NORTH COAST STREAM FLOW COALITION

OUR MISSION IS TO RESTORE HEALTHY NORTH COAST STREAM FLOWS

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April 7, 2013

State Water Resource Control Board (SWRCB) or State Water Board (SWB)
Jeanine Townsend, Clerk to the Board
Executive Office
Cal/EPA Headquarters
1001 "I" Street, 24th Floor

Comments due: April 8, 2013 12:00 p.m.

Project Title: Draft Policy for Maintaining Instream Flows in Northern California Coastal Streams
Contact Person: Division of Water Rights
Telephone Number: (916) 327-2414
Project Location: Coastal streams from the Mattole River to San Francisco and coastal streams entering San Pablo Bay in Marin, Sonoma, and portions of Napa, Mendocino, and Humboldt counties.

Project Description: Water Code 1259.4, which was added by Assembly Bill 2121 (Stats.2004, ch.943 3), requires the SWRCB to adopt principles and guidelines for maintaining instream flows in northern California coastal streams for the purposes of water right administration. The State Water Board adopted the Policy for Maintaining Instream Flows in Northern California Coastal Streams (Policy) in 2010 in order to comply with Water Code section 1259.4. The State Water Board (SWB) has vacated the Policy as a result of litigation and will consider re-adoption of the Policy at a later date. The Policy will apply to applications to appropriate water, registrations and water right petitions. The Policy will establish principles and guidelines for maintaining instream flows for the protection of fishery resources. It will prescribe protective measures regarding the season of diversion, minimum bypass flows and maximum cumulative diversion. The policy contains guidelines for evaluating whether a proposed water diversion, in combination with existing diversions in a watershed, may affect instream flows needed for the protection of fishery resources.

In *Living Rivers Council v. SWRCB* (Sup. Ct. Alameda County, No. RG10-5435923), a case challenging the 2010 Policy pursuant to CEQA, the Superior Court held that the analysis of mitigation measures contained in the Substitute Environmental Document (SED) was inadequate in two respects: 1) it did not evaluate certain subterranean stream delineations as a potentially feasible mitigation measure for the anticipated increased use of percolating groundwater attributable to the Policy, and; 2) it did not present sufficient information to enable decision makers and the public to understand and consider meaningfully the limited legal options facing the SWB to mitigate the expected increase in the use of percolating groundwater and implications for the effectiveness of the Policy. The court issued a Writ of Mandate to the SWRCB directing the SWB to set aside Resolution N. 2010-0021, thereby vacating the SWB's adoption of the Policy

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and certification that the SED had been completed in compliance with CEQA. The SWB complied with this directive on October 16, 2012 (SWB Resolution No 2012-0058).

The SWRCB will hold oral public comments regarding the adequacy of the draft Revised SED on April 23, 2013.

The North Coast Stream Flow Coalition (NCSFC) was formed March 5, 2010. This Coalition consists of 19 North Coast non-profit organizations, including commercial fishermen's associations, from the San Francisco Bay to the Oregon boarder. Our goal is to restore source stream flows for wildlife, swimming, fishing and recreation. Among other things the NCSFC advocates for and educates the public about our ancient Justinian rights promised in the Public Trust Doctrine (PTD) giving the people the right to fish, swim and recreate also known as beneficial rights. This is clearly the spirit and intent of AB2121.

The SWRCB approved the "Maintaining Instream Flows for Northern California Streams" Policy Document in March of 2010. New policies and guidelines for diversion of water were established. Maintaining adequate flows for fish while preserving the public trust are required before water users can take additional water from streams. The State Legislature passed AB2121 in 2004 partially due to a backlog of over 600 water right applications to divert water and applicants had been waiting years for permits to divert water. The reason for the backlog was that stream stakeholders and environmental groups (including groups from the NCSFC) were filing water right protests and complaints about streams being dewatered not only due to small instream dams, riparian diverters and off stream storage (appropriative), but also by excessive groundwater pumping. Additionally, the SWRCB did not have a handle on water availability.

NCSFC member organizations have been filing complaints and protests about dewatering of streams and fish kills within their policy area for years, and this is well known to the SWRCB enforcement department (see 2010 comments from fisheries consultant Patrick Higgins) i.e.:

- Save Mark West Creek-Mark West Creek is a tributary to the Russian River where ground water pumping is devastating the public trust and extirpating coho salmon and threatening steelhead.
- Friends of the Navarro River-Navarro River on-going dewatering.
- Living Rivers Council-Napa River-the main stem of the Napa River now has loosing reaches of groundwater due to excessive groundwater pumping, and tributaries are drying from groundwater pumping. There have been years of dewatering protests and complaints (i.e. Kreuse Creek, Murphy Creek, etc.).
- Most streams in the NCSFC region are experiencing depleted stream flows due to groundwater pumping. (see 2010 Ca. 303 (d) list of impaired water quality stream segments on the SWRCB website)

North Coast Stream Flow Coalition Member Organizations

Environmental Protection Information Center * Community Clean Water Institute * Coast Action Group * Friends of the Navarro Watershed * Friends of the Gualala River *Friends of the Eel River * Humboldt Baykeeper * Institute for Conservation Advocacy, Research and Education *Klamath Forest Alliance * Klamath Riverkeeper * Maacama Watershed Alliance * Willets Outlet Creek Watershed Group * Pacific Coast Federation of Fisherman's Associations * Institute for Fisheries Resources * Sonoma County Water Coalition * Living Rivers Council * Earth Defense for the Environment Now * Save Mark West Creek* Forest Unlimited

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Does Phil Crader, author of this Revised Policy, consult with enforcement on the issues of groundwater pumping complaints documenting where streams are being dewatering in the Policy area?

If the SWRCB continues to ignore our comments, protests, complaints and demands for enforcement actions on all forms of water diversions including groundwater pumping, then streams will continue to lack healthy flows for fishing, swimming and recreation all being beneficial uses.

The SWRCB has been Court ordered to address the issues of some water users possibly pumping groundwater instead of diverting surface flows from streams. The March 2010 approved SED identified significant environmental impacts from pumping groundwater should diverters decide to avoid the new regulations for diverting surface flows and instead pump groundwater. However, now the Revised SED March 2013 states that "pumping groundwater instead of diverting surface flows is not likely to impact stream flows." This assertion is categorically incorrect. There are many places where surface waters and groundwater are directly or indirectly connected. In fact, spring-fed groundwater sources are the origin of much of the stream flows in many river systems coastwide.

This new position of groundwater pumping impacts (March 2010 Policy vs. Revised Policy 2013) by the SWRCB is not based in solid and relevant groundwater science. See USGS Circular 1376, Streamflow Depletion by Wells-Understanding and Managing the Effects of Groundwater Pumping on Streamflow, sent to the SWRCB staff on 3.29.2013 and again here: http://pubs.er.usgs.gov/publication/cir1376. In summary of the USGS Circular 1376, it states that groundwater can supply 90% of the recharge to streams. Groundwater and surface water systems are frequently connected and many of these interconnections are well-known. Groundwater pumping frequently reduces the amount of groundwater that flows to nearby streams and can draw down streamflow into the underlying groundwater systems.

The SWRCB Draft makes several statements to support their flawed position that groundwater pumping is "unlikely" to cause a reduction in surface water streamflows, such as:

1. Groundwater pumping is not a "one to one ratio" like riparian or appropriative rights. Here the SWRCB's asserts that water users diverting or pumping directly from the stream directly dewater the stream, especially during the summer months. The SWB continues to reason that groundwater pumping does not hold this type of "ratio" therefore is "not likely to impact the stream."

Where does the SWRCB get this comparative science? Is this statement reasoned by or asserted by the SWRCB's senior scientists in their departments?

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Rationale: While pumping or diverting from the stream can dewater the stream quickly, especially during the summer, groundwater pumping usually has a direct connection with the stream subsurface where for example the location of the well, length of time pumping, and cubic feet per second (cfs) will determine how fast the stream will be dewatered. Surface water diversions and subsurface groundwater pumping can both dewater the stream and kill fish thereby failing the purpose and intent of AB2121.

2. Out of the 255 current applications only one large agency is "switching" to groundwater pumping. SWB states future applicants are "unlikely" to "switch" to groundwater pumping.

How can the SWRCB predict the future of groundwater pumping based on a few months of backlogged applications fees? Did the SWRCB ground truth these applications to support their assertion that all of the existing 230 of the 255 applications which have existing diversion structures illegally built without a permit to divert are not already pumping groundwater in addition to their water right diversion applications? Did the applications themselves disclose information about existing or future groundwater pumping? If the applicants submitted information about groundwater pumping how many applicants reported they are or would use groundwater pumping?

Rationale: This assertion by the SWRCB lacks credibility and is based purely on speculation. This is flawed reasoning and fails to implement AB2121.

3. If a small diverter may use groundwater, the SWRCB will look at this upon application to divert water where the project may undergo further analysis. SWB claims "it is speculative that groundwater pumping will occur in the Policy area."

Since groundwater pumping is already occurring and currently harming fish in the Policy area as witnessed by all Coalition members who live and work in these watersheds, the SWB should delete this unfounded and highly speculative statement from the Revised record?

4. The SWRCB position in this Revised Policy is that percolating groundwater aquifers in the Policy area

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are geologically removed from the surface flow of the stream and so groundwater usually does not directly "connect with the stream" causing dewatering.

Can you quote your source information for this statement? Have these impacts been analyzed by the USGS or demonstrated by any USGS or similar agency flow modeling? Isn't this contrary to the SWRCB's expert Stetson Engineer's Technical Memorandum, 'Delineated Subterranean Streams and Determine Potential Streamflow Depletion Areas'? Did you know that groundwater is often directly connected to stream flows in many of these areas? Do you have compelling evidence that it is not? If so, what is that evidence? Without that compelling evidence otherwise, it should then be assumed as a precautionary mitigation measure that pumping groundwater directly can dewater nearby streams depending, for example, on: a) distance from the stream; b) cfs flows and pumping involved; c) length of time pumping; d) impacts of other wells also pumping from the same groundwater source (i.e., cumulative effects of pumping groundwater); e) impacts of periodic drought conditions, etc.

The SWB analysis of 255 new water right applications surmises that large agencies are unlikely to pump groundwater instead of diverting surface water. This Revision fails to address the individual water diverters currently diverting groundwater and the likelihood of new groundwater diverters in the future, particularly as minimum in-stream flows begin to become a greater limiting factor of future stream diversion water rights. The SWB utterly fails to address significant cumulative impacts of all current and future small groundwater pumping wells by simply trying to assume them away.

Additionally, the SWRCB's expert, Stetson Engineering, advised that wells pumping groundwater should be set back from the creek to areas of geologic formations consisting of bedrock to reduce the likelihood of (see Stetson Engineer map 12160) dewatering streams. Wells pumping groundwater in close proximity to streams (demonstrated by USGS and Stetson Engineers) have a higher probability of dewatering the nearby stream. Groundwater, whether it is percolating or subterranean, is frequently connected to nearby streams. Well drillers need only drill further into the earth's subsurface to reach the percolating groundwater which is stored deeper in the earth than subterranean groundwater which is directly beneath the stream. For the SWB to take the categorical position that groundwater pumping is inherently unlikely to dewater streams brings into question the credibility and integrity of the SWB's analysis, and ultimately undercuts the Public Trust Doctrine.

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With AB2121 the SWRCB has a statutory responsibility and obligation to supervise the health of streams and to prevent waste and improper use of the State's water. This Revision of AB2121 policy clearly demonstrates that the SWB is not upholding AB2121 as stated.

The SWB was ordered to define the statutory limits of the SWB's authority regarding groundwater, which is as follows:

1. The SWB has permitting authority over subterranean streams flowing through known and definite channels.

2. While limited the SWB has permitting authority over groundwater use under the State of California Constitution Section, article X, section 2 and from the Water Code section 100. The SWB regulates the waste, unreasonable use, unreasonable method of use and unreasonable method of diversion. This constitutional doctrine of reasonable use applies to all water diversions including surface and groundwater diversions regardless of the basis of the water right, which can serve as a limitation on every water right and every method of diversion.

3. The California Constitution also declares that the general welfare requires that the State's water resources be put to beneficial use to the fullest extent capable. Therefore, in determining the reasonableness of a particular use of water or method of diversion, other completing water demands and beneficial uses of water must be considered.

Given this, the SWRCB is within their permitting authority and statutory requirements to require that applicants to appropriate water such as pumping groundwater (subterranean or percolating) must prove through the Policy Document requirements that they will not dewater the streams. This puts the burden of proof on the water users that water is available to pump while at the same time leaving water in the stream for fishing, swimming and recreation. Additionally, streams with healthy flows will help reduce pollutant impacts that continue to degrade our watersheds.

The court ordered the SWB to evaluate certain subterranean stream delineations as a potentially feasible mitigation measure for the anticipated increased use of percolating groundwater attributable to the Policy. The SWB developed a scenario that using the Stetson Engineer Groundwater Depletion Area Maps as a mapping tool for mitigation of groundwater conservation was infeasible because the mapping science used to develop the

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maps would have to undergo public hearings in each County of the Policy for rendering of the subterranean stream delineation maps as an acceptable mapping tool would be financially infeasible.

We question whether this highly restrictive reading of the SWB's public comment obligations is legally accurate? There are many past instances where an analytical methodology, even if submitted for public comments, was not required to have public comment sessions held in every affected County, so long as there is adequate notice to the public of the process for public review.

But even if County-by-County public hearing sessions are legally necessary, by comparison to those additional costs how much in tax dollars goes annually to stream habitat restoration and salmonid recovery? These efforts are being undercut, and these tens of millions of tax dollars potentially being wasted, because these key coastal streams are going dry from excessive water diversions, including interconnected groundwater diversions. Can the SWB address these monetary concerns in context of the much lower costs of dewatering prevention? The costs of publicly "vetting" the Stetson mapping methodology, even in County-by-County public hearings in the Policy area if legally required, is vastly outweighed by the very high potential costs of wasted taxpayer restoration efforts, not to mention the costs to the public and to the regional economy of the continued loss of commercial, recreational and Tribal fisheries from continued stream depletion, and the loss to the public of the economic values of recreational, domestic use and other beneficial uses if coastal streams are allowed, through SWB inaction, to continue on their current trajectory toward complete dewatering. If any cost-benefit analysis of this regulation is undertaken, it must include both the "costs of doing nothing" as well as the economic benefits to both taxpayers and society of maintaining healthy and economically productive coastal rivers and fisheries, rather than drying them all up.

Rationale: We believe that the SWB could put the burden of proof on the individual applicant to prove if groundwater pumping according to Stetson Engineer's groundwater depletion maps (see Stetson's Technical Memorandum, November 14, 2007) could dewater the stream prior to permitting the extraction of groundwater by the SWRCB. Therefore, county by county public hearings would not be necessary.

In summary, if the SWRCB would assert their permitting authority pertaining to subterranean groundwater given the new Policy Document, 'Maintaining Instream Flows for Northern California Streams' while requiring that the applicants utilize groundwater delineation maps to prove that applying for their water right will not dewater streams both from surface and subsurface, then the public could trust that the SWB is leaving adequate water in the stream for fish. Percolating groundwater has hydrologic connections to streams and therefore requires sufficient protection not yet adequately defined by the legislature except under the misuse and waste

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doctrine. In order to fully protect groundwater and stream flows for future generations, the SWB must assert their authority to maintain instream flows for beneficial uses or ask the legislature for laws that fully define this authority.

Chris Malan
North Coast Stream Flow Coalition
Chair

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