REVISED PORTIONS OF THE 2010 RESPONSE TO PUBLIC COMMENTS ON THE DRAFT POLICY FOR MAINTAINING INSTREAM FLOWS IN NORTHERN CALIFORNIA COASTAL STREAMS

VOLUME 2

FEBRUARY 2013

This document contains the revised portions of the document entitled "Response to Public Comments on the Draft Policy for Maintaining Instream Flows in Northern California Coastal Streams Volume 2." Revisions are organized by comment number and shown using red font for additions and strikethrough for deletions.

DIVISION OF WATER RIGHTS
STATE WATER RESOURCES CONTROL BOARD
California Environmental Protection Agency

Comment 23.3.4: There is no discussion at all about diversions based on a riparian, pre-1914, or percolating groundwater right, even though such diversions plainly affect instream flows and the ability of the agency to make informed decisions. (See SED, p. 16.) The SED analysis treats such diversions as thoroughly beyond the influence of the SWRCB - except, ironically, as methods to avoid complying with the Policy. (See SED, p. 49.) This is unfortunate not only because it understates the scope of the agency's constitutional obligation but also because it underestimates the opportunity to create incentives for positive stewardship. *(Brian Johnson, Trout Unlimited and Richard Roos-Collins, Peregrine Chapter of the National Audubon Society)*

Response: The Policy applies to water diversions from all streams and tributaries in the Policy area that are subject to the State Water Board's water right permitting authority, including extractions from subterranean streams. The Policy does not apply to diversions under riparian or pre-1914 water rights nor does the Policy apply to extractions from percolating groundwater because such diversions and extractions are not subject to the State Water Board's water right permitting authority. However, Staff points out that the State Water Board is concerned about increases in diversions under existing water rights and the potential increases in groundwater extraction resulting from the Policy, including extraction of percolating groundwater which ~~can~~ could potentially reduce instream flows needed to protect fish habitat. Accordingly, the SED points out that the Policy could give rise to increases in diversions under riparian rights or increases in groundwater extraction as affected parties take actions in response to the Policy requirements. As discussed in section 6.2 of the SED, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows. In addition, ~~A~~ as indicated in the SED (p. 13), the State Water Board ~~may exercise its~~ has the legal authority under the doctrines of reasonable use and the public trust to address diversions of surface water or groundwater that reduce instream flows in the Policy Area and thus adversely affect fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

Certain actions that affected parties take to increase diversion under riparian or pre-1914 water rights or to increase groundwater extraction might be subject to CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts such as reduction in stream flow, to a level of less than significant. The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but four of the five counties are unlikely to do so because they have not developed a comprehensive program to regulate groundwater pumping. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the State Water Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management.

Comment 23.4.1: Your proposal will endanger more fish than it helps. If it is approved, the vast majority of the 1,800 affected pond owners will have only partially filled ponds. These land owners will be forced to use their riparian right to draft water from Class I and II streams that flow through their property or to drill wells near those streams to draw off underground water near those streams. This is the real problem that California's fish now face and this plan will only make it worse. *(R. Stuart Bewley, Bewley/Motluk Family Limited Partnership)*

Response: The Policy will not endanger fish; rather, it will protect the aquatic environment, including fish habitat, by ensuring that water rights are administered in a manner designed to maintain instream flows. The SED does, however, recognize that the Policy may give rise to potential indirect environmental impacts resulting from action that affected parties take to comply with or avoid the Policy. The SED assesses these potential indirect environmental impacts, including those resulting from the modification or removal of the estimated 1,800 onstream dams which may be affected by the Policy. The SED also assesses the potential indirect environmental impacts of actions that affected parties might take to avoid the Policy by diverting water under a different basis of right that is not covered by the Policy because it is not subject to the State Water Board's water right permitting authority, such as diversion under riparian right or pumping of percolating groundwater. The Policy does apply to diversion of water from subterranean streams~~. As indicated in the SED (p. 13), the State Water Board may exercise its authority under the doctrines of reasonable use and the public trust to address diversions of surface water or groundwater that reduce instream flows in the Policy Area and thus adversely affect fish, wildlife, or other instream beneficial uses. Certain actions that affected parties take to increase diversion under riparian or pre-1914 water rights or to increase groundwater extraction might be subject to CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including cumulative impacts such as reduction in stream flow, to a level of less than significant.~~

Surface water may be diverted and used under a riparian water right. Unless the right has been lost through severance, any owner of a parcel immediately adjacent to a water course has the right to divert water at any time to be used directly and beneficially on the land that borders and is contiguous with the stream. The water that is diverted cannot be seasonally stored. Riparian rights do not require approval from the State Water Board and are not subject to the Policy restrictions on diversions. Similarly, the use of percolating groundwater does not require State Water Board approval, and is not subject to the Policy's restrictions.

As a result of the policy, there could be an increase in riparian diversion of surface water or pumping of percolating groundwater if water users choose to utilize riparian basis of right or percolating groundwater in addition to or in lieu of utilizing an appropriative water right subject to the Policy's limitations. Increased riparian diversion and pumping of interconnected groundwater could reduce stream flows in the spring and summer, which are critical periods for fish habitat. As discussed in section 6.2 of the SED, however, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows.

The State Water Board has the legal authority under the doctrines of reasonable use and the public trust to address any groundwater pumping or diversions of surface water, such as riparian diversions, that reduce instream flows in the Policy area and thus adversely affects fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy. The California Constitution, article X, section 2, and Water Code section 100 prohibit the waste, unreasonable use, unreasonable method of use, and unreasonable method of diversion of water. The constitutional doctrine of reasonable use applies to all water users, regardless of basis of water right, serving as a limitation on every water right and every method of diversion. (*Peabody v. Vallejo* (1935) 2 Cal.2d 351, 367, 372 [40 P.2d 486].) Water Code section 275 directs the State Water Board to take all appropriate proceedings or actions to prevent waste or violations of the reasonable use standard. Thus, the State Water Board has jurisdiction to regulate water use in accordance with article X, section 2 of the Constitution. (See *Imperial Irrigation District v. State Water Resources Control*

Board (1986) 186 Cal.App.3d 1160 [231 Cal.Rptr. 283] [holding that jurisdiction extends to pre-1914 rights].)

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 to which they are capable. (Cal. Const., art. X, § 2.) Therefore, in determining the reasonableness of a particular use of water or method of diversion, other competing water demands and beneficial uses of water must be considered. A particular water use or method of diversion may be determined to be unreasonable based on its impact on fish, wildlife, or other instream beneficial uses. (*Environmental Defense Fund, Inc. v. East Bay Municipal Utility District* (1980) 26 Cal.3d 183 [161 Cal.Rptr. 466].) What constitutes a reasonable water use depends on the entire circumstances presented and varies as current conditions change. (*Id*. at p. 194.)

The State Water Board also has an affirmative duty to take the public trust into account in the planning and allocation of water resources. The purpose of the public trust doctrine is to protect navigation, fishing, recreation, environmental values, and fish and wildlife habitat. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 434-435 [189 Cal.Rptr. 346].) Under the public trust doctrine, the State retains supervisory control over the navigable waters of the state and the lands underlying those waters. (*Id*. at p. 445.) In applying the public trust doctrine, the State Water Board has the power to reconsider past water allocations even if the Board considered public trust impacts in its original water allocation decision. Thus, the State Water Board ~~may exercise its~~ has the legal authority under the doctrines of reasonable use and the public trust to address reduced instream flows in the policy area and adverse affects to fish, wildlife, or other instream beneficial uses due to riparian diversions or the pumping of percolating groundwater.

Certain actions that affected parties take to increase diversion under riparian or pre-1914 water rights or to increase groundwater extraction might be subject to CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts such as reduction in stream flow, to a level of less than significant. For example, if additional riparian diversion facilities are constructed, the construction activity should be undertaken in a manner that does not adversely affect fish and wildlife resources, per Fish and Game Code section 1602. If CDFW determines that the construction activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement would be prepared. The Agreement would include reasonable conditions necessary to protect those resources and must comply with the CEQA.

The five counties in the Policy area also could~~may~~ mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Local regulation of groundwater pumping exists in Napa County and portions of Mendocino County~~ies~~. Napa County's Ordinance 1162, Napa County Code Chapter 13.15, regulates the extraction and use of groundwater in the county and requires the issuance of a groundwater permit before development may occur. The groundwater permit cannot be issued if evidence exists showing that the proposed agricultural, commercial or residential development will increase the existing water use or take more than its fair share of groundwater if there is no pre-existing use. In Mendocino County, Chapter 20.744 of Division III of Title 20 of the Mendocino County Zoning Code contains requirements for the evaluation of the adequacy of groundwater resources for new developments in the Town of Mendocino. It allows local government to mandate the amount of naturally occurring

groundwater that can be withdrawn from the Town of Mendocino's aquifer on a sustained basis to help prevent depletion of the Town's groundwater by not exceeding the aquifer's perennial or safe yield, which is the amount of water that can be pumped regularly and permanently without dangerous depletion of the storage reserve. Current groundwater management policies for the Town of Mendocino are to collect and analyze current groundwater and rainfall data to assist the Board of Directors with their groundwater management decision-making responsibilities, to increase the use of reclaimed water to reduce groundwater extraction, and to promote water conservation measures.

Sonoma County has implemented a non-regulatory Sonoma Valley Groundwater Management Plan. The Plan, implemented by Sonoma County Water Agency in 2007, identifies a range of water management actions to sustain resources for future generations. The goal of the Plan is to locally manage, protect, and enhance groundwater resources for all beneficial uses, in a sustainable, environmentally sound, economical, and equitable manner. The Plan contains basin management objectives; groundwater availability forecasts developed through modeling; actions to attain groundwater sustainability, including increased use of recycled water to offset groundwater pumping, increased conservation, groundwater monitoring, integration of water management planning on a regional scale, and stakeholder involvement; and plan implementation through a collaborative process. Sonoma County has also established a Basin Advisory Panel to develop a groundwater management plan for the Santa Rosa Plain. Scheduled for release in fall 2013, the Santa Rosa Plain plan will set goals and identify ways to protect the Santa Rosa Plain groundwater basin into the future. Although non-regulatory, the Panel will put forward recommendations for managing groundwater in the Santa Rosa Plain and implementing the plan.

Groundwater management plans, and codes or ordinances regulating groundwater use were not found for Humboldt or Marin Counties.

In summary, the five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the State Water Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management.

~~In addition to the regulatory authorities discussed above, under certain circumstances the State Water Board will have the opportunity to identify and mitigate for the potential impacts of increased riparian diversions as part of the State Water Board's review of individual water right applications. To the extent that a diverter might increase riparian diversions in connection with a storage project that requires a water right permit, and the increase in riparian diversions would not occur in the absence of the storage project, the State Water Board can mitigate the impacts of the increased riparian diversions through the imposition of a permit term.~~

~~Inclusion of the following permit term, substantially as follows, in permits issued under this Policy, may reduce potential stream flow reductions due to riparian diversion during spring and summer:~~

~~For all projects where the SWRCB has determined that riparian water has been used on the proposed place of use:~~

- ~~*Permittee shall not use more water under the basis of riparian right on the place of use authorized by this permit than permittee would have used absent the appropriation authorized by this permit. Based on the information in the Division's files, approximately XX acre-feet per year of riparian water has been used on the place of use. Therefore, consistent with this term, permittee may not divert any additional riparian water for use on the place of use authorized by this permit under basis of riparian right. With the Chief of the Division's approval, this information may be updated, and permittee may use water under basis of riparian on the authorized place of use, provided that permittee submits reliable evidence to the Chief of the Division quantifying the amount of water that permittee likely would have used under the basis of riparian right absent the appropriation authorized by this permit. The Chief of the Division is hereby authorized to approve or reject any proposal by permittee to use water under the basis of riparian right on the place of use authorized by this permit.*~~

~~For all projects where the SWRCB has determined that riparian water has not been used on the proposed place of use~~

- ~~*Permittee shall not use more water under the basis of riparian right on the place of use authorized by this permit than permittee would have used absent the appropriation authorized by this permit. Based on the information in the Division's files, riparian water has not been used on the place of use. Therefore, consistent with this term, permittee may not divert any additional riparian water for use on the place of use authorized by this permit under basis of riparian right. With the Chief of the Division's approval, this information may be updated, and permittee may use water under basis of riparian on the authorized place of use, provided that permittee submits reliable evidence to the Chief of the Division quantifying the amount of water that permittee likely would have used under the basis of riparian right absent the appropriation authorized by this permit. The Chief of the Division is hereby authorized to approve or reject any proposal by permittee to use water under the basis of riparian right on the place of use authorized by this permit.*~~

~~In addition, if additional riparian diversion facilities are constructed, the construction activity should be undertaken in a manner that does not adversely affect fish and wildlife resources, per Fish and Game Code section 1602, described above. If DFG determines that the construction activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement would be prepared. The Agreement would include reasonable conditions necessary to protect those resources and must comply with the California Environmental Quality Act (CEQA).~~

Comment 23.4.16: In the absence of other regulatory tools, implementation of the proposed policy will cause many diverters to turn to riparian diversion and/or groundwater pumping which could reduce summer flows. This was presented in the Substitute Environmental Document as a potentially significant impact for which no mitigations are suggested. The technical analysis should have assessed summer flows as a limiting factor to salmonid success and considered the effect of the policy alternatives on summer flows and water quality, including the importance of groundwater flow to summer flow. Further, the potentially significant impacts predicted in the CEQA analysis should have triggered a reassessment of the approach, or at least the development of upfront mitigations to better ensure the policy's success *(Catherine Kuhlman, State of California Regional Water Quality Control Board, North Coast Region)*

Response: Comment noted. The SED points out that the Policy could give rise to increases in riparian diversions and groundwater extraction as affected parties take actions in response to the Policy requirements. Sections 6.2 and 6.3 of the SED~~, in particular Table 6-3,~~ describe~~s~~ the possible environmental impacts resulting from ~~increased~~ switching to riparian diversions and groundwater extraction, respectively, including reduction in stream flow. As discussed in section 6.2 of the SED, the potential switch from surface water diversion to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in stream flow. In addition, the State Water Board has the legal authority under the doctrines of reasonable use and the public trust to address any riparian diversions or groundwater pumping that reduce instream flows in the Policy area and thus adversely affect fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

Certain actions that affected parties take to increase groundwater extraction would be subject to CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts such as reduction in stream flow, to a level of less than significant. The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but four of the five counties are unlikely to do so because they have not developed a comprehensive program to regulate groundwater pumping. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the State Water Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management.

Comment 23.4.26: One predictable consequence [of implementing the proposed regional criteria] is that groundwater pumping in the growing season would be greatly increased, with potentially negative effects on the spring and summer flows which are particularly critical for steelhead. *(Clinton Pridmore, Napa County Resource Conservation District)*

Response: The Policy applies to water diversions from all streams and tributaries in the Policy area that are subject to the State Water Board's water right permitting authority, including extractions from subterranean streams. The Policy does not apply to extractions from percolating groundwater because such extractions are not subject to the State Water Board's water right permitting authority. However, Staff points out that the State Water Board is concerned about potential increases in groundwater extraction resulting from the Policy, including extraction of percolating groundwater. Accordingly, the SED points out that the Policy could give rise to increases in groundwater extraction as affected parties take actions in response to the Policy requirements. Section 6.2 of SED, in particular Table 6-3, describes the possible environmental impacts resulting from ~~increased~~affected persons switching from surface water diversions to groundwater extraction, including reduction in stream flow. As discussed in section 6.2 of the SED, however, the potential switch from surface water diversion to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in stream flow. In addition, the State Water Board has the legal authority under the doctrines of reasonable use and the public trust to address any riparian diversions or groundwater pumping that reduce instream flows in the Policy area and thus adversely affect fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

Certain actions that affected parties take to increase groundwater extraction might be subject to CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts such as reduction in stream flow, to a level of less than significant. The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but four of the five counties are unlikely to do so because they have not developed a comprehensive program to regulate groundwater pumping. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the State Water Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management.

~~Furthermore,~~ During development of the Policy, the State Water Board, directed its consultant, Stetson Engineers Inc., to prepare maps delineating ~~has completed mapping of~~ subterranean streams and areas where groundwater pumping could potentially cause streamflow depletion ~~areas~~ in the Policy area to potentially improve the effectiveness of the Policy by identifying locations where the State Water Board's permitting authority may be applicable. New information and site specific studies may in the future result in some areas currently mapped as Potential Streamflow Depletion Areas (PSDAs) being reclassified as subterranean streams. The methodology and approach used to develop these maps is described in technical memoranda dated May 16, 2008, and February 28, 2008, respectively. The~~e~~ ~~is~~ map~~s~~ ~~ping~~ and memoranda are available on the ~~information is available from the~~ State Water Board website or upon request. ~~in a compilation of technical memoranda and maps entitled "Delineated Subterranean Streams and Potential Streamflow Depletion Areas," dated November 14, 2008 by Stetson Engineers Inc. And finally, as indicated in the SED (p. 13), the State Water Board may exercise its authority under the doctrines of reasonable use and the public trust to address diversions of surface water or groundwater that reduce instream flows in the Policy Area and thus adversely affect fish, wildlife, or other instream beneficial uses.~~ The State Water Board may utilize the mapped subterranean streams and PSDAs in ~~these~~ case-by-case enforcement efforts.

Adoption of the subterranean stream delineations is not a feasible mitigation measure for the potential increase in groundwater pumping attributable to the Policy taking into consideration all relevant factors including the following: (1) the speculative nature of the potential impact, (2) the fact that the potential switch from surface water diversions to groundwater pumping is unlikely to cause a significant reduction in surface water flows, (3) the fact that any localized impacts to groundwater resources are unlikely to be mitigated by adoption of the subterranean stream delineations, which cover only a small portion of the watersheds within the Policy area, (4) the extensive amount of time and high cost associated with a proceeding to consider adoption of the delineations, (5) the fact that even if the subterranean stream delineations are not adopted, the State Water Board can consider the delineation maps and supporting information on a case-by-case basis to assist in determining whether a particular groundwater well is subject to the State Water Board's permitting authority, and (6) the fact that the State Water Board has the legal authority to regulate any unacceptable impacts associated with the potential increase in groundwater pumping pursuant to the State Water Board's authority to prohibit the unreasonable use of water.

Comment 23.4.39: Although the SED does contain a brief discussion of agricultural diverters switching to use of other water sources, it does not adequately analyze the close interactions between groundwater and surface water and the resulting impact on groundwater supply and use that could result from implementation of the Draft Policy. *(Paul "Skip" Spaulding, Farella Braun + Martel LLP/Golden Vineyards)*

Response: Appendix D of the Draft SED examines alternative sources of water supply potentially available to affected parties whose access to surface water is limited by the Policy, including groundwater. The report finds that many groundwater sources of supply may not be adequate to meet future demands.

Staff understands the connectivity of groundwater and surface water and shares the commenter's concerns about potential increases in groundwater extraction resulting from the Policy. Accordingly, the SED points out that the Policy could give rise to increases in groundwater extraction as affected parties take actions in response to the Policy requirements. Section 6.2 of the SED, in particular Tables 6-2 and 6-3, describe the adequacy of groundwater to meet future demands and the possible environmental impacts resulting from ~~increased~~affected persons switching from surface water diversions to groundwater extraction~~,~~ respectively, including reduction in stream flow and associated degradation of fish habitat. As discussed in section 6.2 of the SED, however, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows. In addition, the State Water Board has the legal authority under the doctrines of reasonable use and the public trust to address any groundwater pumping that reduces instream flows in the Policy area and thus adversely affects fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

Certain actions that affected parties take to increase groundwater extraction might be subject to future CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts such as reduction in available groundwater and reduction in streamflow, to a level of less than significant.The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the State Water Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management. ~~And finally, as indicated in the SED (p. 13), the State Water Board may exercise its authority under the doctrines of reasonable use and the public trust to address groundwater pumping that reduces instream flows in the Policy Area and thus adversely affects fish, wildlife, or other instream beneficial uses.~~

Comment 23.4.43: The policy does not address foreseeable secondary impacts of the increased groundwater pumping that may result from restrictions on surface water diversions, and the Water Board should consider likely changes in groundwater interflow to both "gaining" and "losing" stream reaches. The policy does not consider locally increasing needs of surface and groundwater resources due to increasing populations and likely changes in long term climatic conditions (i.e., sustained droughts and/or global warming). The policy area covers a diverse landscape of rural and urban populations, high-value cropland and vast areas of open space. If the social and economic reliance on water is not fully considered in the policy's

regulatory mechanisms, we are concerned that the indirect consequences may be detrimental to the watershed services and endangered species the policy intends to protect. *(Brad Wagenknecht, Napa County Board of Supervisors)*

Response: Appendix D of the Draft SED examines alternative sources of water supply potentially available to affected parties whose access to surface water is limited by the Policy, including groundwater. Appendix D of the Draft SED uses projections of population and water demand in its assessment of the adequacy of available sources of supply to meet future demands. The report finds that many groundwater sources of supply may not be adequate to meet future demands.

Staff understands the connectivity of groundwater and surface water and shares the commenter's concerns about potential increases in groundwater extraction resulting from the Policy. Accordingly, the SED points out that the Policy could give rise to increases in groundwater extraction as affected parties take actions in response to the Policy requirements. Section 6.2 of SED, in particular Tables 6-2 and 6-3, describe the adequacy of groundwater to meet future demands and the possible environmental impacts resulting from ~~increased~~affected persons switching from surface water diversions to groundwater extraction, respectively, including reduction in stream flow and associated degradation of fish habitat. As discussed in section 6.2 of the SED, however, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows. In addition, the State Water Board has the legal authority under the doctrines of reasonable use and the public trust to address any groundwater pumping that reduces instream flows in the Policy area and thus adversely affects fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

Certain actions that affected parties take to increase groundwater extraction might be subject to future CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts such as reduction in available groundwater and reduction in streamflow, to a level of less than significant. The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the State Water Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management. ~~And finally, as indicated in the SED (p. 13), the State Water Board may exercise its authority under the doctrines of reasonable use and the public trust to address groundwater pumping that reduces instream flows in the Policy Area and thus adversely affects fish, wildlife, or other instream beneficial uses.~~

CEQA does not require review of social and economic impacts, unless those impacts result in an impact to the physical environment.

Comment 23.6.4: The SED should discuss the cumulative effects to stream flows caused by overextraction of groundwater. Overextraction of groundwater is known to contribute to diminished water quality and greatly reduced fish habitat in many streams within the region. Peer reviewers (Band, 2008; Gearheart, 2008; McMahon, 2008) point out that no real water budget can be calculated without knowing the influence of ground water withdrawals. *(Patrick*

Higgins, Consulting Fisheries Biologist/Sierra Club Redwood Chapter)

Response: Staff shares the commenter's concerns about potential increases in groundwater extraction resulting from the Policy. Accordingly, the SED points out that the Policy could give rise to increases in groundwater extraction as affected parties take actions in response to the Policy requirements. Section 6.2 of the SED, in particular Table 6-3, describes the possible environmental impacts resulting from ~~increased~~affected persons switching from surface water diversions to groundwater extraction, including reduction in stream flow and degradation in water quality. As discussed in section 6.2 of the SED, however, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows. In addition, the State Water Board has the legal authority under the doctrines of reasonable use and the public trust to address any groundwater pumping that reduces instream flows in the Policy area and thus adversely affects fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

~~As indicated in the SED (p. 13), the State Water Board may exercise its authority under the doctrines of reasonable use and the public trust to address diversions of surface water or groundwater that reduce instream flows in the Policy Area and thus adversely affect fish, wildlife, or other instream beneficial uses.~~ In addition, certain actions that affected parties take to increase groundwater extraction might be subject to CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts, such as reduction in stream flow and degradation in water quality and available groundwater, to a level of less than significant to the extent feasible. The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management.

Comment 23.7.1: Draft Substitute Environmental Document
As part of its consideration of the Policy, the Board has drafted a Substitute Environmental Document (SED) to review and analyze the potential environmental impacts of the Policy under the California Environmental Quality Act (CEQA). The Board claims that it is exempt from CEQA's requirement for preparation of an EIR, negative declaration and initial study because the Policy falls under a list of state certified regulatory programs. Certified regulatory programs, however, remain subject to other core CEQA policies, such as the requirement to identify a project's adverse environmental impacts, to mitigate those impacts by adopting feasible alternatives and mitigation measures, and to justify its action based on specific economic, social, or other condition. (14 Cal Code Regs § 15250, 15252; Sierra Club v. State Bd. Of Forestry (1994) 7 Cal.4th 1215.) As a CEQA document, the SED wholly fails in this regard. The SED identifies numerous potentially significant direct, indirect, and cumulative environmental impacts that would result from the adoption of the Policy. Yet, the SED does not contain a single mitigation measure to mitigate these impacts. CEQA requires public agencies to analyze and mitigate, where feasible, all potentially significant direct, indirect, and cumulative impacts caused by the project. (Pub. Res. Code §§ 21002, 21065; 14 Cal Code Regs 15126.2(a), 15126.4(a); San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 645.) The SED fails to do this. Thus, the SED is entirely inadequate and must

be redrafted to analyze and consider all potentially feasible mitigation measures. *(Barbara Brenner; Janet Goldsmith and Becky Sheehan, Kronick, Moskovitz, Tiedeman & Girard, P.C.; Peter Kiel, Ellison, Schneider & Harris LLP; and Robert Wagner, Wagner & Bonsignore Consulting Civil Engineers; Paul "Skip" Spaulding, Farella Braun + Martel LLP/Golden Vineyards)*

Response: Certified regulatory programs, including adoption of the Policy, are exempt from chapter 3 (commencing with section 21100), chapter 4 (commencing with section 21150) and section 21167 of the Public Resources Code. The commenter is correct that other provisions of CEQA, including the policy of avoiding significant, adverse effects on the environment where feasible, apply to certified regulatory programs.

Mitigation Measures

For purposes of CEQA, the proposed project is adoption of the North Coast Instream Flow Policy. The Policy itself will not approve any particular water diversion projects. Moreover, in general the Policy will operate to protect the environment by ensuring that water rights are administered in a manner designed to maintain instream flows.

The policy requires limitations on diversions which could lead some affected parties to take actions that could in turn result in indirect environmental impacts. An indirect physical change in the environment is a physical change which is not immediately related to adoption of the policy, but which may occur as a result of the policy being adopted.

Examples of such actions that affected parties might take include, but may not be limited to:

- pumping groundwater instead of diverting surface water in order to avoid any limitations applicable to new water right applications that may be contained in the policy;
- directly diverting under their riparian rights instead of seasonally storing water, for which a water right permit is required, which could mean an increase in direct diversions during the spring, summer, and fall (applies to holders of riparian water rights);
- ceasing diverting and allowing previously irrigated land to fallow;
- removing or modifying on-stream storage reservoirs; and
- constructing new off-stream storage facilities.

It is impossible to predict which affected parties will take any of the actions described above, or exactly how many affected parties will take any of those actions. Accordingly, the SED evaluates indirect environmental impacts at a programmatic level. A programmatic level analysis is more general in nature and evaluates the effects on the environment at a broad level. This type of analysis is appropriate when analyzing the potential impacts associated with adopting a program or policy. As explained in section ~~chapter~~ 7 of the draft SED, future CEQA reviews conducted by the State Water Board or by another lead agency can be expected to identify any significant project-specific environmental effects and mitigate them to less-than-significant levels. In addition, other regulatory mechanisms can be expected to provide opportunities for minimizing and avoiding significant environmental effects. Some potential actions, however, such as pumping percolating groundwater, may not require discretionary approvals, and may not be subject to project-level CEQA review. The potential impacts of those actions would not be mitigated unless an agency with regulatory authority takes enforcement action to prevent the environmental impacts of the action.

In response to comments that the draft SED did not adequately describe mitigation measures, the following paragraphs briefly examine some examples of potentially significant indirect impacts of the Policy and the regulatory requirements and mitigation measures for these impacts that may be incorporated at a project-specific level. These regulatory requirements and mitigation measures are likely to reduce many, but not all, of the potential indirect impacts of the draft Policy to less than significant levels. Some indirect impacts may not be identified or mitigated because it is impossible to predict who will take action in response to the Policy, or what action they will take. In some cases, it may not be feasible to fully mitigate for the indirect impacts of the Policy. For example, it may not be possible to fully mitigate for the loss of wetland habitat as a result of onstream dam removal. In addition, some actions may not require discretionary approvals, and the State Water Board, Regional Water Quality Control Boards, and California Department of Fish and Wildlife ~~Game~~ may not have the resources to fully enforce the regulatory requirements described below. For example, the State Water Board ~~does not have~~ only has the resources to investigate ~~every~~ a limited number of possible instances of increased riparian diversions or groundwater pumping and take regulatory action, if warranted, pursuant to article X, section 2 of the California Constitution or the public trust doctrine. Most of the State Water Board's budget for the water right program is supported by fees imposed on water right permit and license holders, and is used for program activities related to the diversion and use of water subject to the permit and license system. Only a small amount of funding is available for other regulatory activities.

Modification or removal of onstream dams and construction of offstream storage facilities

In response to the Policy, persons may choose to modify or remove onstream dams or construct offstream storage facilities. These construction activities may result in temporary impacts to air quality, sedimentation, erosion, and ~~non-visible~~ water quality parameters. They may also cause temporary or permanent impacts to habitat for fish and wildlife.

The Basin Plans for the North Coast Regional Water Quality Control Board and the San Francisco Bay Regional Water Quality Control Board contain numeric and narrative water quality objectives designed to protect the beneficial uses of surface waters. If the modification or removal of an onstream dam or the construction of an offstream storage facility would result in the discharge of waste to waters of the State, the discharger must file a report of waste discharge with the appropriate Regional Water Quality Control Board and obtain a waste discharge requirement (WDR). (Wat. Code, § 13260.) The WDR must implement the applicable Basin Plan and protect the beneficial uses of the receiving waters.

Another regulatory tool that may mitigate the water quality impacts of construction activities is the North Coast Regional Water Quality Control Board's Sediment TMDL. The implementation policy of the TMDL states that Regional Water Board staff shall control sediment pollution by using existing permitting and enforcement tools, including individual NPDES permits and coverage under the general construction stormwater permit. The goals of the TMDL Implementation Policy are to control sediment waste discharges to impaired water bodies so that the TMDLs are met, sediment water quality objectives are attained, and beneficial uses are no longer adversely affected by sediment. The Napa River Sediment Reduction and Habitat Enhancement Plan and TMDL (recently added to the Basin Plan for the San Francisco Bay Region) is a similar regulatory tool that should serve to control excessive sediment and achieve related habitat enhancement goals in the Napa River watershed.

As indicated in the TMDL implementation policy, certain construction activities may be covered under the General Permit for Discharges of Storm Water Associated with Construction Activity adopted by the State Water Board. Covered activities may include grading and excavation of reservoir facilities and pump and piping replacement. Under the general permit, construction Best Management Practices (BMPs) such as silt fencing, straw ~~waddles~~wattles, and other erosion BMPs can be used to contain stormwater runoff and reduce erosion potential. Pursuant to the State Water Board's General Construction Permit, for any construction involving disturbance of 1 acre of more, a Stormwater Pollution and Prevention Plan (SWPPP) would need to be prepared.

Potential mitigation for water quality impacts due to modification or removal of onstream dams or construction of off- stream storage facilities may also involve Water Quality Certifications from the Regional Water Quality Control Boards. Water quality certification requirements would apply to anyone proposing to conduct a dredge or fill project that requires a federal permit and may result in a discharge to waters of the United States, including wetlands, year round and seasonal streams, lakes and other surface waters. A Clean Water Act (CWA) Section 401 Water Quality Certification is a finding from the Regional Water Quality Control Board that the proposed project will comply with CWA Sections 301, 302, 303, 306 and 307, the applicable Basin Plan, and other appropriate provisions of State law, and may be conditioned or denied as necessary to ensure compliance.

Projects having a substantial adverse effect on federally protected wetlands as defined by ~~Section 404 of~~ the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means may need to obtain a permit from the United States Army Corps of Engineers (USACE). If the project will require disturbance of a wetland and the USACE determines that the wetland is not subject to regulation under Section 404 of the CWA, Section 401 water quality certification is not required. However, the Regional Water Board may require WDRs if fill material is placed into waters of the state. If all wetlands cannot be avoided as part of the project, the applicant will be required to file an application for WDRs with the Regional Water Board.

The California Department of Fish and ~~Game~~Wildlife (CDFW~~G~~) is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. Fish and Game Code section 1602 requires CDFW~~G~~ to be notified regarding any proposed activity that may substantially modify a river, stream, or lake. Persons proposing to modify or remove onstream dams or construct off- stream storage facilities should notify the CDFW~~G~~ if the activity will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

If CDFW~~G~~ determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement would be prepared. Conditions that CDFW~~G~~ may require include, but are not limited to, avoidance or minimization of vegetation removal, use of standard erosion control measures, limitations on the use of heavy equipment, limitations on work periods to avoid impacts on fisheries and wildlife resources, minimum bypass flow requirements, and requirements to restore degraded sites or compensate for

permanent habitat losses. In addition, rendering a dam incapable of storing water by leaving the structure in place while allowing water to pass through, may be a less costly alternative, and may reduce impacts to fish and wildlife habitat to less than significant levels. The Agreement would include reasonable conditions necessary to protect those resources and must comply with ~~the California Environmental Quality Act (~~CEQA~~)~~.

Potentially significant air quality impacts associated with modification or removal of onstream or construction of offstream storage facilities are limited to those resulting from short-term construction activities. Construction-related emissions could include exhaust from construction equipment and fugitive dust from land clearing, earthmoving, movement of vehicles, and wind erosion of exposed soil during reservoir construction or removal. The San Francisco Bay Area Quality Management District has developed mitigation measures to reduce construction-related emissions.

In addition to the regulatory requirements described above, the seasonal storage of surface water in most new offstream storage facilities will require a water right permit from the State Water Board. Unless an exemption applies, the State Water Board's review of water right applications is subject to CEQA. In addition, in acting on water right applications, the State Water Board must take into consideration the public interest and the applicable Basin Plan. (Wat. Code, §§ 1253, 1255, 1257, 1258.) Accordingly, the State Water Board will have the opportunity to identify and mitigate the impacts of constructing offstream storage reservoirs as part of the State Water Board's review of individual water right applications. Similarly, the State Water Board will have the opportunity to ensure that applicants comply with any other applicable regulatory requirements. Inclusion of the following permit terms, substantially as follows, in permits issued under the Policy will ensure that applicants comply with any other applicable regulatory requirements.

- *No water shall be diverted under this permit and no construction related to such diversion shall commence, until permittee obtains all necessary permits or other approvals required by other agencies. If an amended permit is issued, no new facilities shall be utilized, nor shall the amount of water diverted increase beyond the maximum amount diverted during the previously authorized time period, until permittee complies with the requirements of this term.*

  Within 90 days of the issuance of this permit or any subsequent amendment, permittee shall prepare and submit to the Division of Water Rights a list of, or provide information that shows proof of attempts to solicit information regarding the need for, permits or approvals that may be required for the project. At a minimum, permittee shall provide a list or other information pertaining to whether any of the following permits or approvals are required: (1) lake or streambed alteration agreement with the Department of Fish and Wildlife (Fish & G. Code, § 1600 et seq.); (2) Department of Water Resources, Division of Safety of Dams approval (Wat. Code, § 6002.); (3) Regional Water Quality Control Board Waste Discharge Requirements (Wat. Code, § 13260 et seq.); (4) U.S. Army Corps of Engineers Clean Water Act section 404 permit (33 U.S.C. § 1344.); or, (5) local grading permits.

Permittee shall, within 30 days of issuance of all permits, approvals or waivers, transmit copies

to the Division of Water Rights.

- *No water shall be diverted under this right unless right holder is operating in accordance with a compliance plan, satisfactory to the Deputy Director for Water Rights. Said compliance plan shall specify how right holder will comply with the terms and conditions of this right. Right holder shall comply with all reporting requirements in accordance with the schedule contained in the compliance plan.*

Inclusion of some or all of the following permit terms, substantially as follows, in permits issued under the~~is~~ Policy, may reduce potential short-term water quality impacts from ~~storage facility~~ construction activities to less-than-significant levels:

- *In order to prevent degradation of the quality of water during and after construction of the project, prior to commencement of construction, permittee shall file a report pursuant to Water Code Section 13260 and shall comply with all waste discharge requirements imposed by the California Regional Water Quality Control Board, San Francisco Bay/North Coast Region, or by the State Water Resources Control Board.*

- *No water shall be used under this permit until permittee has filed a report of waste discharge with the California Regional Water Quality Control Board, San Francisco Bay/North Coast Region, pursuant to Water Code Section 13260, and the Regional Board or State Water Resources Control Board has prescribed waste discharge requirements or has indicated that waste discharge requirements are not required. Thereafter, water may be diverted only during such times as all requirements prescribed by the Regional Water Board or State Water Board are being met.*

- *No debris, soil, silt, cement that has not set, oil, or other such foreign substance will be allowed to enter into or be placed where it may be washed by rainfall runoff into the waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area.*

- ~~*To prevent degradation of the quality of water during and after construction of the project, Permittee shall file a report of waste discharge pursuant to Water Code section 13260 prior to commencement of construction and shall comply with all waste discharge requirements imposed by the California Regional Water Quality Control Board, San Francisco Bay Region/North Coast Region, or by the State Water Resources Control Board.*~~

- ~~*Prior to the diversion of water and construction of the offstream reservoir, Permittee shall obtain coverage from the North Coast Regional Water Quality Control Board/San Francisco Bay Regional Water Quality Control Board under the General Permit for Discharges of Storm Water Associated with Construction Activity prior to conducting any construction activities that disturb more than one acre of soil.*~~

- ~~*Permittee shall prevent any debris, soil, silt cement that has not set, oil, or other such foreign substance from entering into or being placed where it may be washed by rainfall runoff into the waters of the State.*~~

Inclusion of the following permit terms, substantially as follows, in permits issued under the~~is~~ Policy, may reduce potential short-term impacts to wetlands and fish and wildlife from storage facility construction activities to less-than-significant levels:

- *No water shall be diverted under this right, and no construction related to such diversion shall commence, unless right holder complies with the requirements of the Clean Water Act. In order to demonstrate such compliance, right holder shall obtain a Clean Water Act section 404 permit from the U.S. Army Corps of Engineers, or evidence that such a permit is not required, and provide such permit or evidence to the Division of Water Rights. If it is determined that a Clean Water Act section 404 permit is required, right holder shall further demonstrate compliance by obtaining a Clean Water Act section 401 certification from the State Water Board.*

- ~~*Prior to the start of construction, or diversion or use of water under this permit, Permittee shall obtain the appropriate permit from the United States Army Corps of Engineers and file a copy with Division of Water Rights. If a permit from the United States Army Corps of Engineers is not necessary for this permitted project, the Permittee shall provide the Division of Water Rights with a letter from the United States Army Corps of Engineers affirming that a permit is not needed.*~~

- ~~*If the project requires a permit from United States Army Corps of Engineers, Permittee shall obtain Clean Water Act section 401 Water Quality Certification from the State Water Resources Control Board prior to the start of construction, or diversion or use of water under this permit.*~~

~~Inclusion of the following permit term, substantially as follows, in permits issued under this Policy, would reduce potential impacts to fish and wildlife from reservoir construction activities to a less-than-significant level:~~

- *No work shall commence and no water shall be diverted, stored or used under this permit until a copy of a stream or lake alteration agreement between the State Department of Fish and Wildlife~~Game~~ and the permittee is filed with the Division of Water Rights. Compliance with the terms and conditions of the agreement is the responsibility of the permittee. If a stream or lake agreement is not necessary for this permitted project, the permittee shall provide the Division of Water Rights a copy of a waiver signed by the State Department of Fish and Wildlife~~Game~~.*

Inclusion of the following permit term, substantially as follows, in permits issued under the~~is~~ Policy, would reduce potential short-term air quality impacts from storage facility construction activities to a less-than-significant level:

- *Prior to the start of construction, Permittee shall submit a detailed Emission Control and Mitigation Plan to the Deputy Director for Water Rights. Permittee shall also submit a copy of the plan to the ~~San Francisco Bay Area~~ Air Quality Management District. The Emission Control and Mitigation Plan shall be consistent with the ~~San Francisco Bay Area~~ Air Quality Management District's Air Quality Guidelines and include a monitoring and reporting component to ensure that mitigation measures identified in the Emission Control and Mitigation Plan are implemented. Permittee shall provide evidence to verify implementation of measures identified in the Emission Control and Mitigation Plan within 30 days of completion of construction work to the Deputy Director for Water*

Rights. Permittee shall also provide a copy of the evidence to the ~~San Francisco Bay Area~~ Air Quality Management District upon request. Evidence may consist of, but is not limited to, photographs and construction records.

Increased riparian diversion and groundwater use

Surface water may be diverted and used under a riparian water right. Unless the right has been lost through severance, any owner of a parcel immediately adjacent to a water course has the right to divert water at any time to be used directly and beneficially on the land that borders and is contiguous with the stream. The water that is diverted cannot be seasonally stored. Riparian rights do not require approval from the State Water Board and are not subject to the regionally protective criteria contained in the Policy ~~restrictions on diversions~~. Similarly, the use of percolating groundwater does not require State Water Board approval, and is not subject to the regionally protective criteria ~~Policy's restrictions~~.

As a result of the policy, there could be an increase in riparian diversion of surface water or pumping of percolating groundwater if water users choose to utilize riparian basis of right or percolating groundwater in addition to or in lieu of utilizing an appropriative water right subject to the Policy's limitations. Increased riparian diversion and pumping of interconnected groundwater could reduce stream flows in the spring and summer, which are critical periods for fish habitat.

Although the State Water Board does not have permitting authority over riparian diversions or percolating groundwater, the State Water Board has the authority to regulate riparian diversions and groundwater use pursuant to ~~The California Constitution,~~ article X, section 2~~,~~ of the California Constitution and Water Code section 100. These provisions prohibit the waste, unreasonable use, unreasonable method of use, and unreasonable method of diversion of water. The constitutional doctrine of reasonable use applies to all water users, regardless of basis of water right, serving as a limitation on every water right and every method of diversion. (*Peabody v. Vallejo* (1935) 2 Cal.2d 351, 367, 372 [40 P.2d 486].) Water Code section 275 directs the State Water Board to take all appropriate proceedings or actions to prevent waste or violations of the reasonable use standard. Thus, the State Water Board has jurisdiction to regulate water use in accordance with article X, section 2 of the Constitution. (See *Imperial Irrigation District v. State Water Resources Control Board* (1986) 186 Cal.App.3d 1160 [231 Cal.Rptr. 283] [holding that jurisdiction extends to pre-1914 rights].)

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 to which they are capable. (Cal. Const., art. X, § 2.) Therefore, in determining the reasonableness of a particular use of water or method of diversion, other competing water demands and beneficial uses of water must be considered. A particular water use or method of diversion may be determined to be unreasonable based on its impact on fish, wildlife, or other instream beneficial uses. (*Environmental Defense Fund, Inc. v. East Bay Municipal Utility District* (1980) 26 Cal.3d 183 [161 Cal.Rptr. 466].) What constitutes a reasonable water use depends on the entire circumstances presented and varies as current conditions change. (*Id*. at p. 194.)

The State Water Board also has an affirmative duty to take the public trust into account in the planning and allocation of water resources. The purpose of the public trust doctrine is to protect navigation, fishing, recreation, environmental values, and fish and wildlife habitat. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 434-435 [189 Cal.Rptr. 346].) Under the public trust doctrine, the State retains supervisory control over the navigable

waters of the state and the lands underlying those waters. (*Id*. at p. 445.) In applying the public trust doctrine, the State Water Board has the power to reconsider past water allocations even if the Board considered public trust impacts in its original water allocation decision. Thus, the State Water Board ~~may exercise its~~ has the legal authority under the ~~doctrines of~~ reasonable use doctrine to address the impacts of groundwater pumping on groundwater resources, and the State Water Board has the legal authority under both the reasonable use doctrine and the public trust doctrine to address reduced instream flows in the policy area and adverse e~~a~~ffects to fish, wildlife, or other instream beneficial uses due to riparian diversions or the pumping of percolating groundwater.

In addition, if additional riparian diversion facilities are constructed, the construction activity should be undertaken in a manner that does not adversely affect fish and wildlife resources, per Fish and Game Code section 1602, described above. If CDFW determines that the construction activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement would be prepared. The Agreement would include reasonable conditions necessary to protect those resources and must comply with the CEQA.

The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Currently, only one of the counties has developed a comprehensive program to regulate groundwater use (Napa), one county has a program to regulate groundwater use in a portion of the county (Mendocino), one county has implemented a non-regulatory groundwater management plan (Sonoma), and two counties have no plans, codes, or ordinances for regulating the use of percolating groundwater (Marin and Humboldt). As discussed in section 7.2.1 of the SED, the State Water Board's permitting authority over groundwater pumping is limited. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of groundwater in the four counties with no regulatory framework for groundwater management.

~~The five counties in the Policy area also may mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers~~. Local regulation of groundwater pumping exists in Napa and Mendocino Counties. Napa County's Ordinance 1162, Napa County Code Chapter 13.15, regulates the extraction and use of groundwater in the county and requires the issuance of a groundwater permit before development may occur. The groundwater permit cannot be issued if evidence exists showing that the proposed agricultural, commercial or residential development will increase the existing water use or take more than its fair share of groundwater if there is no pre-existing use. In Mendocino County, Chapter 20.744 of Division III of Title 20 of the Mendocino County Zoning Code contains requirements for the evaluation of the adequacy of groundwater resources for new developments in the Town of Mendocino. It allows local government to mandate the amount of naturally occurring groundwater that can be withdrawn from the Town of Mendocino's aquifer on a sustained basis to help prevent depletion of the Town's groundwater by not exceeding the aquifer's perennial or safe yield, which is the amount of water that can be pumped regularly and permanently without dangerous depletion of the storage reserve. Current groundwater management policies for the Town of Mendocino are to collect and analyze current groundwater and rainfall data to assist the Board of Directors with their groundwater management decision-making responsibilities, to increase the use of reclaimed water to reduce groundwater extraction, and to promote water conservation measures.

Sonoma County has implemented a non-regulatory Sonoma Valley Groundwater Management

Plan. The Plan, implemented by Sonoma County Water Agency in 2007, identifies a range of water management actions to sustain resources for future generations. The goal of the Plan is to locally manage, protect, and enhance groundwater resources for all beneficial uses, in a sustainable, environmentally sound, economical, and equitable manner. The Plan contains basin management objectives; groundwater availability forecasts developed through modeling; actions to attain groundwater sustainability, including increased use of recycled water to offset groundwater pumping, increased conservation, groundwater monitoring, integration of water management planning on a regional scale, and stakeholder involvement; and plan implementation through a collaborative process. Sonoma County has also established a Basin Advisory Panel to develop a groundwater management plan for the Santa Rosa Plain. Scheduled for release in fall 2013, the Santa Rosa Plain plan will set goals and identify ways to protect the Santa Rosa Plain groundwater basin into the future. Although non-regulatory, the Panel will put forward recommendations for managing groundwater in the Santa Rosa Plain and implementing the plan.

Groundwater management plans, and codes or ordinances regulating groundwater use were not found for Humboldt or Marin Counties.

During development of the Policy, the State Water Board directed its consultant, Stetson Engineers Inc., to prepare maps delineating subterranean streams to potentially improve the effectiveness of the Policy by identifying locations where the State Water Board's permitting authority may be applicable. The methodology and approach used to develop these maps is described in technical memoranda dated May 16, 2008, and February 28, 2008, respectively. The maps and memoranda are available on the State Water Board website or upon request. Adoption of the subterranean stream delineations is not a feasible mitigation measure for the potential increase in groundwater pumping attributable to the Policy taking into consideration all relevant factors including the following: (1) the speculative nature of the potential impact, (2) the fact that the potential switch from surface water diversions to groundwater pumping is unlikely to cause a significant reduction in surface water flows, (3) the fact that any localized impacts to groundwater resources are unlikely to be mitigated by adoption of the subterranean stream delineations, which cover only a small portion of the watersheds within the Policy area, (4) the extensive amount of time and high cost associated with a proceeding to consider adoption of the delineations, (5) the fact that even if the subterranean stream delineations are not adopted, the State Water Board can consider the delineation maps and supporting information on a case-by-case basis to assist in determining whether a particular groundwater well is subject to the State Water Board's permitting authority, and (6) the fact that the State Water Board has the legal authority to regulate any unacceptable impacts associated with the potential increase in groundwater pumping pursuant to the State Water Board's authority to prohibit the unreasonable use of water.

~~In addition to the regulatory authorities discussed above, under certain circumstances the State Water Board will have the opportunity to identify and mitigate for the potential impacts of increased riparian diversions as part of the State Water Board's review of individual water right applications. To the extent that a diverter might increase riparian diversions in connection with a storage project that requires a water right permit, and the increase in riparian diversions would not occur in the absence of the storage project, the State Water Board can mitigate the impacts of the increased riparian diversions through the imposition of a permit term.~~

Inclusion of the following permit term, substantially as follows, in permits issued under this Policy, may reduce potential stream flow reductions due to riparian diversion during spring and summer:

For all projects where the SWRCB has determined that riparian water has been used on the proposed place of use:

- *Permittee shall not use more water under the basis of riparian right on the place of use authorized by this permit than permittee would have used absent the appropriation authorized by this permit. Based on the information in the Division's files, approximately XX acre-feet per year of riparian water has been used on the place of use. Therefore, consistent with this term, permittee may not divert any additional riparian water for use on the place of use authorized by this permit under basis of riparian right. With the Chief of the Division's approval, this information may be updated, and permittee may use water under basis of riparian on the authorized place of use, provided that permittee submits reliable evidence to the Chief of the Division quantifying the amount of water that permittee likely would have used under the basis of riparian right absent the appropriation authorized by this permit. The Chief of the Division is hereby authorized to approve or reject any proposal by permittee to use water under the basis of riparian right on the place of use authorized by this permit.*

For all projects where the SWRCB has determined that riparian water has not been used on the proposed place of use

- *Permittee shall not use more water under the basis of riparian right on the place of use authorized by this permit than permittee would have used absent the appropriation authorized by this permit. Based on the information in the Division's files, riparian water has not been used on the place of use. Therefore, consistent with this term, permittee may not divert any additional riparian water for use on the place of use authorized by this permit under basis of riparian right. With the Chief of the Division's approval, this information may be updated, and permittee may use water under basis of riparian on the authorized place of use, provided that permittee submits reliable evidence to the Chief of the Division quantifying the amount of water that permittee likely would have used under the basis of riparian right absent the appropriation authorized by this permit. The Chief of the Division is hereby authorized to approve or reject any proposal by permittee to use water under the basis of riparian right on the place of use authorized by this permit.*

In addition, if additional riparian diversion facilities are constructed, the construction activity should be undertaken in a manner that does not adversely affect fish and wildlife resources, per Fish and Game Code section 1602, described above. If DFG determines that the construction activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement would be prepared. The Agreement would include reasonable conditions necessary to protect those resources and must comply with the California Environmental Quality Act (CEQA).

Changes in land use

In response to the policy, persons may change land use patterns. For instance, lands being used for agriculture might be converted for other uses, such as subdivisions, or fallowing. Land use changes would go through a local planning process, with mitigation measures

developed at a local level.

Mitigation measures for cumulative impacts

Potential mitigation measures for cumulative impacts are anticipated to be the same as those described above.

Comment 30.0.1: While groundwater may be a solution, it may have, in the long run, as much of an impact to stream flow as direct diversion. *(Charles Acker)*

Response: Comment noted. The SED points out that the Policy could give rise to increases in groundwater extraction as affected parties take actions in response to the Policy requirements. Section 6.2 of SED, in particular Table 6-3, describes the possible environmental impacts resulting from ~~increased~~affected persons switching from surface water diversions to groundwater extraction, including reduction in stream flow. As discussed in section 6.2 of the SED, however, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows. In addition, the State Water Board has the legal authority under the doctrines of reasonable use and the public trust to address any groundwater pumping that reduces instream flows in the Policy area and thus adversely affects fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

Certain actions that affected parties take to increase groundwater extraction would be subject to CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts such as reduction in stream flow, to a level of less than significant. The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management.

Comment 30.0.3: A shortcoming of the Draft Policy is that there is insufficient consideration of groundwater extractions, despite known linkage to diminished surface flow and carrying for Pacific salmon species regionally. *(Patrick Higgins, Consulting Fisheries Biologist/Sierra Club Redwood Chapter)*

Response: The Policy applies to water diversions from all streams and tributaries in the Policy area that are subject to the State Water Board's water right permitting authority, including extractions from subterranean streams. Extractions from percolating groundwater are not subject to the State Water Board's water right permitting authority. However, the SED points out that the Policy could give rise to increases in groundwater extraction as affected parties take actions in response to the Policy requirements. Section 6.2 of SED, in particular Table 6-3, describes the possible environmental impacts resulting from ~~increased~~affected persons switching from surface water diversions to groundwater extraction, including reduction in stream flow. As discussed in section 6.2 of the SED, however, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows. In addition, the State Water

Board has the legal authority under the doctrines of reasonable use and the public trust to address any groundwater pumping that reduces instream flows in the Policy area and thus adversely affects fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

Certain actions that affected parties take to increase groundwater extraction would be subject to CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts such as reduction in stream flow, to a level of less than significant. The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the State Water Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management.

Comment 30.0.7: To determine which activities impact streamflows for the fish, the relations between groundwater and surface water for any watershed must rely on scientific studies and not solely on legal doctrines. *(Jane Nielson, Sonoma County Water Coalition)*

Response: The Policy applies to pending and new water diversions within the Policy area that are subject to the State Water Board's water right permitting authority, including extractions from subterranean streams. Extractions from percolating groundwater are not subject to the State Water Board's water right permitting authority. The SED points out that the Policy could give rise to increases in groundwater extraction as affected parties take actions in response to the Policy requirements. Section 6.2 of SED, in particular Table 6-3, describes the possible environmental impacts resulting from ~~increased~~affected persons switching from surface water diversions to groundwater extraction, including reduction in stream flow. As discussed in section 6.2 of the SED, however, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows. In addition, the State Water Board has the legal authority under the doctrines of reasonable use and the public trust to address any groundwater pumping that reduces instream flows in the Policy area and thus adversely affects fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

Certain actions that affected parties take to increase groundwater extraction would be subject to CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts, including any cumulative impacts such as reduction in stream flow, to a level of less than significant. It will be the responsibility of the lead agency to ensure that ~~the~~ any techniques used in the CEQA review to evaluate the connection between the proposed extraction project and streamflow is scientifically sound and is in accordance with standard engineering practice. The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the State Water Board does not have permitting

authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management.

~~Furthermore, the State Water Board may exercise its authority under the doctrines of reasonable use and the public trust to address diversions of surface water or groundwater that reduce instream flows in the Policy Area and thus adversely affect fish, wildlife, or other instream beneficial uses.~~ During development of the Policy, t~~T~~he State Water Board, directed its consultant, Stetson Engineers Inc., to prepare maps delineating ~~has completed mapping of~~ subterranean streams and areas where groundwater pumping could potentially cause streamflow depletion in the Policy area to potentially improve the effectiveness of the Policy by identifying locations where the State Water Board's permitting authority may be applicable. The mapped areas were determined using existing geologic and scientific information. The methodology and approach used to develop these maps is described in technical memoranda dated May 16, 2008, and February 28, 2008, respectively. The~~is~~ maps and memoranda are available on~~ping information is available from~~ the State Water Board website or upon request. ~~in a compilation of technical memoranda and maps entitled "Delineated Subterranean Streams and Potential Streamflow Depletion Areas," dated November 14, 2008 by Stetson Engineers Inc.~~ Some areas currently mapped as Potential Streamflow Depletion Areas (PSDAs) ~~in the~~ compilation could be reclassified as subterranean streams if adequate new information and site specific studies become available in the future. The State Water Board may utilize the mapped subterranean streams and PSDAs in case-by-case enforcement efforts.

Comment 30.0.8: Groundwater recharge is the reason most of our rivers and streams continue to flow throughout the dry summer once the winter rains have subsided. It is foreseeable that by decreasing the availability of future surface water diversions, increased groundwater "diversions" will result. However, groundwater is not always subject to the same degree of regulation as surface water. It is therefore recommended that the SWRCB should consider developing standardized techniques and procedures for new groundwater wells that test the connection between groundwater and surface water because over drafting groundwater's could potentially result in reduced instream flows during the summer. *(Linda Ruffing, City of Fort Bragg; Stephen Whitaker, Irish Beach Water District)*

Response: During development of the Policy, t~~T~~he State Water Board directed its consultant, Stetson Engineers Inc., to prepare maps delineating~~has completed mapping of~~ subterranean streams and areas where groundwater pumping could potentially cause streamflow depletion in the Policy area to potentially improve the effectiveness of the Policy by identifying locations where the State Water Board's permitting authority may be applicable. The methodology and approach used to develop these maps is described in technical memoranda dated May 16, 2008, and February 28, 2008, respectively. The~~is~~ maps and memoranda are available on the~~ping information is available from the~~ State Water Board website or upon request. ~~in a compilation of technical memoranda and maps entitled "Delineated Subterranean Streams and Potential Streamflow Depletion Areas," dated November 14, 2008 by Stetson Engineers Inc~~. It includes descriptions of methodology to assess the rate of depletion of surface water due to groundwater pumping. As discussed in revised section 6.2 of the SED, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows.
~~Some areas currently mapped as Potential Streamflow Depletion Areas in the compilation could be reclassified as subterranean streams if adequate new information and site specific~~

~~studies become available in the future.~~ As indicated in the SED (p. 13), however, the State Water Board may exercise its authority under the doctrines of reasonable use and the public trust to address diversions of surface water or groundwater that reduce instream flows in the Policy Area and thus adversely affect fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy. The State Water Board may utilize the ~~mapped subterranean streams and Potential Streamflow Depletions Areas in these efforts~~ methodology described by Stetson Engineers, Inc. in any efforts to address the impacts of groundwater pumping on instream flows pursuant to the reasonable use doctrine or the public trust doctrine.

Comment 30.0.11: The SWRCB ignores groundwater withdrawal in the Policy despite the fact that increased appropriative water rights permit difficulty or cost is likely to increase well use and that groundwater use is recognized as contributing to surface water depletion and loss of fisheries productivity in the region. *(NA, Sierra Club Redwood Chapter)*

Response: The State Water Board did not ignore groundwater withdrawals when it developed the Draft Policy. The SED points out that the Policy could give rise to increases in groundwater extraction as affected parties take actions in response to the Policy requirements. Section 6.2 of SED, in particular Table 6-3, describes the possible environmental impacts resulting from ~~increased~~affected persons switching from surface water diversions to groundwater extraction, including reduction in stream flow and associated degradation of fish habitat. As discussed in section 6.2 of the SED, however, the potential switch from surface water diversions to pumping of percolating groundwater as a result of the Policy is unlikely to cause a significant reduction in surface water flows. In addition, the State Water Board has the legal authority under the doctrines of reasonable use and the public trust to address any groundwater pumping that reduces instream flows in the Policy area and thus adversely affects fish, wildlife, or other instream beneficial uses, regardless of whether the reduction in instream flows is caused by the Policy.

Certain actions that affected parties take to increase groundwater extraction would be subject to future CEQA review at the "project-level" and the lead agency would be required to adopt mitigation measures to reduce significant project impacts , including any cumulative impacts such as reduction in streamflow, to a level of less than significant. The five counties in the Policy area have the authority to mitigate the potential impacts of increased groundwater pumping by regulating groundwater use pursuant to their police powers, but most of the counties are unlikely to do so. Out of the five counties, only Napa County has developed a comprehensive program to regulate groundwater use. In addition, the State Water Board does not have permitting authority over percolating groundwater. Accordingly, there will likely be little to no project-level CEQA review of the potential increase in the use of percolating groundwater in the four counties with no regulatory framework for groundwater management.