 to 1.0 feet, and a prohibition on advancing the storm hydrograph to the bypass flow by more than 0.5 to 2 days. Moyle and Kondolf, "Fish Bypass Flows for Coastal Watersheds, a Review of Proposed Approaches for the State Water Resources Control Board" ("Peer Review") (June 12, 2000) at 12. The Peter Moyle and Matt Kondolf Peer Review found the general form of the NMFS proposal "acceptable," but criticized all three proposals as "ill advised" "one size fits all approaches." *Id.* at 11-12.

Subsequent to the workshop, NMFS and DFG jointly submitted the Draft Guidelines. For a period of time, Board staff applied the Draft Guidelines to new applications in the North Coast region, even though the Board has not adopted the Draft Guidelines as formal policy or regulations. The Draft Guidelines do not provide a workable approach even for screening purposes (as intended by NMFS and others) or as a basis for setting instream flow requirements.

The Draft Guidelines were developed to be a conservative screening tool, to be used to decide whether to protest small water rights applications in North Coast streams because of potential impacts to salmonid species. We generally support the concept that the State Board, Fish and Game, and NOAA Fisheries Service should be able to screen environmentally benign water rights applications, and not require detailed site-specific studies, but a simple screening tool is not a substitute for proper water availability analyses and assessment of fisheries impacts.

As drafted, only the smallest diversions in a handful of watersheds can theoretically be approved under the Draft Guidelines. The Draft Guidelines have not only not helped reduce the extensive backlog of pending water rights applications, but have made that backlog far more burdensome.

It must be recognized that the Draft Guidelines do not establish instream flow standards, or provide a basis for deciding what instream flows should be. They cannot be expanded to cover all existing and proposed diversions without regard for the purpose for which they were created. Further, the Draft Guidelines have been improperly applied as a one-size-fits-all tool to evaluate all applications in the North Coast region, including those from intermittent streams and streams that do not support salmonids, and to evaluate impacts to non-salmonid species. CFII, the procedure developed by the Board to assess cumulative impacts under the Guidelines, is also fatally flawed and should not continue to be used.

Problems with Draft Guidelines include:

- The December 15 to March 31 season of diversion is too restrictive. In some cases, an earlier diversion season, such as October 1, might be more beneficial as reservoirs would fill earlier and therefore spill earlier. Late season flow may be more beneficial than early season flow for particular salmonid species or individual watersheds. As written the Guidelines preclude these considerations.
- The Board cannot designate streams as fully appropriated without compliance with the Water Code provisions for notice and hearing. Limiting the season of diversion to December 15 to March 31 is a de facto designation that North Coast streams are fully appropriated from April 1 through December 14.
- Bypass requirements are not necessary for all diversions. Often, downstream barriers including reservoirs will diminish or obviate the benefit of bypasses at an upstream point of diversion. Where a bypass is beneficial, active bypass (siphons or releases) should be acceptable, because passive systems are very costly and can be environmentally damaging, especially for reservoirs which have been in place for decades. Installing passive bypasses around some reservoirs effectively requires building a new stream channel, which may cause a greater adverse environmental impact than the bypass would mitigate.
- The Guidelines incorrectly assume that diversions are the critical element for fisheries restoration/enhancement. In many watersheds and stream reaches, habitat, migration barriers or other stressors may be the key limiting factors.
- The Guidelines were developed to apply to reaches that support anadromous fishes, but they have been routinely applied to all streams in the North Coast region.
- The CFII calculus does not provide meaningful information. Diversion thresholds of 5% and 10% are too restrictive, and they become increasingly restrictive higher in the watershed. For example, there is less available habitat higher in the watershed due to steeper terrain and less perennial flow. As the size of the watershed diminishes, the CFII calculation returns a larger and larger value suggesting more impact, yet actual

impacts would be minimized by diversions made higher up in watersheds. Basically, the CFII is just an index, a number not related to any known impact, yet the CFII percentage has been treated as an impact to be mitigated. Water availability analyses must remain the standard methodology for an applicant to establish for the Board that water is potentially available in the system for appropriation. Under the CFII, "points of interest" are arbitrarily selected. A point of interest should be "the geographic location" in the watershed where hydrologic information is applied. There are no criteria for determining where in the watershed to reckon the "hydrograph". The use of "face value" water rights severely overstates the demand. The likelihood that the full face value will be diverted by everyone in the same year is extremely small. The use of the face value of water rights and the average supply during a shortened season is massively conservative, that it provides no useful analytical information. Annual stream depletion is a better tool for evaluating impacts on a stream system, since the depletion represents the amount of water that actually is removed from the watershed.

These problems may be addressed through changes to the Draft Guidelines. We would support a basic application screening tool with added flexibility and appropriate clarification as to its application. The CFII, however, is too flawed to continue to be used.

# 2. Recommended Approach

We generally support the concept of a set of guidelines that the State Board, Fish and Game, and NOAA Fisheries Service can use to screen water rights applications that may not require detailed site-specific studies. A simple screening tool is not a substitute, however, for proper water availability analyses and assessment of actual fisheries impacts for most projects.

a) Application Screening Guidelines – Preliminary Water Availability and Fishery Assessments

If the Board adopts an application screening guideline, we suggest the following:

- Preliminary technical engineering analyses together with preliminary fish biology analyses can be a component of the water availability and screening processes. This approach is defined in Exhibit 1. The procedure identified in Exhibit 1 will provide the following information:
  - 1. A determination that water is available in most years and a dry year(s) analysis of the project operation(s);
  - 2. A fisheries site assessment to provide information for evaluating impacts to salmonid species and habitat;
  - 3. A tool (graphical depiction of the hydrologic condition at a given point) for assessing the hydrologic impact of the proposed project.
- The guideline should be limited to screening for potential impacts to salmonid species due to the difficulty in establishing screening criteria that would apply to

multiple species. Potential impacts to non-salmonid species would be addressed through the typical environmental impact analysis and regulatory permit processes. The guideline should apply to perennial streams and non-perennial streams which either support salmonids or substantially affect salmonid habitat, migration, spawning and rearing.

- The recommended rather than mandatory season of diversion should be a range between October 1 to March 15, as determined by the hydrologic and fisheries conditions of the particular stream.
- The Guidelines should be elective for water rights applicants. An applicant for a small or large project should have the option of using the traditional application process involving water availability analyses and site specific fishery and instream flow studies.
- The application screening guideline should not include the WAA/CFII addendum to the NMFS-DFG Draft Guidelines. However, if the Board requires a CFII determination in addition to a project-specific cumulative impacts analysis or as an alternative pathway for applicants, we suggest that the changes to CFII in Exhibit 2 be made.
  - b) Full Water Availability and Fishery Analyses

The Board is required to make a finding of water availability prior to issuing a permit. A water availability analysis provides the basis for determining that there is sufficient water available for an application to be permitted. From a hydrologic, engineering standpoint, standard "desk top" analytical approaches have been used for many years to provide water availability information to the Board. In addition to determining the availability of water from a hydrologic, engineering standpoint, the Board also determines what otherwise available water should not be diverted in order to provide for instream beneficial uses. That inquiry has for many years relied on the environmental review process and protestants' efforts. A screening guideline does not replace these efforts; rather, these efforts (or the equivalent activities undertaken based on North Coast Permit terms) would continue to be used to provide significantly more detailed studies and assessments of water availability and instream needs.

c) Watershed Specific Instream Flow Standards

Stream- and watershed-specific instream standards have not yet been developed in the North Coast due to lack of funding, inadequate or conflicting agency mandates, and lack of critical mass of interested stakeholders. The current backlog of water rights applications and amount of staff resources dedicated by regulatory agencies and stakeholders on North Coast issues may now provide that critical mass to develop instream flow standards on a watershed basis. Our clients with pending water rights applications would be willing to cooperate with other applicants in the same watershed or on the same stream to develop, or at least contribute funding for efforts to develop, instream flow standards tailored to local conditions. We believe that instream flow standards can be developed in one to three years for each watershed. Our proposals for the North Coast Permit Process and the Watershed Management Approach include the concepts that specific instream flow standards can be developed and that the Board can issue water rights permits that will both lead to protecting instream resources in the near future, and alleviate the application backlog.

### C. Compliance and Enforcement

The current Board enforcement priorities are determined through the following criteria: (1) the Board requests that DFG recommend high priority streams and/or stream systems for enforcement; (2) from that list, the Board examines the number and type of water rights and water users in the stream system; (3) if the water rights in the stream system are primarily riparian, the Board will not pursue enforcement due to the technical and legal complexity of examining riparian rights; and (4) the highest priority enforcement are illegal reservoirs due to their impact on the stream and ease of identification. These priorities are very reasonable and appropriate given staffing and fiscal constraints facing the Board, and probably cannot be improved in any meaningful way in the Policy.

Compliance and enforcement are incredibly staff and time intensive, and costly, especially if administrative civil liability is assessed and a hearing is held. Ultimately, few on-the-ground benefits are realized from enforcement due to the cost and time required. We do not suggest that enforcement should be reduced because insufficient environmental benefits are conferred; rather, we suggest that the Board prioritize how many resources it applies to *enforcement* to force compliance versus *incentives* for permitted and unauthorized water users to voluntarily come into compliance. The pending water right applications, many of which have gone unpermitted by the Board for a decade or more, demonstrate the willingness of the land owner/diverter to be regulated. The North Coast Permit Process, described below, offers a practical set of incentives to encourage compliance by granting permits with protective terms and conditions. Unauthorized diverters for which the Board has limited information could be brought into the permitting system. The revenue generated from the permit process and reduced staff processing time would provide the Board with resources to pursue and correct the most problematic violations.

# D. Other Issues

Coordination of the water rights process with other federal, state and local regulatory requirements should be improved. For example, a number of the standard terms and conditions of water rights permits conflict with the standard terms and conditions of Streambed Alteration Agreements (SAAs) issued by DFG. Whether serving as the lead agency issuing an approval or a responsible agency reviewing the proposed approval, regulatory agencies should work together to resolve conflicts where possible.

Delays in processing regulatory approvals related to water rights are also relevant for the Instream Flows Policy because such delays may confound the Board's efforts to improve the administration of water rights. The Board should consider requesting that DFG provide an inventory of pending SAAs, and suggest procedures for coordination of the water rights and SAA process and for streamlining/expediting SAA issuance.

#### IV. North Coast Permit Process

In the AB 2121 North Coast watersheds, there are a large number of existing unpermitted water diversions and reservoirs. As a result of efforts by the Board, a large number of applications are now pending relative to those facilities, as well as applications for new diversion and storage. The number of applications pending in the North Coast watersheds, particularly the Russian River system, is a very substantial percentage of those pending statewide. According to State Board staff, there are approximately 320 pending applications in the North Coast AB 2121 counties out of just over 500 pending applications statewide.

There have been instances in the past where the legislature and the Board have created special programs to address specific problems. For the Napa River, the Board adopted a special regulation (Cal. Code Regs., tit. 23, § 735) to allow certain storage of water for frost protection in order to deal with the problem that ". . . [d]uring a frost, the high instantaneous demand for water for frost protection by numerous vineyardists and other water users frequently exceed the supply in the Napa River stream system." To address the problem that stockponds were largely outside the State Board permit system, the legislature enacted Water Code section 1226 *et seq.* The 1974 stockpond law applied only to stockponds constructed before 1969 and which did not exceed 10 acre-feet as of 1975, and allowed issuance of a "certificate of a water right" for claimants who filed by the end of 1997. A North Coast Permit program would, similarly, be a means to bring diverters into the State Board water rights system and to facilitate, by the imposition of terms and conditions, productive changes for the benefit of fishery and other resources.

A key principle behind a concept of a North Coast Permit process is that it is better to include existing diversions in the water rights system, and to exert jurisdiction over diversion and storage, than to continue to try to address water rights issues on a case-by-case basis under the current water rights system, where that process is not functioning at any level of efficiency. Developing a North Coast Permit process also provides a key linkage to the Watershed Management Approach (Part IV). The focus of both a special North Coast Permit process and the Watershed Management Approach is to provide a mechanism for addressing core watershed issues (gauging and other data acquisition, fish biology work and practical recommendations for addressing limiting factors, developing physical solutions such as making changes in diversion structures, developing and implementing bypass flow requirements, and preferentially developing offstream storage and moving existing onstream diversion and storage offstream wherever possible). The money now being spent on the very ineffective standard water rights process would be, instead, used to make substantial, meaningful changes in the watersheds. The basic principle is that money and effort would be focused on core changes in watersheds to achieve fisheries benefits, and away from the very marginal changes that could theoretically occur on a case-by-case basis within the aegis of the standard water rights permit process and enforcement system.

The North Coast Permit process would be an alternative to the existing water rights process. An applicant within AB 2121 watersheds seeking to obtain an appropriative permit for either a new or existing diversion could either (1) apply under the existing Water Code process, or (2) apply for a North Coast Permit which would follow an expedited process authorized by a new statute. An applicant seeking a permit for an existing diversion would have to weigh the risk of heightened Board enforcement actions under the existing system against the burdens of complying with the terms and conditions to be included in a North Coast Permit.

# A. General Concept of the North Coast Permit Process

An applicant within the AB 2121 area would file an application for a new or existing diversion with the Board. The State Board would issue a North Coast Permit for the diversion subject to terms and conditions (discussed below). Issuance of permits would be ministerial and not subject to CEQA. The terms and conditions are the heart of the permit, and are the key to accomplishing physical solutions and providing fishery benefits, including bypass flows. A North Coast Permittee would have to comply with the terms and conditions, and report to the State Board on all compliance activities.

# B. Standard Terms and Conditions

Every North Coast Permit would be subject to standard terms and conditions which would be set out in the authorizing statute. The Board would be required to include the terms and conditions in all permits. Standard terms and conditions would include:

- Participate fully in a Watershed Management Corporation (see Part IV).
- Grant access for streamflow gauging, other data collection, monitoring, and studies.
- Financial contributions (see Section D, below).
- Engineer and construct facilities to allow bypass of all flows (if bypass facilities do not exist already and if bypass is necessary) within a defined period of time.
- Within a defined period of time, bypass flows in accordance with guidelines to be developed which will take into account the gauging, data collection, and monitoring efforts, and fishery and resource studies within the watershed.
- If offstream storage is developed that allows the permittee to reduce or cease diversions, shift diversions to that stored water.

# C. Reporting Requirements and State Board Enforcement Authority for North Coast Permits

Permittees would be required to report regularly to the Board as to their compliance with terms and conditions. The Board would be authorized by statute to exercise its enforcement authority if a North Coast Permittee failed to comply with permit terms and conditions. This

would include ACL's, cease and desist orders, and requesting the Attorney General to seek injunctive relief. The Board's enforcement authority currently applies only to unauthorized diversions.

### D. Financing Mechanisms

Permittees would be required to accept terms and conditions which require contribution of money to fund efforts such as stream gauging, fishery studies, and identification of potential offstream storage projects. A mechanism for holding and disbursing money for these tasks will have to be developed.

# E. Legislative and Regulatory Changes

Legislation would be required to implement a North Coast Permit Program. Additional legislation is required to provide incentives to existing rights holders to develop offstream storage, with diversions during the winter, rather than divert during the irrigation season under existing rights. Legislation is needed to prevent forfeiture of an existing permitted or pre-1914 right, where the use under the existing right stops or is reduced by virtue of a new offstream storage diversion pursuant to a new water right permit. Such legislation could be modeled after Water Code sections 1005.1, 1010, and 1011.5.

# V. Watershed Management Approach

The goal of a collaborative watershed management approach would be to satisfy competing environmental, land use, and water use interests by taking advantage of opportunities within a watershed, such as cost sharing and coordination of diversions, that may not be available in the traditional arena. Diverters could join together to develop local physical solutions to their watershed-specific problems. For example, instead of regulatory agencies attempting to establish and enforce instream flow standards and environmental objectives through regulation of individual diversions for new applications or in the context of enforcement actions, diverters could agree to collectively manage their diversion schedules so that needed streamflows are maintained at particular points in a stream. They could also share costs associated with developing data and monitoring programs, and could work together on projects to improve habitat at the most significant locations in the watershed, rather than only on their individual properties.

With the watershed management approach, water diverters in a watershed would work together to form an association (such as a corporation or other legal entity) of water diverters specific to that watershed. The primary task of the management entity would be to develop and implement a scientifically sound and feasible watershed management plan that could be recognized by regulatory agencies as a workable approach to accomplish watershed goals. Elements of the watershed management plan would include goals, objectives and strategies for protection of beneficial uses, data collection and monitoring, development of physical solutions and adaptive management approaches, development of flow bypass requirements for a watershed, and regular reporting to and oversight by the State Board and other regulatory agencies. Coordination and cooperation would also be required on a regional level, and with existing public agencies (local, regional, state, and federal). The watershed management approach is not intended to supplant legal requirements or regulatory enforcement; rather, it is an alternative mechanism to accomplish the goals and objectives of the regulatory system.

The watershed management approach would facilitate implementation of the North Coast Permit Program (see Part IV). North Coast Permits would be issued by the State Board with standard terms and conditions, one of which would be that the North Coast Permittee is required to participate fully in a watershed management effort. North Coast Permittee terms and conditions would also commit the permittee to key aspects of the watershed management effort, including: agreement to provide access for stream gauging, monitoring, and studies; financial contribution to the costs of those efforts; participation in rotation programs; engineering studies of facilities changes (bypass facilities); cooperation (including financial participation) in physical solutions (including, e.g., development of offstream storage to reduce onstream storage and diversions). As noted in Part IV, the legislation to authorize the North Coast Permit program would also authorize the Board to exercise all the enforcement powers it now has to stop illegal diversions, to deal with noncompliance by North Coast Permit holders with terms and conditions (administrative civil liability, cease and desist orders, and authorization for the Attorney General to obtain injunctive relief).

One of the most promising physical solution approaches to improving streamflow for fisheries while continuing to meet irrigation needs is to develop offstream storage (or increase the capacity of existing offstream storage facilities). New water rights would be required. The North Coast Permit process would facilitate development of new offstream storage capacity. For water rightholders who would agree to participate in an offstream storage physical solution, a major issue is how to participate without losing their priority rights for their existing diversions. For those rightholders, additional statutory provisions would be needed to provide that their participation in a physical solution (e.g., offstream storage) would not result in loss of their prior rights because of nonuse.

#### VI. Conclusion

We appreciate the opportunity to submit scoping comments on the State Board's North Coast Instream Flows Policy. If you have any questions regarding our comments, please contact Peter Kiel at (916) 447-2166 or <u>pjk@eslawfirm.com</u>.

Sincerely,

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# Exhibit 1

### Proposed Changes to WAA/CFII Addendum to NMFS-DFG Draft Guidelines

#### Addendum A

#### Procedures for assessing cumulative impacts of water diversions based on the cumulative total volume of diverted water <u>Procedures for Preliminary Assessment of Water Availability and for Preliminary</u> Assessment of Cumulative Impacts for Protest Screening for North Coast Streams

#### **Determination of water availability:**

Before issuing any new  $\underline{W}$  ater  $\underline{R}$  rights permits, the State Water Resources Control Board (SWRCB) must first determine whether water is available for diversion. This determination is achieved through a  $\underline{W}$  ater Aavailability Aanalysis (WAA). Among other things, the WAA must estimate expected unimpaired stream flow (the natural flow without diversions) at the diversion site. In addition, it must then consider the water that has already been allocated to existing water rights holders (both riparian and senior appropriative) and the water that is required for the protection of public trust resources.

For preliminary screening purposes, the following WAA protocols apply. Water diversions shall be quantified as the estimated average seasonal *depletion* of the diversions in the watershed above the point of diversion, not the face value of all water rights. Estimated streamflow shall be the average annual streamflow at that same point during the diversion season. For purposes of using a preliminary assessment of water availability, water is deemed to be available when there is a showing that average annual streamflow exceeds average annual depletion in more than 50% of the water years. Water availability analysis shall also include a dry year component which evaluates three consecutive years of below average water supply and a detailed analysis showing the project viability during such periods. Dry year analysis may include identification of alternate water sources, conservation, cutbacks and carryover storage as components.

# **Requirements for resource protection based on potential cumulative impacts:** <u>Preliminary assessment of the need for bypass flows and potential cumulative effects on the natural hydrograph:</u>

Minimum bypass flows <u>can provide instream benefits</u>, <u>including formust be maintained to ensure</u> that threatened and endangered salmonid species are protected. <u>Maintenance of a "near natural</u> <u>hydrograph" at a point of significance for these species in the watershed</u>, <u>can be aAt the same</u> time, additional mechanisms must be employed to <u>conserve protect</u> intermediate and high flows (i.e., maintaining a near natural hydrograph) so that other life history requirements of these species are met (see guidelines section for justification) to also provide instream benefits. Bypass flows are best assessed on a site-specific basis; they may not be required at all points of diversion. For preliminary screening purposes, the following protocols apply. A calculation of the February median bypass flow shall be made. A hydrologic and biological assessment shall also be made to determine whether a bypass will benefit downstream habitat. If it is determined that a bypass is necessary, a further assessment will be made of the feasibility of maintaining a passive bypass method for onstream diversions (existing or proposed). The assessment will consider both cost and disruption to the existing environment. Active bypass systems with appropriate monitoring will be considered as well as passive bypass systems.

For purposes of screening applications, near natural hydrographs are presumed to be preserved if the timing, frequency and magnitude of peak flow as indicated by the impaired hydrograph are not significantly different from the unimpaired hydrograph at a point in the watershed representing the uppermost point of migration or location of suitable habitat. Such point (or points) will be identified by a qualified fisheries biologist.

In the central coastal counties (Napa, Marin, Sonoma, and Mendocino), near natural hydrographs can be preserved by 1) limiting cumulative maximum instantaneous rates of withdrawal consistent with the DFG and NMFS guidelines (i.e., 15% of the "winter 20% exceedence flow"), or 2) by limiting the cumulative volume of water diverted from the watershed. The guidelines section of these guidelines have addressed preserving the natural hydrograph using the "maximum instantaneous rate of withdrawal" approach. This addendum describes an alternative "volumetric" cumulative impact assessment method based on the total volume of water being diverted.

An analysis of site-specific flow requirements of anadromous salmonids in many western streams indicates that in small watersheds the optimal flows for spawning are variable, and often higher than the long term, unimpaired February median flow (Hatfield and Bruce 2000). Hydrologic analysis indicates that adequate spawning flows, and near natural hydrographs, are generally maintained when the natural volume of winter runoff is impaired (i.e., reduced) by less than 10% (SWRCB unpublished data). Spawning habitat for anadromous salmon ids can be adversely affected by diverting more than 10% of winter runoff. Cumulative diversions of even 5 to 10% of annual runoff can also impact spawning habitats if the diversions reduce stream flows to minimum levels for several days during critical spawning periods in early winter.

#### **Engineer's Report of Water Availability and Biologist's Report of Cumulative Impacts**

The preliminary water availability analysis shall be prepared by a Registered Civil Engineer and shall include a map of the watershed and a delineation by a qualified biologist of the point(s) in the watershed to be evaluated hydrologically for potential impacts to salmonid species. The report shall also include all data that was used to support the conclusions including precipitation data, gauge data if available, description of the methodology used to estimate water supply; a hydrograph showing estimated impaired flow at a point specified by the biologist; a dry year analysis and justification for the year types considered and all calculations. The Engineer's Report will also include a biologist's report that shall include justification for selection of the point (or points) of consideration for evaluating the hydrograph.

#### **Determining the Cumulative Flow Impairment Index (CFII):**

To evaluate the potential cumulative effects of water diversions using a "volumetric" approach, the volume of water that is naturally available must be compared with the total volume of water that is, or can be, legally diverted from the watershed through existing water rights. The potential level of impairment to stream flow caused by these cumulative diversions can be evaluated by calculating the Cumulative Flow Impairment Index (CFII), as follows:

where,

CDV = potential volume of water diverted under all bases of right between October 1 and March 31 in a normal water year (in AF)

EU R = estimated volume of surface flow in the stream passing the point of interest between December 15 and March 31 in a normal water year (in AF)

#### **Calculating the Cumulative Diverted Volume portion of the equation (Impaired flow):**

The Cumulative Diverted Volume (CDV) is the volume of water diverted under all water rights potentially affecting the stream flow at a given Point of Interest (Points of Interest are discussed in more detail below). An October 1 to March 31 season is used to calculate the CDV because it reflects the season of diversion for many existing permits. Therefore, use of the CDV season facilitates a more accurate assessment of the cumulative effect of authorized diversions upon flows within a watershed. Calculations of the CDV must include all existing legal diversions (including pre 1914 rights, riparian rights, small domestic and stockpond registrations, and other appropriative rights) together with the proposed project under consideration for a new water right. The computation of CDV is done for average (i.e., normal) water years.

If a portion of the direct or riparian diversion is highly unlikely to occur during most or all of the CDV season, then that portion of the volume of riparian or direct diversion may be discounted when computing the CDV. This is appropriate in situations with year round water rights that are typically not exercised during the winter months (e.g., when irrigation of a particular crop does not occur during wet winter months). However, riparian diversions for frost protection must be included when calculating CDV. All computations of CDV must be accompanied by a list of the diversions used in the calculation. The list must also include: 1) the season of diversion, 2) the potential maximum instantaneous rate of diversion, 3) the potential maximum volume of diversion, 4) the existing water rights excluded from the computations, and 5) any other assumptions related to the calculations for each diversion listed.

# **Calculating the Estimated Unimpaired Runoff portion of the equation (Unimpaired flow):**

The Estimated Unimpaired Runoff (EUR) is calculated for the high flow (winter) season from December 15 to March 31. This season represents the period during which it is assumed that some water <u>may</u> still be available for diversion without additional environmental impact. All computations must be done using standard hydrologic techniques that may include prorating known gauge data, application of precipitation runoff models, or other accepted methods. Calculations of EUR (unimpaired flow) will be accompanied with descriptions of computational methods, input data, data sources, and assumptions sufficient for reviewers to fully understand and replicate the results. As with the CDV, these computations are done for average (i.e., normal) water years.

#### **Locations requiring CFII calculations for a project:**

A CFII is typically calculated for several Points of Interest (POI's) within the watershed. Generally a POI is calculated at the Point of Diversion (POD) and then again for points immediately downstream at each confluence of a major intervening tributary between the project site and the mainstem of coastal rivers. In the case of small mainstem coastal streams (e.g., Sonoma Creek), points of interest extend to the stream's estuary.

The location of the Points of Interest requiring CFII values will be determined by DFG and NMFS staff. To ensure consistency, P01's will be provided directly by NMFS and DFG to SWRCB staff for dissemination to Applicants, their consultants, and other interested parties.

#### Level of potential cumulative impact based on the CFII calculations:

The level of impairment identified by the CFII will determine the likely study effort needed to address the significance of cumulative impacts of the new water right project.

- •If the CF II is greater than 10%, then there is a reasonable likelihood of significant cumulative impacts. When the CFII is greater than 10%, site specific studies will be required to assess impacts and the water right permit Applicant is referred to NMFS and DFG for the scoping of site specific fisheries studies to assess these impacts.
- •When the CFII is between 5 and 10%, the Applicant must provide additional hydrologic analysis documenting the estimated effects of cumulative diversions on the stream hydrograph at the POI's during three representative normal and two representative dry years. If the natural hydrograph is appreciably impaired during the migratory and spawning period of anadromous salmonid species, additional site specific study may be warranted.
- •If the CFII is less than 5%, there is little chance of significant cumulative impacts due to the diversion and the project does not require additional studies to assess these impacts.

#### Scope and purpose of site specific studies:

Site-specific studies prompted by a CFII greater than 10% (or when there is an appreciable impairment of the hydrograph on projects with CFII between 5-10%) are performed to establish terms and conditions that ensure that habitats for anadromous salmonids are not further degraded. For most projects, three issues need to be addressed:

- 1) What are the cumulative effects of this and other projects on channel maintenance (flushing) flows needed to protect geomorphological processes downstream from the project site? Does the project under consideration contribute to a significant adverse effect on flushing flows needed to maintain the stream channel and avoid exacerbating stream sedimentation? Does the project affect the timing of the opening or closure of estuarine mouths with sand bars?
- 2) What minimum bypass flow and maximum instantaneous rate of withdrawal are needed for the project to protect spawning habitat for anadromous salmonids downstream from the project site?
- 3) What minimum bypass flow and maximum instantaneous rate of withdrawal are needed for the project to facilitate migratory movements of anadromous salmonids downstream from the diversion site(s)?

The Applicant should consult with NMFS and DFG concerning the scope and methods of sitespecific studies to address these issues. Performance of site-specific studies does not guarantee that stream flow terms and conditions will be consistent with an economically viable project.

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#### Exhibit 2

#### Proposed Edits to CFII Section of NMFS-DFG Draft Guidelines

We believe the CFII analysis is flawed and unnecessary because applicants can prepare preliminary water availability analyses that include preliminary biologist's reports of cumulative effects specific to the project at the time of submitting an application. However, if the Board requires a CFII determination in addition to a project-specific cumulative impact analysis or as an alternative pathway for applicants, we suggest that the following changes be incorporated.

#### **Determining the Cumulative Flow Impairment Index (CFII):**

To evaluate the potential cumulative effects of water diversions using a "volumetric" approach, the volume of water that is naturally available must be compared with the total volume of water that is, or can <u>likely to be</u>, legally diverted in most years from the watershed <u>throughpursuant to</u> existing water rights. <u>This amount is represented by the estimated average seasonal depletion</u> from the watershed by diversions. The potential level of impairment to stream flow caused by these cumulative diversions can be evaluated by calculating the Cumulative Flow Impairment Index (CFII), as follows:

where,

CDV = <u>potential estimated average seasonal</u> volume of water <del>diverted under</del> <u>depleted from the watershed above the point of interest pursuant to</u> all bases of right between October 1 and March 31 in a normal water year (in AF), and

EUR = estimated <u>unimpaired</u> volume of surface flow in the stream passing the point of interest between <u>December 15-October 1</u> and March 31 in a normal water year (in AF)

#### Calculating the Cumulative Diverted Volume portion of the equation (Impaired flow)CDV:

The Cumulative Diverted Volume (CDV) is the volume of water diverted depleted during the period of October 1 to March 31 under all existing and proposed water rights potentially affecting the stream flow at a given Point of Interest (Points of Interest are discussed in more detail below). An October 1 to March 31 season is used to calculate the CDV because it reflects the season of diversion for many existing permits. Therefore, use of the CDV season facilitates a more accurate assessment of the cumulative effect of authorized diversions upon flows within a watershed Calculations of the CDV must include all existing legal diversions (including pre-

1914 rights, riparian rights, small domestic and stockpond registrations, and other appropriative rights) together with the proposed project under consideration for a new water right. The computation of CDV is done for average (i.e., normal) water years.

If a portion of the direct or riparian diversion is highly unlikely to occur during most or all of the CDV season, then that portion of the volume of riparian or direct diversion may be discounted when computing the CDV. This is appropriate in situations with year-round water rights that are typically not exercised during the winter months (e.g., when irrigation of a particular crop does not occur during wet winter months). However, ripariandirect diversions for frost protection must be included when calculating CDV. Frost protection shall be estimated based on an application rate of 0.01 acre feet per acre per hour of frost and the maximum estimated frost hours for a given watershed. All computations of CDV must be accompanied by a list of the diversions used in the calculation. The list must also include: 1) the season of diversion, 2) the potential maximum instantaneous rate of diversion, 3) the potential maximum volumeestimated annual depletion of diversion, 4) the existing water rights excluded from the computations, and 5) any other assumptions related to the calculations for each diversion listed.

# Calculating <u>EUR</u>the Estimated Unimpaired Runoff portion of the equation (Unimpaired flow):

The Estimated Unimpaired Runoff (EUR) is calculated for the high flow (winter)-season from December 15October 1 to March 31. This season represents the period during which it is assumed that some water may still be available for diversion without additional environmental impact. All computations must be doneprepared using standard hydrologic techniques that, which may include prorating known gauge data, application of precipitation runoff models, or other accepted methods. Calculations of EUR (unimpaired flow) will be accompanied with by descriptions of computational methods, input data, data sources, and assumptions sufficient for reviewers to fully understand and replicate the results. As with the CDV, these computations are done forshall be based on average (i.e., normal) water years.

#### Locations requiring CFII calculations for a project: Points of Interest:

A CFII is typically calculated for several <u>Points of Interest</u> (POI's) within the watershed. Generally a POI is calculated at the Point of Diversion (POD) and then again for points immediately downstream at each confluence of a major intervening tributary between the project site and the mainstem of coastal rivers. In the case of small mainstem coastal streams (e.g., Sonoma Creek), points of interest extend to the stream's estuary.

The location of the Points of Interest requiring CFII values will be determined by DFG and NMFS staff. To ensure consistency, POI's will be provided directly by NMFS and DFG to SWRCB staff for dissemination to Applicants, their consultants, and other interested parties.

The location of the Points of Interest requiring CFII values will be proposed by the applicant in consultation with DFG and NOAA Fisheries. While a WAA analysis at the POD is necessary for a finding of water availability, the CFII analysis will not necessarily be required at the POD unless there are potential impacts to salmonids at that point. As a general rule, the most upstream Point of Interest shall be the most upstream point of migration for anadromous species

that could be impacted by the proposed diversion. Points of Interests will always include a point below which there is a likelihood that cumulative diversions from upstream projects may have an impact on salmonid species. Further analysis below such a point shall not be required. No analysis of Points of Interest shall be required below the point of confluence of the next major perennial tributary.

# Level of potential cumulative impact based on the CFII calculations:

The level of impairment identified by determined from the CFII will determine the likely study effort needed to address the significance of cumulative impacts of associated with the new water right project.

If the <u>A</u> CFII that is greater than 10%, then there is <u>shall be considered sufficient basis for a</u> reasonable likelihood of presumption of potentially significant cumulative impacts. When the CFII is greater than 10%, site specific studies will be required to assess impacts, and the water right permit Applicant is referred may be required to NMFS consult with NOAA Fisheries and DFG for the scoping of site-specific fisheries studies to assess these impacts. At a minimum, such studies shall include a reconnaissance-level field evaluation by a qualified fisheries biologist. If the field evaluation concludes that species or habitat are present, or could be present, then an analysis of the impaired hydrograph shall be prepared for various year types. The analysis shall be performed by a qualified Civil Engineer. An impaired hydrograph showing peak flows and seasonal flow distributions for various year types that are not significantly different from the unimpaired hydrograph shall be considered an adequate determination that public trust resources are protected at that point. If neither habitat nor species are present in the watershed, no analysis will be required.

- •When the CFII is between 5 and 10%, the Applicant must provide additional hydrologic analysis documenting the estimated effects of cumulative diversions on the stream hydrograph at the POI's during three representative normal and two representative dry years. If the natural hydrograph is appreciably impaired during the migratory and spawning period of anadromous salmonid species, additional site specific study may be warranted.
- If the CFII is less than 5%, there is little chance of significant cumulative impacts due to the diversion and the project does not require additional studies to assess these impacts. <u>A</u> CFII that is less than 5% shall be considered sufficient basis for concluding that there is little chance of significant cumulative impacts due to the diversion, and additional cumulative impact studies shall not be required. There shall be a presumption that public trust resources are protected when the result of this calculation is less than 5%.
- If the result of the CFII calculation is more than 5% but less than 10%, then an evaluation of impaired hydrograph shall be prepared for various water year types, except that if the Applicant retains a qualified fisheries biologist to conduct a reconnaissance-level evaluation, and if neither habitat nor species are present in the affected stream, then no additional analysis will be required.

• If the impairment of the hydrograph in any case, regardless of the CFII is shown to be limited (no significant change in peak flow or seasonal distribution of flow) there shall be no additional studies required.

#### Scope and purpose of site specific studies:

Site-specific studies prompted by a CFII greater than 10% (or when there is an appreciable impairment of the hydrograph on projects with CFII between 5-10%) are performed to establish terms and conditions that ensure that habitats for anadromous salmonids are not further degraded. For most projects, three issues need to be addressed:

- 1) What are the cumulative effects of this and other projects on channel maintenance (flushing) flows needed to protect geomorphological processes downstream from the project site? Does the project under consideration contribute to a significant adverse effect on flushing flows needed to maintain the stream channel and avoid exacerbating stream sedimentation? Does the project affect the timing of the opening or closure of estuarine mouths with sand bars?
- 2) What minimum bypass flow and maximum instantaneous rate of withdrawal are needed for required of the project to protect spawning habitat for anadromous salmonids downstream from the project site?
- 3) What minimum bypass flow and maximum instantaneous rate of withdrawal are needed for the project to facilitate migratory movements of anadromous salmonids downstream from the diversion site(s)?

The Applicant should consult with <u>NMFSNOAA Fisheries</u> and DFG concerning the scope and methods of site-specific studies to address these issues. <del>Performance of site-specific studies does</del> not guarantee that stream flow terms and conditions will be consistent with an economically viable project.

# Types of Diversions that are subject to the Proposed Guidelines:

- Existing onstream storage reservoirs. Reservoirs that are constructed on channels, swales and nonflowing water courses which are only active during and immediately following precipitation events shall be excluded from the CFII requirements, but not the WAA requirement.
- 2) Proposed onstream reservoirs will be allowed on 1) channels, swales, or watercourses that are only active during and immediately following precipitation events, 2) watercourses where there are existing downstream reservoirs, or other barriers to upstream migration below the Point of Diversion, or if there is a showing that there is no salmonid habitat or species at the point of diversion, and no significant impact to flows at the most upstream point of migration by anadromous species.
- 3) <u>Proposed and existing onstream reservoirs that hold 10 acre feet or less, shall not be</u> <u>subject to the above guidelines, except that a WAA shall be required, as well as other</u> <u>site-specific biological analysis that may be necessary.</u>

- 4) Offstream storage reservoirs shall not be subject to the Guidelines, except that a WAA shall be required, and appropriate bypass facilities will be required at the Point of Diversion, if needed, to maintain the February median flow.
- 5) <u>Proposed and existing onstream reservoirs may be subject to bypass requirements.</u> <u>Bypass flow may be implemented by actives means such as siphons or releases from storage.</u>