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Section 2.2.1 – Settlement Flow Schedules

RMC-41 Page 2-17, Line 13: How will flexible flow periods be analyzed and implemented? The operators of the system such as SLCC, CCID and the SL&DMWA need to be included in the planning and implementation process in order to have a successful program.

Section 2.2.2 - Flow Considerations by Reach

RMC-42 The Interim Flows (and later Restoration flows and implementation measures, i.e. facilities, riparian alterations) will alter the stream geometry such that the flow path will flood or strand diversion facilities for riparian water users. No analysis has been conducted as to how these changes will be mitigated?

RMC-43 Page 2-18, Lines 14-16: The document needs to delineate how decisions shall be made to reduce flows to eliminate seepage impacts. (Act, Secs. 10004(d) and (h))

RMC-44 Page 2-18, Line 15: The word “may” needs to be changed to “will.”

RMC-45 Page 2-18, Line 28: The EA/IS does not analyze the increase in the frequency and magnitude of additional O&M activities and associated costs. The ea/is must identify and analyze the agreements and or other mechanisms necessary to mitigate for these cost impacts.

RMC-46 Page 2-21, Line 5: The capacity of Reach 2 at 1,300 cubic feet per second (cfs) was effective in 2006. That capacity needs to be resurveyed to confirm it is still accurate because during 2006 flood flows were being managed to minimize seepage. At 1300 cfs over 200 acres were flooded in 2006 despite actions to minimize seepage. In addition, aquatic growth since 2006 has likely impeded flow in this area because the invasive aquatic species program was ceased by the California Department of Boating and Waterways.

RMC-47 Page 2-22, Line 23: In Reach 3 any flows above the exiting 800 cfs baseline has seepage and flooding impacts to particular parcels. Flows at 4500 cfs will have severe impacts.

Section 2.2.3 - Additional Implementation Considerations

RMC-48 Page 2-27, Line 6: The EA/IS needs to list and analyze the required implementation agreements.

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- RMC-49 Page 2-27, Line 19: add the words "owns and" in first sentence after San Luis Canal Company.
- RMC-50 Page 2-27, Lines 26-37: The EA/IS states that the 2008 Smelt BO and the 2009 Salmon BO operations were not considered. By failing to consider the affects of the BOs, the potential impacts on 2010 operations will be understated both as to the Friant long-term contractors, the Exchange Contractors and other CVP contractors if flows are required to meet the water rights from Friant Dam.
- Section 2.2.5 – Seepage Monitoring and Management Plan**
- RMC-51 Page 2-30, Line 24: The document must define procedures that will be in place to allow the Secretary to make timely decisions regarding when to reduce flow releases to prevent seepage impacts.
- RMC-52 Page 2-30, Line 29: The process needs to clearly define how groundwater depth information will be used to identify a threat that could affect agricultural production. Once a threat has been identified, how will information be used to prevent short and long-term impacts?
- Section 2.2.6 – Flow Monitoring**
- RMC-53 Page 2-13, Line 18: All flow measurement stations must be installed and in operation prior to release of interim flows.
- C. Section 3**
- RMC-54 Pg.3-26, DWR: Table 3-5 relies on data from 2002 regarding plant communities and land cover in the restoration area. Further, the table identifies a data gap for over 7000 acres within the restoration area. Use of 2002 data is inadequate, as it does not (1) account for the spread of invasive species that occurred during the flood flows of 2006 and (2) fails to identify approximately 13% of the acreage. The project proponents have the responsibility to collect the data necessary to make informed decisions.
- RMC-55 Pg. 3-27 28, Agriculture: The EA/IS does not properly assess the impacts from species that will be planted or re-established in riparian corridors. Some species can cause problems for production crop species. For example, some almond orchards are infested with Botroyospaeria canker hosted by the Cottonwood trees lining the river. The almond trees in the orchard in the path of the prevailing winds (SW) have died due to

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the disease infecting the pruning injuries. This has been verified by lab testing at UC Davis Kearny Ag Station, Themis J. Michailides, Plant Pathologist, UC KAC (see quoted statement below).

"Michailides, Themis J." <THEMIS@uckac.edu>
Date: Sat, 28 Feb 2009 00:28:07 -0800

"Please let Gary know that the samples I collected the other day during my visit to his orchard had Botryosphaeria, the pathogen causing band canker on almond. In fact, the cottonwood, the willow, and the fig shoots I collected had Botryosphaeria. The blackberry did not. I think the Botryosphaeria from these hosts is moving into the almonds, and this alone can explain why the disease is more common at the side of the riparian area (east) than the west side of the orchard. We can be back later to record the degradation of the disease if more shows up this spring and summer."

Section 3.3.2 Existing Land Uses, Reach 3.

RMC-56 Page 3-10, lines 15-19: The statement that annual crops account for "nearly all ag land use" is not correct. There has been a recent trend towards permanent crops. All data for crops in all reaches needs to be reviewed and updated in order to properly evaluate impacts.

Section 3.5.2 - Reach 4b

RMC-57 Page 3-33, Lines 31-42: The report mischaracterizes the reason that flows are no longer conveyed in Reach 4B as because "the Sand Slough Control Structure diverts all flows into the bypass system." The gates at the control structure are kept closed by the lower San Joaquin Levee District because there is no longer any conveyance capacity in Reach 4B due to the dense growth within the channel and very small (24" diameter) road crossings. Simply opening the gates and sending any water into Reach 4B will create significant seepage, flooding and salt contamination of a wide corridor of adjacent land within 4B.

RMC-58 Page 3-Lines 34-36: An increase in flows may have an adverse impact on listed species. Construction of improvements could also impact species. Some species such as San Joaquin Kit Fox (dens) or California Salamander habitat could be inundated. Also, the seepage induced elevated groundwater elevation could drown out trees, shrubs and grasses which provide habitat for protected species.

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Section 3.8.3 - Salts

RMC-59

Page 3-47, Lines 6, 7, 8: This section miss-characterizes how salt is managed within the plan area. A careful understanding of salt sources and management practices will be necessary by Reach in order to implement a program without impacts. It is essential that the SJRRP coordinate with existing salt management efforts that are in existence, such as the upper San Joaquin River salt TMDL and CV-SALTS. In addition, the report fails to document even the existing data on water quality within the existing channels, document water quality goals that are necessary and sufficient for fish, or analyze whether the proposed flow regimes are sufficient to achieve those goals by themselves.

Section 3.8.4 - Geology & Soils

RMC-60

Page 3-51, Lines 13-15: A statement is made that some lands between the river and the canals protected by dikes for flows up to 4500 cfs. Reach 3 conditions vary substantially and inundation of some fields occurs at any flow above the 800 cfs base flow level. At 4500 cfs a substantial number of fields were flooded such that only a minimum number of fields are protected by dikes at 4500 cfs. All of these fields need to be systematically identified and a mitigation plan developed to allow Interim Flows to be released to this Reach.

Section 3.11 - Hydrology and Water Quality

RMC-61

Page 3-63, Table 3-18: Historic Average Flows: The use of average flows for Reaches 1-5, etc. is an improper basis for analysis. Use of average flows masks the actual impact from the release of program flows to these Reaches. For example, the tabulation of the average flows at the head of Reach 4A is misleading. Reach 4A is dry nearly all the time, unless there are flood flows present from the Kings River, which are very infrequent. The base-line flow that should be considered for evaluating impacts to surrounding lands should be 0 cfs most of the time. The base line is not 1000 cfs in April (as shown in the chart) which is evidently achieved by averaging 4 years of 0 cfs flow with one year where 4000 cfs was present for a short duration.

RMC-62

Page 3-65, Lines 2-3: The text states "the estimated existing capacity [of Reach 4B] is less than 100 cfs throughout the sub-reach." The EA/IS frequently uses this misleading

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technique of making a general statement to imply that it is broadly applicable. See for example Page 3-51, Lines 13-15. The capacity of Reach 4B is essentially 0 cfs and the analysis must proceed on that basis. The capacity issue in 4B must be treated consistently and accurately throughout the EA/IS. It is defined differently in various areas. (e.g. Page 2-23, Lines 12-14)

Section 3.11.2: Surface Water Quality

RMC-63 Page 3-69, Lines 4-5: The EA/IS fails to analyze the additional restrictions that may be placed on agricultural drainers to the San Joaquin River as a result of the implementation of the SJRRP. Impacts of new restrictions that may result from the SJRRP and mitigation of those restrictions need to be identified and analyzed.

RMC-64 Page 3-75, Lines 15-21: The use of groundwater level conditions based on 2005 conditions is inappropriate. The EA/IS must use current data on groundwater conditions due to heavy groundwater pumping during the drought.

Section 3.11.3 – Seepage and Water Logging:

RMC-65 Page 3-77, Lines 5-6: There are numerous parcels adjacent to Reaches 2, 3, 4 and 5 where any flows present in the river above the present irrigation/wildlife delivery flow levels are impacted by seepage and or water logging. Attachment 1 presents a list of parcels where landowners have identified these types of impacts.

Page 3-77, Line 20: In Reach 2A it is the experience of the adjoining landowners and the Levee District that Reach 2A begins to experience horizontal seepage through flood control levees as soon as water levels reach the inside levee toe.

Section 3.11.4 – Flood Management

RMC-66 Page 3-80, Lines 3-4: This bullet should address specific operations of Sack Dam to allow the project proponents and the public to evaluate potential impacts of the proposed action.

Section 3.15 Transportation and Traffic

RMC-67 Page 3-99, Lines 8-9: Add Merced County

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D. Section 4

Section 4.0

RMC-68 The CEQA environmental checklist form fails to identify impacts to: public services/utilities/service systems, agricultural resources, hydrology/water quality, and geology/soils. As stated elsewhere in these comments and below, there are several impacts that have not been identified.

Section 4.2 – Agricultural Resources

RMC-69 Page 4-7, Line 9: The EA/IS fails to identify areas (parcels) of productive farmland and grazing lands that may be inundated to assess short term and long-term impacts. Further, the conclusion there would be no impact on designated farmland is applied too narrowly. Assuming the project proponents are correct that this is a one year program, the EA/IS still fails to acknowledge that farmlands may well be flooded and production lost for this year. Even a one year loss of farmland is a significant impact, and will have both environmental and socioeconomic impacts.

RMC-70 Page 4-8, Line 15: The EA/IS fails to identify areas of productive farmland and grazing lands that may be inundated to assess short term and long-term impacts. Further, the conclusion there would be no impact on designated farmland is applied too narrowly. Assuming the project proponents are correct that this is a one year program, the EA/IS still fails to acknowledge that farmlands may well be flooded and production lost for this year. Even a one year loss of farmland is a significant impact, and will have both environmental and socioeconomic impacts.

RMC-71 Pages 4-8, Lines 16–21: Lands currently being farmed in Reach 3 would be impacted. They will have seepage. Lands farmed in Reach 3 need to be protected in order to continue farming. Reference is made to the attached Attachment 1 which is a tabulation of the parcels in Reaches 2 through 5 that have had significant impacts, some precluding farming practices, when any flood flows were present historically. Further, the release of Interim Flows or Restoration Flows should not be compared to the periodic and temporary flood flows. While farmlands may be inundated by flood flows, those only occur periodically, while restoration flows will occur annually and under all hydrologic conditions.

RMC-72 Page 4-8, Line 22: The statement that “The potential flows under the Proposed Action would not result in seepage effects on adjacent landowners’ properties” is unsubstantiated and false.

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- RMC-73 Page 4-8, Lines 24-28: See comments above.
- RMC-74 Page 4-8, Lines 28-33: Page 4-8 (Lines 28-33). The EA/IS must analyze the likely increased pumping that will occur if Friant division farmers need the water to irrigate their crops. It must also analyze the impacts of the increase in pumping on lands adjacent to the river in Madera and Fresno Counties. Madera County in their AB3030 plan of 2005 estimated that western Madera County is over drafted 80,000 af annually.
- Section 4.3**
- RMC-75 Page 4-12, Lines 34-40: GHG emissions should be analyzed considering the San Joaquin Valley, not the state as a whole.
- Section 4.4 – Biological Resources – Terrestrial**
- RMC-76 Page 4-18, Lines 27-41: It appears the analysis for valley elderberry longhorn beetle is incomplete. Data is missing and the EA/IS acknowledges that certain data collection was “not comprehensive and results may be outdated.”
- Section 4.5 – Biological Resources - Fish**
- RMC-77 This discussion in this section that addresses impacts in the Delta needs to be reconsidered in light of the most recent BOs for delta smelt and salmon.
- RMC-78 Page 4-40, Line 15: How will this increase in export volume at Jones and Banks be quantified real time?
Page 4-40, Line 18: Compliance with the 2008 USFWS OCAP BO will limit the ability to increase Jones and Banks diversions.
- RMC-79 Page 4-41, Line 25: What is the magnitude of changes in allowable Delta exports caused by the alteration in San Joaquin River flows, also considering the new BOs.
- RMC-80 Page 4-44, Lines 5-7: The statement regarding months during which there will be increased San Joaquin River Delta inflows appears to conflict with the months stated at page 4-39.
- RMC-81 Pages 4-44 & 45: There is no discussion of the Hills Ferry barrier and the steps that will be undertaken to address upstream migration and the effectiveness of the barrier, as required by Section 10004(h) of the Act.

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Section 4.9 – Hydrology and Water Quality

RMC-82 Page 4-67, Line 33: Comparison of average annual water temperatures is not a meaningful basis for evaluation of impacts. Water temperatures must be assessed on an hourly or daily basis under varying seasonal operations scenarios to consider the full range of potential impacts.

RMC-83 Page 4-70, Lines 7-19: Groundwater impacts are not analyzed based on current groundwater conditions.

RMC-84 Page 4-71, Lines 4-7: The EA/IS concludes that there will be no “on- or off-site flooding.” The purpose of the Interim Flows is to assess flooding and other adverse impacts. This conclusion is unfounded at this time.

RMC-85 Page 4-72, Lines 16-18: During the last high flow event in Reach 2b (2006) seepage impacts did occur at flows of 1,300 cfs. With 3-years of new growth in the channel it is unclear as to what level of flows can safely pass through the reach without causing significant impacts.

RMC-86 Page 4-72, Line 30: The Seepage Monitoring and Management Plan needs to include additional actions to help identify potential seepage areas. Use of aerial observation and photography may assist to some degree with timely reconnaissance of the river study area, however, in many cases it is likely that by the time aerial observations are made, the damage will have been done.

Section 4.10 - Land Use Planning

RMC-87 Page 4-87, Lines 8-9: The detour will cause the traffic to drive an additional 25 miles each way because there are no parallel roads; it is all private property and largely dirt roads. This is a potential significant impact to air quality.

RMC-88 Page 4-88, Lines 7-9: This statement is inaccurate. Lands in Reach 3 have impacts. For example, the City of Firebaugh’s 2030 General Plan indicates development near the San Joaquin River that would be impacted.

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Section 4.15 - Recreation

RMC-89 Page 4-99, Lines 1-6: There is no public access below Gravelly Ford. Below Gravelly Ford is either a flood control project; private property, or does not provide for access.

Section 4.17 – Utilities and Service Systems

RMC-90 Pages 4-104, 4-105-106: Sufficient water supplies are not available to serve the project from existing entitlements and resources. There is a chronic water shortage within the CVP, including the Friant Division. The EA/IS contains no analysis of the impacts of loss of 200,000 or more acre feet to the CVP.

Section 4.18 – Mandatory Findings of Significance

RMC-91 Pages 4-109: There is no discussion of cumulative effects. This has been pushed off to the PEIS/R. The EA/IS must consider, among others, the impacts on the recent BOs for Delta smelt and salmon.

RMC-92 Page 4-110, Lines 19-21: The PEIS/R was to have been completed by now. It does not seem possible that it is “speculative at present to identify the environmental impacts and their significance that will be addressed in the PEIS/R.” This section is devoid of meaningful analysis of impacts.

Section 4.20 – Socioeconomic Effects and Environmental Justice

RMC-93 The statements in this section conflict with recent statements by Sec. Salazar regarding the impacts that the drought and the water supply situation are having on communities within the San Joaquin Valley. The impact of flows to lands adjacent to the river will have socioeconomic impacts resulting from loss of farmlands, interference with farming operations and potential loss of employment.

E. Section 5

Section 5.1 – Past and Ongoing Efforts

RMC-94 Page 5-1, Lines 14-23: The “Interim Flows” are part of the SJRRP; they are not a stand-alone action and should be analyzed as part of the entire program, not a one year event.

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RMC-95 Page 5-2, Line 3: The San Luis-Delta Mendota Water Authority and Central California Irrigation District should be identified as cooperating agencies.

RMC-96 Page 5-2 Line 23: Comments on the previous "Stream Gage Rehabilitation and Monitoring Plan for Physical Parameters" documents do not appear to have been taken into account in this document.

IV. Comments on the Appendices, Tables and Figures

APPENDIX C

Appendix C – Friant Dam Releases for Restoration Flows

RMC-97 Page 1-1, Line 4: The document states that the appendix provides context for describing the release of Interim and Restoration flows from Friant Dam, but there is no description of the rationale for the development of the Interim flows proposed for the 2010 Interim Flows Project.

RMC-98 Appendix C is devoid of any evaluation of the joint operations of the SOD CVP contractors and the Friant Unit, especially in light of the new Biological Opinions for Delta Smelt and Salmon, Steelhead and Green Sturgeon. Section 7 of Appendix C needs to include this evaluation; otherwise the impacts are understated (or never stated).

APPENDIX D

RMC-99 Page 1-2, Line 9: Seepage should also include "San Joaquin River" as well as flood channel

RMC-100 Page 1-2, Lines 17-19: Should be deleted, repetitive from lines 6-8.

RMC-101 Page 2-2, Lines 5-8: The mitigation plan needs to be in place prior to initiation of flows or seepage and other damage will occur.

RMC-102 Page 3-2, Lines 5-8: It is not clear who the project proponents are requesting to conduct the levee control and in what areas. Are the local landowners or the Levee District expected to add staff to conduct the extraordinary patrol due to Interim Flows?

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Appendix D - Monitoring Program Attachment

- RMC-103 Page 1-1, Lines 16-19: The document states "The intention of this plan is to identify direction for seepage monitoring and management, but not to offer details on the design of seepage monitoring activities." The point of a FONSI/Mitigated Negative Declaration is to support a finding of the absence of impacts or the full mitigation of impacts. This appendix suggested that these impacts will not be studied or known. This conflicts with the FONSI/Mitigated Negative Declaration.
- RMC-104 Page 2-1, Table 2-1: In order to support a FONSI/MND, the monitoring locations listed as "to be in installed pending landowner agreements" must be operational prior to release of Interim Flows.
- RMC-105 Page 3-1, Line 7-8: The existing wells and identified transects will provide very limited information on groundwater levels on private lands. In order to support a FONSI/MND, the program must install additional wells at critical locations based on input from local agencies and land owners.
- RMC-106 Page -3, Figure 3-2: Existing groundwater monitoring wells must be surveyed to allow comparison of consistent water level information throughout the study area.
- RMC-107 Page 3-4, Figure 3-3: There do not appear to be any groundwater wells proposed for installation in Reach 3. The proposed Interim flows may cause seepage impacts as a result of higher flow levels in this reach.
- RMC-108 Page 3-5, Figure 3-4: Reach 4A only includes a single groundwater monitoring location. The program should consider installation of additional wells at critical locations based on input from local agencies and land owners.
- RMC-109 The monitoring program makes no mention of utilizing existing groundwater wells and piezometers on local district or private lands within the study area.

Appendix D – Seepage Monitoring and Management Plan for Water Year 2010 Interim Flows

- RMC-110 Page 2-1, Line 23: The seepage monitoring information must include timely aerial and on ground observations to allow adequate coverage and timely identification of potential seepage impact areas.
- RMC-111 Page 2-2, Line 9: What mechanism do the project proponents have in place to clearly define how "impending rise in the water table" will be quantified to prevent seepage

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impacts? Without this plan in place and readily available for public review and comment the project proponents cannot state they have mitigated any significant impacts.

RMC-112 Page 2-2, Lines 15-19: Once a seepage condition is detected impacts may already exist and the operational responses noted in Section 2.4 will only serve to reduce the magnitude of impacts but not eliminate them. The monitoring plan must be designed to pro-actively identify increases in seepage so that actions can be taken to prevent potential impacts to adjacent agricultural lands prior to the release of any Interim Flows.

RMC-113 Page 3-1, Lines 8-9: Full implementation of site-specific efforts to identify final monitoring locations and install groundwater monitoring wells, including on private lands, must be completed prior to release of any Interim flows.

RMC-114 Page 3-1, Lines 28-29: The use of monitoring transects 8 to 10 miles apart in combination with a few special interest transects is inadequate to assure there are no significant impacts to adjacent lands. Multiple sand strata below the ground surface are a direct conduit for the flow of seepage into adjacent fields. As the Program knows the RMC is in the process of helping Reclamation identify additional locations where groundwater monitoring and interim flow reduction mitigation trigger points need to be installed.

RMC-115 Page 3-2, Line 5: Levee patrols will have limited ability to identify adverse impacts to third parties from groundwater seepage. Aerial observation flights and photography must be used to quickly identify potential seepage areas of concern.

APPENDIX E

Appendix E – Flow Monitoring and Management Plan

RMC-116 Page 1-1, Lines 12-15: The document states “The intention of this plan is to identify direction for flow monitoring and management, but not to offer details on the design of flow monitoring activities.” A document must be available for public review that provides the details of the management strategy and design, specific to the Interim flow monitoring activities.

RMC-117 Page 1-1, Lines 12-15: The document lacks any detail on what experimental methods and proposed analyses will be used as the basis for the monitoring plan, and because of this the project proponents can not accurately claim they have mitigated any significant impacts on third parties.

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RMC-118 Page 2-4, Lines 2-3: Is there an expected level of accuracy associated with the flow monitoring that will be important to data analyses to establish estimates for reach losses etc.?

RMC-119 Page 3-1, Line 11: The seven flow monitoring locations are listed as necessary. How will the Interim flows provide meaningful data if the stations are not operable prior to release of flows?

APPENDIX G

Appendix G – Modeling

RMC-120 Page 2-5, Lines 12-18: Since the Near-River Groundwater model is not clearly defined, nor is it available for peer review, how will it be credibly used to assess potential seepage impacts on shallow groundwater levels? What quantitative methods, if any, were used to quantify seepage impacts to adjacent agricultural lands?

RMC-121 Page 4-10, Line 14: The procedure for determining the diversion to the Chowchilla Bypass to prevent flood damage in the Reaches 2B and 3 is attributed to Mussetter 2008. The Mussetter 2008 reference is not included in the references section.

RMC-122 Page 4-10, Line 25, 28 & 31: The EA/IS incorrectly states that the controlling factor in determining the flow split at the Chowchilla By-pass is 1,300 cfs in Reach 3. Reach 2b has the limiting factor of 1,300 cfs.

RMC-123 Page 4-11, Line 10-14: The EA/IS incorrectly states the flow capacity in Reach 4b is 300-400 cfs. The capacity of Reach 4B is zero.

RMC-124 **Table 1-1:** WY2010 Interim Flows Study Area w/in SJR Reaches and Flood Bypasses in Restoration Area.

Conclusion

The RMC has submitted these extensive comments with the hope that the USBR and DWR will take note of the significant issues and concerns that have been raised both substantively and procedurally. It is the goal of the RMC to see that as useful and complete of environmental documentation is prepared for this major project that will profoundly affect the landowners and farmers along the San Joaquin River.

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In addition to these comments, we are transmitting the results of landowner surveys regarding impacts that will result when the flows are implemented. We are also submitting other documentation identified below to be included in the administrative record.

If you have any questions regarding these comments, please do not hesitate to contact either me or Steve Chedester.

Very truly yours,



Mari Martin
President, RMC

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Attachments and Enclosures

Attachments

1. Compilation of landowners impacts to property
2. Summary of previous submittals

Enclosures

1. Copy of Email Submittal of April 28, 2009 of the Central California Irrigation District depth to groundwater in shallow peizometers and deep well adjacent to the San Joaquin River information.

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**ATTACHMENT 1. COMPILATION OF IMPACTS TO LANDOWNERS
WHEN RIVER FLOWS ARE ABOVE EXISTING BASELINE**

APN's	Root Zone	Impacts SFC Flooding	Farming Practices	Flooding	Levee Maintenance	>GW Levels	Loss of Riparian Habitat	Enhanced Riparian	Comments
042-220-008, 042-220-009, 042-220-010	✓	✓		✓	✓		✓		loss of 158 acres likely
043-064-001, 043-062-002, 043-061-002, 043-061-003, 043-014-001, 043-013-001, 043-011-001, 013-050-08, 013-030-64S, 013-050-07S, 013-020-26	✓	✓	✓	✓	✓				
073-310-002, 073-310-003, 073-320-004, 073-320-005, 073-320-006, 073-340-007, 073-340-008, 073-360-019, 073-040-002, 073-040-003	✓	✓	✓	✓	✓		✓		3 to 4,000 acres loss, in 48
042-010-037 & 038 042-010-030	✓	✓	✓	✓	✓	✓			
001-050-07, 001-180-02, 001-130-13, 001-050-21, 001-050-24, 091-121-002	✓		✓	✓	✓	✓			
085-070-029, 085-070-028, 085-080-001, 085-070-027, 085-080-011, 085-050-014, 085-030-002, 085-380-009	✓	✓	✓	✓	✓				
012-070-30, 013-260-08, 013-020-27	✓		✓						
041-010-001, 041-070-004, 041-130-003, 041-190-003, 041-190-007, 041-201-002, 041-201-001, 042-010-002, 042-010-004, 042-010-011, 042-010-013, 042-010-022, 042-001-005, 042-100-002, 042-100-004, 042-110-003, 042-150-003, 042-161-003, 042-191-002, 042-201-002, 042-220-002, 042-220-008, 042-231-004, 042-241-004, 042-250-002, 042-260-004, 042-270-002, 042-280-005, 013-270-02, 013-270-03, 013-270-04	✓	✓	✓	✓	✓	✓			
042-030-018						✓			
042-010-010, 041-201-009, 041-190-004, 041-130-004, 042-081-011, 042-092-009, 042-300-001	✓		✓						loss of 2 acres, access to water for pumps
040-200-014, 040-200-018, 040-200-016, 040-200-011	✓		✓					✓	loss of 89 acres and well field of 10 pumps
013-040-003, 013-040-018, 013-040-016, 013-020-024, 013-020-040			✓		✓				
042-110-008, 042-110-009	✓			✓	✓				sewer station on 040-160-002 in 2008
013-040-285	✓	✓		✓	✓				85 acres potential loss
040-222-022, 040-222-023, 040-022-010-001, 020-181-003, 020-020-170-010, 020-170-008, 020-074-170-021, 074-170-023, 020-041-015-006, 041-015-003	✓	✓	✓	✓		✓	✓		up to 50 acres loss loss of 30 acres possible
085-080-022, 085-080-007, 085-040-007					✓	✓			potential loss of 30 acres
015-210-11, 015-210-128						✓			
042-072-004, 041-221-003	✓	✓	✓	✓	✓				sewage is a serious threat, lower than neighbors' property
041-130-001, 041-070-003									
073-400-005, 073-400-012, 085-270-003, 085-270-007, 085-270-008, 085-270-009, 085-270-018, 006-080-07, 006-110-12, 006-130-15, 007-081-02, 007-091-01, 008-020-34, 001-110-11, 001-205-38	✓		✓						2437 potential acres impacted or lost
040-042-003, 040-044-001, 042-181-006, 042-182-001						✓			
012-130-11S, 012-130-26, 013-020-38S, 012-040-13S, 012-070-21, 012-100-14, 013-020-40, 013-02-41, 012-0070-31S, 012-100-05S, 012-100-31, 012-120-18S	✓	✓	✓	✓	✓		✓		loss of 164 farmable, 6 riparian acres
012-070-37, 012-070-35, 012-040-14, 013-280-09	✓	✓	✓	✓	✓				loss of 283 acres possible
013-020-44	✓	✓	✓	✓	✓		✓		loss of 175 acres and other crop loss
042-252-001, 042-200-001, 042-220-001	✓		✓						could cause septic tank failure at one parcel
041-130-006	✓								
030-190-42, 060-040-08, 030-011-10, 030-190-43			✓						
030-011-09, 030-019-39, 070-030-12, 070-030-18, 060-060-46	✓	✓	✓	✓		✓			
003-100-22, 003-100-21S, 003-100-26	✓		✓						potential house foundation issue
007-190-32B 042-010-044	✓							✓	

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APN's	Root Zone	Impacts SFC Flooding	Farming Practices	Flooding	Levee Maintenance	>GW Levels	Loss of Riparian Habitat	Enhanced Riparian	Comments
074-020-005, 074-020-004, 074-010-007, 074-010-010, 074-010-009, 074-010-009	✓	✓	✓	✓					
085-090-019, 085-090-018, 085-110-012, 085-110-014	✓	✓	✓			✓			
073-400-009, 073-400-024, 073-400-027, 073-410-003, 085-370-170, 073-360-014, 073-350-001, 073-350-002, 073-410-005, 073-410-006073-390-018, 073-400-020, 073-490-022	✓								
85-070-001, 85-070-025, 85-160-001, 85-060-003, 85-060-009, 85-060-10, 85-160-009, 85-160-010, 85-230-005, 001-110-020, 001-120-03, 001-060-05, 001-060-04, 001-140-05, 001-140-04, 001-120-08, 001-120-07, 001-060-03, 001-120-05, 001-110-14, 086-070-005, 086-080-006, 086-080-007, 089-080-008, 73-360-002, 73-390-008, 73-390-003, 73-360-003, 003-210-03, 003-220-10, 085-370-008, 085-270-020, 003-100-08, 003-100-19, 003-100-04, 003-110-27, 003-110-28	✓		✓						all of these parcels are along channels that are sewage control facilities, additional seepage will likely cause root zone inundation
030-200-025, 030-210-085	✓	✓	✓						loss of 30 plus acres
042-191-001, 042-192-001, 042-220-004, 042-221-001, 042-231-002, 042-310-006, 042-310-007, 042-231-008, 042-232-001, 042-241-001, 042-241-002, 042-252-003, 042-260-003, 042-270-001, 042-280-002	✓	✓	✓	✓	✓		✓		potential seepage loss 1.317
042-010-046, 042-010-047						✓		✓	
013-260-10, 012-070-36	✓		✓						
041-190-001, 041-130-002	✓	✓	✓	✓					
060-050-16, 060-060-30, 060-060-14, 060-060-17, 030-220-12, 070-030-16, 070-030-11, 060-060-45, 060-120-21, 070-061-10	✓	✓	✓	✓	✓				
040-190-012	✓	✓	✓	✓	✓				
001-060-015, 086-080-008, 086-080-004	✓		✓						
085-700-026, 085-140-008, 085-140-009, 085-150-001, 085-150-003, 085-160-001, 085-160-003, 085-160-005, 085-170-011, 085-170-025, 085-170-032, 085-230-024, 085-230-034, 085-300-036, 085-230-039, 085-330-021, 085-330-030, 085-350-017, 085-360-006, 085-360-008, 085-360-013, 085-360-035, 085-360-039	✓			✓					
070-060-19	✓		✓						
015-070-348, 015-030-218, 015-030-228			✓			✓			
040-131-005					✓		✓		
040-182-002, 040-182-003					✓				
49-240-06, 49-240-07, 49-240-08, 49-240-09, 49-240-10, 65-050-04, 74-010-01, 74-010-02, 74-010-03, 74-010-05, 74-010-06, 74-030-01, 74-030-05, 74-030-11, 74-050-01, 74-050-07									loss estimated 1300 acres, pumps and equipment vulnerable
041-130-005	✓	✓	✓	✓	✓				loss of 20 acres
040-131-009, 040-131-007, 040-132-023, 040-132-027	✓		✓	✓	✓		✓		
01-080-07, 01-100-04, 01-100-08S, 01-100-10S, 01-100-12S, 01-100-13S, 01-110-07, 01-110-09, 01-110-23S, 01-110-24S, 01-200-30S01-210-15S, 01-210-16S	✓	✓	✓	✓		✓			Estimate 20% loss of seepage, also increased water pumping from sub-surface interceptor system

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ATTACHMENT 2. SUMMARY OF PREVIOUSLY PROVIDED MATERIALS

1. DVD of aerial flight over the San Joaquin River during the flood event of 2006 in which approximately 4,000 cfs were flowing through the Mendota Dam into Reach 3 and below from the Kings River. The DVD documents many farmed fields inundated from seepage from the San Joaquin River. The DVD was submitted to the Bureau in July 2006. A hard copy of the DVD will be hand delivered to Mr. Kevin Faulkenberry on 20 July 2009.
2. On April 28, 2009, Central California Irrigation District submitted depth to groundwater historical data on shallow observation wells and deep wells and Autocad map showing locations of wells. The depth to groundwater data is from 1983 to present. An electronic copy of the transmitting email and attached data files are submitted with the electronic submittal of these comments. A hard copy of the data will be hand-delivered to DWR and USBR on July 20, 2009.

Response to Comments from San Joaquin River Resource Management Coalition

Attachments: (1) Compilation of landowners impacts to property, (2) Summary of previous submittals, (3) Copy of E-mail Submittal of April 28, 2009 of the Central California Irrigation District depth to groundwater in shallow peizometers and deep well adjacent to the San Joaquin River Information

General Comments

RMC-1 and -2: As acknowledged in comment RMC-2, the first year Interim Flows are required to ascertain the impacts that will result from the subsequent years' Interim Flows and Restoration Flows. Specific data to be collected include information related to water flow, water temperatures, fish needs, biological effects, seepage losses and water management, as described in Section 1.0 of the Draft Environmental Assessment/Initial Study (EA/IS). While the future release of additional Interim and Restoration flows is also mandated under the Stipulation of Settlement in *NRDC, et al., v. Kirk Rodgers, et al.* (Settlement), the specific implementation of these later actions will benefit from data that would be collected under the proposed action.

The Water Year (WY) 2010 Interim Flows constitute a complete project under National Environmental Policy Act (NEPA) because it is a demonstration project that has independent utility and provides useful information on flows, temperatures, fish needs, seepage losses, shallow groundwater conditions, recirculation, recapture and reuse conditions, channel capacity (high and low flows), and levee stability regardless of the future implementation of the Settlement. These data are useful independent of the San Joaquin River Restoration Program (SJRRP), particularly with respect to understanding the flood management system and seepage. While the Proposed Action is one of the first steps in implementing the SJRRP, the Proposed Action can be implemented successfully in meeting its purpose and need and objectives without any subsequent SJRRP activities.

As stated in Section 4.0 of the Draft EA/IS, the SJRRP Program Environmental Impact Statement/Report (PEIS/R) will evaluate the cumulative effects of the implementing the SJRRP, including both Interim Flows and Restoration Flows.

RMC-3: Comparisons to historical flows demonstrate the relative differences between the No-Action Alternative and the Proposed Action; these differences are assessed and compared to impacts under the No-Action Alternative in determining the potential impacts of the Proposed Action. As discussed in Sections 2.0 and 4.0 of the Draft EA/IS, in nonflood periods, the Proposed Action would result in increased flows in most reaches. The greatest differences in flows under the Proposed Action as compared with flows under the No-Action Alternative would occur in spring and early summer (late March through June). As a result of losses to groundwater, the differences in flow between the Proposed Action and the No-Action Alternative become smaller as flows progress

downstream to the Merced River. Downstream of the Merced River confluence, differences in flow between the Proposed Action and the No-Action Alternative would be particularly small.

Section 3.0 of the Final EA/IS has been revised to present stream gage data showing historical flows in the system.

As described in Section 2.0 of the Draft EA/IS, the Proposed Action includes limiting Interim Flows to existing channel capacity as estimated using best available information. As described in Section 2.0 and Appendices D, E, and F of the Draft EA/IS, during the implementation of the Proposed Action, flows would increase gradually and incrementally; decisions to increase flows incrementally would be informed by information collected as part of the Proposed Action, including stage, vegetation, and groundwater depth monitoring; observations made during levee patrols; and input from landowners; as described in Section 2.0 of the Draft EA/IS and in Appendices D, E, and F. Additional text has been added to Section 2.0 of the Final EA/IS and in Appendices D, E, and F for clarity.

The continuation of flows after September 30, 2010 is not part of the Proposed Action. Long-term implementation of Interim and Restoration flows will be assessed in the PEIS/R.

RMC-4: An evaluation of the actions needed to restore viable populations of salmon in the river is not included in the EA/IS because salmon reintroduction is not included in the Proposed Action. Impacts to existing fisheries that may occur as a result of the Proposed Action, as described in Section 4.5 of the Draft EA/IS, are found to be less than significant. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-5: Because access to most private property within the Restoration Area has not been granted by property owners, a comprehensive set of field data not has yet been collected. The best available information, including soil surveys, previously collected and publicly available data, aerial photos, numerical modeling, conceptual modeling, and landowner communication was used in the impacts assessment. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-6: The best available information, including soil surveys, previously collected and publicly available data, aerial photos, numerical modeling, conceptual modeling, and communication with landowners, was used in determining the potential impacts associated with the Proposed Action, including the determination of estimated existing channel capacities. As stated in CVFPB-1 (see Chapter 2), the Proposed Action was developed based upon the best available information at the time the Draft EA/IS was prepared. Information provided by individual landowners and by the RMC as comments to the Draft EA/IS state that flows between 475 and 1,300 cubic feet per second (cfs) also could result in seepage, flooding, and related impacts in some portions of the Restoration Area. The Project Description has been revised to account for this new information.

Under the revised Project Description, flows will begin below 475 cfs, and will be gradually and incrementally increased. Monitoring will be implemented concurrent with the release of Interim Flows to provide additional information about system responses to flows. See Section 2.0 of the Final EA/IS for a complete description of the Proposed Action, as revised.

See response to CVFPB-2 and RMC-10.

RMC-7: The Finding of No Significant Impact (FONSI) and the Mitigated Negative Declaration (MND) are consistent in identifying the need for mitigation (Finding 9 in the FONSI, conclusion 10 in the MND). The Seepage Monitoring and Management Plan is required by the Act, as the comment states.

Text added to the FONSI to clarify that, consistent with Section 10004(h) of Public Law 111-11, the Draft EA/IS includes a description of seepage and flow monitoring programs associated with the Proposed Action. Section 10004(d) of Public Law 111-11 pertains to the mitigation of impacts of the Proposed Action. The Seepage Monitoring and Management Plan is part of the Proposed Action, and is therefore not included as mitigation for potential impacts.

RMC-8: In the event that the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) must make deliveries to the San Joaquin River Exchange Contractors via the San Joaquin River, these water deliveries would have a higher priority over WY 2010 Interim Flows to channel capacity. The text was revised to clarify this.

RMC-9: As stated in Section 2.0 of the EA/IS, the change in pumping in the Delta at existing Central Valley Project (CVP) and State Water Project (SWP) facilities due to the Proposed Action would be subject to all existing operating criteria, prevailing and relevant laws, regulations, Biological Opinions and court orders in place at the time the water is pumped.

Reclamation has provisionally accepted the National Marine Fisheries Service (NMFS) Biological Opinion and is operating according to its requirements. Reclamation and NMFS continue to develop mutually agreeable operation guidelines for pumping in the Delta during March through June when juvenile Central Valley steelhead are moving downstream and are more susceptible to the effects of the CVP and SWP operations. A Biological Assessment for WY 2010 Interim Flows was prepared and provided to U. S. Fish and Wildlife Service (USFWS) and NMFS to support these agencies in determining the extent to which implementing the Proposed Action may affect federally listed species or species proposed for listing as threatened or endangered under their jurisdiction.

The possibility of a listing of fall-run Chinook salmon, followed by a “breakthrough” of fall-run Chinook salmon into the mainstem San Joaquin River above the Merced River confluence is too speculative for meaningful consideration. The Hills Ferry Barrier has been installed seasonally since 1993. The California Department of Fish and Game (DFG) has operated the barrier since 1993 and, although a minor number of fish get through the barrier, no “breakthroughs” have occurred historically. Additionally, Public

Law 111-11 (Act) requires an assessment of the effectiveness of the Hills Ferry Barrier, which will be conducted during the WY 2010 Interim Flows period. Retrofitting of the Hills Ferry Barrier has not been identified as necessary at this time.

The text was revised to clarify that the recirculation of WY 2010 Interim Flows, once diverted from the river, bypass system, or Delta, would be subject to available capacity within CVP/SWP storage and conveyance facilities. As shown in Figure 2-13 of the Draft EA/IS, these facilities include the Jones and Banks pumping plants, the California Aqueduct, the Delta-Mendota Canal (DMC), San Luis Reservoir and related pumping facilities, and other facilities of CVP/SWP contractors. Available capacity is defined as capacity available after satisfying all statutory and contractual obligations to existing water service or supply contracts, exchange contracts, settlement contracts, transfers, or other agreements involving or intended to benefit CVP/SWP contractors served water through CVP/SWP facilities.

RMC-10: Since 2007, Reclamation has actively pursued agreements to access private lands for site-specific data collection on geologic conditions related to seepage and other physical parameters. Landowners have actively denied access to their property for this purpose. A summary of coordination efforts regarding land access for data collection is provided in Appendix J.

The Seepage Monitoring and Management Plan was revised to clarify that the frequency in the evaluation of monitoring information would be increased when releases from Friant Dam would be expected to result in Interim Flows of 475 cfs or greater in Reach 2B. As stated in CVFPB-1, the Proposed Action was developed based upon the best available information at the time the Draft EA/IS was prepared. Information provided by individual landowners and by the RMC as comments to the Draft EA/IS state that flows between 475 and 1,300 cfs also could result in seepage, flooding, and related impacts in some portions of the Restoration Area. The Project Description has been revised to account for this new information. Under the revised Project Description, flows will begin below 475 cfs, and will be gradually and incrementally increased. Monitoring will be implemented concurrent with the release of Interim Flows to provide additional information about system responses to flows. See Section 2.0 of the Final EA/IS for a complete description of the Proposed Action, as revised.

RMC-11: Reclamation delivers water to the San Joaquin River Exchange Contractors at Mendota Pool via the DMC under the San Joaquin River Exchange Contract. Typically, all deliveries to the San Joaquin River Exchange Contractors are made via the DMC, except for flood flows that meet Exchange Contract demands. Under the terms of the San Joaquin River Exchange Contract, Mendota Pool and Mendota Dam are operated to maintain the pool within a narrow elevation range (as described in Section 4 of the Final EA/IS). The operation of Mendota Pool and Mendota Dam would continue according to these terms under the Proposed Action. Reclamation is coordinating with Central California Irrigation District (CCID) and San Luis & Delta-Mendota Water Authority (SLDMWA) to develop a communication strategy, as described in Section 2.0 of the Final EA/IS. Under this strategy, releases for WY 2010 Interim Flows would be communicated as often as necessary for the continued operation of Mendota Pool,

Mendota Dam, and other facilities on the river consistent with all existing operating criteria, prevailing and relevant laws, regulations, biological opinions (BO), and court orders in place.

In the event that Reclamation must make deliveries to the San Joaquin River Exchange Contractors via the San Joaquin River (Reaches 1 and 2), these water deliveries would have a higher priority over WY 2010 Interim Flows to channel capacity. No agreements are needed for Reclamation to provide San Joaquin River water to Mendota Pool to meet Exchange Contract demands. Any necessary agreements with San Luis Canal Company (SLCC), CCID, and SLDMWA will be developed and flows would be released consistent with those agreements. Also, see response to SJRECWA-1D in Chapter 3. Text in Section 2.0 of the Final EA/IS was revised to clarify.

RMC-12: The Proposed Action includes the evaluation of monitoring information and landowner feedback to inform future decision making. The monitoring equipment, facilities, collection methods, and reporting are under continued development by the Implementing Agencies and will be informed by the recommendations of the Restoration Administrator. The Seepage Monitoring and Management Plan has been revised to provide more information on how information will be used in this process to support decisions relevant to the release of WY 2010 Interim Flows. Additional analysis added to the Final EA/IS as Attachment 6 to Appendix G, “Cursory Evaluation of Flood Impacts from Interim Flows,” supports this approach.

RMC-13: The Proposed Action does not include agreements that would need to be developed between Friant, Reclamation and DWR for conveyance of recaptured water. All other necessary actions, including facility operations, agreements, and permits required for routing and recapture of WY 2010 Interim Flows are included in the Proposed Action, and described in Sections 2.0 and 6.0 of the Draft EA/IS. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-14: See response to comment RMC-10.

RMC-15 Shallow groundwater modeling was not used to evaluate potential changes in conditions along the river. Quantitative methods used to identify potential groundwater responses are described in Section 4.0 of the Draft EA/IS. See response to comment RMC-10. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-16: See response to comment RMC-10.

RMC-17: The Seepage Monitoring and Management Plan identifies approximate locations of existing and proposed wells. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text and graphics were not modified.

RMC-18: As described in Section 2.0 of the Draft EA/IS, The Mendota Pool is scheduled to be dewatered from November 26, 2009 through the end of the year. During this period, WY 2010 Interim Flows would not be released from Friant Dam. The EA/IS does not assess potential impacts of the Restoration Flows; these potential impacts will be assessed in the PEIS/R. See response to comment SJRECWA-1A. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

Specific Comments on the FONSI and MND

RMC-19: See response to comments RMC-1 and RMC-2.

RMC-20: See response to comments RMC-1 and RMC-2. DWR's execution of the referenced Memorandum of Understanding is outside the scope of the Proposed Action.

RMC-21: See response RMC-11.

RMC-22: As described on page 2-5 of the Draft EA/IS, the Proposed Action was developed according to and consistent with both the Settlement and the Act. Measures to avoid third party impacts are described in the Proposed Action. Text was added to Section 6.0 of the Final EA/IS describing how sections of the Act pertain to the Proposed Action.

RMC-23: Text is revised to remove statement that farmland inundation would be similar to existing conditions. Because WY 2010 Interim Flows would remain within the low flow channel in the bypass system, the Proposed Action would not interfere with the ability by adjoining farmlands to drain tailwater into the bypass. Additional analysis added to the Final EA/IS as an Attachment 6 to Appendix G, "Cursory Evaluation of Flood Impacts from Interim Flows," supports this conclusion. In addition, and as described in Section 2.0 of the Final EA/IS, monitoring will be conducted to verify that the release of WY 2010 Interim Flows to the bypass does not result in flows outside of the existing low flow channel. The stream gage record shows that, average flows in the Eastside and Mariposa bypasses in all months of all year types are greater than zero. See response to comments RMC-3 and RMC-10.

RMC-24: The Detour Plan has been revised to eliminate the use of unpaved roads for detours, therefore obviating any need to discuss new dust emissions from implementation of the Detour Plan. See response to comment MCDPW-2.

RMC-25: Appendix F does not prescribe multi-year glyphosate applications as the only treatment, and the development of herbicide resistant varieties of these weeds species as a result of this management plan is very unlikely. Nonetheless, the description of treatments in Appendix F was revised to clarify that no single specific herbicide treatment is being prescribed and to revise the approach to treatments to further reduce the likelihood that herbicide resistant populations of these invasive plants would develop. No herbicide resistant populations of these invasive plants have been reported, and despite repeated application over extensive acreages of cropland, range land, wildlands, and landscaping, only a single population of a weed species has been reported to have

developed resistance to glyphosate (Prather, DiTomaso, and Holt 2000). Thus, application of glyphosate and/or other herbicides to the relatively very small area that may be treated for 1 to 3 years under the Proposed Action is very unlikely to result in development of herbicide resistance. Text in Section 1.0 revised to clarify that repeated treatments (if any), would include mechanical removal or application of herbicides with a different mechanism of action or target site from previous applications.

The FONSI identifies mitigation for invasive species in item 4 of the supporting factors.

RMC-26: See response to comment MID-4 in Chapter 3 of Appendix I.

RMC-27: The Draft EA/IS and appendices indicate the expected small reduction in groundwater levels in the Friant Division (most areas less than 1 foot, with the greatest reductions at less than 3 feet) would be within the range of historical groundwater levels. Because of the aquifer materials and extent of past soil compaction in the region, the EA/IS does not find a corresponding potential for soil compaction. The FONSI was revised to strike this statement. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-28: As described in response to comment RMC-27, groundwater changes would be small and would not result in aquifer compaction. The Draft EA/IS addressed expected groundwater response based on the recovery of Interim Flows ranging from no recovery to full recovery. The finding is revised to clarify that the Proposed Action would not substantially deplete groundwater supplies or interfere with groundwater recharge because of a decrease in deliveries to CVP contractors, including the Friant Division long-term contractors.

No impacts to east or westside surface water or groundwater are anticipated as described in response to comments RMC-9 and RMC-27.

RMC-29: See response to comment MCDPW-2.

RMC-30: The Proposed Action does not provide increased access to the river. Lack of river access and locations for boaters to put in or retrieve boats on Reach 2, Reach 3 below Firebaugh, and Reach 4 would greatly limit any potential new or expanded boating activity due to the Proposed Action. Locations of potential unauthorized access or access via private property were not added to the Final EA/IS to avoid encouraging such activity. The finding refers to potential increased use in Reach 1A and, to a more limited extent, Reaches 1B and 2A, as described in Section 4.0. The text in the FONSI and Section 2.0 of the Final EA/IS was revised for clarity.

RMC-31: See response to comment RMC-10. As described in this response, the Proposed Action has been developed in a manner that would not result in seepage impacts. Construction activities associated with monitoring activities are being addressed under separate environmental compliance documents, including the *Installation and Rehabilitation of Stream Gages on the San Joaquin River Environmental Assessment* and FONSI (January 2009) for the installation and rehabilitation of stream gages within the river channel, and a Categorical Exclusion (CEC-09-36, March 2009) for the installation

of 33 monitoring wells on public lands located throughout the Restoration Area. No construction activities are included in the Proposed Action. Reclamation has actively pursued access to private lands since 2007, but has been actively denied access by landowners for the installation of additional monitoring equipment. A summary of coordination efforts regarding land access for data collection is provided in Appendix J. Access is necessary to finalize locations for equipment installation and prepare associated environmental compliance documentation. Reclamation is continuing to actively work with landowners to secure access agreements for the installation of and data retrieval from monitoring equipment.

Impacts of the Proposed Action are described in Section 4.0 of the Draft EA/IS, including socioeconomic and agricultural resources. Due to the low flows associated with the Proposed Action and the lack of large population centers or public access points, impacts to private property associated with increased recreation would not be anticipated under the Proposed Action (see Section 4.0 of the Draft EA/IS). No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-32: With implementation of the environmental commitments described in the Draft EA/IS, Seepage Monitoring and Management Plan for WY 2010 Interim Flows, Flow Monitoring and Management Plan for WY 2010 Interim Flows, and Nonnative Vegetation Management Plan, the reoperation of Friant Dam to release WY 2010 Interim Flows and the recapture of WY 2010 Interim Flows would have no significant adverse effects on the environment. There would not be disproportionate adverse effects on minority or low income populations because no adverse effects would occur from the release or recapture of WY 2010 Interim Flows on any group of people. Potentially significant adverse effects from implementing other potential actions by the SJRRP were not evaluated in the Draft EA/IS because those other potential actions are not part of the Proposed Action evaluated by this EA/IS (i.e., WY 2010 Interim Flows). No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-33: DWR's execution of the referenced Memorandum of Understanding is outside the scope of the Proposed Action.

RMC Comments on the EA/IS

RMC-34: Reclamation and the Exchange Contractors have entered into the Second Amended Contract for Exchange of Waters, Contract Ilr-1144, (San Joaquin River Exchange Contract) and dated February 14, 1968. Under the terms and conditions of that contract, Reclamation is obligated to ensure the availability of required deliveries from the DMC or releases from Millerton Reservoir. The petitions state that Millerton Reservoir operations will be conducted so that the availability of deliveries and releases for the Exchange Contractors' water supply will be the same as in the absence of the proposed changes. Furthermore, Section 10004(g) and 10004(j) of the Act specifically provide Reclamation's change in Millerton Reservoir operations to implement the Proposed Action shall not modify or amend the rights and obligations under the

Exchange Contract. Therefore, the Proposed Action will not adversely impact the Exchange Contractors' water supply. Changes to the San Joaquin River Exchange Contract and a potential new allocation process are outside the scope of the EA/IS.

RMC-35: See response to comment MID-4 in Chapter 3 of Appendix I.

RMC-36: The No-Action Alternative was assessed using the same baseline conditions used to assess the Proposed Action to allow identification of the impacts of the Proposed Action as compared with the No-Action Alternative. The recent biological opinions are not included in the conditions for either the No-Action Alternative or the Proposed Action, in part because numerical tools are not yet available to perform this assessment. However, as both the No-Action Alternative and the Proposed Action would be subject to the recent biological opinions, the relative impacts of implementing the Proposed Action on water supply would not be expected to differ from those described in the Draft EA/IS when such an assessment can be completed. See also the response to comment RMC-8 and RMC-34. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-37: The thresholds for determining significance of impacts related to seepage and groundwater are based on the Environmental Checklist in Appendix G of the State California Environmental Quality Act (CEQA) Guidelines, and are presented for each resource in Section 4.0 of the Draft EA/IS. Additional analysis added to the Final EA/IS as Attachment 6 to Appendix G, "Cursory Evaluation of Flood Impacts from Interim Flows," supports this approach.

RMC-38: Estimated maximum nonflood flows under the Proposed Action are the maximum Proposed Action flows. Total Proposed Action flows would be equal to or less than estimated maximum nonflood flows under the Proposed Action. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-39: As described in the Proposed Action, recapture and recirculation of Interim Flows would be subject to all laws, policies, and regulations in place at the time of recapture. Existing agreements and contracts for use of CVP/SWP facilities would have priority over the use of these facilities to convey recaptured WY 2010 Interim Flows, consistent with PL 111-11. See also the response to comment RMC-11. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-40: An analysis of increased groundwater pumping was completed in preparing the Draft EA/IS. Additional information related to this analysis is presented in Appendix G, Modeling. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-41: Flexible flow periods are analyzed, as described in Appendix G, Modeling. The Restoration Administrator will make recommendations to the Secretary on the implementation of flexible flows. Any necessary agreements with SLCC, CCID, and

SLDMWA will be developed and flows would be released consistent with those agreements. Text added to Section 2.0 of the Final EA/IS describes the communication strategy under development to facilitate implementation of the Proposed Action as it relates to these entities.

RMC-42: The Proposed Action does not include construction actions to modify channel geometry, and no changes to channel geometry are anticipated as a result of implementing the Proposed Action, as described in Section 4.0 of the Draft EA/IS. Additional analysis added to the Final EA/IS as Attachment 6 to Appendix G, “Cursory Evaluation of Flood Impacts from Interim Flows,” supports this conclusion. Subsequent years of Interim and Restoration flows are being evaluated in the PEIS/R (see response to comments RMC-1 and RMC-2). Text in Section 4.0 of the Draft EA/IS has been revised to clarify that stranding of diversion points is not anticipated.

RMC-43: See response to comment RMC-10. Additional analysis added to the Final EA/IS as Attachment 6 to Appendix G, “Cursory Evaluation of Flood Impacts from Interim Flows,” supports this approach.

RMC-44: The text was revised to replace “may” with “would”.

RMC-45: Reclamation is in the process of developing an agreement for operations and maintenance actions and costs with the Lower San Joaquin Levee District. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-46: See response to comment RMC-3.

RMC-47: Flows at 4,500 cfs are not being considered under the Proposed Action. See response to comments RMC-3 and RMC-10. The Seepage Monitoring and Management Plan was revised to clarify that the frequency of evaluation of monitoring information would be increased when releases from Friant Dam would be expected to result in Interim Flows of 475 cfs or greater in Reaches 2B and 3. Additional analysis added to the Final EA/IS as Attachment 6 to Appendix G, “Cursory Evaluation of Flood Impacts from Interim Flows,” supports this approach.

RMC-48: The agreements that will be required for implementation are listed Section 1.0 of the Draft EA/IS. Activities required for the Proposed Action are analyzed in Section 4.0 of the Draft EA/IS. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-49: The text was revised as suggested.

RMC-50: See response to comments RMC-8 and RMC-9.

RMC-51: See response to comment RMC-10.

RMC-52: See response to comment RMC-10.

RMC-53: Stations are currently being installed as identified in the *Installation and Rehabilitation of Stream Gages on the San Joaquin River Environmental Assessment* and FONSI (Reclamation, January 2009). Consistent with paragraph 13(g) of the Settlement, flows will be monitored at six locations. If gaging stations are not installed at these locations, Interim Flows will be measured manually consistent with paragraph 15 of the Settlement. The Flow Monitoring and Management Plan for Water Year 2010 Interim Flows (presented as Appendix E to the Draft EA/IS) describes these and other sections of the Settlement relevant to flow monitoring under the SJRRP. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-54: Best available information was used in preparing the Draft EA/IS. Since 2007, Reclamation has actively pursued agreements to access private lands for site-specific data collection on geologic conditions related to seepage and other physical parameters. Landowners have actively denied access to their property for this purpose. A summary of coordination efforts regarding land access for data collection is provided in Appendix J.

Appendix F to the Draft EA/IS presents a plan to collect data prior to the release of WY 2010 Interim Flows.

Table 3-5 summarizes findings from DWR vegetation mapping conducted in 2002, which did not include most of the bypass system. However, the information in this table, and the data layer it summarizes, were not the sole data source regarding vegetation in the study area considered in preparing the Draft EA/IS. Other data sources included recent aerial images, regional vegetation and land use maps, reports summarizing recent field surveys related to the SJRRP, other existing literature, and personal communications. These other data sources included preliminary results from on-going invasive plant surveys and mapping in the Restoration Area (Stefani, pers. comm, 2008), and information regarding the vegetation of the bypass system that is summarized on Page 3-34 of the Draft EA/IS. To clarify that the data in Table 3-5 are not the sole data source, the text was revised to clarify that characterization and evaluation of environmental consequences for areas not mapped by DWR were based on other data sources. Also, a summary description of the vegetation of the Mariposa Bypass was added to Section 3.0.

RMC-55: The one year duration of Interim Flows included in the Proposed Action will not establish new cottonwood stands. Additional text was added discussing the potential effects on the incidence of disease in agricultural crops has been added to Section 4.0. The added text clarifies that because WY 2010 Interim Flows are not anticipated to substantially change the extent of riparian vegetation, existing orchards and vineyards provide a much more extensive potential source of a greater variety of disease causing organisms, and multiple other factors besides the presence of causal organisms affect the incidence of disease, the Proposed Action is unlikely to cause a substantial change in agricultural productivity by increasing the incidence of disease.

RMC-56: The 2006 Land use information presented in the Draft EA/IS assessments is based on the best available information at the time the document was prepared.

The comment correctly notes that the phrase "nearly all" overstates the portion of agricultural land recently in row and field crops along Reach 3. The text was revised to indicate that annual crops account for most agricultural land uses in this reach. Review of recent land use mapping and aerial images indicate that the other text in Section 3.0 of the Draft EA/IS describing agricultural land uses in the Restoration Area is accurate.

RMC-57: The text was revised to reflect that the current conveyance capacity of Reach 4B1 is unknown and could be as low as zero in some locations. This was made consistent through the document.

RMC-58: Section 4.4 of the Draft EA/IS, Biological Resources -- Terrestrial Species discusses potential effects of flow increases on special-status species. This section also discusses potential effects on vegetation. No construction activities are included in the Proposed Action. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-59: Section 3.0 has been revised to include information on salt issues and current management strategies in the Study Area. Water quality and TMDL information is found in Section 3.11 of the Final EA/IS – Hydrology and Water Quality, as referenced in the revised text. Water quality impact criteria related to fisheries are described in the Biology and Fisheries Sections (Sections 4.5 and 4.6 of the Final EA/IS).

RMC-60: The cited statement has been removed from Section 3.0. Impacts to the flood control system are addressed in Section 4.10 of the Final EA/IS – Hydrology and Water Quality. As stated in CVFPB-1, the Proposed Action was developed based upon the best available information at the time the Draft EA/IS was prepared. Information provided by individual landowners and by the RMC as comments to the Draft EA/IS state that flows between 475 and 1,300 cfs also could result in seepage, flooding, and related impacts in some portions of the Restoration Area. The Project Description has been revised to account for this new information. Under the revised Project Description, flows will begin below 475 cfs, and will be gradually and incrementally increased. Monitoring will be implemented concurrent with the release of Interim Flows to provide additional information about system responses to flows. See Section 2.0 of the Final EA/IS for a complete description of the Proposed Action, as revised.

RMC-61: The historical flows presented in Table 3-18 of the Draft EA/IS are included to describe the environmental setting only. These historical gage measurements are not used in the analyses of Reach 4A Interim Flow impacts presented in Section 4.0 of the Draft EA/IS. A modeled baseline was used for those comparisons. Average flows of the simulation period are used in impact analyses because the future hydrometeorological conditions for WY2010 cannot be known at this time. Limited historical flow data from a USGS gage in Reach 4A indicates that flow is present in this reach approximately 67

percent of the time, and that flow exceeds 150 cfs approximately 20 percent of the time. Text was added to the Reach 4A description to clarify that most flow under non-flood conditions is diverted at Sack Dam, and that Reach 4A flow consists of agricultural return flows and upstream flood releases. See also response to comment RMC-3.

RMC-62: See response to comment RMC-57.

RMC-63: Comment noted. Development and implementation of new restrictions related to water quality are outside of the authority of the Implementing Agencies for the SJRRP. Any assessment of future restrictions/regulations related to water quality that could be imposed by regulatory agencies in the future as a consequence of implementing the Proposed Action, or any other action in the study area, would be speculative. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-64: The Draft EA/IS assessment is based on the most recently available regional data. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-65: See response to comment RMC-10.

RMC-66: The text in Section 3.0 was revised to reflect that Sack Dam is operated in conjunction with Mendota Dam to deliver flows to Arroyo Canal for irrigation. Flood flows conveyed from Mendota Pool pass over Sack Dam.

RMC-67: The text was revised as suggested.

RMC-68: See responses to comments RMC-69 through RMC-74.

RMC-69, -70 and -71: Farmlands will not be flooded as a result of implementing the Proposed Action, as described in Section 4.0 of the Draft EA/IS.

A discussion of potential effects on agricultural land use resulting from inundation or soil saturation caused by WY 2010 Interim Flows was presented in Section 4.2c on Page 4-8 of the Draft EA/IS. Lines 14 through 33 of that discussion has been revised and expanded to clarify that during WY 2010 (October 1, 2009, through September 30, 2010), Interim Flows could temporarily inundate some areas of active grazing lands in the bypasses.

Potential flows under the Proposed Action also would be limited to volumes that do not cause substantial seepage effects on adjacent land. Seepage issues are discussed in Section 4.10 of the Final EA/IS, "Hydrology and Water Quality," and the plan for monitoring and managing seepage is provided as Appendix D. Measures in this plan were developed to avoid or minimize saturation of the upper soil layers, which contain most of the root system of crop plants and thus strongly affect crop growth, and their condition also affects the ability to use farm machinery. Thus, prolonged saturation of the upper soil layers would likely cause temporary, adverse effects on the ability to use land for agricultural purposes. Because the Proposed Action would not cause substantial prolonged saturation of the upper layers of soil, substantial adverse effects on the use of

agricultural land because of soil saturation or substantial damage to existing woody vines and trees in vineyards and orchards would not occur.

RMC-72: The finding is based on the application of best available information, which will be supplemented with measurements, observations, and landowner feedback during implementation of the Proposed Action. See response to comment RMC-10.

RMC-73: See responses to comments RMC-69 through RMC-72.

RMC-74: Changes in groundwater pumping by Friant Division long-term contractors, including those within Madera and Fresno counties, has been estimated, as described in Section 4.0. Non-Friant Division pumpers within Madera and Fresno counties would not experience reductions in surface water supplies as a result of the Proposed Action; therefore it would be speculative to estimate the increase in pumping that may occur in Madera and Fresno counties during WY 2010. Recaptured water would be available to Friant Division long-term contractors and would supplement actual delivery reductions that would otherwise potentially result in increased groundwater pumping. The technical analysis included a range of conditions in the Friant Division long-term contractors, including no recirculation of WY 2010 Interim Flows, and recirculation of the full quantity of recaptured WY 2010 Interim Flows to Friant Division long-term contractors. The text was revised to clarify this.

RMC-75: Greenhouse gas thresholds are analyzed at a state level in order to ensure compliance with AB 32 goals. The text was revised to clarify that this approach is consistent with proposed CEQA guideline amendments for greenhouse gases currently under consideration by the California Office of Planning and Research.

RMC-76: The survey results presented were not intended to imply that comprehensive surveys were conducted. As stated in response to comment RMC-54, the effects analysis does not rely solely on the survey data to determine level of significance of potential impacts to valley elderberry longhorn beetle. The text was revised for clarity.

RMC-77: See response to comment RMC-9.

RMC-78: See response to comment RMC-9.

RMC-79: See response to comment RMC-9.

RMC-80: Although other months also show an increase in Delta outflow, Page 4-44, lines 5-7 are focused on the months that could potentially affect adult Chinook salmon migration, which include the fall months (Sept - Nov). No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-81: See response to comment MID-4 in Chapter 3 of Appendix I.

RMC-82: The text was revised to provide clarity. Impacts to water temperature conditions within this reach were based on simulated daily water temperatures aggregated to time intervals consistent with WY 2010 Interim Flows schedule for all water year types.

RMC-83: Groundwater impacts are analyzed based upon inputs from CalSim operations modeling using a 2005 baseline conditions and the Schmidt tool which utilizes conditions developed in 2005. The Schmidt tool was the most appropriate available tool when the analysis was conducted. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-84: The Draft EA/IS finds that on- and off-site flooding would not occur based on the assessment of the best available information, as described in Section 4.0 of the EA/IS. See response to comment RMC-10.

RMC-85: Vegetative growth in the channel is regularly managed by the Lower San Joaquin Levee District. See response to comment RMC-10.

RMC-86: See response to comment RMC-10.

RMC-87: See response to comment RMC-29.

RMC-88: A project would conflict with a land use plan, policy, or regulation, if implementation of a project would result in a physical change in the environment that the land use plan, policy, or regulation was in place to avoid. The City of Firebaugh has designated land uses in the city in part to provide for orderly development, thereby reducing adverse effects of disorderly ("leapfrog") development. The release and recapture of WY 2010 Interim Flows would not cause physical changes that would alter potential long-term land uses or otherwise require the city to change any of its land use designations. Therefore, the Proposed Action would not conflict with the General Plan of the City of Firebaugh. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-89: Revised text acknowledges that the downstream-most access is at Skaggs Bridge Park on Reach 1.

RMC-90: There would be sufficient water supplies to release WY 2010 Interim Flows down the San Joaquin River. The volume of WY 2010 Interim Flows would be based on the supply of water available to the Friant Division during that water year type, as described in Section 2.2, Proposed Action. The evaluation of effects on water supplies considered baseline conditions and the range of possible flow amounts associated with the range of water year types. Water would be available for release under the terms and conditions of the Settlement and the Act. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-91: Cumulative effects are addressed in Section 4.19. The Proposed Action would not affect the USFWS and NMFS biological opinions, as Interim Flows would be recaptured to the extent possible consistent with and limited by existing operating

criteria, prevailing and relevant laws, regulations, biological opinions, and court orders in place at the time the water is recaptured. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-92: See responses to comments RMC-1, -2, and -3.

RMC-93: Regarding environmental justice, as noted in the response to Comment 161, the Proposed Action would not disproportionately affect any one group, minority, low income, or otherwise, because no significant unavoidable adverse effect would occur as a result of releasing or recapturing WY 2010 Interim Flows. Regarding the impact of flows to farmland adjacent to the river, see response to comment RMC-10. Regarding other potential effects on socioeconomics, none were found to be significant. The economic viability of different agricultural practices (including crop selection) varies from year to year and is affected not only by water availability and costs from different sources, but also by market conditions, energy costs, weather, and other factors. Consequently, management of agriculture land and related socioeconomic conditions vary among years. Because implementation of the Proposed Action would result in some reduction of water deliveries from the Friant Division, management of some agricultural land would likely be altered, as described in Section 4.0.

However, the socioeconomic effects alterations would not be substantial, in part because alternative sources of water are available and the proposed action would last only one year, but also because other agricultural practices and management decisions can and would be adjusted in response to the Proposed Action and other factors to reduce their economic effects. As a consequence, effects on population, housing, employment, and physical decay of communities would not be less than significant. Because the release and recapture of WY 2010 Interim Flows would be for only one year and would not substantially alter the existing economic conditions for a substantial number of people, the socioeconomic effects of implementing the Proposed Action are considered less than significant. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-94: See response to comment RMC-2.

RMC-95: Reclamation is considering identifying San Luis-Delta Mendota Water Authority and Central California Irrigation District as Cooperating Agencies under NEPA. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-96: The comments received from the San Joaquin River Resource Management Coalition on the *Installation and Rehabilitation of Stream Gages on the San Joaquin River, Fresno Madera, Merced and Stanislaus Counties, California Final Environmental Assessment*, and the responses to these comments, have been reviewed in the context of this Final EA/IS. This EA/IS is consistent with the responses to those comments, as applicable.

RMC-97: Appendix C describes the approach developed to set annual allocation volumes and to transform annual allocations in initial Restoration Flow schedules. As described in Section 7.0 of Appendix C, further considerations will be incorporated into the release of Interim and Restoration flows as appropriate. Section 2.0 of the Draft EA/IS describes these further considerations for the WY 2010 Interim Flows included in the Proposed Action. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-98: Appendix C describes factors considered in establishing criteria for the release of Interim and Restoration flows. It is not intended to describe pumping of Interim Flows – this material is provided in Section 2.0 of the Draft EA/IS. Environmental consequences of the Proposed Action (WY 2010 Interim Flows) are described in Section 4.0 of the Draft EA/IS. Environmental consequences are not described in Appendix C.

RMC-99: The text was revised as suggested.

RMC-100: The text was revised as suggested.

RMC-101: See response to comment RMC-10.

RMC-102: As described in Section 2.0 of the Draft EA/IS, levee patrols would be performed by the Lower San Joaquin Levee District. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-103: See response to comment RMC-7.

RMC-104: See response to comment RMC-31.

RMC-105: Since 2007, Reclamation has actively pursued agreements to access private lands for site-specific data collection on geologic conditions related to seepage and other physical parameters. Landowners have actively denied access to their property for this purpose. A summary of coordination efforts regarding land access for data collection is provided in Appendix J.

Multiple meetings held in spring and summer 2009 with landowners in Reaches 2A, 2B, 3, 4A, and 4B addressed WY 2010 Interim Flows, the seepage monitoring and management plan development, and the proposed groundwater monitoring well network. Landowners were given opportunities to identify historical seepage areas and provide input on potential new or alternative seepage monitoring well locations. See response to comment RMC-31.

RMC-106: The best available existing information on groundwater levels in the region was used in completing the impacts assessment presented in Section 4.0 of the Draft EA/IS. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-107: See response to comment RMC-105.

RMC-108: Figure 3-4 illustrates the location of a potential groundwater monitoring well transect in Reach 4A. This transect would include multiple groundwater monitoring well locations. In addition, the SJRRP is considering installation of additional wells at critical locations based upon input from local agencies and landowners. During implementation of the Proposed Action, data from existing groundwater wells monitored by Reclamation, DWR and local districts within the study area will be used. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-109: The monitoring program intends to use existing groundwater monitoring wells and piezometers on local district or private lands within the study area when available. Since 2007, Reclamation has actively pursued agreements to access private lands for site-specific data collection on geologic conditions related to seepage and other physical parameters. Landowners have actively denied access to their property for this purpose. A summary of coordination efforts regarding land access for data collection is provided in Appendix J. Reclamation has met with CCID to coordinate the use of their existing groundwater monitoring wells and piezometers to establish an understanding of the baseline conditions in the area near the river.

RMC-110: Comment noted. The program intends to follow the procedures outlined in the document.

RMC-111: See response to comment RMC-10.

RMC-112: See response to comment RMC-10.

RMC-113: See response to comment RMC-10.

RMC-114: See response to comment RMC-10.

RMC-115: See responses to comments RMC-10 and RMC-110.

RMC-116: The management strategy for Interim Flows is described in Appendix C - Friant Dam Releases for Restoration Flows and in Section 2.0 - Project Description. Gages will be installed at locations as required by Paragraph 13(g) of the Settlement for monitoring Interim Flows, and data collected at these gages will be made publically available after appropriate quality control and quality assurance has been completed. Information on the design of monitoring gages (including locations, type of measurement, monitoring and recording equipment, means of installation, and "operations and maintenance") are provided in the *Installation and Rehabilitation of Stream Gages on the San Joaquin River Environmental Assessment and FONSI (January 2009)*. Text in Appendix E – Flow Monitoring and Management Plan for Water Year 2010 Interim Flows was revised for clarity.

RMC-117 and -118: The SJRRP gage locations will be monitored and calibrated by the U.S. Geological Survey using established standards for the measurement of flows.

Details about the accuracy of each gage will be available online, summarized and published annually, and considered in assessments based on the data (including analysis and computation of seepage losses). Text in Appendix D to the Final EA/IS – Flow Monitoring and Management Plan for Water Year 2010 Interim Flows revised for clarity.

RMC-119: In accordance with Paragraph 15 of the Settlement, to the extent that permanent flow gages are not available, FY 2010 Interim Flows will be measured by establishing temporary gauging locations or by manual flow measurements for the purposes of collecting relevant data. Text in Appendix D – Flow Monitoring and Management Plan for Water Year 2010 Interim Flows revised for clarity.

RMC-120: The Near-River Groundwater Model was not used in the impacts assessment of the EA/IS; reference to it is removed from Appendix G. See response to comment RMC-10.

RMC-121: Correct reference is Mussetter 2002. The text was revised to reflect this.

RMC-122: Appendix G describes the flow routing rules used in the temperature modeling. These routing rules are a combination of the rules applied in the hydraulic and sediment continuity modeling (Mussetter Engineering, Inc. 2002. Hydraulic and Sediment Continuity Modeling of the San Joaquin River from Friant Dam to Mendota Dam, California) and criteria governing real-time decisions in operation of the Chowchilla Bypass Bifurcation Structure. The comment correctly notes that Reach 2B has an estimated capacity of 1,300 cfs; however, the modeling rules to keep Reach 3 flows at or below 1,300 cfs under most conditions would also result in flows in Reach 2B at or below 1,300 cfs under nonflood conditions, as under the current operational pattern. No revisions to the Draft EA/IS text were necessary in response to this comment; therefore, the EA/IS text was not modified.

RMC-123: The text was revised for clarity.

RMC-124: Comment refers to a table 1-1; however Appendix G does not include a table 1-1. Comment consists of the title of Table 1-1 in the Draft EA/IS. The title of Table 1-1 in the Final EA/IS was revised for clarity.

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