## Draft Comment Summary and Responses for Amendments to the Lower San Joaquin River Selenium Control Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Commenter</th>
<th>Commenter Name</th>
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<tbody>
<tr>
<td>1.</td>
<td>General Public</td>
<td>Roger Mammon</td>
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<td>2.</td>
<td>General Public</td>
<td>Felix E. Smith</td>
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<td>3.</td>
<td>General Public</td>
<td>William Tarleton</td>
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<td>4.</td>
<td>General Public</td>
<td>Norman Reddick</td>
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<td>5.</td>
<td>General Public</td>
<td>David F. Scatena</td>
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<td>7.</td>
<td>Grassland Basin Drainers</td>
<td>Joseph C. McGahan</td>
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<td>8.</td>
<td>Grasslands Water District</td>
<td>David L. Widell</td>
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<tr>
<td>9.</td>
<td>Congress of the United States, House of Representatives</td>
<td>Congressman Dennis Cardoza, Congressman Jim Costa</td>
</tr>
</tbody>
</table>
| 10. | California Water Impact Network  
California Sportfishing Protection Alliance  
AquAlliance | Carolee Krieger  
Bill Jennings  
Barbara Vlamis |
| 11. | Sierra Club  
Friends of the River  
Pacific Coast Federation of Fisherman's Planning and Conservation League  
Southern California Watershed Alliance  
Friends of Trinity River  
North Coast Rivers Alliance | Jim Metropulos  
Steven L. Evans  
Zeke Grader  
Jonas Minton  
Conner Everts  
Byron Leydecker  
Frank Egger |
<p>| 12. | Soluri Meserve – Reclamation District 999 | Osha R. Meserve |
| 14. | United States Department of the Interior (Fish and Wildlife Service) | Susan K. Moore |</p>
<table>
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<tr>
<th>No.</th>
<th>Author</th>
<th>Comment</th>
<th>Response</th>
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<td>0.1</td>
<td>Multiple</td>
<td>Some of the comments submitted in opposition to the State Board’s approval of this amendment were previously submitted to the Central Valley Water Board and submitted verbatim to the State Board, without further explanation.</td>
<td>Many of the individual comments submitted to the State Water Board on this matter are identical to a comment submitted to the Central Valley Water Board (Central Valley Water Board) at the time the draft version of this amendment was under consideration. As part of its consideration process, the Central Valley Water Board provided written responses to all of the significant comments it received. The Central Valley Water Board’s responses either indicated that changes would be made to the regulatory provisions or to the related documentation in response to the comment (in which case corresponding changes were made), or the Central Valley Water Board’s written responses indicated that that changes would not be made, and the response included the reason. Where a commenter merely repeats a comment that was originally tendered to the Central Valley Water Board on a prior version of an amendment, but fails to disclose what quarrel, if any, the commenter has with the response provided or the action taken by the Central Valley Water Board in response to the comment, the State Water Board is unable to address the comment. Specifically, in those cases where the Central Water Board made changes in response to a comment, the commenter has failed to explain how the changes were allegedly inadequate. Likewise, where the Central Valley Water Board did not make changes, the commenter has failed to explain how the response or explanation that the Central Valley Water Board provided was allegedly inadequate, or even whether the commenter believes that the response was inadequate.</td>
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| 1.1 | General Public  
– Roger Mammon | “I oppose any extension of selenium discharge into the San Joaquin River. The agencies involved were provided a timeline of almost 14 years to accomplish the goal. Providing another 9 years is not reasonable. Loss of funds from the government should have no bearing in this matter. The dischargers have more than adequate funds to sue the government whenever anything does not go their way.

As a Delta resident who receives drinking water from the San Joaquin River, I say enough is enough. Let the dischargers store their runoff on their own property and stop contaminating our river.” | The Central Valley Water Board has determined and State Water Board staff agree that providing the extension is reasonable given the uncertainties when the original amendment was adopted in 1996 and improvements in water quality and overall reduction of selenium loads. The amendment establishes an interim performance goal of 15 μg/L monthly mean which is expected to be achieved by December 31, 2015, with the water quality objective of 5 μg/L (4-day average) being met by December 31, 2019 when the extension would expire. |
| 2.1 | General Public  
– Felix E. Smith | “Approval of the Basin Plan Amendment continues the Grasslands Bypass Project for another decade to December 31, 2019. The Project will continue to collect and move selenium contaminated drainage from parts of the Westside through the Federal San Luis Drain for discharge / disposal in Mud Slough flowing then to the San Joaquin River. At this location flows from the Merced River and flow releases from Friant Dam and Reservoir to restore the San Joaquin River’s connection to the Delta and San Francisco Bay will reduce the selenium concentration in the lower San Joaquin River. Dilution appears to be the solution to this selenium bioaccumulation pollution.” | The proposed amendment provides required time to develop treatment and other mitigation measures to further reduce selenium levels beyond the 75+ percent reduction already achieved since 1995, and does not simply rely on dilution as suggested by the commenter. |
| 2.2 | General Public  
– Felix E. Smith | “In June of 1983 (over a quarter of century ago) I held the first live grossly deformed American coot hatchling (no eyes, deformed head, wings and no legs) found at the Kesterson NWR evaporation ponds… Those images of gross deformities apparently have been forgotten and haven’t been seen by at least two generations of TV viewers. May be it is time for the Sacramento Bee to run its Special Reports on Selenium of September 1985 and December 1988; for “60 Minutes” and for KQED San Francisco to do a follow-up of “Down the Drain” to expose what has and has not happened during the past 25 year.” | Comment acknowledged. |
| 2.3 | General Public  
– Felix E. Smith | “In 1985 the State Board issued Order WQ 85-1. Order WQ 85-1 found the drainage entering Kesterson evaporation ponds contaminated habitat, threatened fish and wildlife, and was causing reproductive and biological problems to the people’s fish and wildlife trust. This selenium was accumulating to levels toxic to fish and other aquatic life through the food web. The State Board concluded that agricultural drainage was creating and threatening to create | Since 1995, selenium levels have been reduced by 75+% percent, and water quality objectives have been achieved on most of the previously impaired reaches. While it is true water quality objectives have not been fully met in all locations, Central Valley Water Board staff believe, and State Water Board staff agree that further |
conditions of pollution and nuisance, and the continued irrigation of affected lands could constitute an unreasonable use of water.

In 1986, Gerald Johns, a State Board representative, at UC Berkeley conference on drainage, stated that the State Board would use its water quality authority to address the drainage issue. If that did not work, it would then use its water right authority to protect beneficial uses and public trust resources.

It is now a quarter of a century after the State Board’s WQ 85-1. In September 2010, the State Board accepted a Draft proposal to extend the Grassland Bypass Project for another decade from October 31, 2010, to December 31, 2019, which is over 3 decades since the State Board’s WQ 85-1.

| 2.4 | General Public – Felix E. Smith | “After the expenditure of millions of dollars including tax payer dollars and State Grant monies on treatment science, there is no clear best / practical treatment process to remove selenium from the agricultural drainage. Drainers have spent money lobbying the State Board, members of Federal and State legislature to come to their aid. The best practice is do not irrigate saline - seleniferous soils. If one doesn’t cause the drainage mess in the first place, there is nothing to clean up.” | Comment noted. Conclusions and opinions of commenter do not reflect the determinations of the Central Valley Water Board, nor do they reflect the recommendations of State Water Board staff. |
| 2.5 | General Public – Felix E. Smith | “There is little doubt that selenium, like DDT and toxaphene of the 1960’s and 70’s (SWRCB Water Quality Monitoring Report No. 82-1 TS, July 1982, and Water Quality in the San Joaquin –Tulare Basin, 1992-95, USGS Cir. 1159 - 1998), has also accumulated in the mud and food web of the Lower San Joaquin River and southern Delta biota… …it is inconsistent with public trust protection and the reasonable use of water, it is a waste of water and is therefore a nuisance. When selenium enters the bodies of mothers of childbearing age or children, or enters the domestic or wildlife food supply to toxic levels without our consent, it is a trespass.” | Comment noted. Conclusions and opinions of commenter do not reflect the determinations of the Central Valley Water Board, nor do they reflect the recommendations of State Water Board staff. |
| 2.6 | General Public – Felix E. Smith | “The meaning of an 1895 ruling by the California Court in People ex rel Ricks Water Co. v Elk River Mill and Lumber Company (40 Pac Rpt 486-1895) comes to mind. Elk River Lumber Company was a mill / farm / ranch enterprise having a water quality / beneficial use issue. The Elk River Court found filth from cows, hogs, stables, fetid matter and mill debris was entering and polluting Elk River (a | See Response to Comment 2.5 |
domestic water supply). The Court found the situation to be a nuisance and an unreasonable use of State water. The Court reasoned that what the mill was doing was equivalent to actually putting the material directly into Elk River. The meaning of the Elk River decision is very clear; “If the conformation of the defendant’s land is such that he cannot carry on a dairy without putting such filth directly into the water, then he must find some other use for the land. This thinking should be applied to today’s selenium and drainage issues associated with irrigating selenium-contaminated lands on the Westside of the San Joaquin Valley. If the Westside farmers cannot carry on their operations without polluting the local ground and surface water; if they cannot carry on their operations without polluting the San Joaquin River, wetlands and causing mortality (toxicity) to fish and wildlife resources, they must find some other use for the land.

The people, in 1884, did not payoff the corporations hydraulic mining gold to stop dumping / disposing their waste into the State’s rivers. The people, in 1895, did not pay off the Elk River Mill and Lumber Company for it lost waste disposal area. Today, taxpayers do not owe Westside agribusiness a buyout or other payments for them to stop polluting the State’s waters, contaminating aquatic fish and wildlife resources, and degrading beneficial uses of state waters and associated public trust values.”

2.7 General Public

“A key item in the 1902 Reclamation Act is Section 8—The Secretary of the Interior shall proceed in conformity with State laws; --- Provided, “the right to the use of water acquired under the provisions of this Act, shall be appurtenant to the land irrigated and beneficial use shall be the bases, the measure and the limit of that right”--.

It is the Bureau of Reclamation’s responsibility to assure that beneficial use of its water right water attaches to the land being irrigated. The Bureau has not done this. It has looked the other. Impacts to trust resources and beneficial uses are widespread and far-reaching. The impacts extend from areas where the water originates, including the Trinity River and American River, associated fishery resources including Steelhead, Chinook and Coho salmon, recreational, scenic and economic assets and biological values. In the San Joaquin Valley drainage has contaminated groundwater, the San Joaquin River and adjacent wetlands, fishery resources,
associated public trust uses and values. Large corporations are the beneficiaries of this amendment. They are the ones allowing drainage and wastewater from their land to flow into public waters. The poor and low-income farm workers and their families, fisherpersons and others are paying costs through lost beneficial uses and values and with opportunities foregone. Public health advisories have been issued by the State cautioning people about eating fish from the lower San Joaquin River and selected adjacent waters.”

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<th>General Public – Felix E. Smith</th>
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| “The Draft Amendment allows the dischargers (supported by the Bureau of Reclamation and the Delta-Mendota Water Authority) to exceed the selenium objectives for an additional decade, to December 31, 2019. It appears this Water Board desires to continue the drainer’s privilege to pollute surface and groundwater, aquatic habitats and degrade associated beneficial use for their past cooperation at reducing the amount of selenium contaminated drainage entering waters of the State.

If the State Water Board approves the requested amendment, it will be “an enabler”, with the people and beneficial uses of State waters sentenced to another decade of selenium-contaminated discharges to the San Joaquin River. Instead, the State Water Board should issue a cease and desist order against the affected irrigators and drainers using its water right and water quality authorities and its responsibilities under the public trust doctrine. The affective date of such cease and desist order should be October 1, 2010, with full implementation and enforcement by January 1, 2011. Such a use of the public trust doctrine should derail any taking claim (Johnson - Water Pollution and the Public Trust Doctrine, Environmental Law, Northwestern School of Law, Vol. 19, NO. 3 - 1989). This is not about ending irrigated agriculture; it is about ending selenium drainage and its pollution / contamination of State waters.”

The Central Valley Water Board has determined and State Water Board staff agree that providing the extension is reasonable given the uncertainties when the amendment was adopted in 1996 and improvements in water quality and overall reduction of selenium loads. The amendment establishes an interim performance goal of 15 μg/L monthly mean which is expected to be achieved by December 31, 2015, with the water quality objective of 5 μg/L (4-day average) being met by December 31, 2019 when the extension would expire.

State Water Board staff would also like to emphasize that Agricultural Supply (AGR) which is uses of water for farming, horticulture, or ranching including, but not limited to, irrigation (including leaching of salts), stock watering, or support of vegetation for range grazing is a designated beneficial use for this water body.

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<th>General Public – Felix E. Smith</th>
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| “The people want their government to work efficiently, effectively and in the public interest. The process of controlling selenium in drainage started in 1985 and has continued through today. This proposed Amendment allows the use of the Grasslands Bypass Project for another 10+ years. This supposedly will allow time for developing the best and practical corrective action to control selenium drainage from irrigating saline-seleniferous soils which has contaminated local ground water, State waters, associated fish

The amendment will allow discharges from the Grasslands Bypass Project area to continue to impact Mud Slough (north) and the San Joaquin River between the Mud Slough discharge and the confluence with the Merced River for up to an additional nine years, three months. Amendments to Basin Plans often rely on an adaptive management approach. In this case the
and wildlife and degraded other public trust values. That makes a 35-year time frame (over a third of a century) that the State Water Board has been playing with the impacts from selenium contamination of surface and ground water and aquatic habitats of portions of the San Joaquin valley. This 35 year time frame does not seem to equal “timely and effective action” for controlling the production of selenium drainage to protect public trust resources, values and beneficial uses of State waters.

The State Water Board should remember that California courts have said, "The public is not to lose its rights through the negligence of its agents, nor because it has not chosen to resist an encroachment by one of its own number, whose duty it was, as much as that of every other citizen, to protect the state in its rights". The Court in *Cal Trout v State Water Resources Control Board* (207 Cal App 3d 585 - 1989) relied on *People v Kerber* (152 Cal 731,732-736, 93 Pac 878 1908) for the continuous protection of public trust interests. Therefore a member of the public can call for the State Board can revisit existing water rights aspects of irrigating saline-seleniferous lands at any time or can move ahead with independent action, a lawsuit.”

| 3.1 General Public – William Tarleton | “The proposed Approval of Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins to Address Selenium Control in the SanJoaquin River Basin must not be approved. What industry would be allowed to pollute from 1996 to 2019 It would be unconscionable to continue this pollution. If this pollution continues a strong monetary fine must be collected from the polluters. This pollution has been shown to cause significant health problems to Wildlife in the past. It must be stopped for the health of people and Wildlife of our State.

Can you imagine the BP oil well pollution going on for the 13 years being allowed for the Selenium Pollution!!!!" |
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<th>4.1 General Public – Norman Reddick</th>
<th>“It is time to stop the nonsense of allowing agribusiness to farm marginal waste land at the expense of California tax payers and the fragile watershed environment. Those greedy farmers have irreparably harmed the environment and are again dragging their feet in an effort to extract more tax payers funds to line their own pockets. They were given plenty of time to comply and have only procrastinated, selfishly hoping to dump poisoned water into the</th>
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Central Valley Water Board has re-evaluated the amendments and, given the progress that has been made and the information that is now available, has come to the conclusion that is it reasonable to allow an additional 9 years to come into full compliance with the water quality objectives for selenium with a given interim goal to ensure that compliance is achieved by the end of the extension at the latest.
### 5.1 General Public

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<td>David F. Scatena</td>
<td>“The time has come to &quot;JUST SAY NO&quot; to the polluters who dispose of toxic agricultural run off into waterways and underground aquifer. These polluters have had sufficient time, warnings, deadlines, extensions etc to prevent and or develop disposal programs to avoid polluting waterways, wells etc. The time has come for the State Water Resources Control Board to end these sources of pollution that prevent people from using potable water from their taps. It would be outrageous to give them additional time for what they should have already completed. I say &quot;JUST SAY NO&quot; TO ANY EXTENSION OF TIME. So little water, so precious we cannot afford to pollute any of it.”</td>
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See Response to Comment 1.1.

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### 6.1 California Waterfowl Association (CWA), Grasslands Water District (GWD)

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<th>Comment</th>
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<td>“The Grasslands Ecological Area (GEA) is the largest contiguous wetland area remaining in the United States. The GEA consists of over 180,000 acres of wetlands in federal, state, and private ownership… It has also been designated a Globally Important Bird Area by the American Bird Conservancy and the National Audubon Society, and has garnered distinction as a Wetland of International Importance under the RAMSAR Convention (one of only 22 in the world). In addition, the GEA supports thirteen threatened and endangered species plant and animal species…. … The value and productivity of these wetlands are dependent on continuing to reduce soil salt accumulations, and maintaining the use of the San Luis Drain (as proposed) is the only currently viable alternative to accomplish this. As such, California Waterfowl recommends an extension of the of the Grasslands Bypass Project (GBP) and continued use of the San Luis Drain for the full 10 years as proposed to prevent salt and selenium enriched surface and sub-surface flows from entering critical wetlands of the GEA. The significant reduction of salt and selenium load from the Grassland Drainage Area (GDA) and the observed improvements to wetland</td>
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State Water Board staff agrees with California Waterfowl Association and appreciates their comments and support.
According to the San Luis Drain, habitat improvement over the past 15 years can be directly attributed to the success of the GBP and the use of the San Luis Drain."

| 6.2 | CWA, GWD | "The GBP and the San Luis Drain prevent discharge of surface and subsurface agricultural drainage water, with elevated salt and selenium concentrations, from entering into state and federal wildlife refuges and wetlands in the GEA. With the exception of certain stormwater events, all discharges of drainage water from the GDA into wetlands and refuges have been eliminated since the implementation of the GBP. All stormwater events will likely result in discharges to Grasslands Wetlands without the continued use of the San Luis Drain. The inability for Grassland-area farmers to utilize the San Luis Drain to bypass the wetland complex would result in higher water tables and higher concentrations of salt and selenium in the shallow ground water, which will degrade wetland water supplies. Over the past 15 years of the GBP, there has been significant improvement in habitat and water quality of Grassland Wetlands and the San Joaquin River. The continued use of the San Luis Drain is an essential tool to preserve the integrity of California's largest contiguous wetland complex." |
| 7.1 | Grassland Basin Drainers (GBD) | "The extension of the compliance date for meeting selenium objectives in Mud Slough and a short section of the San Joaquin River is an essential element to the GBD's efforts to implement an environmentally responsible solution to the selenium issues in our area. In order to fully execute our plan we require additional time to perfect the final elements of our in-valley drainage solution. Our progress has been delayed due to unexpected delays in funding. Although the Basin Plan Amendment grants our area additional time to finalize our project, our discharges will continue to be controlled by Waste Discharge Requirement and strict provisions of the Use Agreement." |
| 7.2 | GBD | "The Use Agreement requires the region to meet specific load limits that for the first five years are set at the San Joaquin River Selenium Total Maximum Daily Load (TMDL) levels and drop well below the TMDL levels in years six through ten. The agreement utilizes multiple economic incentives to ensure that the region eliminates agriculturally induced selenium discharges to Mud Slough and the San Joaquin River as soon as practicable within the ten year maximum term. Over the term of the agreement, selenium load limit decrease, incentive fees for exceeding these limits increase, and |

Comment acknowledged. See Comment 6.1 above.

State Water Board Staff agrees with the Grassland Basin Drainers and appreciates their comments and support.

Comment acknowledged. Please see comment No. 7.1 above.
mitigation requirement expand. The project also includes a robust monitoring program including both water quality and biological monitoring. The intricate provisions of the Use Agreement were negotiated over many years with input from Federal, State, and Local government agencies as well as environmental stakeholders. The entire project is governed by an Oversight Committee consisting of representatives from the USEPA, USFWS, CDFG, CVRWQCB, and USBR.”

| 7.3  | GBD | “The substantial reduction of both selenium and salt discharges from the area to the San Joaquin River are proof that this regulatory structure is effective. The area farmers have reduced salt discharges by 77% and selenium discharges by 89% since 1995. These efforts have required substantial investments in regional infrastructure and major investments by individual growers to implement practices to reduce discharges. The Grassland Basin Drainers' proven record of implementing innovative projects to meet very challenging discharge limits shows the commitment of these farmers to implement an environmentally responsible solution to the selenium challenge while maintaining the viability of some of the most productive farm land in the state and nation.” |
| Comment acknowledged. Please see comment No. 7.1 |

| 7.4  | GBD | “A primary benefit of the Grassland Bypass Project and the continued use of the San Luis Drain is to eliminate agricultural drainage from over 96 miles of wetland channels. The water quality improvements from this project were substantial and immediate. This Basin Plan amendment allows the continuation of these wetland benefits while the area implements the final phases of the environmentally responsible plan to eliminate agricultural drainage from 97,000 acres of prime farmland.

Despite our proven track record, some continue to have concerns about the viability of our project. The structure of the Use Agreement and the continuous oversight of the project by multiple agencies will ensure that the area meets its commitments and avoids potential environmental problems. In an effort to address lingering concerns, we have reviewed the comments addressed to the Central Valley Water Board and submit the attached comments from Entrix specifically related to the issue of impacts to migrating salmon in the San Joaquin River. These comments add to the responses provided by the Central Valley Water Board by describing specific factual information and scientific considerations supporting the conclusion |
<p>| Comment acknowledged. Please see comment No. 7.1 above. |
|   | Grasslands Water District (GWD) | The San Luis Drain is the sole outlet for not only subsurface agricultural drainage, but also stormwater runoff from GDA. With the inability to utilize the San Luis Drain, stormwater will compound against the COD Main Canal and have to be evacuated through the Camp 13 and Agatha Canals and moved through the wetland complex. Prior to the GBP, the GWD and GRCD received subsurface agricultural drainage and stormwater runoff from the GDA through the Camp 13 and Agatha Canals. Today, the San Luis Drain is the main outlet of the GDA preventing salt and selenium enriched subsurface agricultural drainage and stormwater from entering critical wetland habitats of the GRCD. The San Luis Drain has a maximum flow capacity of 150 cfs, which can contain selenium concentrations up to 60 ppb. Since the implementation of the GBP there have been three storm events where the San Luis Drain maximum capacity was reached resulting in the diversion of excess flow into the GWD conveyance via the Camp 13 and Agatha Canals. If the use of the San Luis Drain were terminated, all storm event floodwaters from the GDA would inevitably enter the GWD introducing significant selenium and salt load into the GRCD. The continued use of the San Luis Drain is vital to the prevention of selenium and salt loading into GRCD wetland habitat. If the San Luis Drain is not available for conveyance of drainage water, the problems associated with the contamination of wetland water supplies during storm events will be further compounded as the Grassland Area Farmers move towards zero discharge. Without this outlet, selenium and salt enriched drainage water will percolate into the shallow ground water, ultimately entering the wetland complex through ground water accretion and contribute to the degradation of wetland water supplies. | State Water Board Staff agrees with the Grassland Water District and appreciates their comments and support. |
| 8.2 | GWD | The inability for the Grassland Area Farmers to utilize the San Luis Drain to bypass the wetland complex would result in higher water tables and higher concentrations of salt and selenium in the shallow ground water, which will degrade wetland water supplies through shallow groundwater infiltration into wetland conveyance. | Comment acknowledged. Please see comments Nos. 6.1 and 8.1. |
| 9.1 | US | “The Grassland Bypass Project is a very successful drainage project under which the project will have a minimal effect on salmon being restored to the River.” | State Water Board Staff thanks the |</p>
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<th>Congressmen (Reps. Dennis Cardoza and Jim Costa)</th>
<th>control program; it is part of the selenium control program of the Central Valley Regional Water Quality Control Board and selenium total maximum daily load program for the San Joaquin River. This has all been accomplished by innovative programs developed by farmers within the drainage area. The agricultural drainage issues in the San Joaquin Valley have been ongoing for over a century and solutions have been elusive. The Grassland Bypass Project is one of the shining examples of proactive management of agricultural drainage. Approval of this extension is crucial to provide an opportunity for the Project to see through to completion further technological advances and improvements in discharges. This program has received ongoing support from Congress, the U.S. Bureau of Reclamation, the State of California and local entities and has been recognized for its innovative and effective approach to drainage control.”</th>
<th>Congressmen for their interest in this issue and appreciates their comments and support. The Central Valley Water Board has determined and State Water Board staff agree that providing the extension is reasonable given the uncertainties when the original amendment was adopted in 1996 and improvements in water quality and overall reduction of selenium loads. The amendment establishes an interim performance goal of 15 μg/L monthly mean which is expected to be achieved by December 31, 2015, with the water quality objective of 5 μg/L (4-day average) being met by December 31, 2019 when the extension would expire.</th>
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<td><strong>9.2</strong> US Congressman (Reps. Dennis Cardoza and Jim Costa)</td>
<td>“This 15-year-old selenium control program has been a resounding success for water quality in the San Joaquin River… The program is governed by an Oversight Committee comprised of executives from the Bureau of Reclamation, Environmental Protection Agency, Fish &amp; Wildlife Service, Department of Fish &amp; Game, and the Central Valley Regional Water Quality Control Board to deal with any problems that might arise.”</td>
<td>Comment acknowledged. See Response to Comment 9.1</td>
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<td><strong>9.3</strong> US Congressmen (Reps. Dennis Cardoza and Jim Costa)</td>
<td>“The Grassland Bypass Project has successfully reduced the amount of drainage water discharged from this area into the San Joaquin River by 77% and a corresponding reduction of selenium and salt by 89% and 77% respectively since the project's inception in 1995… The economic value of agricultural crops in the area is over $300 million per year which is a critical component of economic recovery… Over $104 million has been spent to implement the current program. The federal government has directly committed $19 million to this effort through its San Joaquin River Salinity Management Program annual appropriations. Additional federal funds have also contributed indirectly through conservation programs to member districts. The State of California has contributed $47 million through bond-funded grants and local farmers have contributed $38 million. Additional time and funds will be necessary to complete the final stage. This investment returns many times over to the federal government and</td>
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<td>Comment acknowledged. See Response to Comment 9.1</td>
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| 9.4 | US Congressmen (Reps. Dennis Cardoza and Jim Costa) | “It has been suggested that the Use Agreement's 10-year extension be reduced to a one or two year extension to accommodate the San Joaquin River Restoration Program goal of returning salmon to this stretch of the San Joaquin River in 2012. The project, however, is subject to termination at any time if the Oversight Committee determines that it is producing an unacceptable adverse environmental effect or if ongoing obligations for load reductions are not met. In addition, terminating the project in the short term will not guarantee less selenium in the San Joaquin River. In fact, this project is an important management tool for achieving the best possible water quality in both the wildlife refuges and the San Joaquin River.

The 10-year extension is needed to complete the final stage of implementation - treatment and drainage plan for zero discharge - and allow time for the development, financing, and implementation of treatment technology. If the project terminates after 1 or 2 years and the discharge is taken out of the San Luis Drain, it will be devastating for the region's private, state, and federal refuges and for the San Joaquin River. The drain water will continue to flow with or without this plan and with or without irrigation. The absence of this Project would result in unmanageable drain water backing up and making its way into wildlife refuge delivery systems that have been cleaned up by the Grassland Bypass Project. Rainfall events create runoff and floods from Silver Creek; high-selenium local runoff would, absent the Project, flood the Grasslands. There is a drainage conveyance system in place now that has been very successful and protective of the Grasslands, the refuges and the San Joaquin River.” | Comment acknowledged. See Response to Comment 9.1. State Water Board staff agrees that 1 or 2 years will not be sufficient to address the needs of this project. |
| 9.5 | US Congressmen (Reps. Dennis Cardoza and Jim Costa) | “We commend the Grassland Basin drainers for their proactive approach to comply with regulations and address longstanding drainage problems in the San Joaquin River Basin. We support the Basin Plan Amendment which allows for the delay in implementation of the Mud Slough water quality objective until 2019. This project is a win-win for agriculture and the environment by keeping agriculture in production, maintaining jobs, and bolstering the local and regional economy while also improving the quality of the San Joaquin River and the Sacramento-San Francisco Bay Delta.” | Comment acknowledged. See Response to Comment 9.1 |
### 10.1 California Water Impact Network, California Sportfishing Protection Alliance, AquAlliance (CWIN et. al)

As we understand it, the proposed action is to delay implementation of the 5 μg/l (4-day average) Basin Plan Objective for selenium in Mud Slough (north) and the San Joaquin River from Mud Slough to the Merced River from October 1, 2010, until December 31, 2019. It also proposes a new 15 μg/l (30 day average) interim “Performance Goal” for the same water bodies effective December 31, 2015.

Implementation is not delayed. The compliance date would be extended. Through WDRs the Central Valley Water Board would continue to require implementation actions to further reduce selenium loading.

### 10.2 CWIN et. al

“The California Water Impact Network (C-WIN), the California Sportfishing Protection Alliance (CSPA), AquAlliance and others submitted extensive written and oral comments to the Central Valley Regional Water Quality Control Board for the hearing on May 27, 2010 and to the lead agencies for the EIS/EIR which we incorporate by reference. The vast majority of our comments were either ignored completely, or insufficient responses were given by Regional Board staff. We also incorporate by reference the comments of Felix Smith dated September 8, 2010 and the comments from the coalition that includes the Pacific Coast Federation of Fishermen’s Associations, Planning and Conservation League, Friends of the River, Friends of Trinity River, North Coast Rivers Alliance, Southern California Watershed Alliance and Sierra Club California dated September 22, 2010.”

State Water Board staff has reviewed the administrative record for the Central Valley Water Board action and disagrees that the Central Valley Water Board ignored or insufficiently responded to previous comments. Comments from Felix Smith and Sierra Club et al. are responded to separately as comment letters 2 and 11 respectively.

### 10.3 CWIN et. al

“We recommend that the State Water Resources Control Board reject the proposed Basin Plan Amendment. This letter identifies the issue areas in which we believe the Regional Board inadequately or incorrectly addressed our comments, both orally and in writing as follows…

Instead, we recommend that the Basin Plan Amendment be sent back to the Regional Board with instructions to revise the amendment to a maximum 2-year extension, and to consider land retirement as the Best Practicable Treatment and Control option in the CEQA Functional Equivalency Document, along with additional biological monitoring, completion of a watershed sediment/selenium reduction program to reduce upslope selenium inputs during storm events and an adaptive management strategy developed by all stakeholders.”

A two-year extension was evaluated and found to be equivalent to a “no action” alternative, since there would not be adequate time to implement actions to meet the water quality objective. Within two years, the Grassland Area Farmers will need to identify how they will come into compliance – either through treatment or other options, such as targeted land retirement. Any additional biological monitoring can be considered when the MRP Order and WDRs are updated.

Upslope selenium inputs are from a largely undeveloped area and are not appropriately addressed through a Basin Plan Amendment. The Central Valley Water Board can consider such a reduction program using its other
authorities. An adaptive management strategy has been and will continue to be employed for the Grassland Bypass Project.

| 10.4 | CWIN et. al | “We also request that the State Water Resources Control Board issue a cease and desist order (CDO) of surface water deliveries for irrigation of the Grasslands area and lands draining to the Grasslands area based on the technical and economic infeasibility of irrigating drainage problem lands in the Grasslands Drainage Area and the larger San Luis Unit of the CVP. In the CDO, we also recommend that the State Board make findings of wasteful and unreasonable use of water pursuant to Water Code Section 100 and violation of the Public Trust, similar to those in State Water Resources Control Board Order WQ 85-1 which concluded that agricultural drainage from portions of the San Luis Unit of the CVP was creating and threatening to create conditions of pollution and nuisance, and the continued irrigation of affected lands could constitute an unreasonable use of water.” |

The selenium control program has been successful in reducing discharges from drainage problems land and it is expected that further reductions will result if additional time is provided. The Central Valley Water Board’s Basin Plan indicates that the Central Valley Water Board will request that the State Water Board use its water rights authority if the water quality regulatory process is not effective.

<p>| 10.5 | CWIN et. al | “A. Important Point 4 page III-2.00 states as follows: “Where the Regional Water Board determines it is infeasible for a discharger to comply immediately with such objectives or criteria, compliance shall be achieved in the shortest practicable period of time (determined by the Regional Water Board), not to exceed ten years after the adoption of applicable objectives or criteria.” A cumulative 24-year, 9-month waiver does not meet the criteria in Basin Plan Important Point No 4. <strong>Staff and board response at hearing</strong>—no response. <strong>Discussion</strong>— Considering the significant challenges of agricultural water use and water quality in the Grasslands area, we agree that the ten year time limit for achieving compliance applies to NPDES discharges, as indicated in the expanded discussion in the IV-16.00 section of the Implementation chapter. The “fourth point” on page III-2.00 paraphrased the more extensive discussion and does not include the qualification that the ten year time frame applies to NPDES discharges. The selenium control program applies to subsurface agricultural drainage, a nonpoint source. The longer time period before the prohibition of discharge goes into effect does not preclude the use of alternate adaptive management strategies.” |</p>
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<th>immediate implementation of the Basin Plan selenium objectives would not be in the best interests of the public. However, an additional delay of 9 years and 3 months after 14 years of delay is simply too long, and it defers dealing with the real issue of adding clean water to poison land. We believe our proposal to send the proposed Amendment back to the Regional Board for revision for a maximum 2 year extension is reasonable and more consistent with State Board policies. There are clearly other alternatives that could have been selected besides No Action and a 9 year 3 month renewal alternative. Two years would allow the major stakeholders, including commenting environmental, fishing and conservation groups, the Grasslands Drainers, the Bureau of Reclamation, U.S. Fish and Wildlife Service and others to initiate and pursue alternative adaptive management strategies.</th>
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</table>
|10.6 CWIN et. al| “B. Important Point No. 2 states as follows: “that achievement of the objectives depends on applying them to controllable water quality factors. Controllable water quality factors are those actions, conditions or circumstances resulting from human activities that may influence the quality of the waters of the State, that are subject to the authority of the State Water board or the Regional Water Board, and that may be reasonably controlled. Controllable factors are not allowed to cause further degradation of water quality in instances where uncontrollable factors have already resulted in water quality objectives being exceeded. The Regional Water board recognizes that man made changes that alter flow regimes can affect water quality and impact beneficial uses.”

The Staff report does not recognize the fact that delivery of clean water to poison ground is the source of these problems.

Staff and board response at hearing—no response.

Discussion—The written staff response to our comment that land retirement is the answer to these problems is that it is outside the purview of the Regional Board (see CEQA discussion below). |
|   | The Central Valley Water Board received a report on the progress made to date on control of selenium discharges and adopted a Basin Plan amendment to provide the control program more time to come into compliance. This is an indication that the Central Valley Water Board expects the project to work.

It is expected that the Central Valley Water Board will continue to track the progress of the selenium control effort. The Basin Plan states that the Central Valley Water Board will ask the State Water Board to use its water rights authority if water quality objectives are not met by the specified compliance dates and Central Valley Water Board administrative remedies fail to achieve compliance. At this time, we believe the Central Valley Water Board’s regulatory efforts have been largely successful and our available water quality authorities should be adequate to achieve compliance. |
However, it is clearly within the Regional Board’s purview to make a recommendation to the State Board to consider the effect of water deliveries to this poisonous land and its effect on water quality. No such recommendation was discussed or considered by the Regional Board or its staff.”

10.7 CWIN et. al

“C. Important Point 1 states in relation to water quality objectives:
“Better enforcement of the water quality objectives or adoption of certain policies or redirection of staff and resources may also be proper responses to water quality problems.”

Staff response at hearing and in written response to comments—It would be too much work to regulate 100+ dischargers.

Discussion—The staff and Regional Board could have considered reallocating resources to deal with 100+ discharges, but did not even consider it. They just gave up.”

The selenium control program has benefited from the development of an effective regional management group. There is no indication that water quality would be better protected by working individually with all of the farmers individually. Changing a successful control program in a manner that requires a significant additional investment or redirection of State resources would not make fiscal sense and would have negative policy consequences. Resources would likely be diverted from other irrigated agricultural control efforts, likely delaying the resolution of other water quality problems (e.g., toxicity, pesticides).

10.8 CWIN et. al

“D. Tom Stokely of C-WIN also stated at the 5/27 hearing that the Basin Plan needs to be updated to reflect current costs of cleaning up these selenium discharges. The Basin Plan contains a 1990 cost estimate for the San Joaquin River Subsurface Agricultural Drainage Control Program. The San Luis Drainage Feature Re-Evaluation contains extensive cost estimates that should be reviewed for an update of Page IV-38.00 of the Basin Plan. The Basin Plan estimates it will cost $3.6 million/year to $27.4 million/year to meet selenium objectives in the San Joaquin River. The Preferred Alternative selected in Reclamation’s Record of Decision, which includes the Grasslands area and portions of Westlands which drain subsurface water to the Grasslands and potentially the San Joaquin River will cost nearly $50 million/year.

Approximately $60 million of the $100 million spent so far on the Grasslands Bypass Project were public funds, equating to a public subsidy. Additional state bond act funding is anticipated, resulting in an anticipated increased in subsidies. Furthermore, the Bureau of Reclamation has indicated that its Record of Decision for the San Luis Drainage Feature Re-Evaluation, which includes the Grasslands Bypass Project, is infeasible for cost reasons.

The cost information in Basin Plan is not for benefit/cost analysis, but is presented to satisfy the requirements of CWC 13141, which requires the development of a cost estimate and identification of sources of fund prior to implementation of any agricultural water quality control program. There is no requirement to continually update the cost estimate information. However, it should be noted that the $27.4 million/year (1990 dollars) estimate is equivalent to $45.8 million/year in 2010 dollars when accounting for inflation.
Therefore, the project is not cost effective.

Staff and board response at hearing—Staff stated orally and in the Response to Comments Document (R10-C) that the basin plan cost estimates are fine. There was no response on cost effectiveness except to state in the FED that the recommended alternative maintains farm profits.

Discussion—The Basin Plan is outdated and should be amended. The excessive costs compared to benefits makes continued irrigation of these lands infeasible.”

10.9 CWIN et. al

“2. The proposed Basin Plan Amendment is not consistent with the California Toxics Rule.

The California Toxics Rule (CTR) promulgated by USEPA in May 2000 contains a maximum 10-year time limit on compliance schedules. The maximum time that the CTR allows for a compliance schedule is ten years after the adoption of the final rule, regardless of how many years after the final rule the first permit renewal occurred.

Discussion—Approval of the proposed Basin Plan Amendment would be in violation of the CTR by extending the compliance schedule to a total of 24 years and 3 months, well beyond the 10 years allowed in the CTR.”

10.10 CWIN et. al

“3. The Environmental Impact Report/Statement (EIR/S) certified by the San Luis Delta Mendota Water Authority and the proposed Regional Board staff Functional Equivalency Document (FED) do not meet the legal requirements of CEQA and are not based on the Regional and State Boards’ responsibilities to protect beneficial uses of water.

A. We stated in our letter to the Regional Board that the Purpose and Need Statement for the Final Environmental Impact Statement and Report (EIS/EIR) for the Grasslands Bypass Project 2010-2019 “To facilitate drainage management that maintains the viability of agriculture in the Project Area and promotes continuous improvement in water quality in the San Joaquin River” was unduly narrow for the Regional Board and State Board to consider the proposed Basin Plan Amendments

The Central Valley Water Board considered a “no-project alternative” and determined that it was not acceptable because if the predicted impacts on agricultural use and on the environment. The fact that the Central Valley Water Board decided that the alternative did not meet its policy objectives does not render its analysis of the alternative invalid.

Moreover, in evaluation the project the Central Valley Regional Board considered a reasonable range of regulatory alternatives in compliance with CEQA and 23 CCR §3777. The project analyzed in the Central Valley Water Board’s
because it favors continued agriculture in the Grasslands area over other beneficial uses of water. As Judge Racanelli stated in United States v. State Water Resources Control Board, water quality planning (of which basin plan amendments are a kind) is about identifying and protecting beneficial uses, not protecting water rights or contractual water services. The range of alternatives in the EIS/EIR and FED analyzed was not reasonable because neither the lead agencies nor the Regional Board in the Draft Staff Report considered the possibility of land retirement as a permanent solution to selenium tainted drainage. In focusing on keeping agriculture in business in this area is to ignore the Board’s mandate to protect all beneficial uses of water. Alternatives which would consider less time than 9 years, 3 months, land retirement, rotational fallowing until a treatment plant comes on line, dry land farming of biofuels such as camelina that the Navy could use at the Lemoore Naval Air Station in Westlands, conversion of cultivated lands to solar farms, and Integrated Farm Drainage Management (IFDM) were not considered because the Purpose and Need Statement was inherently the continuation of status quo agriculture in the Project Area, at the expense of water quality and other beneficial uses.

Staff and board response— The Response to comments document (response R1a-C) stated that the Final EIS/EIR has been certified and is not subject to Board action. It also stated that the Regional Board cannot mandate land retirement. It went on further to state that the No Action Alternative will result in rising groundwater and forcible retirement of land. Those statements were reiterated by Regional Board staff at the 5/27 public hearing.

Discussion—The Regional Board cannot mandate land retirement or other alternatives, but it has a responsibility under CEQA to consider feasible alternatives and mitigation measures in the Functional Equivalency Document (FED). As stated numerous times by C-WIN, CSPA and AquAlliance in writing and at the 5/27 public hearing, land retirement from irrigation is the only solution that have been proven to reduce the amount of toxic drainage created and to reduce groundwater levels. Neither the EIS/EIR nor the FED prepared by Regional Board staff considered land retirement as an alternative. The No Action Alternative in the Substitute Environmental Documentation (SED) is a Basin Plan amendment that allows irrigators in the Grassland subarea 9 years and 3 months additional time to complete a the regional drainage management system to gain full control of agricultural subsurface drainage discharges and develop a long-term stormwater-only management plan. The regulatory alternatives analyzed included a “no project” alternative which would not permit the additional time and leave dischargers subject to a 1 October 2010 prohibition, the extension of the compliance period as proposed, and the extension of the compliance period, but with additional provisions that would aid in timely compliance and performance-tracking.

The appropriate place for discussion of land retirement was not as a separate alternative but arguably within the no project alternative. “After defining the no project alternative . . . the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.” 14 CCR 15126.6(e)(3)(C). Indeed, the Staff Report predicted that land retirement may effectively be one of the outcomes of the no project alternative because of salinization of the soil. The no project alternative did not anticipate voluntary retirement of land in the absence of salinization as a reasonably foreseeable consequence of non-approval. However, some voluntary retirement of land could be a component of the efforts to mitigating environmental impacts under any of the alternatives and is in fact a component of the regional effort outlined in the Use Agreement.
EIS/EIR predicted that additional land would be salinized and taken out of production compared to the Action Alternatives, but it was not an inherent part of the alternative, it was an environmental consequence of the alternative. Furthermore, while it’s true that the EIS/EIR has already been approved by Reclamation and the San Luis Delta Mendota Water Authority, the Regional Board apparently relied on that document and its Functional Equivalency Document for compliance with CEQA. The purpose and need statement as well as the alternatives were unduly narrow to comply with CEQA. Therefore, the process is not in compliance with CEQA. We recommend that the State Water Resources Control Board reject the proposed Basin Plan Amendment and send it back to the Regional Board with instructions to revise the Purpose and Need Statement, consider an alternative with less time than 9 years 3 months, and consider land retirement in some form as part of an action alternative.”

It should also be reiterated that the Final Environmental Impact Statement and Report for the Grasslands Bypass Project 2010-2019 (GBP EIR/EIS) has already been certified by the U.S. Bureau of Reclamation and the San Luis and Delta-Mendota Water Authority. The adequacy of the EIR/EIS is not the subject of this Central Valley Water Board action. Further, while commenters are correct that the Central Valley Water Board relied on the GBP EIR/EIS in preparation of Substitute Environmental Documentation for compliance with CEQA, the Central Valley Water Board’s standing with regard to the GBP EIR/EIS is more akin to that of a responsible agency than that of a lead agency. The extension of the basin plan compliance date supported by the SED acts to facilitate the implementation of the Use Agreement supported by the GBP EIR/EIS and is therefore based on the same set of environmental impacts considerations. Land retirement is discussed significantly in the EIR/EIS, but rejected as a full alternative and analyzed instead more narrowly as a tool available in achieving compliance.

“B. The No Action Alternative is not accurately portrayed in the EIS/EIR and the FED.

We commented in writing and Tom Stokely commented orally at the 5/27 Regional Board hearing that the No Action Alternative is mischaracterized as a doomsday alternative that would result in disbanding of the regional drainage efforts, massive selenium contamination of the wetlands, the San Joaquin River and rising groundwater.

Staff and board response—Response to comments R1b-C and R1d-C reiterate the doomsday scenario that the regional drainage entity would disband, that water quality degradation would ensue and WDR’s on individual dischargers would take years to enforce.

Discussion—The proposed Basin Plan Amendment is NOT a vote

The description of the No Action Alternative is consistent with the potential outcome as described by the operators of the selenium control program. We believe it is a reasonable outcome given the significant disruption and transition that would be required to go from a regional effort to regulation of individuals. Given the time to order the submittal of over 100 reports of waste discharge; review those ROWDs and take follow-up action on any deficient ROWDs; hold the hearings necessary to adopt the WDRs; and address any petitioned WDRs; it would likely be years before a new program was fully in place. In addition, individual growers would have limited options (e.g., shutting off sumps), which would likely result in flooding of the downslope
by the Regional Board or the State Board to continue with or without the drainage entity. It is highly likely that the Grasslands Area Farmers (GAF) would continue to work cooperatively to solve their drainage problems as part of the larger Westside Regional Drainage Management Plan. The inability to discharge selenium contaminated drainage water in excess of Basin Plan water quality objectives means that the GAF would find other ways to deal with their problem such as increased use and size of the San Joaquin River Improvement Project (reuse area). Ultimately, the Regional Board would have to take enforcement actions against the drainers. The proposed Basin Plan Amendment appears to be a rationale for the Regional Board to avoid doing its job, to avoid using its authority appropriately. Comments by USEPA and others agree with us that the No Action Alternative is inappropriately characterized.”

10.12 CWIN et. al

“C. The cumulative impacts analysis in the FED and EIS/EIR should have considered and analyzed the impacts of this project on restoration of salmon in the San Joaquin River, as well as the cumulative impacts of groundwater pumping. We commented in writing and orally by Tom Stokely at the 5/27 Regional Board hearing that the CEQA documentation did not fully consider impacts to restore salmon in the San Joaquin River, nor did it consider the impacts of groundwater pumping in the region on water quality. C-WIN provided documentation from Dr. Dennis Lemly, research biologist and expert on selenium, that the continued selenium discharges into the San Joaquin River would kill up to 50% of the juvenile salmon and steelhead. Comments by the U.S. Fish and Wildlife Service on the EIS/EIR noted that Reclamation mischaracterized selenium impacts on salmonids in the San Joaquin River. USFWS stated in their comments to the Regional Board that “…the revised compliance schedule…is not protective of salmonids and could result in the loss or harm to outmigrating young salmon on the San Joaquin River.”

Staff and board response—Response to comment R3-USFWS stated that “the information on impacts to salmonids was considered in drafting the staff report.” Response to comment R11-C stated that “groundwater pumping, water transfers and land use decisions are outside the scope of the proposed Amendments.”

Discussion—Regardless of authority, the Regional Board has an
obligation under CEQA to disclose probable environmental impacts to water quality, fish, wildlife and other resources, as well as cumulative impacts from other reasonably foreseeable actions. There was no disclosure in the FED regarding potential impacts to and conflicts with the San Joaquin River Restoration Program and the likely mortality of salmonids, nor was there disclosure that regional groundwater pumping efforts may be degrading water quality and increasing biological exposure to selenium.”

10.13 CWIN et. al

“D. There is a deferred mitigation violation in the EIS/EIR and FED for water supply to state and federal refuges. We commented in writing and Tom Stokely stated at the 5/27 Regional Board hearing that the mitigation well water supply for loss of Mud Slough habitat was not completed and that there is no mitigation monitoring requirement that the well meet the 2 μg/l Basin Plan objective for wetland water supplies.

Staff and board response—Comment R12-C stated that there is clean groundwater in the area and that the water supplied will have to comply with the 2 μg/l objective.

Discussion— The response did not address the fact that there is no mitigation monitoring requirement to ensure that the 2 μg/l objective is met. The response did not provide specific information regarding the water quality of the proposed well either—it just asserted that it would be fine without providing evidence. A more suitable and reliable source of water would be water from the Delta provided by the Exchange Contractors.”

As stated in the Central Valley Water Board’s response to comments, not all groundwater in the Grasslands area is contaminated with selenium and groundwater or surface water to supply wetland mitigation habitat must comply with the 2 μg/l objective for the wetland water supply channels. Accordingly, there is no deferred mitigation violation. Mitigation monitoring will be provided through updated WDRs issued to the project upon final approval of the amendment.

10.14 CWIN et. al

“E. The EIS/EIR and FED fail to identify a flood control plan for the upper watershed as a potential mitigation measure. Our written comments and those of the USFWS stated that a significant amount of selenium is discharged during storm events and that a key to meeting water quality objectives is to control those discharges.

Staff and board response—Response to comment R15-C stated that this issue is outside the scope of the proposed amendments, but that such a plan was to be addressed in the Use Agreement.

Discussion—The Regional Board has an obligation under CEQA to identify feasible alternatives and mitigation measures. Clearly an

Since the current selenium control program for the San Joaquin River Basin was adopted in 1996, flood events have been rare and short term in nature. While the flood flows carry selenium and contribute to violations of water quality objectives, agricultural subsurface discharges have been found to be the primary source of selenium discharges. The Central Valley Water Board’s selenium control program, therefore, focuses on the regulation of subsurface agricultural drainage discharges.

Also, see response to comment 10.3 and 10.10
upslope watershed program that reduces selenium inputs into the Grasslands area would greatly improve the possibility that Basin Plan water quality objectives for selenium will be met. Prohibitions on cultivation of floodplains, limitations on Off-Highway Vehicle use, grazing and other land-disturbing activities would be key components of a plan to reduce significant upslope seleniferous sediment discharges."

The Central Valley Water Board will require the Grassland Area Farmers to submit a feasibility study and analysis in two years, which describes how they intend to meet the revised compliance date, whether through treatment or other methods. Since that information is not available at this time, it is not included in the Staff Report.

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<th>10.15</th>
<th>CWIN et. al</th>
<th>“F. The Regional Board’s Functional Equivalency Document fails to adequately describe and analyze the impacts from a reverse osmosis treatment facility. The FED mentions only the energy impacts of a reverse osmosis facility to treat contaminated drainage. However, the entire success of this project to meet water quality objectives relies on a treatment facility that is admittedly not technically feasible, funded or designed. The FED should include a more robust description of the facility, its cost to build and operate, and at least range of estimated impacts including, but not limited to energy usage and global warming impacts.”</th>
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Commenters are incorrect that Central Valley Water Board’s action on this Basin Plan amendment triggers consultation requirements under CESA beyond that already carried out by the Board or that the Board action is otherwise inconsistent with the requirements of CESA. Fish and Game Code section 2080 provides that “no person shall . . . take . . . any species . . . that the commission determines to be an endangered species or a threatened species . . . except as otherwise provided [in CESA].” CESA sets out several procedures by which a take may nevertheless be authorized, including an incidental take permit issued by DFG under section 2081 or a determination by DFG under section 2080.1 that a take permit issued by a federal agency is consistent CESA. Neither the section 2081 process for obtaining an incidental take permit, nor the section 2081.1 process for review of a federal take permit is triggered as a result of Central Valley Water Board action on the basin plan amendment. An obligation under section 2081 arises when a take will occur and

| 10.16 | CWIN et. al | “4. There is no attempt to achieve compliance in the proposed project’s design with the California Endangered Species Act (CESA) for the Delta Smelt, Giant Garter Snake, Swainson’s Hawk, San Joaquin Kit Fox, spring run Chinook and other state listed species for the Proposed Action. We commented in writing and Tom Stokely stated orally at the 5/27 Regional Board hearing that there is no information in the record that the project proponents have done anything other than coordinate with the Department of Fish and Game’s (DFG) Wildlife Refuge unit. However, there has not been issuance of a CESA incidental take permit or consistency determination by DFG, as required by law. Coordination should not be confused with attaining protection and recovery of endangered species.

**Staff and board response**—Written response R3-C restates that DFG has had ample opportunity for input. It does not address the lack of CESA documentation for the proposed Basin Plan Amendment. During the 5/27 Regional Board hearing, Ms. Wadhwani of the Regional Board staff responded that there were no impacts to listed species and therefore no consultation with DFG was required.

**Discussion**—The fact that there was consultation with the National
Marine Fisheries Service and a Biological Opinion from the U.S. Fish and Wildlife Service indicates that there is a potential for impacts to state listed species. There is a specific process in Fish and Game Code 2080.1 where a federal biological opinion can be used to satisfy CESA requirements. No such consistency determination by the Department of Fish and Game has been issued. The proposed Amendment cannot be approved until CESA has been complied with."

that obligation attaches to the party causing the take, i.e. the discharger; further, there was no federal take permit issued in this case and therefore a consistency determination under 2080.1 was never required. The Waste Discharge Requirements will require the dischargers to comply with CESA.

Further, and contrary to commenters’ assertions, both the parties to the Use Agreement and the Central Valley Water Board have met any requirements to consult with Fish and Game they may have had in connection with the development of the Use Agreement and in connection with this Board action. The Department of Fish and Game participated in the Use Agreement negotiations and DFG’s input is reflected in the mitigation measures in the 2010 Use Agreement. The Use Agreement was supported by a Biological Opinion by USFS, along with a letter from National Marine Fisheries Service. The Biological Opinion concluded:

After reviewing the current status of the species considered in this opinion, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service’s biological opinion that continuation of the GBP and execution of the third Use Agreement for use of the SLD, as described, is not likely to jeopardize the continued existence of the giant garter snake and the San Joaquin kit fox.

National Marine Fisheries service found: Based on our review of the material provided and the best scientific and commercial information currently available, NMFS has determined that execution of the 3rd Use Agreement for the
| 10.17 | CWIN et. al | **“5. Recommendation to SWRCB for Cease and Desist Order for delivery of irrigation water to toxic lands.”** We commented in writing and Tom Stokely stated orally at the 5/27 Regional Board hearing that since the cause of the problem of subsurface agricultural drainage is application of irrigation water, the Regional Board should make a recommendation to the State Board to issue a Cease and Desist Order for delivery of water to these lands. |

Grasslands Bypass Project, is not likely to adversely affect Central Valley steelhead, Sacramento winter-run Chinook salmon, Central Valley spring-run Chinook salmon, or the Southern DPS of North American green sturgeon, or modify any of their respective designated critical habitat.

The EIS/EIR was submitted to DFG for review and DFG additionally had an opportunity to weigh in on the USFS and NMFS findings.

The Staff Report in support of the Basin Plan amendment was circulated to DFG and DFG was therefore provided with an opportunity to comment. At no point has DFG indicated that it had insufficient opportunity to participate in or comment on the proposed Central Valley Water Board action, stated that it did not concur with the biological opinions of the federal agencies, or otherwise expressed concerns with regard to potential CESA violations. Additionally, if adopted, the amendment will be subject to a DFG determination at that time.

It should be further noted that DFG will remain an active participant in the monitoring and oversight of the Grassland Bypass Project through the Data Collection and Reporting Team, the Technical and policy Review Team and the Oversight Committee.

The Central Valley Board’s Basin Plan indicates that it will ask the State Water Board to use it water rights authority if the water quality regulatory process is not effective. Granting a time extension for the ongoing control effort indicates that, after reviewing progress made to date, the Central Valley Water Board expects the
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<td><strong>Staff and board response</strong>—The delivery of water is outside of the purview of the Regional Board.</td>
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<td>process to succeed.</td>
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<td><strong>Discussion</strong>—As discussed in Important Point Number Two in item 1 above, Basin Plan policy states that “achievement of the objectives depends on applying them to controllable water quality factors.” Clearly, the application of surface water to toxic lands is a controllable factor. The Regional Board has the authority and obligation to make recommendations to the State Board when water rights affect water quality. The Regional Board has not done so and did not address the issue adequately.”</td>
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<td><strong>“6. The proposed Basin Plan Amendment conflicts with the San Joaquin River Restoration Program.</strong> We commented in writing and orally by Tom Stokely at the 5/27 Regional Board hearing that there information in the record from both research biologist Dennis Lemly and the U.S. Fish and Wildlife Service (USFWS) that the continued selenium discharges into Mud Slough and the San Joaquin River could result in substantial mortality of salmon and steelhead.</td>
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<td>The concern regarding the potential impact of selenium on salmon is mentioned in the staff report.</td>
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<td><strong>Staff and board response</strong>—Response to comment R3-USFWS stated that “the information on impacts to salmonids was considered in drafting the staff report.”</td>
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<td>It is important to note that the San Joaquin River Restoration Program will result in a significant increase in flows in the river at the confluence with Mud Slough. The elevated selenium levels evaluated by USFWS and compared to salmonid effects levels are based on current conditions - essentially no / low upstream San Joaquin River flows, which would dilute the selenium discharge, and no salmonid migration. Any analysis will need to look at both the duration of exposure and the likely concentration of selenium salmonids will be exposed to once the restoration flows are provided. State Water Board staff agrees with the USFWS recommendation that such analysis be conducted within the next two years and recommend that the Central Valley Water Board require this work through the update of the WDRs.</td>
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<td><strong>Discussion</strong>—There is no discussion in the FED or the Staff Report on the potential for significant impacts to salmon restoration in the San Joaquin River. There is no discussion of the scientific disagreement between Reclamation and USFWS regarding impacts to salmonids. The concurrence memo to Reclamation from the National Marine Fisheries Service does not absolve the Regional Board from disclosing potential scientific disagreements regarding the biological impacts to a major federal salmon restoration program on the San Joaquin River.”</td>
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<td><strong>“7. There is strong evidence contained in the U.S. Fish and Wildlife Service's Biological Opinion for the Grasslands Bypass Project and other reports of existing and continued high risk of selenium exposure to listed species and birds protected under the Migratory Bird Treaty Act from the</strong></td>
<td></td>
<td>This comment raises several selenium-related issues, most of which are not related to changing the effective date of a prohibition of discharge as proposed by the amendment.</td>
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10.18 CWIN et. al

10.19 CWIN et. al
Grasslands Bypass Project.

**Staff and board response**—Response R7C stated that operation of the drainage reuse area is outside the scope of the proposed Amendments, but that the issue will be considered in issuance of Waste Discharge Requirements.

**Discussion**—The FED checklist should have identified that part of the project is potentially resulting in take of bird species protected by the Migratory Bird Treaty Act, including black necked stilts and American Avocets within the reuse area.

Other sources of selenium should have also been identified in the FED. Six sumps along the Delta-Mendota Canal discharge highly contaminated groundwater into the DMC, which supplies water to refuges and wetlands in Grasslands. The U.S. Fish and Wildlife Service’s Biological Opinion also indicated that the Poso/Rice/Almond drain areas adjacent to the Grasslands area are discharging uncontrolled drainage water into areas such as the Agatha Canal, which periodically has extremely high selenium levels.

Additionally, a study by the U.S. Fish and Wildlife Service identified that several bird species protected under the MBTA are considered “species most at risk” from selenium contamination in the San Francisco Bay. Greater scaup, lesser scaup, black scoter, white winged scoter, surf scoter and bald eagle are listed as “species most at risk” from selenium contamination and all are covered by the MBTA. By allowing continued discharges of selenium in excess of Basin Plan objectives, there is downstream contamination and selenium bioaccumulation in the Bay-Delta which should be addressed in the FED and staff report. The staff report does not even acknowledge that over 40,000 acres in the Delta are listed as impaired by selenium and the San Joaquin River is a major source of that impairment. Furthermore, these discharges are contaminating navigable waterways in violation of the Commerce Clause of the U.S. Constitution (Article I, Section 8, Clause 3) and the Public Trust.”

The WDRs for the Grassland Bypass Projects and/or other aspects of the Central Valley Water Board’s regulatory program can address the other issues raised.

Selenium loads have been reduced significantly by the control program and the San Joaquin River downstream of the Merced River is in compliance with selenium objectives, as evidenced by the State Water Board’s delisting of the San Joaquin River from the Merced River to Vernalis.

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10.20 CWIN et. al “8. There is ample evidence that the Grasslands Bypass Project and the larger Westside Regional Drainage Plan are...
concentrating and storing selenium, salt and boron in the shallow aquifers of the region, prolonging the risk of surface water discharges with large selenium loads and regional degradation of groundwater.

**Staff and board response**—Written response to comment R6a-C does not address selenium storage in aquifers, but states that continued participation by the discharges in CV-SALTS is important.

**Discussion**—Weekly samples taken at Site H (San Joaquin River at Hills Ferry) show selenium levels on January 19 and 20, 2010 higher than selenium in Mud Slough downstream of the San Luis Drain discharge (52 μg/l vs. 8.2 μg/l). This indicates that either there are unregulated discharges in that area, or that the regional aquifer has filled up with selenium-contaminated drainage water and is discharging to the river or Mud Slough. See Figure 1 below.

The staff report and FED fail to disclose adequately the risks of continuing to reuse and concentrate selenium contaminated agricultural runoff/drainage from these lands in regional aquifers, and that the Basin Plan Amendment provides a free ride to unregulated dischargers.”

groundwater of the Grassland watershed pending development of storage and/or disposal facilities. These constituents occur naturally at elevated levels in the shallow aquifers and soils. CV-SALTS is a project to develop Basin Plan amendments that will address salinity in the Central Valley, including the salt and boron associated with the Grassland watershed.

The source of high selenium levels detected in the San Joaquin River at Hills Ferry is under investigation by the Grassland Bypass Project Data Collection and Review Team. Conclusions from this investigation can be used by the Central Valley Water Board to modify the monitoring or regulatory effort, as appropriate.

The Basin Plan amendment is a change to deadlines in a compliance program that applies to subsurface agricultural drainage discharges. There was no intent to evaluate all aspects of selenium management in the watershed.
“9. Inconsistency of Basin Plan Amendment with State and Federal Antidegradation Policies

Both the federal government and the State of California have adopted antidegradation policies as part of their approach to protect water quality. The Selenium BPA is inconsistent with both of these regulations.

A. Federal Antidegradation Policy

Federal antidegradation policy (40 CFR Section 131.12) states in part:

... The Regional Board Staff report (p. 25) acknowledges that the amendment will result in “temporary continuation of the potential impairment to warm freshwater habitat, spawning and wildlife habitat.” In fact the Board acknowledges that “with the amendments, water quality in Mud Slough (north) will remain vulnerable to degradation for up to an additional nine years, three months beyond 1 October 2010.” (Ibid.)

The Regional Board argues that the amendment is consistent with federal antidegradation law because the degradation of state waters is justified. Specifically, the Board argues that the degradation is justified because it will improve water quality in the future. (Staff Report, supra, p. 25.) However, this circular argument fails to account for alternative actions which could be taken to benefit wildlife without first degrading state water. The Regional Board fails to support any contention that the amendment is necessary.

The Board also concludes that wildlife will degrade without the amendments because “the cooperative drainage management organization (GAF) could dissolve; and with it, the economic support for the regional drainage management system . . . ” (Staff Report, supra, p. 25.) The report continues to conjecture as to what difficulties might ensue if the GAF were to dissolve. Ibid. This argument is purely speculative. There is no firm basis for asserting that the GAF would dissolve without the amendments or any basis for asserting what would happen if the GAF were, in fact, to dissolve.

The Regional Board states that the “discharge of agricultural

The Basin Plan amendment extends a compliance schedule for attainment of the water quality objective for selenium in limited segments of Mud Slough and the San Joaquin River. The Basin Plan amendment does not change the requirement that the water quality objective for selenium is met in these segments at the end of the compliance period. The water segments in question are currently impaired for selenium and are neither waters “exceed[ing] levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water” within the meaning of the federal antidegradation policy, nor “high quality waters” within the meaning of the state antidegradation policy. Accordingly, attainment of the water quality objective for selenium is the appropriate legal standard under any anti-degradation analysis, consistent with both 40 CFR 131.12(a)(1) and State Water Board Policy 68-16.

As acknowledged in the Staff Report, the extension of the compliance deadline may result in “temporary continuation” of potential degradation during the compliance period in that the achievement of water quality objectives may be delayed. However, the Central Valley Water Board has always had clear authority to provide for a compliance schedule in the achievement of water quality objectives. See CWC §§ 13242 and 13300. Given this authority, the Regional Board acts within its discretion in providing a compliance period, even if the requirements of the anti-degradation policies are not strictly met during that period.

Further, even if the Central Valley Board is required to demonstrate consistency with the federal and state anti-degradation policies during the compliance period, it has done so with its
subsurface drainage on a controlled, limited basis . . . is allowable under the federal anti degradation policy because the permanent diversion . . . has long-term environmental benefits to the wildlife utilizing this portion of the Pacific Flyway and the Grasslands Ecological Area . . . ” (Staff Report, supra, p. 25.) Delta farmland, part of the Pacific Flyway, is an extremely important habitat for a wide range of birds and wildlife. International conservation programs, as well as local and regional forms of habitat designations and programs all recognized that these lands are an important part of the landscape used by these migratory birds. Give the land’s ecological significance, any degradation of water quality is prohibited under the federal antidegradation policy.”

“B. State Antidegradation Policy

The Regional Board also argues that the amendment is a justified violation of state antidegradation laws. Antidegradation provisions of the State Water Resources Control Board Resolution No. 68-16 (“Statement of Policy with Respect to Maintaining High Quality Water is California”) states in part:...

The Regional Board argues that the amendment is consistent with the state antidegradation policy because water degradation will continue to occur with or without the amendment. (Staff Report, supra, p. 26.) Essentially this argument is based on the assumption that without the amendment no alternative actions will be taken. The argument also fails to acknowledge that regardless of what may or may not happen in the future, the amendment will worsen the present quality of the water which is inconsistent with State antidegradation policy.

The Regional Board argues that the “maximum benefit to the people of the State is best served by temporarily allowing water quality in Mud Slough (north) to be degraded in a controlled manner while full regional drainage management capability is developed.” The Regional Board has failed to show that the amendment will result in the best practicable treatment or control of the discharge necessary to circumvent pollution and ensure that the highest water quality consistent with maximum benefit to the people of the State will be maintained as required under State antidegradation policy. As a

analysis in the Staff Report:

As a preliminary matter, the Basin Plan Amendment includes a new performance goal, which will result in improvements in water quality in Mud Slough, rather than degradation during the compliance period. The selenium levels discharged (load and concentration) prior to the project were much higher than is currently being discharged. Extension of the compliance date is likely to continue to result in improvements from pre-project conditions, not a worsening of conditions.

Moreover, the best practicable control of the discharge is to manage it regionally and eliminate any agricultural drainage from the wetland supply channels and the Basin Plan amendment facilitates the Use Agreement enabling such regional management.

The GBP Use Agreement includes mitigation measures to provide additional habitat along Mud Slough in State and Federal wildlife refuges and these mitigation measures will be incorporated into the WDRs. In addition, the Basin Plan Amendment provides that the prohibition can be applied immediately by the Central Valley Water Board, if adequate mitigation is not provided.

Finally, temporary degradation, if any, would be consistent with important economic or social development and with the maximum benefit of the people of the State. Incomplete control over agricultural subsurface drainage, resulting in the absence of the implementation of the Use Agreement; will cause cropland to be damaged as well as cause increased selenium exposure risk to wildlife from groundwater seepage to deep drains and conveyance channels. Such
result, the Selenium BPA violates State antidegradation policy.”

economic and environmental detriments are better avoided with continuing the regional effort rather than facing the regulatory delays and gaps that will result from changing course to individual regulation of dischargers.
| 10.22 | CWIN et. al | “10. Impacts to green sturgeon, a federally—listed threatened species are not disclosed.

Green Sturgeon are extremely sensitive to selenium. While there is no information about specific selenium levels in green sturgeon from the Delta, white sturgeon, which USFWS considers to be a representative surrogate species for the green sturgeon, have been the subject of detailed studies within the San Francisco Bay estuary. San Francisco Bay white sturgeon were found to have extremely high levels of selenium, in some cases exceeding the threshold of reproductive toxicity by up to seven times in adults and thirty five times in eggs. The high bioaccumulation efficiency of Asian clams and their importance in the diet of white and green sturgeon ensures that any selenium reaching the estuary from upstream sources contributes to the exposure risk of green and white sturgeon.

Kaufman et al determined that green sturgeon are more sensitive to selenium than white sturgeon, and that white sturgeon should NOT be used as surrogate species for green sturgeon. An article recently published in Science and the Total Environment clearly documents the sensitivity of green sturgeon to selenium. It strengthens the evidence that EPA's proposed criteria for selenium are not protective of green sturgeon. The article reports that selenium at the proposed EPA criterion concentration of 7.9 ug/g (maternal whole body dry wt.) would cause about 90% mortality of larvae that hatch from the eggs of green sturgeon. The study determined larval/egg LC05 of 3.07 μg/g and LC10 of 3.73 μg/g, which translates into maternal whole body LC05 of 1.93 μg/g and LC10 of 2.34 μg/g.

Observed levels of selenium in the Bay-Delta are likely to have an adverse effect on green sturgeon. The studies listed above show that green sturgeon is as sensitive as salmonids to selenium, except that green sturgeon are even more vulnerable because they eat clams, many of which bioaccumulate very high selenium levels that have not declined in recent years. Given existing high levels of selenium in Bay-Delta white sturgeon and recent declines especially for green sturgeon, it's clear that selenium from the Grasslands Bypass Project has a very significant negative impact on green sturgeon. The Regional Board failed to disclose this impact in the

The article by Kaufman was published after the Central Valley Water Board adopted the amendment. However, it should be noted that the comments are directed toward selenium levels in San Francisco Bay and possibly the Delta. In order to meet the proposed performance goal in Mud Slough, further selenium load reductions will be required. These reductions are on top of the 75%+ reductions that have already occurred. Any potential effects on downstream waters have already been significantly reduced, as evidenced by the removal of the San Joaquin River from the 303(d) list for selenium impairments and the lack of a selenium listing in the Delta.
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| 10.23 | CWIN et. al | "11. The proposed Amendment contributes to violation of State Board Resolution No. 88-63, Sources of Drinking Water Policy.  
Resolution No. 88-63: Sources of Drinking Water Policy states that all waters of the state are to be protected as existing or potential sources of municipal and domestic supply water (MUN). The proposed Basin Plan amendments are inconsistent with this policy because they fail to protect a MUN beneficial use. The drinking water standard for selenium is 50 μg/l. This water quality objective was exceeded at Site H (Hills Ferry on the San Joaquin River) on January 20, 2010 (52 μg/l) and on November 6, 2007 (86.1 μg/l). Furthermore, in reviewing historical weekly monitoring data at Site H (October 1996 through March 2010), it appears that water quality in the San Joaquin River is already degrading, rather than improving. See Figure 2 below. Consider the following:  
- The drinking water standard of 50 μg/l for selenium has been exceeded twice since 2007.  
- Between August 11, 2009 and January 20, 2010, the average weekly selenium concentration at Hills Ferry was 15.77 μg/l.  
There are either unregulated discharges into the San Joaquin River and Mud Slough, or selenium has concentrated in the regional aquifer and is discharging to surface waters. It is clear that drinking water is at further risk from the proposed Basin Plan Amendment." |
| 11.1 | Sierra Club, Friends of the River, Pacific Coast Federation of Fisherman’s Associations, Planning and Conservation League, North Coast Rivers Alliance, Southern California Watershed Alliance, | "Sierra Club California, Friends of the River, Friends of Trinity River, Pacific Coast Federation of Fisherman’s Associations, Planning and Conservation League, North Coast Rivers Alliance, Southern California Watershed Alliance, other environmental groups and some of our members (Environmental Coalition) submitted extensive written and oral comments to the Central Valley Regional Water Quality Control Board for the 2 hearing on May 27, 2010. We incorporate those comments by reference. Most of the comments were either ignored completely, or insufficient responses were given by Regional Board staff." |

The goal of the selenium control program is comply with the 5 μg/l objective that is protective of aquatic life. This will be protective of the designated potential drinking water use in the San Joaquin River upstream of the Merced River. The Central Valley Water Board has designated uses for Mud Slough and there is no designated MUN use.
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| "We recommend that the proposed Basin Plan Amendment NOT be granted. The proposed Basin Plan Amendments effectively sanction pollution of Mud Slough, the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta, by failing to enforce science-based protective water quality standards for selenium and allowing the continued contamination of these water bodies. Too much selenium in streams kills or deforms fish and other aquatic life, including waterfowl, and is a human-health concern in drinking-water supplies. Selenium is one of a number of contaminants that are discharged from the federally owned San Luis Drain directly into the waters of the state. This failure to enforce protective selenium water quality objectives transfers pollution from these Grassland drainers through this federal drain to the waters of the state, harming beneficial uses of these waters for our members’ recreational use, domestic water supply, public health and public trust values."

The Basin Plan Amendment reflects an update in a selenium control program adopted in 1996. The Central Valley Water Board found that the deadlines set at that time could not be met and additional time is needed to achieve compliance with objectives. Significant progress has been made and there is no intent to discontinue the effort to reduce selenium discharges.

Also, please see above responses to 10.3 and 10.4 above.

| **11.3 Sierra Club et. al** |
| "The Central Valley Regional Water Quality Control Board believes that controlling this selenium pollution at its source—the export of Delta water to irrigate toxic selenium soils and then sending the drainage selenium pollution back—is not within its regulatory authority. Such control of pollution and unreasonable uses of water, however, certainly is within the State Boards authority.

See Racanelli Decision (*United States v. State Water Resources Control Board*, 182 Cal.App. 3d 82, 130 (1986)): We perceive no legal obstacle to the State Board's determination that particular methods of use have become unreasonable by their deleterious effects upon water quality. Obviously, some accommodation must be reached concerning the major public interests at stake: the quality of valuable water resources and transport of adequate supplies for needs southward. The decision is essentially a policy judgment requiring a balancing of the competing public interests, one the Board is uniquely qualified to make in view of State Water Board staff agrees with the commenter that this is an important policy determination that must balance competing interests. The Central Valley Water Board has shown that the control program has been effective and the removal systems in place seem to be working. The State Water Board also acknowledges that at any time any of the parties involved in the project oversight, including the Central Valley Water Board and the State Water Board deem that the program is not effective they may petition the State Water Board to enforce water rights at their discretion. |
| 11.4 Sierra Club et. al | “The proposed amendment, if finalized, would substantially weaken the Basin Plans existing program by delaying the selenium objective in these waterbodies by another nine years, three months. This open-ended extension would needlessly facilitate additional discharge of selenium-contaminated water, vitiating compliance with key provisions of the Basin Plan and the Clean Water Act, as well as state policy for water quality control. (See Wat. Code section 13146.) The amendment will allow for existing control programs to move forward. These operations will be regulated by WDRs, so this is not an open-ended relaxation of the regulatory program. The updated WDRs are expected to call for additional selenium reductions during the term of the time extension. | Despite their earlier letter, EPA approval authority remains uncertain. EPA’s assertion of approval authority in its comments made to the Regional Board will be resolved in subsequent discussions with EPA. |
| 11.5 Sierra Club et. al | “The EPA’s concerns, which went substantially unanswered, are of particular importance. EPA confirmed that extending the Basin Plan’s compliance timetable is an “Amendment,” reviewable by the EPA under section 303(c) of the Clean Water Act. Section 303(c)(2) requires the EPA Administrator to review the proposed revisions, which must among other things “protect the public health or welfare, enhance the quality of the water and serve the purposes of the Act.” Where the revised standard does not meet the Clean Water Acts requirements, sections 303(c)(3) and 303(c)(4) empower the EPA Administrator to specify changes, and if needed, to adopt a new standard.” | The 5 ug/L objective will be in effect. The time schedule allows for additional time before the prohibition of discharge goes into effect. |
| 11.6 Sierra Club et. al | “The Staff Report asserts that it is in compliance with the Clean Water Act because “[t]he proposed amendments will not change the water quality objectives that now protect [Salt Slough, wetland water supply channels, and the San Joaquin River]. The amendments simply allow additional time for the objective to be met in Mud Slough [north] and the San Joaquin River above the Merced in a manner the dischargers find feasible.” (Staff Report, p. 27.) This contention is untenable. The proposed amendments, if approved, would remove the protective water quality standard of 5 μg/L set to be in effect on October 1, 2010, and would authorize proceeding without a protective selenium water quality standard in place until December 31, 2019. Further, the amendment will continue the practice of merely shifting the pollutants from Salt Slough to Mud Slough and continue discharge of these highly toxic pollutants into the San Joaquin River, There is not just a shift of discharge from Salt Slough to Mud Slough. There have been significant overall reductions in selenium loading. |
| 11.7 | Sierra Club et. al | “The EPA expressed “concerns regarding the feasibility of the Grassland Bypass Project (GBP) operators being able to implement appropriate drainage treatment technologies by December 31, 2019” and instead, “believe[d] it would be prudent for the [Regional] Board to consider other approaches to drainage management that could provide alternative means of meeting the proposed performance goal by 2015 and the final water quality objective by 2019,” such as a targeted removal of lands that contribute high selenium inputs and rotational land fallingow. (EPA Comment Letter, April 26, 2010.) The Regional Board’s responses to these comments—that the dischargers would have to submit a report to the Regional Board, and that the Board cannot mandate that land be retired to comply with the water quality objectives—were inadequate. (See Responses R1a-C, R1c-C, and R2-USEPA.)” | State Water Board staff agrees with the Central Valley Water Board’s staff. Water Code Section 13360 states: “13360. (a) No waste discharge requirement or other order of a Central Valley Water Board or the State Water Board or decree of a court issued under this division shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner. However, the restrictions of this section shall not apply to waste discharge requirements or orders or decrees with respect to any of the following:

(1) Discharge of solid waste to disposal sites other than evaporation ponds from which there is no drainage or seepage which requires the installation of riprap, the construction of walls and dikes, the installation of surface and underground drainage facilities to prevent runoff from entering the disposal area or leakage to underground or surface waters, or other reasonable requirements to achieve the above or similar purposes.

(2) Discharges of waste or fluid to an injection well, except any well which is regulated by the Division of Oil and Gas in the Department of Conservation pursuant to Division 3 (commencing with Section 3000) of the Public Resources Code and Subpart F of Part 147 of Title 40 of the Code of Federal Regulations and is in compliance with that division and Subpart A (commencing with Section 146.1) of Subchapter D of Chapter 1 of Title 40 of the Code of Federal Regulations.

(b) If the court, in an action for an injunction brought under this division, finds that the enforcement of an injunction restraining the discharger from discharging waste would be impracticable, the court may issue any order
| 11.8 | Sierra Club et. al | “Moreover, the Regional Board’s statement that “[d]ischargers must comply with the Basin Plan and their Waste Discharge Requirements, but the Board does not dictate how compliance is achieved” (R2-USEPA) does little to allay concerns about actual compliance when, after having 14 years to meet the standard, the dischargers receive a nine year, three month extension.” | WDRs have been used to successfully reduce the discharges and will continue to be used to require additional reductions. |
| 11.9 | Sierra Club et. al | These responses fail to adequately address the EPA’s suggestion that the ILRP could be an adequate substitute for the current cooperative agreement. And they fail to show how even with the speculated collapse of the cooperative agreement that the No Project Alternative is more environmentally damaging than having no protective selenium standards for the nine year, three month extension when admittedly the Regional Board would have other regulatory options and duties to implement. | State Water Board staff disagrees. The Central Valley Water Board staff stated that they would explore all regulatory avenues in the event the cooperative agreement dissolved, including the use of the Irrigated Lands Regulatory Program. |
| 11.10 | Sierra Club et. al | “Further, the staff report’s description of what could occur under the No Project alternative indicates that regulation of these toxic contaminants could be done, but staff considers it more convenient to delay enforcement of the regulation until some unknown treatment can be developed. Both federal and state water quality statutes demand the waters of the state not be degraded, even if regulation is difficult. Discharge of pollution is not a right of drainers’ use of imported water.” | The regional management of agricultural drainage in the Grassland Watershed has been successful in reducing selenium discharges and eliminating such discharges from potentially harming the most sensitive receptors – waterfowl in the wetland areas. Changing the control program at this time would cause delay without assurance of success and would likely cause water quality impacts while resources were diverted and new regulatory mechanisms developed. |
| 11.11 | Sierra Club et. al | “The EPA also outlined the potential for the Basin Plan Amendment to conflict with upcoming federal regulations. EPA indicated that it will soon publish revised CWA 304(a) aquatic life criteria for selenium. These standards will be more stringent than even the 5 μg/L standard that would be implemented on October 1, 2010 if the more polluting amendment is not adopted. EPA is also developing statewide wildlife criteria for selenium, pursuant to Endangered Species Act consultation with US FWS and National Marine Fisheries Service, for the California Toxics Rule. These criteria will most likely be more stringent than the revised draft national CWA 304(a) criteria, since .This Basin Plan Amendment does not propose to change the selenium water quality objectives, only the compliance schedule for the already approved objectives and the application of the prohibition of discharge. CWA 304(a) criteria are information/guidelines and do not become applicable standards unless the State acts to adopt those criteria as standards and the USEPA approves them under CWA 303 or the USEPA acts to promulgate those criteria as standards. |
they will be designed to protect threatened and endangered species in California.”

11.12 Sierra Club et. al

“The Regional Board responded that the “[one of the reports cited by USFWS] was considered in drafting the staff report; however modifications to the national criterion for selenium on which the San Joaquin River objective is based are outside the scope of the proposed Amendments.” (Response to Comments, R3-USFWS.)

This response fails to address the USFWS’ concern regarding the impacts of the proposed amendment on the protected species in the area directly affected by the proposed Basin Plan Amendment. The USFWS’ concerns are squarely within the Regional Board’s purview. As the USFWS remarked, the proposed 9 year extension and the contamination it would allow compounds the reasonable and beneficial use problem that has eluded effective resolution. Namely: “Exceedences of the State-adopted, federally approved chronic water quality objective for selenium in the Grassland wetland water supplies are a continuing problem and are resulting in failure to protect designated beneficial uses, including use by wildlife species.” (USFWS Comment Letter, p. 3 [emphasis in original].)”

The Basin Plan has provisions for protection of the wetland water supply channels and the concerns raised by this comment can be addressed through the regulatory process. In some cases, WDRs may have to be issued to control discharges from subsurface agricultural drainage systems outside of the area serviced by the Grassland Bypass Project.

The only water supply channel that will be impacted by the proposed amendment is Mud Slough and the new Use Agreement for the Grassland Bypass Project contains mitigation measures that address those impacts. The prohibitions and compliance dates for the other wetland water supply channels would not be changed by these amendments.

11.13 Sierra Club et. al

“The EPA and USFWS letters corroborate key problems with the proposed open-ended extension identified, and further detailed, in the Environmental Coalition comments. The proposed alternative of a two-year extension would better protect water quality and further federal laws and policies. The failure to adopt that alternative cannot be avoided simply via speculation about the failure of continued cooperation of regional stakeholders. We urge the State Board to take over the control and regulation of the selenium discharge from the San Joaquin Valley using the federal San Luis Drain to transfer this pollution to the San Joaquin River and Sacramento-San Joaquin Delta.”

State Water Board staff recommends continued support of the Central Valley Water Board control program and believes this discharges are most effectively regulated by the Central Valley Water Board.

11.14 Sierra Club et. al

“THE REGIONAL WATER BOARD’S APPROVAL CONFLICTS WITH STATE AND FEDERAL ANTI-DEGRADATION POLICY

Both USEPA (40 CFR §131.12) and the State of California (State Water Board Resolution 68-16) have adopted antidegradation policies as part of their approach to regulating water quality. The Regional Water Board must ensure that its actions do not violate the

Please see response to comment 10.21 above.
| 11.15 | Sierra Club et. al | **APPROVAL OF THE OPEN-ENDED EXTENSION WOULD FRUSTRATE IMPLEMENTATION OF KEY BASIN PLAN OBJECTIVES**
Compliance with Basin Plan objectives and their implementation program is mandatory. (See State Water Res. Control Bd. v. Office of Admin. Law (1993) 12 Cal. App. 4th 697, 701-02.) The proposed nearly decade-long compliance extension comes in direct conflict with crucial Basin Plan Objectives, and the proposed amendment fundamentally alters the basin plan selenium pollution controls out of meaningful existence. Waiving enforcement or “implementation” for almost a decade has the effect of sanctioning pollution that will bioaccumulate in plant material, enter the food chain, and gather in groundwater and surface water supplies so as to significantly impact beneficial uses for decades.” | The change is based on a reevaluation of the current control program and the time it will take to implement additional control measures. Discharges will continue to be regulated through WDRs that are expected to call for additional load reductions. |
| 11.16 | Sierra Club et. al | “The Regional Board admits that the “proposed time extension will . . . potentially result [] in violation of the selenium water quality objective | The reference to “activities that increase the discharge of poor quality agricultural surface |
in Mud Slough (north) and the San Joaquin River above the Merced River.” (Staff Report Environmental Checklist, Section 9 “HYDROLOGY and WATER QUALITY.”) The Basin Plan prohibits “[a]ctivities that increase the discharge of poor quality agricultural subsurface drainage.” (Basin Plan, Resolution No. 96-147, p.16.) The record shows the Regional Board’s action will allow discharge of selenium contaminated water into Mud Slough, a tributary of the San Joaquin River, in excess of Basin Plan water quality objectives. The Regional Board amendment fails to take action to stop selenium discharges to Mud Slough and the San Joaquin River in excess of Basin Plan Water Quality Objectives. The failure to stop this discharge of pollution will further deteriorate the waters of the state and the Sacramento-San Joaquin Delta and its tributaries.

| 11.17 | Sierra Club et. al | “Furthermore, the Basin Plan requires that “[w]here the Regional Water Board determines it is infeasible for a discharger to comply immediately with such objectives or criteria, compliance shall be achieved in the shortest practicable period of time (determined by the Regional Water Board), not to exceed ten years after the adoption of applicable objectives or criteria.” (See Basin Plan, at III-2.00.) The ten years has not only already been exhausted, it has been exceeded, as the objectives were promulgated in 1996. (Resolution 96-147.) Allowing additional time for compliance is a violation of the Basin Plan. (See Basin Plan, at III-2.00.)” | Reference response to CWIN comment. |

| 11.18 | Sierra Club et. al | “Under the Basin Plan disposal of drainage wastewater and dilution of salt is not a beneficial use and “cannot be satisfied to the detriment of beneficial uses.” (Resolution No 96-146; Basin Plan, p. II-1.00, Para. 2.) As the USFWS outlined, the extension of the compliance timeline for almost ten years will harm the other beneficial uses recognized in the Basin Plan.” | The time extension is to allow ongoing control efforts to be completed in an orderly fashion, not to provide the convenience of drainage discharge. |

| 11.19 | Sierra Club et. al | “The regional board staff response is woefully inadequate, as it essentially asserts the best way to achieve “compliance” is to change the Basin Plan rules or not enforce them: “It should be noted that the proposed change in the compliance schedule conforms to the time frame in the Grassland Bypass Project Use Agreement. The proposed Amendments merely allow the Use Agreement to be implemented while remaining in compliance with our Basin Plan.” (R2-USFWS at p.32.)” | The terms of the Basin Plan amendment do align with many of the features of the Use Agreement. The State Water Board staff note that the Use Agreement were developed through a negotiated process with downstream water users and environmental groups involved in the discussion. The Use Agreement includes additional selenium load reductions. The other components of the selenium control program (e.g., compliance in the wetland supply channels and San Joaquin River downstream of the Merced River and upstream |

“water” is based on the conditions as they existed in 1996. The ongoing discharge was occurring at that time, so there has been no increase. If fact there has been a decrease.

The project will continue to be regulated by WDRs that are expected to call for further reductions in selenium discharges over time.
|   | Sierra Club et. al | "APPROVAL OF THE SELENIUM POLLUTION WAIVER IS NOT IN COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT" The Regional Board invoked the regulatory exemption from the California Environmental Quality Act ("CEQA") for the Basin Planning process, arguing that its Staff Report and checklist were adequate to meet the further documentation required under Title 23, section 2377 of the California Code of Regulations. Instead of doing its own complete environmental analysis, the Regional Board relied almost exclusively on the EIS/EIR for the Grasslands Bypass Project (2010-2019), prepared by Bureau of Reclamation and San Luis & Delta-Mendota Water Authority, to satisfy CEQA. Delta-Mendota certified the EIR on February 8, 2009, and filed its Notice of Determination with the State Clearinghouse on October 8, 2009. The Bureau’s Record of Decision issued December 18, 2009. However, the exemption for the certified state regulatory programs is not a blanket exemption from CEQA, as the agency must still comply with CEQA’s policies, evaluation criteria and standards. The required environmental review must address all activities and impacts associated with a project. (Laupheimer v. California (1988) 200 Cal. App. 3d 440; Environmental Protection Information Center, Inc. v. Johnson (1985) 170 Cal. App. 3d 604.) The Regional Board must still provide responses to significant environmental objections, and must still properly analyze alternatives (including the No Project Alternative). (Mountain Lion Foundation v. Fish & Game Com. (1997) 16 Cal. 4th 105, 123.) The Regional Board failed to satisfy even these basic requirements. The Regional Board improperly discounted crucial new evidence, postdating the 2009 EIS/EIR and directed specifically at the Regional Board’s review and action on the Basin Plan amendment. For example, the Regional Board failed to consider the information contained in the 2010 EPA and USFWS letters, research biologist Dennis Lemly’s findings in December 2009 regarding salmonid mortality rates caused by selenium discharges in the San Joaquin River, and Thomas Maurer’s 2010 assessment of salmonids. These sources, as well as other comment letters, demonstrate that in its 2010 review, the Regional Board misidentified the No Project Alternative, evaded genuine assessment of the two-year extension alternative, and understated the project’s significant environmental problems. As pointed out in the staff report, giving the project two years to cease discharge can be achieved through a Cease and Desist order based on the current Basin Plan and WDR. This can be done without a modification to the current Basin Plan language and thus was deemed equivalent to the No Project Alternative. Additionally see responses to Comments 10.10 and 10.11. | The staff report noted the concern regarding salmon. |
impacts. In addition to water quality and others, those impacts include impacts on the use of floodwaters, and on the protection of aquatic life and fisheries."

| 11.21 | Sierra Club et. al | **APPROVAL OF THE AMENDMENT -- BASICALLY AN ENFORCEMENT WAIVER FOR SELENIUM POLLUTION -- VIOLATES LAWS PROTECTING ENDANGERED SPECIES**  

The Regional Board failed to conduct adequate analysis under either federal or state endangered species laws. The Regional Board’s citing of federal consultation letters with the Bureau of Reclamation -- the NOAA NMFS Concurrence letter dated November 19, 2009 or the USFWS Biological Opinion dated December 18, 2009 -- is insufficient for California Endangered Species Act (“CESA”) compliance. Reliance on the NOAA NMFS Consultation dated November 19, 2009 is insufficient as the letter does not analyze a waiver of the 5 μL selenium standard that extends until January 1, 2020. Nor does the letter take into account new evidence of additional impacts from December 2009 and early 2010 provided by USFWS and Dennis Lemly. In addition, the Water Board failed to consider the cumulative impacts of the discharge allowed under the proposed Basin Plan Amendment on the San Joaquin River and Delta ecosystem, inhabited by several federally and state listed species. The Regional Board’s entire statement regarding compliance with CESA in the Draft Staff Report is as follows: “[California Department of Fish and Game (“CDFG”) has been working closely with the Bureau and Authority to craft the 2010-2019 Use Agreement’s wildlife monitoring and protection and impact mitigation requirements.” (Staff Report, p. 28.) This falls far short of CESA’s requirement that either the CDFG issue concurrence statements for the NMFS and USFWS Biological Opinions, or issue separate CESA clearance for Delta Smelt, San Joaquin Kit Fox, Giant Garter Snake, Swainson Hawk Sacramento River winter-run Chinook, spring run Chinook, and other state-listed species affected by the Proposed Action.” |

| 11.22 | Sierra Club et. al | “We further recommend the State Board consider taking over the regulation and control of selenium discharges so that this selenium drainage pollution is not merely exported from the San Joaquin Valley to the Sacramento-San Joaquin Delta. We urge the State Board to exercise both its water quality, water rights and public trust authority to ensure this pollution does not further degrade the waters of the state and nation. The Central Valley Regional Water Quality |

See response to comment 10.16.

Please see response to comment 11.3 above
Control Board believes controlling this selenium pollution at its source—the export of Delta water to irrigate toxic selenium soils and then sending the drainage selenium pollution back—is not within its regulatory authority. Such pollution control and unreasonable use is within the State Board’s authority.”

Finally, the Regional Board refuses to effectively address and regulate Westside upslope selenium contamination. State Board action should be undertaken to complete a watershed sediment/selenium reduction program to reduce upslope selenium inputs from Westlands and surrounding irrigated areas or to control upslope selenium contaminants during storm events (See pages 89-91 of the May 27, 2010 transcript). This program should include the unregulated Delta Mendota Canal sumps that are within the project area and lands to the north of the project area that still discharge into the wetland channels with impacts to endangered species and aquatic ecosystems. Further, extensions of any Selenium waiver should be contingent on compliance with protective water quality objectives for salmon in the San Joaquin River upstream of the Merced, and contingent on compliance with compliance with the 2 ppb SE objective in the Grasslands wetland channels. The interim 2 year extension recommended to the Regional Board was ignored. Such an approach would provide the opportunity to see if treatment methods actually exist that are effective. It would also provide time to investigate control measures to reduce Se pollution in the San Joaquin River at Hills Ferry that exceed drinking water standards. We include the September 22, 2010 comments of C-Win, CSPA and AquAlliance by reference.”

The Central Valley Water Board received the comments the day before the Central Valley Water Board Adoption Hearing and were not given adequate time to respond in writing as they were exceedingly late. In addition, the district submitted changes to those comments the day of the hearing.

However, during the Central Valley Regional Board Adoption hearing, Central Valley Water Board Staff responded orally to comments presented by the District at the hearing. State Water Board Staff consider that this was a more
submitted comments (including the technical memorandum). than adequate response considering the lateness of the comments received. The District has not provided details as to how those oral responses at the meeting were inadequate. See also Response 0.1.

12.2 Soluri Meserve – Reclamation District #999

“Specific Comments on Proposed Grasslands Bypass Project Basin Plan Amendments

The Grasslands Bypass Project Basin Plan Amendments (“BPAs”) would weaken requirements applicable to selenium discharges to Mud Slough and the San Joaquin River. Specifically, the proposed action would delay implementation of the 5 µg/l (4 day average) Basin Plan Objective for selenium in Mud Slough (north) and the San Joaquin River from Mud Slough confluence to the Merced River for nine years. The BPAs also propose a new interim "Performance Goal" of 15 µg/l (30 day average), effective on December 31, 2015 - up from the 5 ug/l (4-day average) slated to be effective in October 2010.

Selenium is a naturally occurring element, which is concentrated as a result of agricultural activities in the San Joaquin Valley…

…According to the U.S. Fish and Wildlife Service, selenium concentrations at this location are “well above hazardous concentrations,” although they are slowly trending downward. (Available at http://www.fws.gov/pacific/ecoservices/envicon/pim/reports/Sacramento/San%20Luis.html)

Selenium and the host of other toxins including boron, chromium, molybdenum, and methylmercury, continue downstream to the Sacramento-San Joaquin Delta. Much effort has been and is being expended to address pollution and related problems in the Delta. As a result, water uses and discharges are becoming more, not less, stringent as regulators attempt to improve ecosystem conditions in the Delta.

The proposed BPAs, however, weaken critical Basin Plan

State Water Board Staff acknowledges that there are concerns about the impacts of continuing discharges to Mud Slough. While the amendment does allow for discharges to Mud Slough to continue, it should be noted that in the 2010 Use Agreement there are requirements for mitigation actions to offset the impacts of ongoing operations during the extension period.

The new 2010 Use Agreement will include mitigation measures for the Grasslands Area Farmers including, providing fresh water to ponds in state wetland areas, creating year-round wetlands on federal refuge lands at a site to be determined later. (Discussions are ongoing between USFWS and the Bureau), establishing a Mitigation Project Fund, and a fee per pound of attributable selenium discharge after 2015.
objectives designed to protect fish and wildlife and human health and will lead to the further deterioration of the state of the Sacramento-San Joaquin Delta and its tributaries. This is of particular concern because deliveries from the Central Valley Project make up a large portion of the drainage water at the root of the selenium contamination problem. Continuing exports of Delta water to the San Joaquin Valley without adequate regulatory requirements to address the Sources of selenium contamination exacerbates the current situation, creating a seemingly endless toxic cycle.”

12.3 Soluri Meserve – Reclamation District #999

“The BPAs apply not only to the Grassland Area Farmers ("GAF"), who have made important strides in the battle against further selenium contamination, but to all sources of contamination in Mud Slough. By rolling back the selenium requirements, the BPAs facilitate the continued contamination of Mud Slough and downstream waters by those (unlike the GAF) that are not currently regulated by Waste Discharge Requirements. As discussed at the RWQCB’s hearing on the BPA, both groundwater and surface water flows occur from upslope areas to the Grassland Bypass Project service area. (RWQCB Transcript (May 27, 2010), pp. 89-91.) Though the GAF are held accountable for meeting applicable water quality objectives, other contributing dischargers are not. To the extent the Irrigated Lands Program is pointed to as a means to address contamination from these other sources (RWQCB Transcript (May 27, 2010), pp. 90-91), it must be understood that this program has thus far been ineffective in regulating selenium pollution from these sources.”

Central Valley Water Board Staff did acknowledge that there are some concerns from inflows outside of the grasslands area to the project. To address these concerns there is an interagency technical group that will be gathering monitoring data as part of the 2010 Use Agreement. If their monitoring data determines that data should be collected from outside sources the Central Valley Water Board will take action to do so. It is expected that the Central Valley Water Board would work to address these sources through their Irrigated Lands Program or other regulatory programs.

The commenter has not presented any evidence as to how the Irrigated Lands has been ineffective in regulating selenium pollution.

Also, please see response to No. 10.20 above.

12.4 Soluri Meserve – Reclamation District #999

“Concurrent with the request to weaken the Basin Plan's selenium protections, many CVP water recipients such as Westlands Water District, are actively working through the Bay Delta Conservation Plan to relocate the CVP's primary pumping facility upstream to the Sacramento River. This change in point of diversion would dramatically improve the water quality of exported water by allowing CVP water users to avoid their own toxic runoff. The BPAs would allow these CVP water users to continue circumventing responsibility for their polluted discharges and underseepage.”

State Water Board staff cannot respond to the comment since the CVP is a project outside of the scope of the Basin Plan Amendment. The Basin Plan amendment does not allow dischargers to circumvent their legal requirements. The dischargers must comply with the conditions set forth in the conditional prohibition of discharge and compliance timeframe extension.

12.5 Soluri

“As a result of these concerns, the District does not support the

The State Water Board has only the authority to
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<th>Draft</th>
<th>Meserve – Reclamation District #999</th>
<th>requested BPAs, which allow increased loading of selenium in the Delta and its tributaries in violation of state and federal antidegradation policies, among other legal requirements. If a BPA is adopted despite these concerns, RD 999 recommends that it be for a shorter duration (such as 2 years) and that the water boards commit to bringing all appreciable sources of selenium within the Basin Plan under direct regulatory supervision in that same time period. At this critical juncture, the health of the Delta is too important to roll back selenium requirements in the Basin Plan.”</th>
<th>remand or approve resolutions brought before them, we do not have the authority to revise any resolution unless it is for clarification purposes and it is deemed to be unsubstantative. Therefore, revising the extension timeline is beyond the scope of what the State Water Board is legally able to do. Also see response to comment 10.3.</th>
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<tr>
<td>13.1</td>
<td>National Oceanic and Atmospheric Administration – National Marine Fisheries Service (NOAA NMFS)</td>
<td>On November 9, 2009, NMFS provided a concurrence letter (2009/04097) stating that the third Use Agreement of the Grasslands Bypass Project is not likely to adversely affect anadromous species and their designated critical habitat. Since this concurrence letter was written, the following new information has become available. Water quality data in the San Joaquin River at Hills Ferry beginning in the fall of 2009 through January 2010 indicate prolonged, elevated selenium levels. These levels were measured as high as 52.0 parts-per-billion on January 20, 2010. The San Joaquin River Restoration Program (SJRRP) Water Year (WY) 2010 Interim Flows Project was in effect at that time; however, the flows had not reached the confluence of the Merced River until the spring of 2010. This means that the elevated levels of selenium were not from the Interim Flows project but from nonpoint sources closer to Hills Ferry. Selenium concentrations this high will be problematic in restoring spring- and fall-run Chinook salmon (Oncorhynchus tshawytscha) to the upper reach of the San Joaquin River. In addition, the regular reoccurrence of high selenium levels for prolonged periods could negatively affect Central Valley (CV) steelhead (O. mykiss) and the Southern distinct population segment (DPS) of North American green sturgeon (Acipenser medirostris), both of which are listed as threatened under the Endangered Species Act (ESA). The Hills Ferry site is on the San Joaquin River between the confluence with Mud Slough and the Merced River. The high concentrations of selenium noted in this comment are still being evaluated by the Data Collection and Reporting Team of the Grassland Bypass Project. The Central Valley Water Board’s control program regulates subsurface agricultural drainage and if there are other selenium sources, as implied by the NOAA letter, new control efforts would have to be developed. There is insufficient information to initiate any new control effort at this time. Also, see response to comment 10.18.</td>
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<td>13.2</td>
<td>NOAA NMFS</td>
<td>On June 2, 2010, NMFS published the final rule, in 75 FR 30714, to establish take prohibitions for the threatened Southern DPS of North American green sturgeon. The rule states, &quot;Furthermore, the national standards for use of pesticides and toxic substances may not be conservative enough to adequately protect the Southern DPS as was found for listed salmonids in recent draft and final jeopardy biological opinions issued by NMFS to the EPA (NMFS J998, NMFS 2000, New US EPA selenium criteria have been anticipated for some time. When the new regulations are final, it is expected that the selenium program for the San Joaquin River basin will be evaluated to determine if any updates are needed.</td>
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NMFS 2(08), Thus, programs to aid agricultural producers in meeting NMFS-imposed water quality standards may be required to minimize adverse impacts on the Southern DPS," The USEPA Region IX is currently in the process of updating selenium water quality standards as required by the California Toxics Rule to meet a protective level, Newly published studies have also become available regarding selenium toxicity and effects to green sturgeon. For example, larval green sturgeon experienced higher mortality than larval white sturgeon when exposed to selenium stress (Silvestre et al. 2010). Elevated loading into the Bay Delta system over an extended period of time could contribute to these effects.

| 13.3 | NOAA NMFS | "In the concurrence letter for the SJRRP WY 2010 Interim Flows Project, NMFS supported the need for water quality monitoring as part of the project description to evaluate potential changes in water quality (including selenium) that could adversely affect anadromous fish. The potential effects of the WY 2010 Interim Flows on selenium levels at Hills Ferry and downstream are currently under review. The high levels observed in the San Joaquin River at Hills Ferry from August 2009 to January 2010 are a cause for concern. Table IV -4 in the Proposed Amendments to the Basin Plan summarizes the proposed changes in timeline and selenium water quality objectives for non-point sources in the San Joaquin River between Mud Slough (north) and the confluence with the Merced River. changing the water quality objective from a 5 ug/L 4-day average to a 15 ug/L monthly mean could allow significant elevation(s) in selenium levels that could cause take of listed anadromous species in the lower San Joaquin River Basin and Delta. NMFS is concerned that increasing the selenium water quality objective for non-point sources on the San Joaquin River between Mud Slough and the confluence with the Merced River (i.e., outside the scope of the Grasslands Bypass Project) would encourage outside parties to discharge selenium laden agricultural tailwaters. NMFS supports water quality criteria extending upstream to Mud Slough as well as the overall Grasslands Bypass Project objectives of continuously improving water quality in the San Joaquin River and maintaining viability of agriculture in the Grasslands Bypass Project area. NMFS, therefore, supports extending the Basin Plan Amendment compliance date for meeting selenium objectives in Mud Slough and the San Joaquin River from the confluence with the Merced to Mud Slough for an interim period of two years, in concurrence with the US Fish and Wildlife |

| 13.3 | NOAA NMFS | The Basin Plan amendment has not changed the 5 ug/L water quality objective for selenium. Mud Slough and the San Joaquin River between Mud Slough and the Merced River have not attained the 5 ug/L, despite significant reductions in selenium discharges. The 15 ug/L is a target that will be used to ensure that further reductions are taking place over the course of the time extension. The time extension does not prevent the opportunity to study, monitor, and reduce selenium levels. This can be done pursuant to the WDRs and associated monitoring and reporting program (MRP) order. Also see response to comment 10.3. |
Service's September 22, 2010, comment letter. This would provide additional time to study, monitor, and reduce selenium levels prior to the introduction of spring- and/or fall-run Chinook salmon, which is to occur no later than December 31, 2012, as required in the Stipulation of Settlement in NRDC, et al. v. Kirk Rodgers, et al., as well as explore the downstream effects to green sturgeon and salmonids present in the San Joaquin River basin and Delta. A longer compliance date extension may result in risks to the ESA listed species mentioned previously as well as the required reintroduction.”

14.1 United States Department of the Interior - Fish and Wildlife Service (USFWS) “The Service previously submitted comments to the California Central Valley Regional Water Quality Control Board (Regional Board) in May 2010 on the Draft Staff Report (Staff Report) concerning the proposed Basin Plan Amendments dated March 2010. We incorporate those comments to this letter by reference. We are submitting this comment letter to the State Board to provide an explanation as to why we believe additional modifications to the Basin Plan Amendment are needed. A copy of the Service’s May 2010 comments are available on the Regional Board’s website at: http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/” Comment noted.

14.2 USFWS “The Basin Plan Amendment focuses largely on allowing the continuation of the Grassland Bypass Project (GBP) by proposing to modify the compliance time schedule in the current Basin Plan for meeting selenium objectives in Mud Slough (north) and the San Joaquin River between Sack Dam and the Merced River. The Staff Report includes a revised compliance schedule for meeting selenium water quality objectives in Mud Slough (north) and the San Joaquin River (from Sack Dam to the Merced River). This revised compliance schedule includes a non-binding Performance Goal of 15 μg/L monthly mean by December 31, 2015, and a binding objective of 5 μg/L 4-day average for the reaches of Mud Slough (north) and the San Joaquin River by December 31, 2019. As stated in our May 8, 2010 letter to the Regional Board, our primary concerns regarding the Basin Plan Amendment are related to: 1) the environmental impacts associated with deferring compliance of water quality objectives in Mud Slough (north) and the San Joaquin River are not adequately addressed nor remedied; and 2) the inputs of selenium contamination (some outside of the scope of the GBP) in the Grasslands wetland supply channels that result in continued exceedences of water quality objectives in those The selenium control program for the San Joaquin River Basin has made significant progress in reducing selenium concentrations in wetland water supplies and other water bodies. This effort is expected to continue and to address the concerns raised by this comment. Many of the comments raised that are outside the scope of this Amendment can be addressed through the revision of the WDRs or the Central Valley Water Board’s other regulatory programs.
channels and environmental harm are not addressed nor remedied. Because of the concerns identified above, our May 2010 comment letter recommended that the Regional Board broaden the analysis and scope of the Staff Report and associated Basin Plan Amendment, by assessing and remedying the selenium water quality impairments in the San Joaquin River and the Grasslands wetland supply channels in order to achieve water quality objectives and protect beneficial uses in impacted surface waters in the Grasslands and San Joaquin River. The Regional Board’s response to the Service's comments noted that the Service and the National Marine Fisheries Service had completed Endangered Species Act consultations, resulting in the conclusions of not likely to jeopardize and not likely to adversely affect federally listed species, respectively. Although the Regional Board’s response is correct, the Service believes that the Basin Plan Amendment should include assessing and remedying the effects of selenium contamination in the San Joaquin River upstream of the Merced River, and in the Grassland wetland supply channels. Our detailed comments and recommendations are provided below."

| 14.3 | USFWS | **“Effects of Deferring Compliance of Selenium Water Quality Objectives in the San Joaquin River**

As we noted in our May 2010 comment letter to the Regional Board, significant spikes of selenium concentrations have been observed at Hills Ferry on the San Joaquin River. Recent GBP monthly monitoring reports documented elevated selenium concentrations at the Hills Ferry sampling station H for 6 months from August 2009 through January 2010. These spikes in selenium concentration at Hills Ferry are not an isolated event, and appear to be recurring with some frequency. Since January 2005, selenium in water collected at Hills Ferry has been at or above 5.0 micrograms per liter (μg/L) forty separate times. Of those samples, nineteen were at or above 10 μg/L and nine were above 20 μg/L. All water samples at or above 10 μg/L were collected between May 2007 to January 2010. The three highest concentrations of selenium collected from Hills Ferry since 2005 were 86.1 μg/L on November 6, 2007, 52.0 μg/L on January 20, 2010, and 40.6 μg/L on November 25, 2008. Elevated concentrations of selenium in the San Joaquin River from

The reason for and/or cause of the high selenium levels reported at the Hills Ferry site on the San Joaquin River are still being investigated by the Data Collection and Reporting Team of the Grassland Bypass Project. USFWS is a member of that team and can participate in not only that effort but the development of the updated WDRs for the Grassland Bypass Project. It is anticipated that the WDRs will address the concerns related to the reintroduction of salmon to the San Joaquin River upstream of the Merced River.

Please see responses to comments 10.18 and 10.20 above.
sources including the GBP may be problematic to efforts to restore salmon runs to the upper San Joaquin River ecosystem through the San Joaquin River Restoration Program. Rivers and sloughs that carry agricultural drainwater have been found to concentrate selenium in invertebrates, small (prey) fish, and larger predatory fish. Selenium concentrations in the food-chain of these impacted waters have often reached levels that could kill a substantial proportion of young salmon (Beckon et al. 2008) if the salmon, on their downstream migration, are exposed to those selenium-laden food items for long enough for the salmon themselves to bioaccumulate selenium to toxic levels. Saiki et al. (1991) documented that juvenile salmonids are present in the lower San Joaquin River for periods of time that are sufficient for them to accumulate selenium to levels that could cause mortality. Based on existing water quality data for selenium in specific reaches of the San Joaquin River, Beckon and Maurer (2008) concluded that there remains a substantial ongoing risk to migrating juvenile Chinook salmon and steelhead in the San Joaquin River, as shown in Figure 1 below.

In our May 2010 comments to the Regional Board, we noted that the proposed revisions to the Basin Plan could adversely impact efforts to restore salmon to the upper San Joaquin River, scheduled to begin at the end of 2012. We remain concerned that continued spikes in selenium concentration in the San Joaquin River upstream of the Merced River could adversely impact salmon restoration.

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<th>14.4</th>
<th>USFWS</th>
<th>“Selenium Contamination in the Grassland Wetland Supply Channels”</th>
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<td>As we noted in our May 2010 letter to the Regional Board, exceedences of the 2 μg/L monthly mean selenium objective in water still occur in the Grassland wetland supply channels. Sources of ongoing selenium contamination in Grassland wetland channels include 1) continued contamination of the water supply in the Delta Mendota Canal; 2) unregulated and unmonitored discharges of agricultural subsurface drainwater from nearby farmland into local ditches and canals that feed into the Grassland wetland supply channels; and, 3) and large storm events that can overwhelm the GBP channel, requiring that uncontrollable storm runoff be diverted into wetland supply channels (Beckon et al. 2007; Paveglio and</td>
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With the exception of the uncontrollable storm water, the Basin Plan has provisions to control the discharges discussed in this comment. The Basin Plan amendment does nothing to weaken the ability of the Central Valley Water Board to address these issues. A storm water management plan is required as part of the Use Agreement and similar provisions will likely be incorporated into the WDRs.
Since the onset of the second Use Agreement for the GBP in September 2001, there have been consistent short-term pulses of selenium inputs into the Grassland wetland supply channels that have resulted in exceedences of the 2 \( \mu g/L \) monthly mean selenium objective. For example, a recent GBP monthly monitoring report identified a highly elevated selenium concentration of 26.4 \( \mu g/L \) on August 10, 2009 in a Grassland wetland supply channel (Station K, Agatha Canal). Typically, these exceedences of 2 \( \mu g/L \) are associated with heavy rainfall events, occur in the spring of each year (usually in March and/or April), and occur during periods of low flow in the wetland channels as depicted in Figure 2 below, Weekly Selenium Concentrations in the San Luis Canal, 1996-2007 (a wetland supply channel in the South Grasslands). As a result of non-compliance with selenium water quality objectives and an existing TMDL for the Grassland wetland channels the State Board included the Grassland Marshes (Grassland Wetland Supply Channels) on the 2006 303(d) list of impaired water bodies for California (SWRCB 2007).

Continuing unregulated sources of selenium contamination in the Grassland wetland supply channels are of concern to the health and integrity of wetland ecosystems, including federally listed species that utilize wetland habitats such as the giant garter snake. Selenium bioaccumulates rapidly in aquatic organisms and a single pulse of selenium (>10 \( \mu g/L \)) into aquatic ecosystems could have lasting ramifications, including elevated selenium concentrations in aquatic food webs (Besser et al. 1993; Graham et al. 1992; Maier et al. 1998; Nassos et al. 1980; Hamilton 2004).

| 14.5 | USFWS | “The Service’s biological opinion on the Third Use Agreement for the GBP 2010-2019 (GBP BO) concluded that, “the continuation of the GBP and execution of the third Use Agreement for use of the SLD, as described, is not likely to jeopardize the continued existence of the giant garter snake and the San Joaquin kit fox.” This conclusion was based on the definition of the scope of the GBP. However, the drainage problem in this area is a regional problem, and inputs of selenium outside of scope defined for the GBP still impact and impair water quality and the associated aquatic foodchain in the south Grasslands. The GBP BO included an amendment will not adversely impact south Grasslands. In fact, it may prevent adverse impacts of high groundwater that could have developed if the prohibition of discharge was triggered. The Basin Plan already contains provisions that can protect the south Grasslands water supply through the regulatory process. |
updated Status of the Species and Environmental Baseline on the threatened giant garter snake (*Thamnophis gigas*) in the Grassland wetlands and Mendota Pool vicinity. The Service found that the garter snake has been adversely affected by water management actions (i.e. water transfers/exchanges, and ground water pumping, which have contributed to changes in cropping patterns), limited availability of summer water habitat (e.g., level 4 refuge water supplies) and by degradation of water quality in the San Joaquin Valley. The GBP BO indicated that under current conditions in the Grassland wetland supply channels, “dietary selenium concentrations in the South Grasslands still pose a risk to growth, reproduction and survival of giant garter snakes. Further, contamination in the food chain in the North Grasslands, specifically Mud Slough (North) could preclude re-establishment of the snake in the vicinity of this waterway.” In our May 2010 comments we incorporated the GBP BO by reference and asked that the Regional Board staff review the Environmental Baseline for the giant garter snake pertaining to selenium water quality and the giant garter snake (pages 111-119 of the GBP BO). The Service’s GBP BO is available at: http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=351

| 14.6 | USFWS | The Service’s May 2010 letter to the Regional Board recommended that all sources of selenium contamination that are impairing water quality and associated beneficial uses in the Grasslands wetlands be addressed in the Basin Plan Amendment or by means of some other Regional Board action. The Regional Board’s responses to these recommendations were as follows, “The proposed Amendments do not change the compliance dates for wetland supply channels. Central Valley Water Board staff are considering the most effective method for ensuring the drainage from areas not included in the GBP do not cause or contribute to exceedences…Grassland area wetland water supply channels have a selenium water quality objective of 2 μg/L. Irrigated lands and wetlands near but not within the GBP are regulated through a conditional waiver. The waiver does not exempt these areas from compliance with water quality objectives. Central Valley Water Board staff will work with the Westside San Joaquin River Watershed Coalition and other interested parties to determine appropriate follow-up actions to address any selenium discharge issues associated with areas outside the GBP…Management of | Comment noted. We do not believe our response suggests allowing any impacts in the wetland supply channels to occur indefinitely. |
Drainage sumps is outside the scope of the proposed Amendments; however, USBR has told staff that it is investigating options for rerouting the discharge from the Firebaugh sumps to avoid the Delta Mendota Canal, including routing sump discharge to the drainage reuse area. This issue should be discussed at a future meeting of the GBP Data Collection and Reporting Team...Stormwater management is outside the scope of the Amendments, but the 2010 Use Agreement requires the discharges to develop a long-term stormwater management plan. This should include protocols for dealing with routine high rainfall events and the extreme events that now trigger use of the wetland water supply channels.”

The Service believes that the Regional Board’s responses to addressing all sources of selenium contamination that are impairing water quality and associated beneficial uses in the Grasslands wetlands while helpful, could allow these selenium inputs to continue to impair water quality and cause harm to fish and wildlife, including federally listed species, in the Grassland wetland supply channels indefinitely into the future.

### 14.7 USFWS Recommendations

In order to protect existing and future runs of anadromous fish in the San Joaquin River, to protect the quality of water delivered to wetland areas within the Grassland watershed, and to protect fish and wildlife resources, including federally listed species, in the Grassland wetlands, the Service recommends that the State Board modify the Basin Plan to include the following.

1. Complete an assessment of the effects of continued selenium inputs into the San Joaquin River on existing and future runs of anadromous fish, and develop remedies for any impairments in order to achieve water quality objectives which protect beneficial uses in the San Joaquin River including the reach upstream of the Merced River. Consideration should be given to ensuring adequate water quality to protect reintroduced salmon runs starting at the end of 2012;

2. Include lands north of the GBP’s Drainage Project Area into the GBP that continue to discharge directly into the south Grasslands wetland supply channels;

Per CWC 13245, the State Water Board may approve or return the Amendment to the Central Valley Water Board for resubmission. State Water Board authority to modify the Amendment is only provided after resubmission by the Central Valley Water Board of a returned Amendment. Several aspects of the San Joaquin River Restoration Project are still under development. Given the uncertainty, the water quality control effort related to protecting the salmon can best be handled through the WDR process. Any assessment can be addressed as part of the WDRs and associated MRPs. The WDRs can be adjusted based on that assessment.

The GBP includes provisions for including new lands into the GBP. The Central Valley Water Board can regulate discharger’s subsurface agriculture drainage that are not served by the GBP by WDRs if necessary to ensure...
| 3. Eliminate discharges into the Delta Mendota Canal from the drainage sumps in the Firebaugh Canal Water District owned by the U.S. Bureau of Reclamation; | compliance with receiving water objectives. Central Valley Water Board staff have notified the State Water Board staff that funding has been provided by the USBR to replumb the drainage sumps and send the drainage to the reuse area instead of the DMC. The Use Agreement calls for development of a storm water management plan. Note, however, that landowners and dischargers in the Grassland Watershed area the recipients of flood waters from the Panoche Creek and have no control over the lands that generate the runoff. There is generally undeveloped land in the upper watershed and no engineered control structures. |
| 4. Evaluate alternative routes of disposal and/or storage of excess drainage flows that occur during heavy rainfall events and that have historically been discharged into the Grassland wetland water supply channels | |
