

RECLAMATION

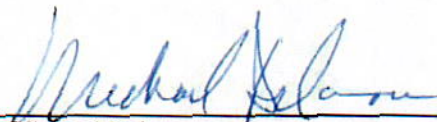
Managing Water in the West

Record of Decision

Grassland Bypass Project, 2010-2019

ROD-07-141

Recommended by:



Date: 12/18/2009

Michael Delamore
Acting Deputy Area Manager
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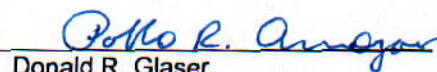
Concurred by:



Date: 12/18/2009

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Date: 12/21/9

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Introduction

This document constitutes the Record of Decision (ROD) of the Department of the Interior, Bureau of Reclamation (Reclamation), Mid-Pacific Region, regarding the execution of a new Use Agreement for the continued use of the San Luis Drain, 2010–2019, (2010 Use Agreement) that will enable the San Luis & Delta-Mendota Water Authority (Authority) to continue the Grassland Bypass Project (GBP) through December 31, 2019. The Preferred Alternative is the subject of the *Final Environmental Impact Statement/Environmental Impact Report, Grassland Bypass Project, 2010-2019* (FEIS/EIR), dated September 29, 2009 and developed in compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Background

The original Use Agreement, dated November 3, 1995, allowed the Authority to use a portion of the San Luis Drain (Drain) to convey agricultural drainwater through adjacent wildlife management areas to Mud Slough, a tributary to the San Joaquin River. The 1995 Use Agreement allowed for use of the Drain until September 30, 2001. The 2001 Use Agreement allowed continuation of the use of the Drain through December 31, 2009. The 2010 Use Agreement will permit the Authority to continue the GBP through December 31, 2019.

The purpose and objectives of the continuation of the GBP, 2010–2019 (Preferred Alternative) are:

- To execute the 2010 Use Agreement in order to allow the Grassland Area Farmers (GAF) time to acquire funds and develop feasible drainwater treatment technology to meet water quality objectives¹ by December 31, 2019.
- To continue the separation of unusable agricultural drainage water discharged from the Grassland Drainage Area (GDA) from wetland water supply conveyance channels for the period 2010–2019.
- To facilitate drainage management that maintains the viability of agriculture in the Project Area.
- To promote continuous improvement in water quality in the San Joaquin River to achieve zero discharge of subsurface drainage from irrigated lands in the GDA.

The Preferred Alternative is needed to assure that any future use of the Drain beyond 2009 is consistent with the long-term Westside Regional Drainage Plan and the San Luis Drainage Feature Re-evaluation (SLDFR) Plan for drainage service. Execution of the 2010 Use Agreement

¹ As specified in The Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin (Basin Plan), as amended, and the revised Waste Discharge Requirements (WDR) for the Grassland Bypass Project.

provides for compliance with applicable water quality control programs including Basin Plan and WDR amendments.

Decision

Reclamation's decision is to execute the 2010 Use Agreement in order to implement the Preferred Alternative identified in Section 2.2 of the FEIS/EIR. The decision includes implementation of the mitigation measures listed in Section 15 of the FEIS/EIR and the reasonable and prudent measures and terms and conditions in the 2009 Biological Opinion from the U.S. Fish and Wildlife Service (FWS). These measures are required to implement the Preferred Alternative.

Execution of the 2010 Use Agreement will result in continuing the present drainwater conveyance using the Drain with discharge of a portion of the collected drainwater to Mud Slough, an updated compliance monitoring plan, revised selenium and salinity load limits, an enhanced incentive performance fee system, a new WDR from the Regional Water Quality Control Board, and mitigation for continued discharge to Mud Slough. In-Valley treatment/drainage reuse at the San Joaquin River Water Quality Improvement Project (SJRIIP) facility will be expanded to 6,900 acres.

Alternatives Considered

No Action

The No Action Alternative is defined as what could be expected to occur in the foreseeable future (after December 31, 2009) if the 2010 Use Agreement for the Drain is not approved. The No Action Alternative is a construct based upon not executing the 2010 Use agreement, as well as continuing an ongoing program for drainage management, including the initial phases of the treatment/drainage reuse facility known as the SJRIIP. Under this alternative, the GAF would not have use of the Drain. Agricultural subsurface drainage would not be collected into a single drainage outlet (Grassland Bypass Channel) for conveyance to the Drain. However, the GAF would still be responsible for meeting WDR and the Basin Plan requirements which would require projects that are not currently planned or financed, at both the district and farmer level, in order to maintain viable agriculture over the long term.

Preferred Alternative

The continuation of the GBP for the period 2010 to 2019 is the Preferred Alternative due to its water quality and wetland enhancement over the long term. The 2010 Use Agreement will consolidate subsurface drainflows on a regional basis and utilize a portion of the Drain to convey drainflows around wetland habitat areas. Key components are summarized below.

Existing features of the GBP that will continue under the Preferred Alternative include the following:

- The removal of agricultural drainwater from 93 miles of conveyance channels in the Grassland wetlands and wildlife refuges, except during high rainfall conditions. Any discharges to these conveyance channels will be in accordance with the existing Storm Water Plan as modified consistent with the 2010 Use Agreement.
- The use of the Grassland Bypass Channel, a four-mile-long constructed earthen ditch and an existing drain that was modified to convey drainwater from the Panoche and Main drains to the Drain near South Dos Palos, California.
- The use of 28 miles in the Drain to its northern terminus near Gustine, California. From that point, the drainwater will enter Mud Slough (North) for six miles before reaching the San Joaquin River at a location three miles upstream of its confluence with the Merced River.

New features of the GBP that will be implemented under the Preferred Alternative include:

- Execution of the 2010 Use Agreement for the Drain (Appendix A), to include an updated compliance monitoring plan, revised selenium and salinity load limits, an enhanced incentive performance fee, a new WDR from the Regional Board, and mitigation for continued discharge to Mud Slough.
- In-Valley treatment/drainage reuse at the SJRIP facility.
- Sediment management plan to remove and dispose of sediment from the Drain, to improve flow capacity.
- Utilizing and installing drainage recycling systems to mix subsurface drainwater with irrigation supplies under strict limits.
- Continuing current land retirement policies listed in the 1998 *Long-Term Drainage Management Plan for the GDA* and subsequent Westside Plan. Key among these is that land retirement should be voluntary.
- Implementing a compliance monitoring program with biological, water quality, and sediment components. Results of the monitoring program will be reviewed by an interagency oversight committee.
- Continuing the operation of a regional drainage management entity to perform management, monitoring, and funding of necessary control functions.
- A single WDR for the GDA.
- An active land management program to utilize subsurface drainage on salt-tolerant crops.

- Low-interest loans for irrigation system improvements, such as gated pipe, sprinkler, and drip irrigation systems.
- An economic incentive program including tiered water pricing and tradable loads.
- A no-tailwater policy that will prevent silt from being discharged into the Drain and promote the secondary benefits of irrigation water management.
- Implementing drainwater displacement projects such as using subsurface drainage for dust control on roadways.
- Meeting with landowners as necessary to implement projects and policies cited above.

Environmentally Preferable Alternative

The Preferred Alternative is the environmentally preferable alternative because it will result in greater environmental benefits (improved water quality and lesser biological impacts) to the San Joaquin River and includes mitigation for water quality impacts on Mud Slough. The slough is potential habitat for the giant garter snake and other sensitive species.

Alternative Action

The only other reasonable alternative is known as the 2001 Requirements Alternative and is similar to the Preferred Alternative in all aspects except the selenium and salt loads discharged to Mud Slough would be limited to those in the 2001 Use Agreement (i.e., less stringent allowances and compliance date). Existing project features that would continue under this alternative include all of those for the Preferred Alternative, except the load values and incentive fees would be those associated with the 2001 Use Agreement. It does not include the Mud Slough mitigation component. This alternative does not avoid or substantially lessen any potentially significant impact of the Preferred Alternative but it is technically feasible. While the Alternative Action does not meet current Mud Slough selenium objectives for 2010, it does meet San Joaquin River objectives. In short, it represents a continuation of the 2001 Use Agreement "as is" until December 31, 2019.

Basis of Decision, Issues Evaluated, and Factors Considered

The No Action Alternative is not a feasible alternative because it fails to meet the first three of the four purposes of the Project. It does not keep drainwater out of the wetland channels. Also, the viability of agriculture would be adversely affected. The Alternative Action is not the preferred alternative because it does not provide the same level of protection for water quality and biological resources; selenium and salt load discharge allowances would be less stringent, and no Mud Slough mitigation would be provided. The Preferred Alternative will have the following negative impacts on the resources listed below. Impacts on other resources will either

be beneficial, minimal, or non existent. Land use and environmental justice concerns will be beneficial compared to the No Action because the Preferred Alternative will continue viable agriculture in the affected area.

Air Quality

Compared to the No Action, average annual power consumption within the GDA will be increased by 21 million kWh. Use of electric power contributes to climate change indirectly through the combustion of fossil fuels in power plants, along with generating resources, which do not emit greenhouse gases (GHGs). Operation of the treatment facility using electric power will result in increased indirect GHG emissions that are neither substantial nor significant (compared to the No Action), but which will cumulatively contribute to climate change.

Greenhouse gases will be emitted during construction of the new treatment facility, primarily from diesel-powered construction equipment, although this amount will be small when compared to indirect GHG emissions caused by long-term facility operation. Since it is likely that the SJRIP facility will be operated at its peak capacity during the summer months when power demand is at its greatest, energy conservation, and thus GHG emissions minimization, will be considered in both the design and eventual operation of the treatment facility, to the maximum extent feasible. Since the Preferred Alternative effects are not substantial, mitigation measures are not required. Additional indirect GHG emissions will incrementally add to the cumulative contributions and effects of all other sources of GHG emissions, both in the state and world-wide.

Biological Resources

Compared to the No Action Alternative, the Preferred Alternative will continue to expose listed and sensitive species in Mud Slough and the San Joaquin River below the Mud Slough tributary (Area 3) to selenium from the GDA. During wetter years, the Sacramento splittail will be exposed. During wetter years, wetland habitat will experience higher selenium exposure in Area 3. However, mitigation for water quality impacts in Mud Slough will be provided, and water quality will improve by 2015.

Migratory birds will be exposed to elevated selenium on the expanded reuse area for the SJRIP. Monitoring will continue across the reuse area to count nesting birds and measure selenium exposure. Hazing will continue, and mitigation habitat will be provided. Current data show that few birds have been nesting in the SJRIP and that the mitigation area is attracting birds away from the reuse area. The protective measures implemented for the current reuse area will also apply to the expanded acreage.

On December 18, 2009, the FWS issued a biological opinion (2009 Biological Opinion) to Reclamation concluding that the Preferred Alternative may affect the giant garter snake (*Thamnophis gigas*) and the San Joaquin kit fox (*Vulpes macrotis mutica*). The 2009 Biological Opinion provides reasonable and prudent measures and terms and conditions to implement those measures. The operation of the entire project, including the SJRIP reuse area, will be subject to the terms and conditions specified in the 2009 Biological Opinion. On November 18, 2009, the

National Marine Fisheries Service (NMFS) provided a letter concurring with our determination that execution of the 2010 Use Agreement may affect, but is not likely to adversely affect, Federally threatened Central Valley steelhead (*Oncorhynchus mykiss*), threatened Central Valley spring-run Chinook salmon (*O. tshawytscha*), endangered Sacramento River winter-run Chinook salmon (*O. tshawytscha*), threatened Southern Distinct Population Segment (DPS) of North American green sturgeon (*Acipenser medirostris*), or any of the critical habitat designated for these listed species. NMFS found that no conservation recommendations were needed for essential fish habitat.

Surface Water Resources

Selenium, Salinity, Boron and Molybdenum

Relative to the No Action, the Preferred Alternative will continue the discharge of agricultural drain water in Mud Slough and the San Joaquin River, subject to monthly and annual loads specified in the Use Agreement and WDR to achieve the water quality objectives in the amended Basin Plan. Reclamation, in cooperation with other agencies, will implement the GBP Compliance Monitoring Program that will measure the concentrations of selenium and salts in water, sediment, and biota across the region. The loads of salts and selenium in Mud Slough will decrease by 2015.

Compared to the No Action Alternative, selenium water quality objectives will not be met in Mud Slough and the San Joaquin River upstream of the confluence with the Merced River. Salinity and boron concentrations in Mud Slough and the San Joaquin River downstream of Mud Slough will increase compared to the No Action Alternative. Molybdenum concentrations in Mud Slough and the San Joaquin River downstream of Mud Slough will be higher and water quality objectives will be exceeded more frequently.

Sediment Accumulation in the San Luis Drain

The Compliance Monitoring Program (Reclamation et al. 1996) for the GBP specifies annual monitoring of the accumulation of sediment in the Drain. The estimated volume of sediment in the Drain increased by 140,000 cubic yards since 1998.

The water velocity within the Drain is kept below one foot per second to prevent the suspension of material from the sediment bed. The slower velocity also increases the rate at which suspended solids drop out of the water column. Therefore, the accumulation of sediment will continue to occur, although the rate can be reduced if large storm events are bypassed around the Drain. The rate of accumulation is estimated to be about one to two inches per year spread through the entire Drain. Currently, the Drain has greater than one foot of freeboard during peak flows of 150 cubic feet per second. If additional sediment accumulates to the extent that it will pose a problem to the use of the Drain or to downstream resources, the sediment will be removed in accordance with the 2010 Use Agreement, applicable laws and regulations, and the Sediment Management Plan provided in Appendix B of the FEIS/EIR. This will mitigate the impact of the sediment accumulation. Fill of wetlands and other waters of the U.S. from sediment removal and disposal will be avoided by following the Sediment Management Plan.

Implementing the Decision and Environmental Commitments

Reclamation and the Authority have adopted all practicable means to avoid or to minimize adverse environmental impacts of the Preferred Alternative. Chapter 15 of the FEIS/EIR is the Mitigation Monitoring and Reporting Program (MMRP) for the Preferred Alternative.

Compliance with the terms and conditions in the 2010 Use Agreement requires a monitoring plan and reporting of the results. Section V, paragraph A of the 2010 Use Agreement states that the Authority shall be responsible for implementing a comprehensive monitoring program that meets the following objectives:

- to provide water quality data for purposes of determining the Authority's compliance with Selenium Load Values and Salinity Load Values as set forth in this Agreement;
- to provide biological data to allow an assessment of whether or not any environmental impacts constitute Unacceptable Adverse Environmental Effects that have resulted from this Agreement; and
- to provide data on sediment levels, distribution, and selenium content.

In addition to the MMRP, Reclamation and the Authority will comply with all the terms and conditions found in incidental take statement appended to the 2009 Biological Opinion.

The 2010 Use Agreement includes the Compliance Monitoring Program; results pertaining to the discharges of selenium and salts being delivered from the Drain to Mud Slough, will be submitted to Reclamation, the Oversight Committee, and other interested parties. (Section V, Paragraph B).

Results of the monitoring program will be reviewed frequently as required to implement this Agreement, by technical representatives on the Oversight Committee. If unacceptable problems or impacts are identified, appropriate mitigative actions to address the problems will be identified by the Oversight Committee. The definition and identification of "unacceptable" problems or impacts and need for mitigative action will consider applicable environmental laws as well as the impacts in all channels affected by implementation of the Preferred Alternative. Appropriate mitigative actions, depending on the situation, will include, but not necessarily be limited to, interruption of a specific identified contamination pathway through hazing or habitat manipulation, increased management, enhancement, and recovery activities directed at impacted species in channels cleaned up as a result of the GBP, and/or establishment and attainment of more stringent contaminant load reductions. The costs of mitigation, as well as any required cleanup, will be borne by the Authority.

Compliance Monitoring Plan

Under the Preferred Alternative, Reclamation, in cooperation with other agencies, will continue to implement the GBP Compliance Monitoring Plan. The key features of the GBP Compliance Monitoring Plan include:

- Daily compliance monitoring for flow and water quality (daily data at Station B and Station N).
- Continuous measurement of flow, salinity, and temperature at five sites;
- Collection of weekly samples at stations in local sloughs and the San Joaquin River;
- Quarterly monitoring for selenium in biota and sediment upstream and downstream of the Project;
- Annual measurements of sediment volume and selenium concentration in the Drain;
- Quality assurance, verification, and management of data by Reclamation;
- Review and analysis of all data by state, Federal, and local agencies;
- Publication of monthly and quarterly data reports and annual analytical reports;

The GBP Compliance Monitoring Plan may be revised by the Data Collection and Review Team based on the 1996–2009 results and the requirements of the 2010 WDR. The WDR will include the Storm Management Plan.

Sediment Management Plan

The Sediment Management Plan (Appendix B of the FEIS/FEIR) includes the following monitoring protocol to be applied to all land application sites until selenium levels have decreased to unrestricted use (in areas where applied sediments exceeded ecological or human health risk criteria). In areas where revegetation was conducted as part of the application of sediments, monitoring will continue until the predetermined success criteria for the revegetation program is met (i.e. percent cover or establishment of a particular vegetation community).

- Quarterly monitoring of soil, water, and groundwater to confirm that soluble selenium is not migrating toward the water table;
- Biannual soil sampling to monitor selenium displacement and solubility;
- Annual plant sampling and analysis at agriculture and open space sites to confirm that selenium is not being accumulated to levels of concern. Selenium uptake may change as selenium solubility increases;

- Installation of either neutron probe access pipes and/or tensiometers in agricultural sites to measure soil water movement.

Storm Event Plan

A Storm Event Management Plan has been developed describing how the GBP will operate during storm events. The major concerns with allowing high flows into the Drain are related to excess sediment loading and accumulation in the Drain and scour of previously accumulated sediment from the Drain into the receiving waters due to high water velocities. In addition, structural integrity of the bypass channel is of concern.

The major components of the Storm Event Management Plan include the following:

- Notification of regulatory and system users to inform them of the intent to operate under the storm event plan when Project flows are to be affected by impending storm events;
- Opening of gates to Grassland Water District (GWD) supply channels (Agatha Canal and Camp 13 Ditch) when anticipated flows exceed 100 cubic feet per second and precipitation is imminent;
- In-field decisions on how much to divert to GWD and how much to allow into the Project during event conditions;
- Closing gates to GWD supply channels when flow falls below 100 cubic feet per second and no further threat of imminent precipitation exists;
- Daily monitoring of bypassed flows to the GWD for quantity and quality;
- Modification of sump pump operations as practical to minimize the production of drainwater.

Other Mitigation and Environmental Commitments

Section III, paragraph H of the 2010 Use Agreement contains environmental commitments pertaining to operations, spill prevention, downstream users notification, regional archaeology, protection of China Island, Mud Slough, sediment, and load reduction assurances. In addition, Reclamation and the Authority will implement those reasonable and prudent measures and terms and conditions in the 2009 Biological Opinion.

As part of the GBP, the Authority plans to complete the development of the SJRIP reuse facility on up to 6,900 acres of agricultural land. The Negative Declaration on Phase I (and subsequent Negative Declaration in August 2007 on expansion of the facility) commits the GAF/Panoche Drainage District to a biological monitoring program that will be capable of detecting migratory bird impacts and, if necessary, capable of providing the data for project adjustments to avoid such impacts.

Comments on the Final Environmental Impact Statement/Final Environmental Impact Report

The Notice of Availability of the FEIS/EIR was published in the Federal Register on September 29, 2009. Between that date and the execution of this ROD, six comment letters were received: three from the California Water Impact Network/California Sportfishing Protection Alliance (CWIN/CSPA) (October 7, 2009, October 29, 2009, and December 9, 2009), two from the FWS (October 27, 2009 and November 18, 2009 via electronic mail), and one from the United States Environmental Protection Agency (EPA) on October 23, 2009. A letter from the City of Stockton (City) was received on September 3, 2009, prior to the publication of the Notice of Availability, but after the release on August 6, 2009 of the FEIS/EIR under CEQA. Additionally, it was discovered that a comment letter from Revive the San Joaquin that had been submitted on the Draft EIS/EIR (DEIS/EIR) on February 10, 2009, had been misplaced shortly after its submission. Reclamation provided a detailed response to Revive the San Joaquin (RSJ) by letter on November 30, 2009. The issues raised in these letters are summarized and discussed below:

Thresholds of Significance

Comments were received concerning analysis of water quality impacts and thresholds of significance used in the FEIS/EIR. The City of Stockton and C-WIN/C-SPA (by reference) commented that the response to their original comment fails to address the substance of their concerns about narrative water quality objectives in the Basin Plan and that these narrative objectives should be used to develop specific numeric standards of significance, in particular, salinity. The City objects to the use of "frequency of WQO exceedances" and says this does not ensure that the Project will not "substantially degrade water quality."

Response: The comments regarding thresholds of significance relate primarily to CEQA, rather than NEPA, standards for analysis. The Authority, prior to their certification of the Final EIR, responded to the City's comments and C-WIN/C-SPA's October 7, 2009 comment letter on the FEIS/EIR. Those responses are incorporated herein by reference. The FEIS/EIR explains the relevance of the criteria used. The evaluation of impacts used existing water quality objectives, ecological risk guidelines, and other available information to evaluate and describe potential impacts of the project. It is beyond the scope of the project or the role of Reclamation to establish new or additional numeric objectives or criteria as appears to be proposed in the City's comments.

Range of Alternatives

Several comments addressed the scope of the project and the range of alternatives considered in the FEIS/EIR. The City, C-WIN/C-SPA, and RSJ commented that the FEIS/EIR failed to consider a meaningful range of alternatives, in particular permanent land retirement. RSJ suggested supporting commercial hydroponics as an alternative action. The City also commented that the No Action Alternative makes unreasonable and unsupported assumptions about agricultural and water management practices in the GBP Area. C-WIN/C-SPA stated that "In particular, the No Action Alternative is not accurate because, absent the Preferred Alternative,

regulatory enforcement will be used to alleviate the water quality problems associated with drainage.”

RSJ further commented that the scope of the project and alternatives is too narrow, piecemealed and postpones or fails to resolve the overall drainage problem. C-WIN/C-SPA requested that the 2010 Use Agreement be renewed for only two years, during which time the United States Geological Survey Decision Analysis be used to identify a drainage strategy for the San Luis Unit, and that a new NEPA/CEQA process be initiated integrating Reclamation’s SLDFR and the GBP into one document.

Response: The FEIS/EIR provides information on 20 alternatives considered and the criteria, based on the Purpose and Need, used for determining which alternatives were evaluated in the FEIS/EIR versus those eliminated from further consideration. The Alternatives Report (updated in 2008 and incorporated by reference in the DEIS/EIR, page 2-24), contains discussion of Land Retirement and other alternatives mentioned in City’s and C-WIN/C-SPA’s comments. The No Action Alternative is based on existing and reasonably foreseeable conditions in the absence of the Preferred Alternative. The assumptions with respect to the No Action Alternative are identified in the FEIS/EIR. The City’s comments offer no new information or explanation as to why they consider the assumptions to be unreasonable and unsupported. With respect to regulatory enforcement, the California Regional Water Quality Control Board has recognized that in cases of non-point source discharges from agriculture, the issuance of individual waste discharge requirements is not an assured mechanism for attainment of water quality objectives. There is simply no basis in the record or otherwise to assume that if there were no project, regulation would resolve water quality issues associated with drainage.

With respect to the scope of the project and alternatives, the Purpose and Need is identified in the FEIS/EIR. The federal action under consideration by this project is not to address the long term drainage needs and issues of the San Luis Unit, but rather to allow continued use of the San Luis Drain for up to 10 years under specified terms and conditions as identified in the FEIS/EIR. The long term drainage needs of the San Luis Unit as a whole were addressed in the SLDFR EIS and Feasibility Report and are the subject of ongoing activities including proceedings in the District Court.

New Information

C-WIN/C-SPA and FWS suggested that new information had become available since the FEIS/EIR relevant to the GBP. C-WIN/C-SPA and FWS cited a recent report prepared by HT Harvey as new information that suggests more significant impacts to wildlife from exposure to selenium in the reuse area than identified in the FEIS/EIR. C-WIN/C-SPA also cited a recent decision by the federal courts on the Stockton East case as new information “extremely relevant to the Grassland Bypass Project”. In supplemental comments, C-WIN/C-SPA further elaborated that the FEIS/EIR fails to identify how Reclamation intends to meet salinity objectives in the San Joaquin River without New Melones dilution flows as a consequence of the legal decision.

Response: The HT Harvey report referenced in the comments is the latest in a series of annual reports of monitoring at the reuse area. The SJRIP reuse area has an ongoing

tiered contaminant monitoring program that covers monitoring for avian and terrestrial species. The egg monitoring program has been ongoing since 2001. Selenium in eggs has been monitored and reported annually to the FWS. Selenium in egg levels have been elevated for some time, which has been taken into account in the evaluation of impacts in the FEIS/EIR. The monitoring program identifies subsequent steps depending on the test results and is not new information. The monitoring has also in previous years identified Swainson's hawks, burrowing owls and tri-colored blackbirds in the project area and this information was taken into account in the mitigation measures proposed for the project.

The comment regarding a recent federal court decision apparently refers to the case decided September 30, 2009, by the United States Court of Appeals for the Federal Circuit, 2007-5142, Stockton East Water District, et al, v. United States. The case decides claims for damages for breach of contractual rights of two Central Valley Project contractors from the New Melones Unit of the Central Valley Project who are not involved in the Grassland Bypass Project, and remands the case to the trial court for a determination of monetary damages. Whether or not the case will ever bear on the operations of the Central Valley Project to meet water quality obligations under its water rights permits is speculative. In any event, the purpose of the Preferred Alternative is not to identify how Reclamation intends to meet water quality obligations under its water rights permits. The court decision does not represent new information relevant to the Purpose and Need for the Preferred Alternative as identified in the FEIS/EIR, nor the effects or mitigation measures proposed.

Biological Opinion

C-WIN/C-SPA requested that a revised FEIS/EIR be prepared and circulated as a new draft because at the time the FEIS/EIR was issued, there were no Biological Opinions by the FWS and National Marine Fisheries Service (NMFS) nor the California Department of Fish and Game (CDFG) available in order for the public to evaluate mitigation measures.

Response: A Biological Opinion was issued by the FWS on December 18, 2009. Reclamation and the Authority will implement the reasonable and prudent measures and terms and conditions contained in the 2009 Biological Opinion which are non-discretionary and must be implemented in order for the exemption in section 7(o) (2) of the Endangered Species Act to apply. Implementation of the terms and conditions does not result in a change in the Preferred Alternative or new environmental consequences which had not been considered in the FEIS/EIR.

Reclamation received a concurrence from NMFS with our determination that the Preferred Alternative is not likely to adversely affect federally listed anadromous fishes and their critical habitats, and no measures were required by NMFS. The Authority and the CDFG have identified and agreed upon mitigation terms, some of which are incorporated into environmental commitments and some of which are set out in a Memorandum of Understanding. Those mitigation measures are disclosed in the FEIS/EIR.

Impacts to Salmonids

RSJ, C-WIN/C-SPA, and the FWS submitted comments regarding the analysis of impacts to salmonids. RSJ commented that the FEIS/EIR should have recognized that the barrier in the San Joaquin River at the Merced River confluence will be removed as part of the San Joaquin River Restoration Program (SJRRP). The FWS commented that the analysis and response to comments on the DEIS/EIR underestimated the likelihood that selenium levels in the lower San Joaquin River are impacting salmonids both currently and in the future, and recommended follow-up monitoring to show whether salmonids are being exposed to selenium for sufficient periods of time in the lower San Joaquin River between Mud Slough and Hills Ferry. C-WIN/C-SPA reiterated the FWS comments and provided e-mail correspondence from Dr. Dennis Lemly supporting their concern.

Response: The fish barrier across the San Joaquin River at the confluence with the Merced River is operated independently by CDFG. It is specifically identified in the WDRs for the GBP and will continue to be in operation until barriers called for in the San Joaquin River settlement are installed, and it is therefore not relevant to include in the FEIS/EIR. Paragraph 11(a)(10) of the Settlement Agreement for the SJRRP specifically calls for installation of barriers at Mud Slough and Salt Slough and this is addressed in the June 2009 Fisheries Management plan for the SJRRP. This will provide the same protection to salmon that the currently operated barrier does, i.e. it keeps salmon from migrating into Mud Slough.

The Beckon and Maurer (2008) document referenced in FWS and C-WIN/C-SPA comments was one of several information sources Reclamation reviewed and utilized in the development of the Biological Assessment, the FEIS/EIR, and the responses to comments. Reclamation acknowledged that uncertainty continues to exist, described the uncertainties, and, based on the data and information available, made the determination that the impacts will not be significant to the species. Reclamation consulted with NMFS and on November 18, 2009, received their concurrence with our determination that execution of the 2010 Use Agreement may affect, but is not likely to adversely affect, Federally threatened Central Valley steelhead (*Oncorhynchus mykiss*), threatened Central Valley spring-run Chinook salmon (*O. tshawytscha*), endangered Sacramento River winter-run Chinook salmon (*O. tshawytscha*), threatened Southern Distinct Population Segment (DPS) of North American green sturgeon (*Acipenser medirostris*), or any of the critical habitat designated for these listed species. Reclamation determined that essential fish habitat of Pacific salmon will be adversely affected, and requested consultation pursuant to the Magnuson-Stevens Fishery Conservation and Management Act. In their November 18, 2009, letter, NMFS found that no conservation recommendations were needed for essential fish habitat.

Reclamation's conclusion that the Preferred Alternative will not significantly affect salmonid species due to selenium toxicity arising from the Preferred Alternative is supported by the available data and by regulation, and is a reasonable conclusion. The FWS recommendation concerning monitoring will be considered and incorporated as appropriate, in coordination with the SJRRP, as part of the Compliance Monitoring Plan for the GBP.

Viability of Drainwater Treatment

The EPA reiterated a comment that they made on the DEIS/EIR, that they remain concerned about the uncertainty of developing feasible methods of drainwater treatment and disposal that will make it possible to meet selenium objectives by 2019 and arrest the buildup of selenium in groundwater. C-WIN/C-SPA comments also reflected concern over the technical and economic viability of treatment technologies.

Response: No further response necessary.