Appendix A Comments and Responses

Reclamation Responses to Arvin-Edison Water Storage District letter dated March 23, 2012

Arvin comment 1: *Water Quality: Our primary concern of this subject program and the proposed discharges to the Friant-Kern Canal (FKC) is the potential water quality impacts to AEWSD. As you may be aware, AEWSD's turnout is located at the terminus of the FKC and would be subject to any changes in water quality caused by these action(s), including but not limited to, the use of the 500 cfs FKC/Cross Valley Canal (CVC) Intertie that is less than 100 feet upstream of AEWSD's FKC Turnout. In that regard, compliance with the FKC/CVC Operating Agreement and associated CVC Operating Agreement should be incorporated into the EA/FONSI.*

Reclamation response to Arvin comment 1: In the EA in Section 2.2.4.3, Cumulative Impacts, it states: "The Proposed Action would not interfere with deliveries, operations or cause adverse changes to the rivers, creeks or conveyance facilities associated with the SWP or CVP. The conveyance facilities and river systems in and around the Region are interconnected and allow for a myriad of transfers, exchanges, contract assignments, banking projects, and conveyances of water via Warren Act contracts, Operational Contracts or Article 55 of the SWP. The conveyance of water under these water service options are subject to available capacity, meeting primary requirements, and environmental reviews." Therefore, one of the environmental commitments associated with the Proposed Action will be that the Proposed Action will not impact the CVP and/or SWP. Additionally, Reclamation will require the proponents to acquire the facility's operating entity approval prior to the conveyance of water through the conveyance facilities.

Arvin comment 2: *Additionally, and as further specified in AEWSD's letter to Reclamation dated November 5, 2009 (regarding EA/FONSI 09-92) and January 16, 2012 (regarding Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals, Water Quality Monitoring Requirements - 2011) as well as other numerous comments submitted to Reclamation regarding water quality, the District believes the existing USBR Water Quality Monitoring Policy is deficient, and lacks sufficient protections (or standards) for discharges of "non-Millerton Lake" / foreign supplies into the FKC, it does not currently have adequate protection for Irrigation Suitability, and does not address the State's anti-degradation policy and set limits to the amount of degradation to be allowed in the FKC.*

Reclamation response to Arvin comment 2: Thank you for your comment. Reclamation is currently reviewing the water quality standards contained in our Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals dated March 7, 2008. If Reclamation revises the water quality standards currently in place, all programs that introduce water into the FKC will be notified of the revised water quality standards and required to comply with the then-existing water quality standards as determined by Reclamation.

Arvin comment 3: *In this regard, the Appendix B 'Water Quality Policy/Monitoring Requirements" appears to be missing from the Draft FONSI/EA as only the tables are provided.*

Reclamation response to Arvin comment 3: Thank you for your comment. The "Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals – Water Quality Monitoring Requirements" in its entirety has been added to Appendix B.

Arvin comment 4: *Furthermore, Reclamation, at their March 21, 2012 Water Quality Workshop clarified that the Water Quality Monitoring Policy is in the process of being modified and updated. More specifically, that it will regulate ALL discharges into the FKC, including all discharges such as those considered under this draft EA, and regardless as to whether or not the water is deemed to be Project or Non-Project water, or whether it is previously banked Central Valley Project (CVP) supplies or non-CVP supplies. Reclamation also stated the revised Water Quality Monitoring Policy will incorporate Irrigation Suitability requirements and will also specify allowable limits or degradation to baseline conditions, if any.*

Until Reclamation's Water Quality Monitoring Policy is updated, it is unclear to AEWSD whether appropriate protections will be in place to avoid water quality impacts from this program and specifically these type(s) of discharges. AEWSD reserves the right to comment further when that information is made available by Reclamation.

Reclamation response to Arvin comment 4: See Reclamation's response to comment 2.

Arvin comment 5: *The Draft FONSI also mentions that FKC water, due to its higher or better quality water, will benefit the groundwater quality among the program participants, CVP and non-CVP alike. Yet there are dozens of proposals regarding discharges of lesser quality water into the canals, and in addition, proposals to send this water to other districts via "Operational Exchanges" whereby the program participants receive the higher quality FKC water and the existing FKC contractors must accept the lesser quality water developed from this program.*

AEWSD does not desire nor agree to have its contracted FKC water supplies degraded by these programs from which AEWSD would receive no benefit while the participating districts in this program reap the benefits of both water quantity and water quality at AEWSD's expense. It should also be noted that due to the proximity of these proposed discharges to AEWSD's turnout, AEWSD will bear a large and disproportionate share of the impacts.

Reclamation response to Arvin comment 5: One of the environmental commitments for this program is as follows: "Depending on the facility and groundwater quality, decreases in concentrations of certain constituents may occur as well as increases in others. To the extent that direct delivery of groundwater to the Aqueduct or FKC is needed, the water quality of constituents known to be of concern would be measured and compared against the background water quality in the surface water conveyance system in accordance with the Reclamation's existing policy for accepting waters in the Friant-Kern and Madera canals (see Appendix B of EA 09-121). All waters introduced into the FKC as a result of programs under this project would be in accordance with this policy. Calculations of the blended water quality would be made,

taking into consideration the groundwater quality and the historic surface water quality. Reclamation would review each action between the districts and would decide what water quality monitoring requirements would be required based on the then-existing Water Quality Monitoring requirements."

Arvin comment 6: *Friant-Kern Canal prorates: FKC was designed and built (size and hydraulics) with specific Points-of-Delivery in the FKC, and more specifically to their individual district lands such as for Delano-Earlimart Irrigation District, Kern-Tulare Water District, and Shafter-Wasco Irrigation District in this incidence. Any movement of their supplies downstream from their designed turnout has the potential to affect other contractors. As you are aware, the FKC is currently undersized under high flow conditions and prorate constraints are frequently in place when these high-flow short-duration supplies are available. Subsequently, almost any change in point of diversion has the potential to further restrict deliveries to current FKC contractors under those conditions. It shall be noted that some of the CVP districts in this program are located up to 40 miles upstream of some of the considered delivery points. Has Reclamation evaluated or provided safeguards against such conveyance delivery impacts?*

Reclamation response to Arvin comment 6: See Reclamation response to Arvin comment 1.

Arvin comment 7: *Cumulative Impacts analysis: The cumulative impacts analysis is too narrow and the only programs and\or projects included, when cumulative impacts are discussed, are those which the RWMG have done in the past 5 years. The cumulative impact analysis, by definition, is a "forward look" and not a backwards look. Cumulative impact analysis must also look at areas outside of associated RWMG agency boundaries. AEWSD is aware of other similar programs and projects to those proposed. The Draft FONSI states that "The Proposed Action when added to other past, present, and future similar actions will not result in cumulative significant impacts due to water quality." AEWSD could not find any analysis of the future similar actions, so we do not know Reclamation's basis for that statement. It appears to be lacking in foundation and still needs to be analyzed.*

Reclamation response to Arvin comment 7: Resource Study Areas established for the analysis of cumulative impacts are based on existing resources potentially affected which in the case of the proposed action are limited to agricultural and groundwater resources. Cumulative impact analysis should determine the current status or health of each resource and how the proposed action would affect those resources. Since the banked, transferred or exchange water would be used for existing agricultural purposes and/or groundwater recharge and be kept within the Region and within the CVP authorized place-of-use, no adverse cumulative impacts were identified. As such, speculative "forward look" analysis was not warranted.

Arvin comment 8: *Accelerated Water Transfer Program (AWTP): As you are aware, the Friant Division contractors transfer and exchange supplies on an annual basis pursuant to the AWTP. Given the subject long-term (25-years) environmental documentation considers the transfers, exchanges, and groundwater banking of Friant CVP water supplies between Poso*

Creek RWMG's CVP districts. AEWSD assumes that when environmental review is complete and approved the future transactions of these Poso Creek RWMG districts would not be counted against the AWTP cap limit in subsequent years. Please clarify that point.

Reclamation response to Arvin comment 8: Arvin is correct. The AWTP proposed action does not include "transfers and/or exchanges that meet the above criteria but are increments of larger actions." Therefore, the transfers that are a part of this EA will not be counted against the AWTP cap limit.

Arvin comment 9: *A further note related to transfers, the Draft EA states that the six agricultural districts are seeking "approval for a streamlined process to allow groundwater banking, transfers, and exchanges of their contracted and purchased CVP water amongst each other within the Region as part of the IRWMP." AEWSD is concerned with the requested ability of these participants to accept purchased/transferred water from one district, and then subsequently transfer it to another district. Our first concern is with the legality of this transaction. In addition, when AEWSD agrees to transfer or exchange its supplies with another district, it is with the understanding and knowledge that it will be used for specific purposes and by a specific district. We do not agree with the proposal that Reclamation grant the participating districts to further transfer or exchange AEWSD water to other districts and for other purposes without the knowledge and approval of the originating district.*

Reclamation response to Arvin comment 9: Thank you for your comment. The agreement to transfer water is a transaction between the buyer and seller. However, one of the environmental commitments is that the CVP water will be used within the place of use.

Arvin comment 10: *Additional Considerations: The Draft EA lists a variety of districts that may receive a variety of water sources conveyed through a variety of pathways over an extended period of time. No schedules associated with the potential delivery (and return) of water are presented in the environmental documentation for review and this information is necessary for a proper analysis and review of associated impacts. The potential quantities from each of the variable sources are also not provided. The full range of potential impacts of the proposed program (transfers, exchanges, and groundwater banking) cannot be fully analyzed without first identifying the amount of water to each district, from each source, and the variety of pathways that are probable. This information should be provided.*

Reclamation response to Arvin comment 10: The proponents will be required to submit a schedule prior to the conveyance and delivery of Project Water and exchange water. Reclamation will review the schedule and consult with the appropriate Operating Non-Federal Entity to ensure there is sufficient capacity in the facilities to convey this water. Once a concurrence of available capacity is received and after review of the current conditions, Reclamation will allow the water to be conveyed and delivered consistent with Reclamation's approval and in accordance with the "*Operational Guidelines For Water Service, Friant Division, Central Valley Project".* Additionally, one of the criteria that Reclamation will evaluate at the time a request is made to convey this water, is whether the federal contractor has a sufficient quantity of water available to it. In accordance with the contract with each federal contractor, subdivision (c) of Article 4 states: "*The Contractor shall not schedule Project Water*

in excess of the quantity of Project Water the Contractor intends to put to reasonable and beneficial use within the Contractor's Service Area, or to sell, transfer or exchange pursuant to Article 10 of this Contract or bank pursuant to subdivision (d) of Article 3 of this Contract during any Year." Therefore, Reclamation believes there are sufficient safeguards in place to make sure that the federal contractors do not schedule Project Water in excess of the quantity of water available to them. Table 2-1 has been revised to accurately reflect the cumulative amount of water that may be transferred, banked or exchanged.

Arvin comment 11: *On a related note, multiple figures are illegible as provided (see attached example). AEWSD reserves the right to provide additional comments when such information is provided in a legible format.*

Reclamation response to Arvin comment 11: Reclamation provided some of those figures as requested however not all were available so the requestor was advised to contact the Poso Creek Group directly or any of the consulting staff who were involved in the mapping. Reclamation provided the contact information for the consulting staff responsible for creating those figures.

Reclamation Responses to Central Delta Water Agency (Agency) letter dated March 23, 2012

Agency comment 1: *An Adequate Description of the Project Has Not Been Provided. The project description is vague, ambiguous, and not clearly defined. Indeed, it is so general and lacking in details as to make it difficult to engage in meaningful analysis. The project seems to attempt the allowance of every conceivable groundwater banking, transfer, and exchange program so as to avoid the need to ever again make an environmental assessment of a project.*

In order to provide a complete and adequate ability for Reclamation to make a meaningful analysis, the projects should be more fully and completely described. The project should also be clarified to state whether any past practices are or are not part of this project, and identify and analyze the specific supplies that would be captured for transfer, banking, or exchange, and the environmental impacts of such capture.

Reclamation response to Agency comment 1: Reclamation disagrees based on the fact that specific components of the Proposed Action including points of diversion, conveyance and return mechanisms were described in both text and figures. In addition, annual approvals would be provided as each water management action is proposed and determined to be consistent with the scope of the Environmental Assessment. As such, any components of the Proposed Action not analyzed would be subject to additional analysis as required.

Agency comment 2: *A Shorter Term Alternative Should Be Evaluated. The proposed project will open the floodgates for 25 years, obviously creating a potential for significant effects. Shorter terms should be considered in any EA and EIS so that results, including benefits and detriments, can be analyzed, appropriate adjustments can be made, and appropriate mitigation measures can be imposed.*

Reclamation response to Agency comment 2: Annually, Reclamation will review and approve the banking, transfers, and exchanges in accordance with this EA and the federal contractor's specific contract. Therefore, at least annually, Reclamation will have the opportunity to determine whether adjustments to the program or additional mitigation measures would be needed.

Agency comment 3: *Permanent Crop Conversion Analysis and Hardened Water Demand. Although the EA acknowledges that there have already been shifts to permanent crops creating an alleged need for water deliveries, the EA does nothing to assess the cause of such a shift, whether the shift is continuing, and what effects the project will have on permanent crops. Further, no assessment is made of whether the project will potentially influence future permanent crop plantings nor is any assessment made of the effects of further increases in permanent crop plantings. The project will likely encourage maintenance of existing and future plantings of permanent crops. There are obvious environmental impacts that should be thoroughly analyzed.*

Also, conversion of developed water from agricultural to municipal uses will be encouraged. Moreover, the speculative and unsustainable demand for scarce water resources will be hardened, resulting in increased demands on other water resources when uncertain and fluctuating supplies from transfers, exchanges, and banking are inadequate. This should be considered in an EIS.

Reclamation response to Agency comment 3: Shifts to permanent crops may occur with or without this program. The permanent crops would have a greater certainty of water availability during times of low water allocation due to the ability of the federal contractors to get the banked or exchanged water back to supplement their current year low water allocation. Additionally, the water banked, exchanged, or transferred would be for current irrigation and/or groundwater recharges uses. If the use changes to municipal, additional environmental documentation would be need to analyze this change. Reclamation has revised the Proposed Action to more clearly define the uses of the water will be for irrigation and/or groundwater recharge purposes.

Agency comment 4: *Again, although the EA acknowledges "change is occurring in the use of groundwater supplies from agriculture to urban due to urban growth", the EA does not contain any analysis of that change, much less an assessment of how the project may have effects on groundwater use and on urban growth. Again, an EIS is appropriate.*

Reclamation response to Agency comment 4: See Reclamation response to comment 3.

Agency comment 5: *Full Analysis of the Impacts from Use of Conservation Measures. With regard to the investigation and evaluation of impacts, potential impacts, and cumulative impacts, the assessment should fully evaluate the use and expectations of the use of conservation measures to reduce or eliminate demands. Further, the EA and an EIS should investigate, discuss, and analyze the necessity of the project, including project duration, based on conservation expectations.*

Reclamation response to Agency comment 5: The Central Valley Improvement Act of 1992 and Section 210(b) of the Reclamation Reform Act of 1982 requires the preparation and submittal of Water Management Plans (Plan) from certain entities that enter into a repayment contract or water service contract with the Bureau of Reclamation which includes the federal contractors referenced in this EA. Each Plan is required to be updated every 5 years. Therefore, the federal contractors are already investigating the use of conservation measures to reduce or eliminate demands. The two districts who are State Water Project member units have completed Agricultural Water Management Plans and will be updating them in 2012. The district with supplies from the Kern River is scheduled to complete an agricultural water management plan by the end of 2012.

Agency comment 6: *Substantial and Cumulative Impacts in Other Areas. The EA fails to evaluate potentially substantial and cumulative impacts in all of the areas directly or indirectly affected by the project, including but not limited to areas from which the water would be taken to be banked in the project. An EIS should evaluate such impacts.*

Reclamation response to Agency comment 6: Reclamation disagrees based on the fact that all banking, transfers, and exchanges between the Poso Creek RWMG would utilize facilities that have been through environmental review and have received appropriate approvals and all water involved in such actions would be compliant with contractual requirements. An Environmental Impact Statement is required where significant impacts are identified that cannot be avoided, minimized or mitigated to a level on non-significance. The determination of significance requires quantifiable support that a measurable threshold would be exceeded or unquantifiable support that has been found to be acceptable in case law. Comment 6 did not identify any potential significant impacts or support for those impacts.

Agency comment 7: *Full Analysis Should Be Made of the Short and Long-Term Effects of Changes in Cropping Patterns, Irrigation Practices, and Cropland Idling. Changes in cropping patterns, including conversion to permanent crops, changes in irrigation practices, and cropland idling, or fallowing, as a result of the projects creates a whole host of issues that must be analyzed, including but not limited to the following:*

> *A. Changes in groundwater recharge by percolation and return surface flows to waterways from surface irrigation.*
> *B. Habitat modification for species benefitting from annual crop farming, including waterfowl.*
> *C. Economic impacts to the communities from loss of farm employment and adverse impacts on the local business community dependent upon annual crop cultivation practices and actual farming.*
> *D. Greenhouse gas effects, including carbon sink and sequestration relative to active farming, and effects of cropping changes in the area of supply and the area of usage.*
> *E. The impacts of having food supplies from annual crops grown at other than existing locations, including the need for annual crops to be grown elsewhere.*
> *F. The loss of availability of water supply for other local uses on the land from which the water for the project is obtained.*

All of these potential effects should be analyzed.

Reclamation response to Agency comment 7: See Reclamation response to comment 3.

Agency comment 8: *Evaluation for Compliance and Consistency with the Delta Reform Act of 2009. The Delta Reform Act of 2009 provides in California Water Code section 85021, made applicable to Reclamation through Section 8 of the Reclamation Act: "The policy of the State of California is to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply projects, and improved regional coordination of local and regional water supply efforts." The EA should assess whether the project is consistent with applicable law, including Water Code section 85021, and the future availability of supplies anticipated by the project. It is not enough to say that the project will improve regional self-reliance. Instead, the EA and an EIS need to examine whether the project relies upon existing and future water supplies from the Delta.*

Reclamation response to Agency comment 8: Regulatory and judicial actions have adversely impacted Delta water supply reliability. The reduced reliability is well documented in the SWP Delivery Reliability Reports that are prepared by DWR. With about one-third of the Region's surface water supplies diverted from the Delta, it is no surprise that reduced reliability of Delta water supplies was a major driver in bringing the Region together to prepare the Poso Creek IRWMP. As a generalization, reliability is a measure of coincidence of supply and demand --- the better the match, the more reliable or "firm" is the supply. With the IRWMP as a guide, districts within the Region are working cooperatively to reduce dependence on "firm" deliveries from the Delta. In particular, this is being accomplished through projects --- both structural and non-structural --- which increase the Region's ability to make the best use of water supplies when they are available, whatever the source (local, SWP, or CVP). To a large extent, this means leveraging the direct recharge assets of the Region to regulate water supplies from times of surplus to times of need --- this is what "water banking" is all about. This, in turn, translates to having the necessary conveyance interties to move the available supplies to available absorptive capability and to deliver previously-banked water during times of need. Both Project 1 and Project 2 fill this need.

Agency Comment 9: *Full Analysis of the Drainage Impacts from Use of Transferred Water. With regard to the investigation and evaluation of impacts and potential impacts, the EA should evaluate the direct and indirect impacts of the use of transferred and banked water. The transfer of water requires in-depth study of the drainage in all areas of delivery which directly or indirectly drain surface and subsurface waters, and, hence, the various pollutants contained in such waters and irrigated lands, into any waterways. Such waters directly or indirectly drain into waterways and upslope areas which generate hydraulic pressure which thereby increase the drainage of waters from the downslope lands into groundwater. Waterlogging of the lowlands in the CVP service areas is a substantial issue, and could be worsened by the project. The potential for such impacts is widely recognized and well-established.*

Reclamation response to Agency comment 9: Semitropic Water Storage District in 2007 produced a document entitled, "*Water Operations Model for the Poso Creek Integrated Regional Water Management Plan"* which analyzed the direct and indirect impacts for banking of water. There are no drainage impacted areas within the boundaries of the Proposed Action. In addition, there would be no water applied to land that has not been previously irrigated in the last three years. The proposed action only provides flexibility to meet demand. In the past, water logging of lands from a perched water table has occurred in a small area of the western portion of the proposed project area surrounding the Goose Lake bed, however, once drip irrigation methods were installed, the previously installed tile drains dried up. Water logging of lowland is not currently occurring and the Proposed Project is not going to increase the amounts of water applied beyond historical averages.

Agency Comment 10: *The proposed EA should investigate, discuss, analyze, and ultimately mitigate to the fullest extent feasible, the potential impacts from the project relative to TDS, arsenic, as well as other contaminants (e.g., selenium, boron, molybdenum, other trace elements, etc.). Any transport of these contaminants that may arise from the project must be evaluated. The EA and an EIS must evaluate potentially substantial and cumulative impacts in all of the areas directly or indirectly affected by the project. It is already acknowledged in the EA that there are issues concerning TDS, arsenic, and other contaminants, but adequate analysis and assessment has not been made.*

Reclamation response to Agency comment 10: In the EA, Section 2, part 2.2.1, it states: "Groundwater quality within the Poso Creek Region is generally suitable for the overlying agricultural uses and, except for arsenic in some parts of the Region, meets drinking water standards. However, as surface water supplies become scarce, groundwater levels could deepen over time due to groundwater pumping to a point where water quality could degrade." Since the uses of the banked, transferred, or exchanged water are for irrigation uses and/or groundwater recharge, the groundwater quality is sufficient for agricultural uses.

Agency Comment 11: *Consideration of Federal Anti-degradation Laws. The Federal Environmental Protection Agency ("EPA") requires all states to adopt an "anti-degradation policy" similar to the State Water Resources Control Board's ("SWRCB") Resolution 68-16. (40 C.F.R. 131.12.) Resolution 68-16 is intended to and implements Water Code section 13000, requiring the SWRCB to regulate all "activities and factors which may affect the quality of the waters of the state" such that they "attain the highest water quality which is reasonable."*

The SWRCB's Resolution 68-16 (commonly referred to as the SWRCB's "Anti-Degradation Policy") provides in pertinent part: "Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies."

To the extent any part of the project may result in waters returned as surface flow, groundwater flow, drainage, induced drainage, or otherwise discharged, directly or indirectly, into the San Joaquin River basin, the Agency is concerned that such water not have any detrimental effect on waters in the San Joaquin River basin.

The EA and an EIS should analyze compliance with these requirements, and explain the proposed project's potential impacts upon water quality in all waters into which transferred waters may drain or supply, including, but not limited to, drainage from lands irrigated by water supplied by the project as well as water supplied by others and other sources. The significant potential for degradation of San Joaquin River and Sacramento River water quality and water quality elsewhere is a great concern, and the same must be fully analyzed and evaluated. Further, it must be determined whether the project meets the specific requirement that it be "consistent with [the] maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies."

The transfers present a number of troubling issues due to the substantial risk of impairment of waters within and outside the project area. This needs to be thoroughly investigated and analyzed in the EA and in an EIS.

Reclamation response to Agency comment 11: All water conveyed in the Friant Kern Canal would be subject to Reclamations 2008 *Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals*. The Policy describes the approval process, implementation procedures, responsibilities and monitoring requirements to ensure that water quality is protected and that domestic and agricultural water users are not adversely impacted by the introduction of non-project water.

Agency Comment 12: *The San Luis Act of June 3, 1960, Public Law 86-488, 77 Stat. 156. Public Law 86-488 specifically requires: "Construction of the San Luis unit shall not be commenced until the Secretary has ... received satisfactory assurance from the State of California that it will make provision for a master drainage outlet and disposal channel for the San Joaquin Valley, as generally outlined in the California water plan, Bulletin Numbered 3, of the California Department of Water Resources, which will adequately serve, by connection therewith, the drainage system for the San Luis unit, or has made provision for constructing the San Luis interceptor drain to the delta designed to meet the drainage requirements of the San Luis unit as generally outlined in the report of the Department of the Interior, entitled 'San Luis Unit Central Valley project,' dated December 17, 1956." (Emphasis added.)*

The drain for removal of salts from the valley has never been constructed, yet over a million acre feet of water per annum from the San Luis Unit was committed to use. With every acre foot of water delivered to the San Joaquin Valley through the Delta Mendota Canal and San Luis Unit, there is delivered a significant quantity of salt which is retained in the San Joaquin Valley or transported to the Delta via the San Joaquin River. The substantial degradation of the San Joaquin River from such drainage is well-understood and recognized.

To the extent any part of the project may result in waters returned as surface flow, groundwater flow, drainage, induced drainage, or otherwise discharged, directly or indirectly, into the San Joaquin River basin, the Agency is concerned that such water not have any detrimental effect on waters in the San Joaquin River basin.

The EA should evaluate whether the project will result in further impairment of water quality, and in doing so, will merely increase the volume of salt in the groundwater and return flows. Moreover, in the absence of the project it is reasonable to anticipate a reduction or change in cropping patterns and a reduction in lands in transferee areas under cultivation, thereby reducing ground and surface water quality impairment. The EA jumps to conclusions about groundwater pumping without adequate analysis. An EIS should fully investigate and analyze all of these issues.

Without the required drain, an EIS must evaluate the project's impact, including cumulative impacts. ensuing from the continued irrigation of any transferee area of use, and the impacts of increasing irrigation in areas that would not otherwise be irrigated in the absence of the project. The EIS should examine and explain how the proposed project as well as existing conditions are consistent with and in compliance with PL 86-488.

Reclamation response to Agency comment 12: No part of the project results in waters returned as surface flow, groundwater flow, drainage, induced drainage, or discharges directly or indirectly into the San Joaquin River basin. The project Proposed Action area is not in the San Luis Unit.

Agency Comment 13: *The EA and an EIS Should Include and Fully Assess A Range of Alternatives, including a No Project Alternative. As stated above, the EA and an EIS should evaluate a more reasonable range of reasonable alternatives. Instead, the EA purports to assess the project only as against no project. The assessment does not give a fair and complete assessment of the no project alternative. A scaled down project and shorter terms for the project should be considered. Reducing and curtailing water supply demand, including the reduction and elimination of the irrigation supply to drainage impaired lands, and alteration of farming practices, including cropping, in the transferor and transferee area, should be evaluated.*

The EA should also include, in the context of the analysis of some of the foregoing alternatives or otherwise, an evaluation of desalinization options in order to promote regional self-sufficiency and, hence, improved water reliability that would obviate the need for the project. Such a discussion would be in furtherance of Water Code section 12946 which provides: "It is hereby declared that the people of the state have a primary interest in the development of economical saline water conversion processes which could eliminate the necessity for additional facilities to transport water over long distances, or supplement the services to be provided by such facilities, and provide a direct and easily managed water supply to assist in meeting the future water requirements of the state."

Opportunities for environmentally friendly desalinization of brackish ground waters should be thoroughly examined.

Reclamation response to Agency comment 13: A scaled down version of the Proposed Alternative would not meet the need which was based on studies done for the IRWMP which

projected a decrease in average annual surface water supplies for the Region is estimated to be in excess of 100,000 acre-feet per year projected over a 25-year period (Poso Creek IRWMP 2007, Summary of Finding and Conclusions). Reducing and curtailing water supply demand, the alteration of farming practices and desalinization are beyond the scope of the environmental document based on the Proposed Action and would themselves result in potential adverse impacts. Proposed Alternatives should be focused, have independent utility, be economically feasible and in the case of desalinization economically achievable from and engineering perspective.

The Proposed Action would provide the RWMG members in the Friant Division of the CVP and RWMG members who are Cross Valley CVP contractors a streamlined process for obtaining Reclamation's approval for groundwater banking, transfers, and exchanges between themselves and non-CVP RWMG member districts within the Region. As a result, the RWMG members would be able to more effectively manage the Region's collective water supply and would have the enhanced ability to store surplus surface water supplies (at that time) within the Region which has capacity to absorb the supplies (with a coincident demand) at the time the supply is available. It is expected that a streamlined approval process for banking, transfers, and exchange would provide greater flexibility in matching available supplies to water-deficient areas by helping to balance existing water supplies in the Region, thereby more effectively meeting the RWMG's water management objectives as outlined in their IRWMP.

Agency Comment 14: *Full Analysis of Impacts In the Delta. In addition to the San Joaquin River water quality issues from return flows and accretions, hydraulic pressures, and waterlogging, other impacts outside and within the Delta should be fully evaluated. This would include effects upon Delta water use due to the periodic imposition of Term 91 conditions to protect the transferee water supply during transfers, thereby depriving Delta water users of the ability to use water during July through September.*

Reclamation response to Agency comment 14: No new or additional supplies will be available to the proponents other than their current supplies. Therefore, there would be no additional impacts to the Delta.

Agency Comment 15: *Evaluate Conditions That May Be Reasonably Anticipated to Exist in the Future. The EA and an EIS should include an analysis of the present and future water needs including environmental water needs and the needs to offset overdraft of groundwater within the watersheds of origin (See Water Code section 11460) and determine the availability of surplus water. Water not needed by the transferors may be needed by others within the watersheds of of origin.*

Even more so since no drainage solution has been implemented, the EA and an EIS should evaluate impacts of the project against the background of a variety of scenarios and outcomes, including but not limited to, the lack of a drain ever being implemented, substantially inadequate supplies in the transferor and transferee areas, implementation of the SWRCB Flow Study, the project's enablement of continued farming and cropping practices and urbanization that are not otherwise supportable by adequate supplies of water, and land retirement.

Reclamation response to Agency comment 15: See Reclamation response to comment 11.

Agency Comment 16: *CVPIA Analysis. The EA and an EIS should include an analysis of how the transfers will impact water purchases by the CVP to enable compliance with the Central Valley Project Improvement Act.*

Reclamation response to Agency comment 16: To date, the Water Acquisition Program (WAP) has acquired water primarily from the San Joaquin River Group Authority (SJRGA) and its member agencies. These transfers provide additional spring and fall fishery flows on the Stanislaus, Tuolumne, Merced, and lower San Joaquin rivers. The WAP water acquisition process starts with willing sellers, i.e., water districts or other entities that hold water rights and are willing to transfer their water rights (either temporarily or permanently) to the U.S. Department of the Interior. [Source: http://www.usbr.gov/mp/cvpia/3406b3_wap/info/background_info_sheet_11-2003.pdf]. Separate environmental analysis will be required for these purchases of water. Therefore, any of the proponents at any time may be a willing seller and contact the WAP team to sell their water. Reclamation is not able to analyze the impact of water purchases by the CVP as it would be speculative at best.

Agency Comment 17: *Calfed Bay Delta Authorization Act. The EA and an EIS should include an analysis of how transfers will impact CVP compliance with the California Bay Delta Authorization Act, October 25, 2004, Public Law 108361, 118 Stat. 1681, section 103(d)(2)(D).*

Reclamation response to Agency comment 17: See Reclamation response to comment 13.