APPENDIX P5

Local Agency Comments and Responses

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ALPHABETICAL TABLE OF COMMENTERS

COMMENT L-01. STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE (SCERC), W. RICHARD JANTZ AND RAUL MENDEZ

CHIEF EXECUTIVE OFFICE
Richard W. Robinson
Chief Executive Officer

Patricia Hill Thomas
Assistant Executive Officer

1010 10th Street, Suite 6800, Modesto, CA 95354
P.O. Box 3404, Modesto, CA 95353-3404

Phone: 209.525.6333 Fax 209.544-6226

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

JUL 14 2005

July 11, 2005

Claire Jacquemin
Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

SUBJECT: **ENVIRONMENTAL REFERRALS-DEPARTMENT OF THE INTERIOR-BUREAU OF RECLAMATION-NOTICE OF AVAILABILITY OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DRAFT EIS) AND NOTICE OF PUBLIC HEARINGS (San Luis Drainage Feature Re-evaluation)**

Ms. Jacquemin:

The Stanislaus County Environmental Review Committee (ERC) has reviewed the subject project and has the following comment(s):

L-01-1

- Applicant shall determine, to the satisfaction of the Department of Environmental Resources (DER), that a site containing (or formerly containing) residences or farm buildings, or structures, has been fully investigated (via Phase I and II studies) prior to the issuance of a grading permit. Any discovery of underground storage tanks, former underground storage tank locations, buried chemicals, buried refuse, or contaminated soil shall be brought to the immediate attention of DER.

The ERC appreciates the opportunity to comment on this project.

Sincerely,

W. Richard Jantz, Deputy Executive Officer
Raul Mendez, Senior Management Consultant
Environmental Review Committee

cc: ERC Members

RESPONSE TO COMMENT L-01

L-01-1

The proposed project will adhere to any applicable grading permit requirements. The Department of Environmental Resources would be notified of any existing or former underground storage tank locations, buried chemicals or refuse, contaminated soil, or any other hazardous material encountered.

COMMENT L-02. CONTRA COSTA COUNTY, MARY N. PIEPHO

Mary N. Piepho
Supervisor, District III
Contra Costa County
Board of Supervisors

Contra Costa County

309 Diablo Road
Danville, California 94526
925.820.8663
925.820.8527 FAX

3000 Central Blvd., Suite B
Brentwood, California 94513
925.240.7760
925.240.7261 FAX
district3@cccounty.us

July 14, 2005

Ms. Claire Jacquemin
U.S. Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Re: Draft Environmental Impact Statement (EIS) on the San Luis Drainage Feature Re-evaluation and July 12 Public Hearing in Concord

Dear Ms. Jacquemin:

I appreciate this opportunity to submit comments on this project of vital interest to communities such as those I represent in Contra Costa County District III that are downstream of drainage-impaired lands in the San Joaquin Valley and near to the proposed terminus of the San Luis Drain. County staff will subsequently submit detailed comments on the EIS, but I wanted to have my views known on this matter.

My primary concerns are as follows:

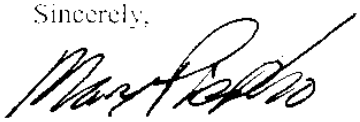
L-02-1

- Constructing the San Luis Drain and transferring the agricultural wastewater to the Delta is not an acceptable approach for addressing the drainage impairments of agricultural lands in the Westside of the San Joaquin Valley.
- The Sacramento-San Joaquin Delta is a significant ecological resource and source of drinking water for many residents of east and central Contra Costa County as well as most of the state.

  The Delta is also a premier area in the state for hunting and fishing. Taxpayers have invested millions of dollars to improve the health of the Delta and sustain and expand its many beneficial uses. Construction of the San Luis Drain would seriously undermine past and on-going investments in the health of the Delta and its not a viable solution to the problem.
- Feasible, in-valley alternatives to drainage export do exist and must be pursued to address the drainage problem of the San Joaquin Valley.

Thank you very much for considering these comments.

Sincerely,



MARY N. PIEPHO
County Supervisor, District III

MNP:rpk

RESPONSE TO COMMENT L-02

L-02-1

Comment noted. No response necessary.

COMMENT L-03. SAN LUIS OBISPO COUNTY FARM BUREAU, JACKIE CRABB

SAN LUIS OBISPO COUNTY FARM BUREAU
651 TANK FARM ROAD • SAN LUIS OBISPO, CA 93401
PHONE (805) 543-3654 • FAX (805) 543-3697 • www.slofarmbureau.org

July 14, 2005

Members
Bureau of Reclamation

Re: Discharge of San Joaquin water to Estero Point

Dear Sirs:

Representing the San Luis Obispo County Farm Bureau, we would like to ask for your total rejection of the proposal of piping San Joaquin Valley water to the Central Coast of California for disposal off Estero Point, or any other location on the Central Coast.

L-03-1 Our farmers and ranchers are being held to a very high standard of water quality discharge on the Central Coast. To introduce water from the San Joaquin Valle which will have, at the very least, selenium contamination, is a direct contradiction to the requirements that our area's non-point source discharges must be of a quality to protect the rare and endangered, as well as other species that populate our area, especially the ocean along our Central Coast.

The Regional Water Quality Control Board is currently sampling and monitoring the quality of the ocean water off the Central Coast. San Joaquin selenium water would have a significant impact on the quality of the off-shore waters. This impact will reflect on our Central Coast farmers and ranchers.

Please reject the piping of San Joaquin water to the Central Coast.

Thank you,

Jackie Crabb
JACKIE CRABB
Executive Manager

RESPONSE TO COMMENT L-03

L-03-1

Water discharged under the Ocean Disposal Alternative would be classified as a point source and subject to CWA NPDES permit requirements and Ocean Plan requirements and water quality objectives. See Master Responses SW-12 and SW-13 regarding effects of the Ocean Disposal Alternative on special-status species and water quality, respectively.

COMMENT L-04. CITY OF MORRO BAY, BRUCE AMBO

City of Morro Bay
Morro Bay, CA 93442 • 805-772-6200
www.morro-bay.ca.us

July 14, 2005

Ms. Claire Jacquemin
U.S. Department of the Interior
Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Re: San Luis Drainage Feature Re-Evaluation Draft EIS

Dear Ms. Jacquemin:

On behalf of the City of Morro Bay staff, I would like to express my concerns with the Ocean Disposal Alternative addressed in the DEIS for the San Luis Drainage Feature Re-Evaluation project, and request an extension of the public review period to allow for adequate review time of this document which will enable our community to fully consider the potential environmental impacts and develop a more informed opinion on this project. Due to the limited time frame in reviewing this rather lengthy and complicated technical document, we were only able to conduct a cursory review of the potential environmental impacts to the receiving waters of Estero Bay and the socioeconomic impacts to the Central Coast region.

L-04-1 There appear to be a few significant flaws related to the incomplete analysis of the ocean disposal alternative. In the absence of a complete analysis, the comparison of alternatives is also flawed in that the DEIS does not adequately characterize potential impacts to ocean water quality and compliance with California Ocean Plan requirements. The document does not include a complete analysis justifying or supporting the increased pipeline capacity and ocean outfall location (deeper than necessary). At a minimum, the DEIS should be revised to include a complete, comprehensive evaluation of potential impacts to ocean water quality associated with the project at full capacity, including identification of "related projects", and inclusive of all relevant physiochemical constituents from the California Ocean Plan.

L-04-2 The Ocean Plan lists of over 80 physiochemical constituents. They all require evaluation and monitoring in the effluent. The anticipated concentrations in the source water (end of pipe) and after dilution should be cited for all of these other compounds. For example, there is no mention of the concentrations of pesticides or other priority pollutants in the source water. The constituents that are not evaluated in the environmental document may pose more of an ocean water quality problem than the narrow list that was evaluated in the DEIS.

Furthermore, the DEIS notes that these analyses would be conducted as part of project permitting, but NEPA (and CEQA) do not allow deferring the analysis of potential environmental impacts (or mitigation) to a later date. A revised DEIR must contain a complete analysis of all relevant physiochemical

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FIRE DEPARTMENT 715 Harbor Street
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HARBOR DEPARTMENT 1275 Embarcadero Road
CITY ATTORNEY 459 Venetia Avenue
POLICE DEPARTMENT 850 Morro Bay Boulevard
RECREATION AND PARKS 1001 Kennedy Way

constituents listed in the Ocean Plan to thoroughly evaluate the relative impacts of each alternative. The full extent of these project-related impacts are unknown at this time, and we find it extremely difficult at best to accurately gauge these impacts and mitigation costs in comparison to other project alternatives.

We have other questions and concerns on a number issues, including but not limited to, the source of power, potential impacts and the costs for operating the 23 pumping plants; the accuracy in evaluating the potential impacts on biological and marine resources; the discrepancy in discharge estimates and the hydraulic capacity of the oversized pipe, and the associated impacts of the "other drainage producers."

L-04-3 Thank you for the opportunity to provide our brief comments and raise these critically important issues. Based upon the above, we believe there is a well-demonstrated need to extend the public review period to allow for more meaningful analysis of the Ocean Disposal Alternative. We would also like to reserve the right to conduct further analysis and provide additional comments when more accurate and complete information has been provided.

Please feel free to contact me if you have any questions or would like additional information. We look forward to working with you in sharpening the analysis of impacts in this document.

Sincerely,

Bruce Ambo, AICP
Public Services Director

cc: Mayor and City Council
Robert Hendrix, City Manager
Rob Schultz, City Attorney
Bill Boucher, Capital Projects Manager
Ellen Carroll, SLO County Environmental Coordinator
Jerry Robbins, Bureau of Reclamation

RESPONSES TO COMMENT L-04

L-04-1

See Master Response SW-13 in regard to potential impacts to ocean water quality and compliance with California Ocean Plan requirements. Section 5 has been amended in the Final EIS to compare effluent characteristics to the Basin Plan (for the Delta Disposal Alternatives) and the Ocean Plan (for the Ocean Disposal Alternative). The impacts of all effluent constituents on marine resources are considered in Sections 7 and 8. See Master Response ALT-P3 for discussion of pipeline capacity and design.

L-04-2

For more information about chemical constituents in water discharged under the Ocean Disposal Alternative, see Master Response SW-13.

L-04-3

See Master Response GEN-4.

COMMENT L-05. CONTRA COSTA COUNTY WATER DISTRICT, RICHARD A. DENTON

CONTRA COSTA
WATER DISTRICT

1331 Concord Avenue
P.O. Box H20
Concord, CA 94524
(925) 688-8000 FAX (925) 688-8122

July 27, 2005

Claire Jacquemin
United States Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

RE: Comments on San Luis Drainage Feature Re-evaluation Draft EIS

Dear Ms. Jacquemin:

Contra Costa Water District (CCWD) appreciates this opportunity to provide public comments to the United States Bureau of Reclamation (Reclamation) on the draft Environmental Impact Statement (EIS) for the San Luis Drainage Feature Re-evaluation dated May 2005

CCWD commends Reclamation for the comprehensive environmental analyses in the draft EIS and for doing the right thing in moving forward with an alternative that will have the least impact on water quality in the Delta. CCWD supports Reclamation's decision to pursue an in-valley solution for San Luis Unit drainage disposal. The in-valley solutions proposed in the draft EIS do not appear to have negative impacts on water quality at CCWD's intakes, which provide source water for the 500,000 people in CCWD's service area.

CCWD maintains its opposition to Delta discharge of drain water from the San Luis Unit, an alternative that is carried forward in the draft EIS but is not the preferred alternative. Our long-standing historical opposition is well documented, and was described in CCWD's 2003 comments to Reclamation on the San Luis Drainage Feature Re-evaluation Plan Formulation Report (Richard Denton to Jason Phillips, February 28, 2003). The attached comments are based on review of the Delta disposal alternatives included in the current draft EIS, and are provided to establish CCWD's position should there be any consideration of selecting Delta disposal as the preferred alternative in the final EIS.

If you have any questions regarding CCWD's comments, please contact Matt Moses at (925) 688-8106, or me at (925) 688-8187.

Sincerely,

Richard A. Denton
Water Resources Manager

RAD/MM:wec

Attachment: Technical Comments on Delta Drainage Alternatives

Attachment A

Technical Comments on Delta Drainage Alternatives

CCWD offers the following technical comments based on review of the Delta disposal alternatives for San Luis Unit agricultural drainage. Background information on CCWD operations is also presented to aid in understanding these comments.

CCWD delivers drinking water to 500,000 people in central and eastern Contra Costa County. The source of this drinking water is entirely from the Delta, with diversions made at Mallard Slough, Rock Slough, and Old River near Highway 4. The Contra Costa Canal and Los Vaqueros Reservoir and associated intake and conveyance facilities make up CCWD's principle water delivery system.

A Thorough Review of Delta Water Quality Modeling Should Be Performed

L-05-1

Because Reclamation has indicated that Delta discharge will not be the preferred alternative, CCWD has not carried out a comprehensive review of Delta water quality modeling work presented in the draft EIS. However, should Reclamation change its mind about not considering Delta disposal as a preferred alternative, CCWD requests that Reclamation provide CCWD with detailed electronic data files of operations, hydrodynamics, and water quality impacts related to Delta discharge alternatives to enable CCWD to fully review the modeling results. The draft EIS fails to report any water quality results for CCWD's Old River intake, the source of water for filling Los Vaqueros Reservoir. Without full analysis and disclosure of impacts on water quality at CCWD's Old River intake, the EIS environmental analysis is insufficient to disclose impacts on CCWD.

Estimated Water Quality Impacts Would Significantly Impact CCWD Operations

L-05-2

The draft EIS states that "[d]isposing drain water to Chipps Island, in the Delta, poses a threat to the CCWD drinking water supply" (page 5-95). This is correct. As reported in the draft EIS, the anticipated increase in salinity is from 15 to 35 mg/L total dissolved solids (TDS) at Mallard Slough, and up to 17 mg/L TDS at Rock Slough. These water quality impacts would force major changes in CCWD operations that would reduce the effective storage available to CCWD in Los Vaqueros Reservoir and increase CCWD's power and water costs. In light of these effects on CCWD operations, the impacts to Delta water quality should be considered significant impacts.

The draft EIS also reports increases in the concentrations of bromide and total organic carbon resulting from Delta discharge. These constituents are both precursors to harmful disinfection byproducts. CCWD's source water is already impacted by high concentrations of bromide and TOC, so even small increases represent a potential risk to public health and make it more difficult for CCWD to meet future drinking water regulations.

Claire Joaquimin, United States Bureau of Reclamation
Comments on San Luis Drainage Re-evaluation Draft EIS
July 27, 2005
Page A-2

L-05-3 As discussed above, the draft EIS fails to report water quality results for CCWD's Old River intake. If the Delta disposal alternative is considered further, the EIS must first be revised to disclose the water quality impacts at CCWD's Old River intake, and re-released for public comments and review.

L-05-4

The waste pipeline must not be located adjacent to the Contra Costa Canal

The Contra Costa Canal is a primary conveyance facility for delivering source water from the Delta to the CCWD service area for drinking water use. Although no final alignment or design details for drain water conveyance structures are presented in the draft EIS, the possibility that the alignment could be along the Contra Costa Canal right-of-way is raised. As noted in the draft EIS, "[t]his alignment may receive a negative public reaction even if the two conveyances are completely separated" (page 5-106). It is wise to acknowledge this point now, as CCWD and its customers strongly oppose placing an agricultural waste facility adjacent to CCWD's drinking water supply. The risk of contamination is not one that the 500,000 people that rely on CCWD for their drinking water supply should have to bear. At a minimum, secondary containment of the drain water pipeline with leak detection would be necessary to ensure public acceptance. The seismic evaluation performed for a drain water conveyance along the Contra Costa Canal is also not adequate to eliminate public concerns. In the event of a major earthquake in the Bay Area, local water supply systems are likely to be highly taxed, and the additional possibility of water supply contamination by breakage of the drain water pipeline is too significant to ignore.

L-05-5 The cost estimates for conveyance systems presented in Tables 2.9-3 and 2.10-3, approximately $390 per linear foot of pipe, appear to be too low. This is much less than CCWD's average cost of construction for a similarly sized water supply conveyance pipe through eastern Contra Costa County, installations that did not include waste control measures such as secondary containment. The cost estimates used in the draft EIS were apparently based on recent or similar construction in the San Joaquin Valley area rather than Contra Costa County where typical construction costs can be much higher.

The EIS must be revised to include realistic costs of conveying contaminated drain water through Contra Costa County, well away from the Contra Costa Canal, and fully containing the pipeline to prevent surface and groundwater contamination in the economic evaluation of alternatives. This cost estimate should include costs based on construction costs in eastern Contra Costa County. If Reclamation were to consider Delta disposal as a preferred alternative, a realistic cost analysis must be carried out and incorporated into a revised EIS and released for further public review and comment.

RESPONSES TO COMMENT L-05

L-05-1

The comment is noted. The commenter is welcome to review modeling study files prepared for the EIS.

L-05-2

The commenter correctly reiterates the modeled changes in water quality at Mallard Slough and Rock Slough from the Delta-Chipps Island Disposal Alternative. However, Reclamation disagrees that the increases in TDS (which are predicted to be less than 1 percent of current levels) would have a significant impact on operations of Los Vaqueros Reservoir. Similarly, predicted increases in TOC and bromide would be negligible compared to current conditions and are not significant.

L-05-3

If either of the Delta Disposal Alternatives were advanced for further consideration, water quality impacts at the CCWD's Old River intake would be evaluated using modeling procedures similar to those used to evaluate water quality at other CCWD intake locations in the Delta in the current Draft EIS analysis. Note that the Old River intake is located between the Rock Slough and Clifton Court Forebay intake points, which were explicitly modeled and for which results are presented in the EIS. These two intake points would likely constitute upper and lower limits on the water quality that might be expected at the Old River intake, thus water quality characteristics at the Old River intake would likely be within the range for which the two stations provide boundaries.

L-05-4

Reclamation agrees that pipeline leakage is very important if it results in great harm, such as impacts to drinking water supplies. Reclamation does not agree that secondary containment for the pipeline is necessarily needed. This issue would have to be re-evaluated during future design phases if one of the Delta Disposal Alternatives were advanced for further consideration. See Master Response SW-15 for a discussion of leakproofing the pipeline.

L-05-5

The estimated costs presented in Tables 2.9-3 and 2.10-3 reflect Reclamation's appraisal level costs. These costs are approximate and are intended to help determine whether more detailed investigations of the proposed project are economically justified and to serve as an aid in comparing and selecting among alternate project features. Portions of the pipeline will be more expensive to construct due to localized conditions. The average unit costs appear to be representative of average construction costs throughout the project. The appraisal estimates are not intended to be used as a basis for requesting project authorization or obtaining funding.

See Master Response GEN-1 for an explanation of the appraisal level of design.

COMMENT L-06. PORT SAN LUIS HARBOR DISTRICT, CAROLYN MOFFATT

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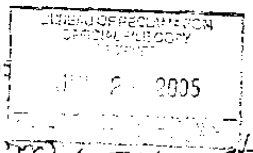
JAY K. ELDER — *Harbor Manager*
THOMAS D. GREEN — *Legal Counsel*
PHILLIP J. SEXTON, CPA — *Treasurer*



July 26, 2005

Ms. Claire Jacquemin
Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Re: San Luis Drainage Draft EIS

Dear Ms. Jacquemin:

Port San Luis Harbor District provides for the public utilization and enjoyment of the marine resources on the Central Coast, all of which depend upon a clean, productive marine environment. The District opposes the contamination of the marine ecosystems with pollutants and toxic chemicals.

L-06-1 The Ocean Disposal Alternative in the San Luis Drainage Draft Environmental Impact Statement proposes to discharge tens of millions of gallons a day of highly contaminated water into the waters of the Central Coast without adequate analysis of contaminants contained in the discharge, and without implementing reasonable feasible mitigation.

L-06-2 While the list of constituents in drain water (Appendix C, Table C2-8) includes high concentrations of many pollutants which bio-accumulate or otherwise would have a destructive impact on the cycles and systems of the marine environment, there is not adequate discussion of the possible effects. There is no discussion of pesticides and herbicides reasonably expected to be in agricultural discharge water. Additionally, the DEIS identifies selenium reduction efforts and reverse osmosis treatment in association with other alternatives, but not with the Ocean Discharge Alternative.

L-06-3 The "In Valley" alternative has previously been identified as the responsible response to in-valley generation of this severe environmental and economic agricultural problem. Remediation must address the source of the problem.

Thank you for your future thorough analysis of impacts to the marine environment in the Ocean Discharge Alternative.

Sincerely,

Carolyn Moffatt

Carolyn Moffatt
Commissioner
Port San Luis Harbor District

CM: lp

RESPONSES TO COMMENT L-06

L-06-1

More detailed information has been included in Section 5 of the Final EIS regarding water quality under the Ocean Disposal Alternative. Also see Master Response SW-13.

L-06-2

See Response to Comment L-06-1 in regard to pesticides and herbicides in the agricultural discharge water. For a discussion of why treatment is included in other alternatives but not the Ocean Disposal Alternative, see Master Response SW-6.

L-06-3

See Master Response ALT-S1 for a discussion of source control of drainwater.

COMMENT L-07. CITY OF ANTIOCH, WILLIAM R. GALSTAN

OFFICE OF THE CITY ATTORNEY (925)779-7015
P.O. Box 5007, Antioch, CA 94531-5007 FAX (925)779-7003

July 27, 2005

BUREAU OF RECLAMATION OFFICIAL FILE COPY RECEIVED
JUL 28 2005

Claire Jacqueman
U.S. Bureau of Reclamation
Planning Division
2800 Cottage Way
Sacramento, CA 95825

Re: Environmental Impact Statement, San Luis Drain

Dear Ms. Jacqueman:

The Antioch City Council has directed me to send you this letter. The City of Antioch joins the Contra Costa Water District in opposing as an option the release of drainage water from San Joaquin County agribusiness into the Delta, particularly at Chipps Island near Antioch.

For over 130 years, the City of Antioch has enjoyed water rights in the San Joaquin River for municipal purposes and has withdrawn water from the river to service the community. Antioch continues to do so, serving our present population of more than 100,000.

L-07-1 Our municipal water intake is located near the ~~proposed discharge area at Chipps~~ Island. Allowing the selenium-rich drain waters to be discharged in close proximity to the municipal water intake of our city raises a number of health and environmental concerns and considerations. Any decision to allow the discharge near this location must include a full environmental and health risk assessment regarding this fast-growing area of Contra Costa County. While many environmental factors are important, human health must have the highest consideration as the Bureau wrestles with this difficult question. The City of Antioch *cannot* stand by and allow the Delta option to proceed.

L-07-2 I also note recent newspaper reports that Delta Smelt populations are at an all-time low and that aquatic life in the Delta "has taken a nose-dive." Surely this drainage into the Delta can only worsen this situation.

Very truly yours,

William R. Galstan

WILLIAM R. GALSTAN
City Attorney

WRG/sh
cc: Mayor and City Council Members
James M. Jakel, City Manager
Contra Costa Water District

Classification
Project
Control No. 5010259
Folder I.D.

RESPONSES TO COMMENT L-07

L-07-1

Reclamation agrees with the comment that human health must have the highest consideration. See Master Response SW-1 in regard to effects of the Delta-Chipps Island Disposal Alternative on drinking water.

L-07-2

A recent synthesis of studies conducted through the CALFED Science Program and the Interagency Ecological Program to identify causes of pelagic organism decline did not identify Se concentrations as a potential cause (http://science.calwater.ca.gov/pdf/workshops/IEP_POD_2005WorkSynthesis-draft_111405.pdf). As described in Section 8.2.10.3 of the Final EIS, the Delta smelt is known to breed in or migrate through the Delta in the vicinity of outfalls that would be constructed under the Delta Disposal Alternatives. However, this species feeds primarily on zooplankton and is unlikely to forage significantly on Asian clams or other benthic invertebrates that tend to accumulate Se at elevated concentrations.

COMMENT L-08. FRIANT WATER AUTHORITY, RONALD D. JACOBSMA

FRIANT
WATER AUTHORITY

July 28, 2005

Mr. Gerald Robbins
U.S. Bureau of Reclamation / Mid-Pacific Region
2800 Cottage Way
Sacramento, California 95825

Subject: Comments on San Luis Drainage Feature Re-evaluation Draft Environmental Impact Statement

Dear Mr. Robbins:

The Friant Water Authority appreciates the opportunity to review and provide comments on the action alternatives relating to the subject Environmental Impact Statement (EIS) prepared by the Bureau of Reclamation (Reclamation). As an agency contracted by Reclamation to operate and maintain the Central Valley Project's Friant-Kern Canal distribution system and as an organization representing the interests of those water districts and growers in the nearly one million acres of farmland within the Friant Division, the Friant Water Authority appreciates the complexity of the issues at hand and recognizes that there is no simple fix or perfect solution. While drainage impairment is not an issue within Friant Division lands, some of the remedies being considered for the San Luis Unit's drainage impairment, most specifically; varying degrees of land retirement and the potential to erode those Central Valley Project contractual volumes delivered to the San Luis Unit, provoke cause for concern within our service area and the greater Central Valley Project lands.

L-08-1

The subject EIS thoroughly describes those solutions conceived by Reclamation and stakeholder groups, which provide a host of action alternatives to comply with the decision of the Ninth Circuit Court ruling which states that the "...Department of Interior...shall without delay, provide drainage to the San Luis Unit, pursuant to the statutory duty imposed by section 1(a) of the San Luis Act." The EIS asserts that 379,000 out of 730,000 acres within the San Luis Unit are marginally agriculturally productive due to drainage impairment resulting from natural geologic conditions and proposes three categories of alternative solutions; "In-Valley disposal (with varying degrees of land retirement); collection, treatment and discharge of concentrated waste streams into the Pacific Ocean; and collection, treatment and discharge of concentrated waste streams into the San Joaquin River Delta system.

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LINDSAY, CA 93247	ORANGE COVE, CA 93646	DELANO, CA 93215	SACRAMENTO, CA 95814
PHONE: 559-562-6305	PHONE: 559-626-4444	PHONE: 661-725-0800	PHONE: 916-441-1731
FAX: 559-562-3496	FAX: 559-626-4457	FAX: 661-725-9545	FAX: 916-441-1581

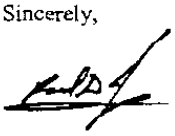
Among these action alternatives presented for consideration in the EIS, the Friant Water Authority cannot, on a logical basis, support the category which transfers the drainage waste stream outside of the impacted area (neither the Pacific Ocean nor the San Joaquin Delta). This leaves an assortment of In-Valley alternatives whose waste stream volumes vary inversely with the area of drainage impaired land taken out of production (retired). Based on these alternatives, the Friant Water Authority advocates the "In-Valley Disposal Alternative" through which the acreage declared for land retirement is minimized as this alternative is; least likely to diminish existing agricultural productivity; most likely to maintain existing CVP contractual quantities deliverable to the San Luis Unit; and maintain, if not improve, the underlying socioeconomic conditions within the region.

L-08-2

The potential for success of this approach, as demonstrated by the efforts undertaken at John Diener at Red Rock Ranch Drainage Project, illustrates the reality of a workable, creative solution to managing drainage impaired lands, without fallowing existing irrigated farmland and impacting the socioeconomic fabric of the communities supported by irrigated agriculture. Some of these communities within the San Luis Unit that will be affected by marginal land retirement include the communities of; Dos Palos, Mendota, Firebaugh, Huron, Five Points, Avenal and Coalinga, many of which have expressed opposition to land retirement because of the direct and indirect socioeconomic effects that will result.

In summary, the Friant Water Authority hopes that Reclamation chooses to support, preserve and ultimately strives to improve agricultural productivity within Central Valley Project, which will ultimately preserve the ability of California's Central Valley to provide food and fiber for our nation and beyond.

Sincerely,



Ronald D. Jacobsma
General Manager

RDJ:tm

cc: FWA Member Districts

RESPONSES TO COMMENT L-08

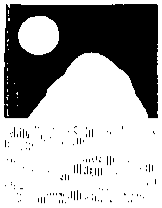
L-08-1

The comment is noted. The issue of CVP water contract terms is beyond the scope of the EIS.

L-08-2

The comment is noted. Socioeconomic effects of the Land Retirement Alternatives are discussed in Sections 17 and 18 of the EIS.

COMMENT L-09. CITY OF MORRO BAY, JANICE PETERS



City of Morro Bay

Morro Bay, CA 93442 • 805-772-6200
www.morro-bay.ca.us

Ms. Claire Jacquemin
U. S. Department of the Interior
Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

July 29, 2005

Dear Ms. Jacquemin:

The Morro Bay City Council supports our City Staff's letter to you regarding the need to extend the official comment period on the Draft EIS for the San Luis Drainage Feature Re-Evaluation beyond August 1, 2005, due to the quantity and complexity of this issue.

In addition, the City Council has voted unanimously to oppose the Out-of-Valley Ocean Disposal Alternative as a viable option for the following reasons:

L-09-1 1. Drainage service will not be provided in a timely manner due to multiple environmental permits.

L-09-2 2. Disposal into the ocean does not provide for water production.

L-09-3 3. Adverse environmental effects and risks are higher because no biotreatment is proposed.

L-09-4 4. Deep water drainage is not proven, other than through modeling, to be technically effective.

L-09-5 5. Cost effectiveness should include more than direct costs of building the facilities.

The residents of the City of Morro Bay and the surrounding San Luis Obispo County have successfully kept our waters as clean as possible due to our economic dependence on commercial fishing, sport fishing, and tourism, as well as our dedication to preservation of the marine environment. We respectfully request that you honor our endeavors and choose a preferred alternative that protects our precious coastal waters.

Sincerely,

Janice Peters
Mayor

cc: Mr. Gerald Robbins, Project Manager

FINANCE 595 Harbor Street	ADMINISTRATION 595 Harbor Street	FIRE DEPARTMENT 715 Harbor Street	PUBLIC SERVICES 955 Shasta Street
HARBOR DEPARTMENT 1275 Embarcadero Road	CITY ATTORNEY 955 Shasta Avenue	POLICE DEPARTMENT 850 Morro Bay Boulevard	RECREATION AND PARKS 1001 Kennedy Way

RESPONSES TO COMMENT L-09

L-09-1

As stated in Master Response REG-1, the time needed to obtain necessary permits for all action alternatives was assumed to be equal for the purpose of determining the start date for drainage service. The actual time required to obtain permits is not known for all of the alternatives. To avoid unfounded speculation on permitting timelines, this was not used as a discriminating factor in the analysis of the time required to implement drainage service.

L-09-2

The comment is noted. The purpose of the project is provision of drainage service and not production of water.

L-09-3

Modeling results for the Ocean Disposal Alternative suggest that treatment of effluent water is not needed to comply with the water quality requirements of the Ocean Plan. However, if this alternative were advanced for further consideration, the final decision regarding the need for treatment would be made by the State Board and Regional Board as part of the NPDES permit requirement. See Master Responses SW-6 and SW-13 for additional discussion of treatment costs and water quality under the Ocean Disposal Alternative.

L-09-4

Several ocean disposal pipelines already exist in the offshore environment, including one operated by the City of Morro Bay. As a result, Reclamation disagrees with the comment based on observation of current conditions.

L-09-5

The assessment of cost effectiveness does include more than the direct costs of building facilities. Appraisal-level cost estimates for construction (including right-of-way and land acquisition), annual operation and maintenance (including energy), and replacement costs were included and considered for all alternatives analyzed in the Draft EIS, as described in Master Response GEN-1.

COMMENT L-10. SOUTH DELTA WATER AGENCY, JOHN HERRICK

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Mary Hildebrand

Engineer:
Alex Hildebrand
Counsel & Manager:
John Herrick

August 1, 2005

Via Fax (916) 978-5094

Ms. Claire Jacquemin
Bureau of Reclamation
Planning Division
2800 Cottage Way MP-700
Sacramento, CA 95825

Re: Draft EIS for the San Luis Drainage Feature Re-Evaluation

Dear Ms. Jacquemin:

The South Delta Water Agency submits the following comments to the Draft Environmental Impact Statement for the above-referenced project.

L-10-1

1. The Drainage Feature Re-Evaluation is a positive first step in addressing the salinity problems in the San Joaquin Valley and River. However, it needs to be part of a broader effort to insure compliance with existing water quality objectives and goals not just in response to litigation. Failure to take the broad approach can lead to actions that are counter productive in meeting other ongoing obligations. By way of example, under current federal law, the Bureau is supposed to be developing a plan under which it will meet its existing water quality obligations on the San Joaquin River including the salinity standards measured at Vernalis and three other interior South Delta locations. The Bureau's efforts at addressing the salinity problem in the Valley should not solely focus on the San Luis Unit's soil salinity problem, but should include addressing the overall situation.

L-10-2

2. The DEIS does not adequately explain and examine the effects of upslope groundwater on downslope groundwater and lands. Although districts such as Westlands do not have facilities that drain to other areas or directly to the river, a portion of their drainage does leave the district by means of subsurface flows. The DEIS needs to analyze how shifts in applied water may affect the subsurface flow, and how the quality of that flow may be changed thus potentially affecting downslope subsurface and surface waters.

L-10-3 3. It is not clear in the DEIS if land retirement will be offset to any degree by bringing other lands into production. The location and drainage of such lands can affect neighboring lands and surface and subsurface water quality.

L-10-4 4. It is not clear from the DEIS whether the net consumptive use of water in the project area will change as a result of the proposed actions or other ongoing actions. As above, such changes could cause an overall detriment if the existing and delivered salts remain the same but consumption increases.

L-10-5 5. It is not clear from the DEIS if the various alternatives include continued deliveries of water to areas outside of the permitted place of use for CVP permits, or if encroachment or expansion lands (as defined in D-1641) will receive CVP water in the future.

L-10-6 6. The DEIS fails to mention the other current water quality objectives at the three interior South Delta compliance locations.

L-10-7 7. The DEIS at various places notes that decreased surface drainage, especially from the GBP, results in a net improvement in San Joaquin River water quality due to the decreased salt load entering the river. This is not necessarily the case. If the surface drainage is of better quality than subsurface accretions to the river, that drainage provides dilution to the accretions and may decrease the burden on New Melones for additional dilution water. This issue deals with the difference between decreasing load and affecting concentration. It is important to note that the water quality objectives are in parameters of concentration not load. In the DEIS, it appears that the no action and all the alternatives make this assumption with regard to improvement in San Joaquin River water quality. Further examination or explanation is necessary.

L-10-8 8. The DEIS does not adequately explain the effects of subsurface flows and accretions in other neighboring CVP service areas. The project area directly affects the subsurface waters in those neighboring areas and the surface water flows further downslope. Retirement of certain upslope lands and decreased surface drainage may have no effect on accretions to the river. The result may be the expenditure of hundreds of millions of dollars and still have high salinity in the San Joaquin River.

L-10-9 9. Table 5.1-14 appears to incorrect omit the San Joaquin River as a high priority for an EC (salt) TMDL.

L-10-10 10. The modeling used to estimate inputs on the San Joaquin River includes assumptions that certain TMDL's are instituted and affective. Although that assumption is attractive, the current environmental settings should be used not a setting that assumes another process has cured the River's salinity problems.

L-10-11 11. Each alternative and the no action alternative assume improved San Joaquin River water due to a cessation of drainage from the GBP. That assumption is based upon goals of that project and as yet undefined funding for salinity control. The DEIS should examine various scenarios that do not make this assumption.

L-10-12 12. The land retirement alternative should include a scenario under which the districts with such lands receive less CVP water than they currently do.

L-10-13 13. On page 5-130, the DEIS refers to the Interim South Delta Program. I believe that name applies to a previous and suspended project that sought to install permanent barriers in the South Delta. The subsection should refer to DWR's yearly actions regarding temporary rock barriers and not to the ISDP.

L-10-14 14. Under cumulative effects, page 5-131, the DEIS refers to the Exchange Contractor's transfer program. Notwithstanding that program's FEIR/EIS, increasing the consumption of water through the transfers is in violation of CVPIA section 3405(a)(1)(I) and will necessarily degrade water quality by increasing salinity concentrations.

L-10-15 15. The DEIS repeatedly states that there will be salinity increases beneath re-use facilities and evaporation basins, but that they are "relatively small" and are "reversible." These conclusions are without support in the document. Though small in area, a significant increase in concentration in the groundwater can result in significant effects both in the immediate area and to groundwater and surface water downslope. The document needs to further examine this issue and set forth facts to support any conclusions.

L-10-16 16. The SDWA continues to support the principles and proposals set forth in the "Rainbow Report" referred to in the document.

Please call me if you have any questions or comments.

Very truly yours,

JOHN HERRICK

JH/dd

RESPONSES TO COMMENT L-10

L-10-1

The comment is noted. As stated in Sections ES.2 and 1.1, the purpose of the proposed project is to provide agricultural drainage service to achieve a long-term sustainable salt and water balance needed to ensure sustainable agriculture in the San Luis Unit and the region. A broader effort to ensure compliance with existing water quality objectives and goals outside of the San Luis Unit is not within the scope of this EIS.

L-10-2

The Draft EIS used a three-dimensional numerical groundwater-flow model to analyze how shifts in applied water and land use potentially affect groundwater levels and flow in the drainage study area. The model was originally developed by the USGS and reliably simulates the vertical movement of water to deeper portions of the saturated aquifer as well as the horizontal movement of groundwater between adjacent land areas.

The USGS used an extensive database of geologic, groundwater-level, and water-use data to develop and calibrate the model. Later testing conducted on the model, whereby input data sets were updated and the simulation results compared to recent observed conditions, confirmed model accuracy and the appropriateness of specified model input.

The Draft EIS employed the groundwater-flow model to quantitatively examine the interaction between upslope and downslope groundwater. Specifically, the model simulates the horizontal exchange of groundwater between present-day undrained districts such as Westlands and adjacent areas. It also simulates subsurface flow from west to east from areas such as Westlands to the eastern San Joaquin Valley. The current conceptual model is that these subsurface flows generally do not move to the San Joaquin River but flow to areas of groundwater pumping in the eastern San Joaquin Valley. Although simulated fluxes between districts and the east are not explicitly reported, the simulated impacts (i.e., water levels, area affected by shallow groundwater, and bare-soil evaporation rates) are the net consequence of these simulated flows.

In the drainage study area, groundwater movement is in response to significant downward flow, which is a combined response to percolation of applied irrigation water and pumpage from deep water supply wells. Groundwater movement is therefore primarily in the vertical direction, and horizontal movement is less significant. Additionally, the area of the aquifer studied is more than 1,000 square miles, whereas its average total thickness is only about 3,000 feet. From a drainage-study-area perspective, much more water moves in the vertical direction than in the horizontal direction, and groundwater level and quality impacts, therefore, occur primarily under the irrigated fields. The Draft EIS assumed that lateral movement of water and dissolved constituents are significantly controlled by subsurface drainage, and the analysis showed a drainage project is beneficial to water-table and groundwater quality relative to continued irrigation and undrained conditions.

L-10-3

No other lands are assumed to be brought into production as part of an alternative. However, land retirement reduces the overall demand for irrigation water in the San Luis Unit, allowing the limited water supply to be used on other lands. The net result could be to avoid land fallowing on those other lands or to avoid the need to develop or purchase supplemental water supply.

L-10-4

Both applied water and crop consumptive use in the San Luis Unit would decline as land is retired. Crop consumptive use was not identified as an important screening or evaluation criterion, so it is not explicitly displayed in the Draft EIS. As a result of changes in irrigated acreage due to land retirement or fallowing, both applied water and consumptive use would

change. The value of the change in water either acquired or made available is estimated and shown in Section 12. See also Response to Comment I-09-19.

L-10-5

Reclamation does not deliver water outside of the place of use.

L-10-6

This comment refers to salinity standards for three interior South Delta compliance locations. The Water Quality Control Plan for the San Francisco Bay and Sacramento–San Joaquin River Delta Estuary (Delta Basin Plan, 1995) contains salinity requirements for: (1) San Joaquin River at Airport Way Bridge, Vernalis; (2) Old River near Middle River; and (3) Old River at Tracy Road Bridge. The EC water quality objective at these three locations is 700 mmhos/cm (approximately equivalent to 110 mg/L, 150 mg/L, and 110 mg/L TDS, respectively, based on relevant DWR site-specific conversion factors). For comparison, the incremental maximum monthly contribution to EC from the Delta Disposal Alternatives at Clifton Court Forebay (the modeled station nearest to the three interior South Delta locations) was calculated to be 13.6 mg/L (or ppm; see Table 5.2-7 on page 5-69 of the Draft EIS).

L-10-7

Appendix D4 provides additional modeling information on the effects of removal of the Grassland Bypass Project discharge from the San Joaquin River. It should be noted that removal of the discharge was assumed for both the action and No Action alternatives because the Use Agreement for the Grassland Bypass Project to convey water to the San Joaquin River via the San Luis Drain will expire in 2009. The modeling indicates that removal of the Bypass discharge from the San Joaquin River is a benefit to water quality in the river.

L-10-8

The Draft EIS employed a groundwater-flow model originally developed by the USGS to quantitatively examine the interaction between upslope and downslope groundwater. Specifically, the model simulates the horizontal exchange of groundwater between neighboring CVP service areas and groundwater flow from the western to the eastern San Joaquin Valley. Although simulated fluxes between districts are not explicitly reported, the simulated impacts considered (i.e., water levels, area affected by shallow groundwater, and bare-soil evaporation rates) are the net consequence of these vertical and horizontal flows.

The groundwater-flow model was used to analyze how shifts in applied water and land use, including retirement of different lands within the drainage-impaired area, potentially affect groundwater levels and flow in the drainage study area.

The model does not explicitly represent the San Joaquin River, and potential changes in river gains (accretions) or losses and associated changes in salt loads were not considered. However, available data indicate that the San Joaquin River adjacent to and downgradient of land retirement areas generally loses water to the subsurface (from Mendota Pool to Sack Dam).

Therefore, management practices such as land retirement in Westlands reduce subsurface flows to the east, and should not affect San Joaquin River gains.

From a project-wide perspective, much more water moves in the vertical direction than the horizontal direction, and groundwater level and quality impacts occur primarily under the irrigated fields. The Draft EIS showed that water table and salinity conditions are improved by the capture and control of subsurface drainage, which presumably would represent a benefit to the San Joaquin River.

L-10-9

Table 5.1-14 has been corrected in the Final EIS to indicate that EC is a high-priority constituent for the San Joaquin River.

L-10-10

The comment states that the assumption that certain TMDLs are instituted and effective in the modeling of San Joaquin River conditions may not be correct. The assumption is based on compliance with applicable laws and with Waste Discharge Requirements for the Grassland Bypass Project. See Master Response SW-16 in regard to the baseline conditions considered for the San Joaquin River.

L-10-11

The reviewer noted that the Draft EIS should examine various scenarios that do not assume improved San Joaquin water quality due to a cessation of drainage from the Grassland Bypass Project. The assumption made in the Draft EIS is based on compliance with applicable laws and with the Waste Discharge Requirements for the Grassland Bypass Project.

L-10-12

See Master Response GEN-6.

L-10-13

The text in Section 5.2.12.4 has been revised to describe the temporary rock barriers in addition to the proposed Interim South Delta Program.

L-10-14

Comment noted, although this is not the subject of this EIS.

L-10-15

The conclusion presented in the Draft EIS regarding salinity increases beneath the reuse facilities being relatively small and reversible was based on the following:

- From a project-wide perspective, the reuse facilities are relatively small in area. Between 7,500 and 19,000 acres of reuse facilities are needed to accommodate the expected drainage

volume for the different alternatives considered. The reuse facility area corresponds to only 2 to 5 percent of the total drainage-impaired area and only 1 to 3 percent of the drainage study area.

- The reuse areas are assumed to have subsurface tile drains. These drainage systems will be designed to collect percolating reuse water and, therefore, can prevent downslope migration of water and dissolved constituents.
- Groundwater quality beneath the reuse areas is expected to gradually decline during long-term use, which is typical for all aquifers underlying irrigated land. In the future, salt-affected soils and groundwater can be reclaimed by applying relatively high-quality irrigation water and removing the leached salts and saline groundwater with the planned drainage systems.

L-10-16

Comment noted. No response necessary.

COMMENT L-11. CENTRAL DELTA WATER AGENCY, DANTE JOHN NOMELLINI

CENTRAL DELTA WATER AGENCY
235 East Weber Avenue • P.O. Box 1461 • Stockton, CA 95201
Phone 209/465-5883 • Fax 209/465-3956

August 1, 2005

Via Facsimile (916) 978-5094

Ms. Claire Jacquemin
Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Re: DEIS - San Luis Drainage Feature Re-Evaluation

Dear Ladies and Gentlemen:

The following constitute our comments on the above-referenced DEIS.

Inadequate Baseline and Project Purpose

L-11-1 Both the no-action alternative and existing condition ignore the tremendous damage and degradation to surface water, groundwater and land resources from the failure to provide an adequate drainage solution in a timely fashion. The San Luis Act was passed in 1960. The project purpose does not address the need for restoration.

Inadequate Analysis of Impacts From Reuse and Recycling Common Elements

The DEIS at 6-25 references the impact to groundwater including horizontal movement of as much as 500 ft/year or about 20,000 feet in 44 years in the upper 50 feet of saturated zone for evaporation basins. At page 6-11 seepage to the San Joaquin River is cited as a groundwater discharge. At pages 6-31, 6-34, 6-36 and 6-37 it is recognized that:

L-11-2

> "Beneath the reuse facilities, where undiluted drainwater is applied directly to crops, the expected salinity increase is more dramatic. For example, salinity calculations for fields within the GDA indicated that irrigation with undiluted drainwater caused groundwater salinity to increase by more than 40 percent. Although these salinity increases represent significant adverse effects, they are limited to relatively small areas and are not irreversible. Affected soils could be reclaimed and saline shallow groundwater removed if an alternative means of salt disposal becomes available."

The potential impact of such increased salinity from reuse and even recycling to the San Joaquin River is not analyzed. Although the DEIS admits that the salinity increases from the reuse represent significant adverse impacts, no analysis and no mitigation is provided.

Mitigation is outlined for the evaporation ponds, i.e., liners and seepage collection systems and it would appear that the reuse areas and perhaps even some of the areas where recycling is significant should be improved with systems to contain and/or intercept the saline water seeping into the San Joaquin River and its tributaries.

L-11-2 cont.

Storage of salts in the soils and groundwater by way of the recycling and the reuse areas is a common feature of all alternatives. The areas of planned recycling and the reuse areas are being used simply as additional waste disposal areas and should be addressed with the same care as the evaporation pond areas. Water transfers which are being encouraged and facilitated by the Bureau will result in less water for dilution and higher salinities in both the soils and groundwater in the areas of concern.

The Delta-Chipps Island Disposal and the Delta-Carquinez Strait Disposal Alternatives Present a Substantial Unjustified Risk to the Environment and Particularly the Fish.

L-11-3

The analysis and discussion of possible impacts to the fisheries in the Bay-Delta estuary does not adequately account for the failure to understand and mitigate the already occurring damage to Sturgeon, Striped Bass, Salmon, Smelt and Steelhead.

The Delta-Chipps Island Disposal Alternative Degrades Delta Water Quality.

The DEIS improperly concludes that increased salinity in the southern and western Delta which does not violate water quality standards is not a significant adverse impact. Such a conclusion ignores the adverse impacts relative to reuse and recycling; drinking water and industrial water treatment; and soil salinity build-up. Such degradation will even work against the purpose of the proposed project. The California Water Plan Update - Bulletin 160-93 cited as the cost for reduced water quality a generally recognized value of $0.80 per acre foot per milligram per liter. Today's value is much higher.

L-11-4

The resulting impact is clearly significant even without recognition of the "nondegradation policy" of the State.

Yours very truly,

DANTE JOHN NOMELLINI
Manager and Co-Counsel

DJN:ju

RESPONSES TO COMMENT L-11

L-11-1

The No Action Alternative and existing conditions discussions are adequate for the evaluation of project-related environmental impacts. The purpose of the project is to provide drainage service,

as required in the authorization of the San Luis Unit. One objective is to avoid adverse environmental effects of the project; however, restoration is not a specific project objective.

L-11-2

The Draft EIS employed a groundwater-flow model originally developed by the USGS to quantitatively examine how shifts in applied water and land use (including reuse and recycling common elements) potentially affect groundwater levels and flow in the drainage study area. However, the model does not explicitly represent the San Joaquin River, and potential changes in river gains, losses, and associated salt loads were not considered. Given the location of the reuse facilities relative to gaining reaches of the San Joaquin River and plans to employ subsurface tile drainage systems to manage and control shallow groundwater levels and salinity, adverse impacts on the San Joaquin River are not anticipated. From a project-wide perspective, much more water moves in the vertical direction than horizontally, and groundwater level and quality impacts are anticipated to occur primarily under the irrigated fields within the reuse facility.

The reuse facilities are managed operations and are assumed to include subsurface tile drains. These drainage systems will be designed to collect percolating reuse water to prevent rising water levels and downslope migration of water and dissolved constituents. As the plants grown transpire the applied drainwater, the total volume of drainwater is reduced.

From a project-wide perspective, the reuse facilities are relatively small in area, and salt-affected soils and groundwater can later be reclaimed by applying relatively high quality irrigation water and utilizing the drainage systems to remove the leachate.

L-11-3

A number of factors unrelated to the SLDFR affect populations of sturgeon, striped bass, salmon, smelt, and steelhead in the Bay-Delta, and considerable uncertainty exists regarding the effects of various factors. The objective of the EIS is to evaluate potential impacts of the alternatives considered, and this evaluation is presented in Sections 7 and 8. The EIS does not serve to substantiate whether or not risks are justified, but instead presents the effects of various alternatives to assist Reclamation in meeting their court order to provide drainage service and a basis in which their management can decide how best to meet their Federal mandate.

L-11-4

Water quality impacts from the Delta Disposal Alternatives are discussed in Section 5 and Master Response SW-1. The cost for reduced water quality provided in the comment has been considered in the mitigation cost analysis in the Final EIS.

COMMENT L-12. SAN JOAQUIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, MEL LYTLE

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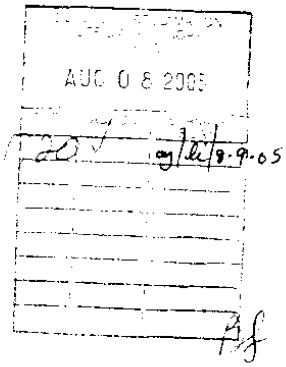
FLOOD CONTROL ENGINEER



August 1, 2005

Ms. Claire Jacquemin
United States Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, California 95825

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STUDY FOR SAN LUIS DRAINAGE FEATURE RE-EVALUATION

Dear Ms. Jacquemin:

This letter is in response to your request for Comments on the Draft Environmental Impact Study (EIS) Released for San Luis Drainage Feature Re-Evaluation.

Since the United States Bureau of Reclamation (Bureau) completed the Friant Dam in the late 1940's, nearly 90 percent of the San Joaquin River's natural flow has been diverted away from San Joaquin County. Consequently, long reaches of the river are now dry in all but the wettest of years; a once thriving salmon fishery is now extinct; and concentrated salt drainage flows into the river each year due to the lack of an adequate agricultural drainage program and the incompletion of the San Luis Drain. The County's water supplies and quality have been critically impacted.

One of the cornerstones of the San Joaquin County Board of Supervisor's (Board) water policies has been the protection of Delta and restoration of the San Joaquin River. In order to address these problems, the Board has adopted objectives included within the 1999 Strategic Plan to Meet Water Needs, the Countywide Water Management Plan adopted in 2002, and other detailed resolutions, which state that San Joaquin River flows and quality should be restored to address the acute water resource problems of the South and Central Delta; the lack of sufficient flow in the City of Stockton Deep Water Ship Channel; and the continued overdraft of the Eastern San Joaquin Groundwater Basin.

In addition, Central Valley Project (CVP) operations have resulted in drainage to the San Joaquin River of hundreds of thousands of tons of concentrated salt each year from the farmlands and wetlands in the CVP's Westside service area. The Bureau has used water from New Melones Reservoir to dilute this salt load to meet the burden imposed on the CVP by the State Water Resources Control Board. The actual amount of water

required to meet the salinity standard can be as much as 200,000 acre-feet in some years, which increases the burden on the New Melones Reservoir to dilute drainage from the CVP Westside service area to comply with the Vernalis Water quality and Flow Standards.

Subsequently, the Board has adopted several actions concerning the restoration of the San Joaquin River and the completion of the San Luis Drain including:

1. San Joaquin County supports the earliest possible planning and construction of a San Joaquin Valley out-of-basin drainage system;

2. High-salinity drainage water from lands in the CVP Westside service area, Grasslands, and wildlife refuges should not be permitted to flow into the San Joaquin River, nor should that drainage be impounded within the Valley;

L-12-1

3. San Joaquin County strongly discourages consideration of a drainage route which discharges the drainage waters into San Francisco Bay, Monterey Bay, or into the Sacramento/San Joaquin Bay-Delta Estuary system, and;

4. San Joaquin County strongly supports the Bureau's consideration of a drainage route which, after concentration and treatment, discharges the drainage water into the Pacific Ocean (Ocean Outfall Alternative) at a point sufficiently off-shore to easily assimilate the drainage water into the ocean waters.

In the San Luis Drainage Feature Re-valuation Draft EIS, the Bureau expects to select one of the In-Valley Alternatives based on flexibility of implementation and the greatest net economic benefit to the nation. However, on review of this alternative, great concern regarding the thought process, analytical protocol, and the quality assurance/ quality control of foundational pilot testing was questioned.

A key feature of the In-Valley Alternatives will be the selenium (Se) biotreatment process. Selenium, a natural element that exists in the parent materials and soils within the project area, is of great concern due possible impacts of Se bioaccumulation in fish and wildlife. The ability and effectiveness of Se removal from drainage water prior to release into impoundment facilities will be vital. The ineffectiveness of treatment could expose untold thousands of migrating waterfowl and shorebirds to Se contamination, as

L-12-2

was the well known condition at the Kesterson Wildlife Refuge.

According to information contained in the Draft EIS Technical Appendix, pilot tests were used to validate the Se biotreatment process. It appears that the pilot studies were not conducted under a peer-review process, but rather by a company that could stand to benefit financially from the selection of In-Valley Alternatives where the Se biotreatment process was used. In addition, it also appears that the pilot tests were only conducted at one site (Panoche Water District site) where drainage water from this single site and

not concentrated reject stream from a reverse osmosis facility was used. On further review of the pilot tests, it was also found that the experimental design of the pilot testing was extremely limited and included only four large tanks in sequence. To increase the questionable nature of the pilot testing process, testing procedures were altered during the testing phase where the first tank was taken off-line in the middle of the test. The entire pilot testing process appears to lack sufficient quality control and quality assurance that would be required to validate the Se removal process. In addition, there is little mention as to the nature of the innoculate or process used, its effectiveness in other areas outside of the Central Valley, the speciation of bioaccumulated Se in the pilot tests, or its fate.

L-12-2 Cont.

Consequently, it is of great concern that a key process that is fundamental to the In-Valley Alternatives was proven during pilot tests that:

- Lacked adequate peer-review and experimental design
- Sufficient experimental replication and quality assurance, and
- No independent validation or documentation of the Se-removal process.

Without thorough review and development, any data or information concerning the selenium biotreatment process is woefully suspect. Should you have any questions or comments, please contact me at (209) 468-3089.

Sincerely,

MEL LYTLE, Ph.D.
Water Resource Coordinator

CML:THM:ne

c: DeeAnne Gillick, Neumiller and Beardslee
T.R. Flinn, Director of Public Works
Tom Gau, Deputy Director/Development Services

RESPONSES TO COMMENT L-12

L-12-1

Comment noted. No response necessary.

L-12-2

See Master Response ALT-T1 for a discussion of the evaluation of treatment technologies.

COMMENT L-13. SAN LUIS OBISPO COUNTY BOARD OF SUPERVISORS, SHIRLEY BIANCHI

BOARD OF SUPERVISORS

COUNTY GOVERNMENT CENTER, Room 370 • SAN LUIS OBISPO, CALIFORNIA 93408-2040 • 805.781.5450

AUG 18 2005

SHIRLEY BIANCHI
SUPERVISOR DISTRICT TWO

August 15, 2005

Ms. Claire Jacquemin
Bureau of Reclamation
2800 Cottage Way, MP 700
Sacramento, CA 95825

Subject: Draft Preliminary Comments on the St. Drain Feature Draft EIS for Ocean Disposal Alternative

We would like to take this opportunity to comment on the Draft EIS. The Draft EIS fails to consider the environmental impacts of the proposed Ocean Disposal alternative adequately. There are many foreseeable direct, indirect and cumulative impacts on the marine and terrestrial environment that are not addressed.

The proposed outfall is located in a highly sensitive coastal resource area. The following environmental impacts should be considered:

L-13-1 • Water "effluent" contains heavy metals (e.g., chromium, etc.), nitrates/phosphates and pesticides - no technical analysis on impacts to seawater/marine life;

L-13-2 • Bioaccumulation of selenium and other discharge contaminants in the marine ecosystem;

L-13-3 • Stimulation of localized algal blooms including blooms toxic to marine mammals and humans at the discharge site;

L-13-4 • No bathymetric analysis of ocean current dynamics (i.e., "closed ocean current cell" may not allow quick dispersion within Estero Bay, but rather concentrate pollutants near shore);

L-13-5 • Potential introduction of invasive species into the marine environment;

L-13-6 • Potential impacts to giant kelp photosynthesis and toxicity to marine microorganisms and

plankton;

L-13-7 • The Draft EIS does not adequately address the economic impact of damage to the fisheries that the fishing industry in Morro Bay depends on for its survival. In addition, the adverse impact to Morro Bay's tourism industry could severely further damage the community's standard of living. Also, what are impacts to nearby abalone farms;

L-13-8 • Monterey Marine Sanctuary is proposing to extend south (below Estero Pt.) which would result in the proposed outfall area being within the Sanctuary should this alternative be approved;

L-13-9 • Little or no detail on ongoing maintenance and energy costs; if included would no longer be one of the less expensive alternatives. Energy costs continue to dramatically increase;

L-13-10 • There is new technological information on selenium removal that may be more cost effective that has not been addressed/considered in EIS:

L-13-11 • Cayucos relies heavily on tourist trade - how will outfall-water impact recreational water use in area (e.g., swimming, kayaking, scuba diving, windsurfing, etc.)

L-13-12 • Inadequate detail on costs to mitigate impacts (archeological resources, sensitive plant and wildlife species and habitats). Will there be a permanent loss to agriculture within

L-13-13 pipeline easement?

L-13-14 • What are costs for leak detection for length of pipe?

L-13-15 • Numerous active faults to cross, including San Andreas - how much more are costs to specially design pipeline to span such faults or design for eminent failure due to the large expected quake in the next 20 years?

L-13-16 • NEPA also mandates coordination and collaboration among federal and state agencies prior to making a detailed environmental impact statement. The Ocean disposal alternative conflicts with many of the policies of the following agencies: NOAA, USEPA, U.S. Fish and Wildlife, California Coastal Commission, Cal EPA, SWRCB, RWQCB, California Department of Fish and Game and even the President's Council on Environmental Quality;

L-13-17 • A thorough and complete accounting of the Ocean Disposal Alternative's very significant environmental impacts would quickly demonstrate its infeasibility and reflect much higher true project costs;

L-13-18 • The Ocean disposal alternative is in direct conflict with federal and state statutes, regulations, and policies regarding coastal and ocean protection. A review of these protections quickly identifies inadequacies in the Draft EIS's severe underestimation of the true time, costs and lack of feasibility associated with the Ocean Disposal alternative;

L-13-19

- Generally just not enough detail about the Ocean Disposal Alternative pipeline route to adequately assess environmental impacts and associated mitigation costs, such as impacts on endangered species, wetlands and faults; etc.

L-13-20

We are opposed to the consideration of the Ocean Outfall Disposal Alternative in the San Luis Drainage Feature Re-evaluation Project. This alternative provides absolutely no benefit to the County of San Luis Obispo and would only serve to reverse significant gains the county has made to preserve and protect its pristine natural environment. The preferred alternative should clearly be one that provides some benefit to the area it affects, this is obviously not the Ocean Outfall Alternative.

Thank you for your consideration in this matter.

Sincerely,

SHIRLEY BIANCHI
Chairperson, District Two

cc: Ellen Carroll, Environmental Coordinator

RESPONSES TO COMMENT L-13

L-13-1

See Master Responses SW-8, SW-13, SW-9, and SE-1.

L-13-2

See Master Responses SW-8 and SE-1.

L-13-3

See Master Response SW-11 in regard to stimulation of harmful algal blooms from Ocean Disposal Alternative effluent.

L-13-4

As noted in the comment, an extensive three-dimensional analysis of ocean current dynamics was not conducted as part of the Draft EIS analysis. It was the judgment of the EIS preparers that this detailed level of analysis would not be warranted unless the Ocean Disposal Alternative is advanced for further consideration, at which time feasibility level studies would be conducted (see Master Response GEN-1). However, it is important to note that a substantial quantity of ocean current data were collected and used in the EIS analysis. Temperature, salinity, and current velocity data were gathered from four sources to form the basis of the discharge diffusion analysis (see Section 5.2.2.1). These data indicate that currents in the vicinity of the proposed outfall location would afford substantial effluent dilution, and that the location would not be a "closed ocean current cell" that would lead to high localized concentrations as the comment suggests (see Master Response SW-4). An analysis of available data suggests that "stagnant" conditions – i.e., conditions under which current speeds are less than 0.02 meters per second – occur in the vicinity of the diffuser only 1 percent of the time, and for durations of around one hour (though in some cases up to three hours) (data source: acoustic Doppler current profiler [ADCP] data at the NOAA Point San Luis station for the years 1997–2002, including approximately 82,500 data points). This additional analysis bolsters the claim that the diffuser would not be located in a "closed ocean current cell." Nevertheless, if the Ocean Disposal Alternative were to become the preferred alternative in the future, a more detailed analysis of local ocean currents would be required and conducted.

L-13-5

The physical and biological conditions that exist within the Central Valley are significantly different from the marine environment at the Ocean Disposal Alternative outfall location. Reclamation believes there is no potential for exotic invasive species to be introduced from the agricultural runoff into the marine environment; therefore, this scenario is not discussed in the EIS.

L-13-6

See Master Responses SW-8, SW-13, and SW-9.

L-13-7

See Master Response SW-10 regarding the effects of the Ocean Disposal Alternative on fisheries, tourism, and abalone farming. Note that the Draft EIS analysis did not indicate a significant impact to fisheries; therefore, no economic impact would result.

L-13-8

The EIS cannot evaluate policy proposals that have not been adopted. See Master Response SW-7 in regard to the potential addition of Point Estero to the Monterey Bay National Marine Sanctuary.

L-13-9

See Master Response GEN-1 in regard to cost estimates for the Ocean Disposal Alternative.

L-13-10

See Master Response ALT-T1 in regard to the evaluation of Se treatment options and technologies.

L-13-11

See Master Responses SW-8, SE-1, and SW-10.

L-13-12

Appraisal-level mitigation cost estimates for the Ocean Disposal Alternative are presented in Appendix O.

L-13-13

There would not be a permanent loss to agriculture within the pipeline easement, although trees and certain crops could be affected. See Master Response ALT-P1.

L-13-14

Leak detection along the length of the pipeline is not planned; rather, leak detection would be conducted at specific locations. See Master Response SW-15 for further discussion.

L-13-15

While the design of a fault crossing for a pipeline would add to the design cost, design costs are much less than construction costs. Also, the cost of constructing a fault crossing should be only a fraction of the overall construction cost.

L-13-16

See Master Response REG-1 in regard to regulatory compliance for the Ocean Disposal Alternative.

L-13-17

See Master Response GEN-1 for a discussion of the level of analysis used to assess environmental impacts and estimate costs.

L-13-18

See Master Response REG-1 in regard to regulatory compliance for the Ocean Disposal Alternative.

L-13-19

See Master Response GEN-1 regarding the level of design of the Ocean Disposal Alternative. Appraisal-level mitigation cost estimates are presented in Appendix O.

L-13-20

Comment noted. No response necessary.

COMMENT L-14. LOS OSOS COMMUNITY SERVICES DISTRICT, BRUCE BUEL

LOS OSOS COMMUNITY SERVICES DISTRICT

President

Vice-President

Director

General Ma

Utilities Man

Administrati Services Mai

Fire Chief

August 26, 2005

Ms. Claire Jacquemin
Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825.

SUBJECT: San Luis Drainage Draft EIS

Dear Ms. Jacquemin

L-14-1 The Los Osos Community Services District opposes the Ocean Disposal alternative described in the San Luis Drainage draft Environmental Impact L-14-2 Statement (DEIS) and we believe that the DEIS, as written, is deficient as the basis upon which the Bureau can select a disposal option. We recognize that the San Luis Drainage Unit faces a severe environmental and agricultural problem with water quality. Exporting that problem to the pristine coastline of Estero Point, or to the already beleaguered environment of the Bay-Delta, does not meet the stated goals of the project *"A long term sustainable salt and water balance is needed to ensure sustainable agriculture in the Unit and the region"* (Page 1, L-14-3 Executive Summary, DEIS). The primary goal of a sustainable solution should be to reduce or eliminate the production of contaminated water, and where that is not feasible, to treat the polluted materials. In other words, this problem needs to be addressed at its source.

The Ocean Disposal alternative as described in the EIS involves the least effort to reduce the production of polluted water and treat polluted water. Specifically it does not include the selenium reduction efforts outlined for the Delta alternatives, nor the reverse osmosis treatment associated with the In-Valley alternatives. Instead it would allow unsustainable practices to continue in the Drainage Unit, maximizing the ongoing production of toxic drainwater, at the expense of our public trust resources.

Following are concerns and questions that LOCSD requests be addressed in the final EIR:

- L-14-4 Both Morro Bay and San Francisco Bay are part of the US EPA's National Estuary Program (NEP). The NEP status of Morro Bay and San Francisco Bay should be referenced in the description of these areas.

L-14-5

- The discussion of the ongoing impacts of ocean disposal and Delta disposal is inadequate. Dilution is assumed to eliminate any far field impacts to ocean water quality (DEIS Section 5.2.8.3 and Appendix D 2.2), yet only Se, Bromide, TOC, TDS, and Temp seem to be considered in this brief dismissal of the issue. The list of constituents in the drain water (Appendix C, Table C2-8) includes many other pollutants of concern at very high concentrations, many of which are known to bio-accumulate, including mercury, chromium, copper, and nickel, and others of which (nitrate, ammonia) are likely to result in significant algal blooms that could create persistent hypoxic conditions that are toxic to marine life. Phosphate and/or orthophosphate concentrations are noticeably absent from Table C2-8. Orthophosphate levels are likely to be high in the effluent, and should be considered in a discussion of the potential for algal blooms and resultant hypoxia. The final EIS should include detailed analyses of the potential for water quality, bioaccumulation, and toxicity impacts associated with the full suite of analytes reasonably expected to be present in the effluent, including at a minimum, all constituents listed in Table C2-8 as well as orthophosphate, herbicides, and pesticides (see next point).

L-14-6

- There is no discussion of the identities or concentrations of the numerous pesticides and herbicides certain to be present in the discharge water. This is a series flaw in the DEIS across all the alternatives it is impossible to adequately examine the impacts of any of the alternatives to biological resources, surface water quality, ocean water quality, and ground water quality without this information, including a discussion of the current scientific understanding of the potential for interactions among and between the many pesticide and herbicide associated chemicals likely to present, their toxicity, and potential for bio-accumulation..

In summary, LOCSD believes that the draft EIR fails to adequately consider the impacts of ocean or Bay-Delta disposal. Thank you for your consideration of these comments. We look forward to seeing them addressed in the Final Environmental Impact Report

Sincerely,

Bruce Buel, General Manager
Los Osos CSD

Cc: LOCSD Board of Directors
The Honorable Shirley Bianchi, SLO County Board of Supervisors
The Honorable Lois Capps
The Honorable Barbara Boxer
The Honorable Dianne Feinstein
Dan Berman, MBNEP
Frank Honeycutt, SLO County Public Works
Roger Briggs, Central Coast Regional Water Quality Control Board, SLO
Steve Monowitz, California Coastal Commission, Santa Cruz
Gerald D. Robbins, Bureau of Reclamation, Sacramento
File

RESPONSES TO COMMENT L-14

L-14-1

Comment noted. No response necessary.

L-14-2

Reclamation has provided a sufficient level of detail in the project description to allow an adequate environmental review of the project alternatives. See Master Response GEN-1.

L-14-3

The EIS evaluates a range of alternatives, including In-Valley Alternatives. See Master Response ALT-S1 for a discussion of source control of drainwater.

L-14-4

Sections 5.1.3 and 5.1.4 of the Final EIS has been modified to state that San Francisco Bay and Morro Bay are part of the National Estuary Program.

L-14-5

See Master Responses SW-8, SW-13, SW-11, SW-9, SE-1, and SW-10.

L-14-6

More detailed information about pesticides and herbicides in discharge water has been included in Section 5 of the Final EIS. See Master Responses SW-3 and SW-13 in regard to water quality impacts. For additional discussion of impacts to biological resources, see Master Responses SW-8, SW-9, SE-1, and SW-12.

COMMENT L-15. SAN LUIS OBISPO COUNTY FARM BUREAU, TOM IKEDA

SAN LUIS OBISPO COUNTY FARM BUREAU
651 TANK FARM ROAD • SAN LUIS OBISPO, CA 93401
PHONE (805) 543-3654 • FAX (805) 543-3697 • www.slofarmbureau.org

August 23, 2005

Ms. Clare Jacquemin
Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Dear Ms. Jacquemin:

L-15-1 The San Luis Obispo County Farm Bureau Board of Directors on our August Board of Directors meeting, voted unanimously to oppose the Ocean Disposal Alternative for Selenium from the San Luis Drainage as proposed in the Draft Environmental Impact Statement. The San Luis Obispo County Farm Bureau represents over 1,000 farmers and ranchers in San Luis Obispo County.

We strongly oppose the transport of water with Selenium and other constituents from the San Luis Drainage through San Luis Obispo County for discharge into the Pacific Ocean. Although the Draft EIS briefly mentions the agricultural use of herbicides/pesticides and fertilizers, the fact that the 21,000 AF of water to be discharged at Estero Point will be untreated (section 7 Bio 7-75) means that more than just Selenium will be released into the ocean at the discharge point.. Local agriculturalists have serious concerns about the dumping of these pollutants into the Pacific Ocean off our Central Coast Watersheds because regulations are holding our local irrigated agriculturalists to a very high water discharge standard (see remarks 11 and 12).

Below, you will find fourteen points that address inadequacies and inaccuracies in the Draft EIS. The points are:

L-15-2 **The Draft EIS has not adequately addressed the earth movement of this area:** The proposed pipeline route from Highway 101 to Point Estero has serious stability issues that are not resolved in the Draft Environmental Impact Statement (EIS). As an example of the inadequacy of the Draft EIS, the document erroneously states that it is "unlikely that any of these faults (referring to the smaller faults along the potential route) could cause a major disruption of this route".

L-15-3 1. Those issues include:
   a. This is a highly active seismic area. This route has, over the last 4 years experienced hundreds of 1.9 up to a 6.5 earthquakes. These quakes create deep crevasses, cracks and slips that regularly separate and break pipelines. (The USGS map for the period 8/15/05 to 8/21/05 shows 7 earthquakes the smallest 1.4 and the largest 3.1. Seven quakes in seven days)
   b. Besides earthquakes, this area is well known to have land slips and slides. One of the largest landslides in California is on Villa Creek and is over 8 miles long. The slides in this area are numerous and range from shallow (only inches deep) to slides that are over 15 feet deep. Landslides and slips can be seen all along the steep hills of this area.

L-15-4 c. The EIS has not considered the hazard to the proposed tunnels being lined with concrete. Because of the earth movement, concrete will quickly be subject to fracturing and failure.

L-15-5 2. **The Draft EIS has not adequately addressed the issue of pipe leaks and breaks or the consequences:** The pipe, upon entering the Cottontail Creek watershed crosses above the Whale Rock Reservoir which is the source of water to both Cayucos and portions of San Luis Obispo Communities. The EIS has not addressed:
   a. How to prevent breaks in the pipeline;
   b. The impact and mitigation to the public water supply from a leak or break:

L-15-5 cont.

c. How to detect leaks in the pipeline or tunnels or
d. How to mitigate/clean-up the lands impacted by the leaks.

3. **The Draft EIS has not adequately addressed the cost of the ocean disposal alternative:** There are many costs that have not been found in the EIS such as:

L-15-6

a. The additional cost of constructing the pipeline in this steep, hilly, remote area;
b. The cost of the maintenance of the pipeline in this remote and seismically active area or
c. The reimbursement of landowners for the losses from the construction, impacts of pipeline leaks and breaks with the contamination of the soil.

L-15-7

4. **The Bureau of Reclamation in the planning of the ocean disposal alternative does not appear to have adequately consulted with local agencies or local landowners.** Because of the lack of communication with the local agencies and landowners, the Bureau is inadequately informed as to the many issues relating to the construction and maintenance of the ocean disposal pipeline.

L-15-8

5. **The Draft EIS, on page 2-71, states that the "conveyance has the potential for other drainage producers to utilize the conveyance and disposal facilities".** The EIS does not address who or what this other uses might include or exclude or the consequences of the other uses.

L-15-9

6. **The Draft EIS states that Estero Point was selected because it is located outside of the Monterey Bay National Marine Sancturay.** If the materials that are to be transported by the pipeline are not hazardous to people and natural resources than locating the pipeline within the boundaries of the Sanctuary would not be a problem. Because of the specific reference to not locating the discharge within the Sanctuary boundaries, than it is apparent that the materials are hazardous, by concentration and constituency. This is born out in the Draft EIS when, in section 08 8-25, acknowledged reproductive impairment, embryonic deformities, sublethal reductions in health and other consequences result from selenimum concentrations.

L-15-10

7. **The Draft EIS does not adequately evaluate the constituents that will be carried in the pipeline along with the selenium.** Because the water from the San Joaquin will carry more than selenium and because the effluent will not be treated as in other alternatives, there will be constituents such as listed in statement 6 in the water. The Draft EIS has not considered these issues and how to mitigate them.

L-15-11

8. **Discussions with the Bureau engineers indicated a tremendous range in the diameter of the pipe(s) transporting the selenium. This is not adequately addressed in the Draft EIS.** With the pipe ranging from 42 inches to 10 inches, there is not adequate discussion of the pressure(s) within the pipe at various places, how the pressure will be equalized (pressure dissipaters) or how the pipe will tolerate the higher pressers (as in the State Water metal pipelines, double welds at the joints). As this is PVC pipe how will the pressure issues be resolved?

L-15-12

9. **The different selenium disposal alternatives have not been equally analyzed in the Draft EIS as required through NEPA.** The Draft EIS has not adequately described the alignment, costs, environmental impacts and other issues related to the ocean disposal alternative. If this alternative is not eliminated, then the whole NEPA process must be reopened with a complete and adequate EIS fully addressing the ocean disposal issues. This much then be re-circulated to the public for review and comment.

L-15-13

L-15-14

10. **The Draft EIS review of the surface water resources is inaccurate.** The report in the Draft EIS relating to the major creeks that drain into the greater Estero Bay erroneously states that the "creeks flow only during and shortly after the rainy season" A number of the creeks flow year-round, such as Villa Creek, Old Creek and Chorro Creek, and support steelhead fish.

L-15-15

11. **The EIS does not adequately address the impacts to coastal water from the ocean discharge.** Under surface water resources state that the Estero Bay water quality is good, with beach water quality data showing a score of A and A+. Additionally, the EIS accurately states that Estero Point (watershed is Villa Creek) is not on a 303(d) list or scheduled for a TMDL. The EIS does not adequately address the impacts to the Estero Bay water quality and the water quality of the watersheds when the pipeline empties into the ocean or if there is a leak or break in the line. There is no consideration of the impacts that contaminated water resources will have on the local agriculturalists who are being held to a very high water discharge quality through the Central Coast Conditional Waiver. (see more in talking point 12).

L-15-16

L-15-17

12. **The EIS erroneously states in Section 5 that construction effects "on surface water resources are not significant".** The Central Coast irrigated agriculturalists through the Central Coast Conditional Waiver are required to meet a high standard for water quality discharges. A major part of the waiver is monitoring and reduction of sediment. Although the Draft EIS acknowledges that "construction effects could include increases in sediment" there is no consideration of the impacts this will have on the local agriculturalists and the restriction on the amount of sediment that can be discharged into the watersheds.

L-15-18

13. **The EIS biological resources evaluation is incomplete and inaccurate:** Because the EIS states that "Reclamation routinely requires appropriate construction procedures and site management, and operating controls" the introduction of noxious weed infestations and spread of noxious weeds would "not be significant". There is a serious lack of delineation of how noxious weed introduction or spread would be prevented, as local landowners currently have to protect their land from the spread of such noxious weeds as yellow star thistle and distaff thistle or Phylloxera and Pierce's Disease (serious grape diseases) all of which are easily carried on vehicles and equipment such as would be used in the construction of the pipeline. A simple statement that the impact would not be significant is not sufficient.

L-15-19

14. **The map, Figure 5. 1-8 is seriously out of date.** The map shows Santa Rosa Creek Road as Highway 46, yet Highway 46 has been a completed highway since 1972. If this is an example of the accuracy of the EIS, then the conclusions from the study are highly questionable.

L-15-20

There are additional issues related to the ocean discharge, such as the cold water current (closed ocean current cell) off the shore which causes circling of the waters and in the Estero Bay are and will cause the pollutants to concentrate near shore as opposed to dissipating, and it is hoped that other commentors will address these offshore issues.

Please consider the above issues seriously and eliminate the ocean discharge at Estero Point alternative from the Bureau's project and proceed with one of the in-valley alternatives.

Sincerely,

Tom Ikeda

TOM IKEDA
President

cc: Gerald D. Robbins, Bureau of Reclamation
Sammie Cervantes, Bureau of Reclamation
San Luis Obispo County Board of Supervisors
Assemblyman Sam Blakeslee
Congresswoman Lois Capps
Congressman Bill Thomas

RESPONSES TO COMMENT L-15

L-15-1

Comment noted. No response necessary.

L-15-2

Potential types of earth movement along the proposed Ocean Disposal Alternative pipeline route include seismic ground shaking, surface fault displacement, liquefaction, and mass wasting. Each of these factors could pose a significant effect if untreated. With mitigation and design to current construction codes and state of the practice, effects would be negligible. These effects and potential mitigation measures are discussed in Section 9 (see Section 9.2.8 for a specific discussion of the Ocean Disposal Alternative). Master Responses GEO-1, GEO-2, and GEO-3 provide additional information on seismic hazards in the project vicinity, surface disruption, and mitigation, respectively.

L-15-3

The "smaller faults" referred to in Section 9.2.8 are those that have had no late Quaternary movement (see Master Response GEO-1). Section 9 and Appendix H have been updated to include discussion of the December 2003 San Simeon earthquake. Appendix H provides a summary of significant faults in the region.

L-15-4

Tunnels lined with concrete hold up well when subjected to seismic loadings. Unlike aboveground structures that have inertia and resonant frequencies, tunnels move with the ground. Problems can occur if a tunnel passes through an active fault. In that case, an internal flexible pipe can be used inside the tunnel to prevent breaches.

L-15-5

See Master Response SW-15.

L-15-6

The estimated costs were based on appraisal-level engineering design quantities and pay item descriptions. The estimates are approximate and are based on incomplete specifications and rough general design criteria. The appraisal-level estimates are intended to be used for the purpose of determining whether more detailed investigations of the proposed project are economically justified. These appraisal costs are not intended to be used as a basis for requesting project authorization or obtaining funding.

The appraisal estimate included the costs of construction in somewhat "steep, hilly, remote" areas along the proposed alignment. Most Reclamation pipelines are constructed in what could be considered remote areas. Topographic maps of the proposed San Luis Drain alignment were studied and the alignment was discussed with Reclamation engineers who performed field observations and reconnaissance along the proposed alignment. A relatively small percentage of the pipeline will be constructed along steep, hilly areas, while the majority of the pipeline is proposed to be constructed along gently rolling terrain.

Maintenance costs for the Ocean Disposal Alternative pipeline were included in the cost estimate. Landowners would be reimbursed for construction right-of-way through compensation

in accordance with established Reclamation policies and practices. Pipeline spills and breaks are not considered reasonably foreseeable circumstances (see Master Response GEN-3).

L-15-7

Sections 21.1 and 21.2 discuss meetings Reclamation held with local agencies and landowners starting in October 2001 to discuss the scoping and development of this EIS. Appendix P1 describes the public hearings held on the Draft EIS. If the Ocean Disposal Alternative were selected for implementation, additional coordination would be conducted.

L-15-8

No additional users have been identified. Additional users would require supplemental environmental documentation.

L-15-9

Effluent discharged under the Ocean Disposal Alternative is not anticipated to be hazardous. See Master Response SW-13 for additional discussion.

L-15-10

Section 5.2.8 of the Final EIS has been revised to include additional details about constituents in drainwater discharged under the Ocean Disposal Alternative. Also see Master Response SW-13.

L-15-11

See Master Responses GEN-1, SW-15, and ALT-P3.

L-15-12

The alternatives have been treated equally within the requirements of NEPA.

L-15-13

As discussed in Master Response GEN-1, the Draft EIS was prepared at an appraisal level of design, and as such, the analysis for the Ocean Disposal Alternative is considered adequate for assessment of environmental effects. The Draft EIS would only be revised and recirculated if there was a substantial change to a proposed action or significant new circumstances or information. Since no change is proposed and no new information has been provided, a revised Draft EIS is not appropriate at this time.

L-15-14

The Final EIS has been revised to indicate that some of the creeks in greater Estero Bay flow year-round and not just in response to precipitation.

L-15-15

Impacts to coastal waters from the Ocean Disposal Alternative effluent and pipeline operation are discussed in Master Responses SW-9, SW-13, SW-8, SE-1, GEN-3, and SW-15.

L-15-16

The Ocean Disposal Alternative is not expected to result in water quality impacts to local agriculturalists, as discussed in Master Response AG-1. See Master Responses SW-4 and SW-13 for additional discussion of water resources under the Ocean Disposal Alternative.

L-15-17

Generally, contractors installing a pipeline are responsible for controlling runoff from their construction areas. If sediment-laden runoff were to enter an agriculturalist's monitoring area, it would be the contractor's responsibility to contain it. The agriculturalist should note such run-on in his or her visual monitoring reports.

Additional information on sediment control and erosion control has been added to Sections 5.2.8.1 and 5.2.9.1 of the Final EIS.

L-15-18

If the Ocean Disposal Alternative were selected as the preferred alternative, additional feasibility and final design studies would be conducted to provide more detailed information about noxious weed management and other issues if appropriate. As discussed in Master Response GEN-1, the Draft EIS was prepared at the appraisal level of design, which means that the final route and exact location of the pipeline would not be determined unless the Ocean Disposal Alternative were advanced for further consideration. The Draft EIS provided adequate information on the environmental impacts of the project to facilitate the selection of the preferred alternative.

L-15-19

Figure 5.1-8 has been modified to include the source of the base map. Reclamation believes that the map is adequate for purposes of illustrating the locations of offshore outfalls in Estero Bay.

L-15-20

The evidentiary basis of this comment is unclear. The substantial data gathering task undertaken as part of the EIS analysis of the Ocean Disposal Alternative did not yield any evidence that the diffuser would be located in a "closed ocean cell." While an extensive 3-dimensional analysis of ocean current dynamics was not conducted as part of the EIS analysis, it was the judgment of the EIS preparers that this detailed level of analysis was not warranted (see Master Response GEN-1). However, as mentioned, a substantial quantity of ocean current data was collected and utilized in the EIS analysis. Temperature, salinity, and current velocity data (over 200,000 data points) were gathered from four sources to form the basis of the discharge diffusion analysis (see Section 5.2.2.1, page 5-52). These data indicated that currents in the vicinity of the proposed outfall location would afford substantial effluent dilution, and that the location would not be a

"closed ocean cell" that would lead to high localized concentrations as the comment suggests. It is important to note that outside of the zone of initial dilution (ZID), effluent concentrations will not be higher than they are at the edge of the ZID. It is also instructive to note that EIS estimates suggest that "stagnant" conditions–i.e., conditions under which current speeds are less than 0.02 meter per second–occur in the diffuser vicinity only 1 percent of the time, and for durations of around 1 hour (though in some cases up to 3 hours). These estimates are based on analysis of acoustic Doppler current profiler (ADCP) data at the NOAA Point San Luis station for the years 1997–2002. This further analysis bolsters the claim that the diffuser would not be located in a "closed ocean cell." If the Ocean Disposal Alternative were chosen as the preferred alternative in the Record of Decision, a more detailed analysis of local ocean currents would be required and conducted.

COMMENT L-16. CITY OF SAN LUIS OBISPO, JOHN MANDEVILLE

City of San Luis Obispo
990 Palm Street, San Luis Obispo, CA 93401-3249

August 25, 2005

Ms. Claire Jacquemin
Bureau of Reclamation
2800 Cottage Way
MP-700
Sacramento, CA 95825

Subject: Draft Environmental Impact Statement for San Luis Drainage Feature Re-Evaluation.

Ms. Jacquemin,

The City of San Luis Obispo appreciates the opportunity to review the Bureau of Reclamation's Draft Environmental Impact Statement (DEIS) for the San Luis Drainage Feature Re-Evaluation. The Bureau is considering alternatives for providing drainage service to the San Luis Unit of the Central Valley Project. The "preliminary" alternatives being considered are Ocean Outfall, Delta Outfall, Landfill/In-Valley, and Deep Well Injection. The Ocean Outfall Alternative (OOA) involves transporting agricultural wastewater from the west side of the San Joaquin Valley to the Pacific Ocean via a 200-mile pipeline over the Coast Range. Although precise pipeline alignment and outfall location(s) are not shown, the DEIS indicates this alternative would probably discharge agricultural wastewater into the ocean at an outfall location off Point Estero near the town of Cayucos in San Luis Obispo County.

We understand the Bureau is considering several potential outfall locations and pipeline routes, and that such discharge may or may not be treated to remove salt and sediment loads and other potential contaminants before it enters the Pacific Ocean. According to the DEIS, construction along the OOA corridor would temporarily disturb up to 1,940 acres of existing native and natural terrestrial habitats on grazed annual grasslands, alkali desert scrub, coastal scrub, and valley oak woodland. This estimate includes permanent removal of up to 56 acres of valley oak woodland. Other potentially significant adverse impacts identified in the DEIS include:

1. *Surface disturbances associated with construction and operation of Ocean Disposal Alternative.*
2. *Facilities could increase introduction of noxious weeds and/or the spread of existing noxious weed infestations.*
3. *Potential adverse effects to Kit Fox, Swainson's hawk, Giant Kangaroo Rat, and Western Burrowing Owl from construction of aqueduct and to Kit Fox from construction of in-valley project facilities and the loss of marginal foraging habitat and established travel corridors.*
4. *Potential construction disturbances or permanent loss of habitat at major river crossings, along aqueduct, and at the undersea outfall.*

The City of San Luis Obispo is committed to include the disabled in all of its services, programs and activities. Telecommunications Device for the Deaf (805) 781-7410.

5. *Construction activity in or near identified wetlands could result in the loss of functions and values. No effect or net loss of functions and values with appropriate construction.*

L-16-1 The City of San Luis Obispo has numerous concerns with this project and with the DEIS, as described below. The OOA has the potential to cause significant, adverse impacts to the City and the region. Agricultural wastewater is known to be contaminated with Selenium, Boron, Molybdenum, and Nitrate, as well as agricultural pesticide and herbicide residues. Overall, our

L-16-2 fundamental concern with the DEIS is that it describes potential impacts of the OOA broadly, but does not adequately identify and evaluate potential site-specific impacts to terrestrial, coastal and marine habitats and species, potential spills into creeks, aquifers, public water facilities and watersheds, vernal pools and other important wetlands. Specific City concerns include:

L-16-3 1. **Adequacy of Evaluation and Comparison of Alternatives**. Under NEPA, discussion of alternatives is the heart of the DEIS, and rigorous evaluation and comparison of the alternatives are required. The OOA is not evaluated in sufficient detail to compare it to the other alternatives in terms of environmental, economic and social justice impacts. Moreover, NEPA requires that a

L-16-4 preferred alternative must be identified if one exists, and that an environmentally preferable alternative must be identified. The DEIS does not appear to meet these requirements.

L-16-5 2. **Pipeline Route in Ocean Outfall Alternative.** It is difficult to determine the exact route of the pipeline. Figure 5.1-8 appears to be the best delineation, but at the scale used it is difficult to determine whether the proposed pipeline would run through the City of San Luis Obispo's

L-16-6 Whale Rock Reservoir watershed. It appears that it may, since Table 2.8-2 shows a pipeline segment titled "Cottontail pipeline" and Cottontail Creek flows into the Whale Rock Reservoir. This area of potential impact needs to be evaluated and discussed in the DEIS due to possible contamination of a public water source during a spill.

L-16-7 3. **Whale Rock Reservoir.** The document discusses Whale Rock Reservoir on pages 5-25 through 5-26 but incorrectly states that Whale Rock Reservoir "stores local runoff and water imported from Santa Margarita Lake...." This should be corrected, since there is no ability to move water between the two reservoirs.

L-16-8 4. **Location of Water Treatment Plants.** On page 5-66 ("Effects on Drinking Water Intakes"), the information incorrectly states that the closest water treatment plants are Lopez Water Treatment Plant and Lompoc Water Treatment Plant. Actually, the closest water treatment plant is located in Cayucos and the City of SLO and California Men's Colony both have surface water treatment plants nearby. A desalination drinking water plant is located nearby in Morro Bay. This information is important in evaluating potential effects of spills and should be corrected.

L-16-9 5. **Natural Hazards.** The pipeline corridor to the coast would cross the San Andreas Fault in one of the Nation's most seismically active regions. Among the alternatives, OOA poses the greatest likelihood of significant hazards due to earthquakes, landslides, subsidence, slope instability, soil expansion and tsunami impacts at the coast. The DEIS provides no mitigation for impacts related to pipeline failure due to natural hazards.

L-16-10 6. **Socio-Economic Effects.** Tourism, agriculture, and fishing/aquaculture are important economic sectors in San Luis Obispo County. These sectors, closely tied to environmental quality and safety, employ thousands of low-income and living wage workers in the region. While the DEIS identifies some of the potential impacts which could adversely affect these important sectors, such as increased noxious weeds, potential spills, displacement of wildlife, and temporary and permanent displacement and loss of habitat, NEPA requires that it also identify potential effects of the project in terms of "environmental justice." The DEIS only discusses environmental justice in terms of project-related increases in temporary construction jobs for "minority and low-income employment."

L-16-11 7. **Inadequate Mitigation.** Mitigation is deferred in most cases pending the results of the various environmental surveys required. The DEIS doesn't offer a "menu of mitigation options" commonly used to address deferred mitigation (i.e., "if this impact is encountered, then the following measures would reduce impacts to less than significant..."). Further study is not deemed adequate mitigation under NEPA.

L-16-12 8. **Overlapping Jurisdiction and Consultation.** NEPA mandates coordination and collaboration among federal and state agencies prior to making a detailed environmental impact statement. The OOA conflicts with policies of the following agencies: NOAA, USEPA, U.S. Fish and Wildlife, California Coastal Commission, Cal EPA, SWRCB, RWQCB, California Department of Fish and Game and even the President's Council on Environmental Quality. It is
L-16-13 not clear from the DEIS that coordination has taken place. In addition to the local, State and
L-16-14 Federal permit processes, the DEIS should address the need for CEQA compliance and local permits.

Thank you for considering the concerns of citizens of the City of San Luis Obispo. If you have questions, please call Jeff Hook, Senior Planner at 781-7176. jhook@slocity.org

Sincerely,

John Mandeville

John Mandeville, Director
Community Development

c: City Council
San Luis Obispo County Board of Supervisors
Regional Water Quality Control Board
San Luis Obispo County Environmental Coordinator's Office
Hon. State Senator Abel Maldonado
Hon. Assemblyman Sam Blakeslee
Hon. Representative Lois Capps
Hon. U.S. Senator Diane Feinstein

RESPONSES TO COMMENT L-16

L-16-1

Reclamation notes the concern expressed in the comment. Impacts of the Ocean Disposal Alternative and mitigation recommendations are described in the Environmental Consequences discussions in EIS Sections 5 through 18.

L-16-2

The EIS provides an adequate evaluation and comparison of effects to terrestrial, wetland, marine, and aquatic species to allow selection of the preferred alternative. See Master Responses GEN-1 and GEN-3 regarding the level of detail of the Draft EIS and the potential for pipeline failures, respectively.

L-16-3

The level of analysis is the same for all alternatives. The impacts of the action alternatives are compared to the No Action Alternative, and the changes from No Action are presented for each resource.

L-16-4

See Master Response ALT-A1 regarding the selection of a preferred alternative.

L-16-5

The pipeline alignment follows Cottontail Creek, which flows into Whale Rock Reservoir. See Master Response GEN-1 in regard to the exact location of the pipeline route and Master Response GEN-3 for a discussion of the potential for pipeline failure.

L-16-6

If the Ocean Disposal Alternative were selected as the preferred alternative, a more detailed pipeline alignment would be prepared. In the event that a risk to a water supply is identified, mitigation through pipeline construction and secondary containment could be incorporated. See Master Response GEN-3 for a discussion of the adequacy of the impact analysis for pipeline failures.

L-16-7

The sentence identified in the comment has been deleted from Section 5.1.4 of the Final EIS.

L-16-8

Section 5 of the Final EIS has been revised to indicate that (1) the closest water treatment plant is located in Cayucos, (2) the City of San Luis Obispo and the California Men's Colony both have

surface water treatment plants nearby, and (3) a desalination drinking water plant is located in Morro Bay.

L-16-9

Section 9 has been revised to include potential design features and mitigation measures to address fault displacement, landslides, and liquefaction along the Ocean Disposal Alternative route. If selected, the design of this alternative would emphasize preventing pipeline failure rather than merely responding to it. See Master Response GEO-3 for additional discussion of mitigation.

L-16-10

The Ocean Disposal Alternative is not expected to affect tourism, agriculture, or fisheries, as discussed in Master Responses SW-10 and AG-1.

L-16-11

Section 20 of the Final EIS has been revised to include more specific mitigation measures. The "menu" of mitigation measures for typical impacts has been included. For example, for biological species that may be encountered in pipeline construction, standard mitigation measures include surveys, pipeline re-alignment where possible, and restricting construction to periods that avoid sensitive life cycles (i.e., breeding). As these are standard Service protocols for protection of endangered species, they do not need to be discussed in detail in the EIS.

L-16-12

Consistency of the Ocean Disposal Alternative with applicable policies and regulations is discussed in Appendix L and Master Response REG-1.

L-16-13

Reclamation has completed consultation under Section 7 of the ESA for the In-Valley Alternatives. The findings of the Biological Opinion have been incorporated into the Final EIS, and the complete opinion is included as Appendix M2. There is no requirement under NEPA or ESA for Reclamation to conduct consultation for all alternatives retained in the Final EIS. If, and only if, Reclamation intends to select the Ocean Disposal Alternative, Reclamation will complete the necessary consultations on it prior to signing the ROD.

L-16-14

See Master Response REG-2 in regard to CEQA compliance. Local permits and other regulatory requirements are outlined in Section 4 and Appendix L.

COMMENT L-17. CITY OF MORRO BAY , WILLIAM T. BOUCHER

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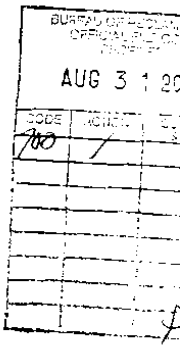


August 30, 2005

Ms. Claire Jacquemin
U. S. Department of the Interior
Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Subject: San Luis Drainage Feature Re-evaluation Draft EIS

Dear Ms. Jacquemin,

Staff of the City of Morro Bay have seen numerous letters on the draft EIS and do not wish to repeat concerns of others but rather to provide supplemental comments where appropriate. In addition to our comment letter dated July 14, 2005, please consider the following comments on the draft environmental document:

L-17-1 Section 2: Alternatives: Under the Ocean Disposal section Table 2.8-1, it is stated that 20,988 acre feet of contaminated water per year is proposed for disposal in a 42" diameter pipeline system more than 200 miles long.

The hydraulic capacity of the proposed 42" pipeline, with it's 23 pump stations, is significantly higher than the amount of wastewater currently proposed for disposal, a fact acknowledged by the draft EIS. This section also introduces the idea that the pipeline system has the "potential for other drainage producers to utilize the conveyance and disposal facilities" in the future. This proposal is not buttressed by subsequent analysis in the document.

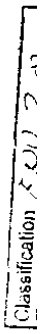
There are San Joaquin Valley "related projects" identified by the Bureau of Reclamation in other documents that may be inferred to be the "other drainage producers" referenced, or there may be other such "drainage producers" along the proposed pipeline route, perhaps in the Kettleman City area or westward. For the environmental document to be adequate, this matter must be fully addressed, with other "drainage producers" clearly identified along with their particular water quality problems, flow rates, proposed mitigations and related data and the document re-circulated for review and comment.

L-17-2 In Section 2.11.3 the document provides that the Point Estero (Cayucos) disposal site was selected over the Needle Point (Santa Cruz) disposal site because it took less time to implement, was outside the Monterey Bay National Marine Sanctuary, has the "potential for other drainage producers to utilize the conveyance and disposal facilities" and Point Estero had the highest average score for "other factors".

We saw nowhere where "other factors" were discussed or brought to light. What are they and how are they rated?

L-17-3 Section 5: Surface Water Resources: This section includes as Estero Bay dischargers the Duke power plant, the Cayucos abalone farm, the Morro Bay-Cayucos WWTP (wastewater treatment plant) and Chevron. The Chevron facility has closed. The City of Morro Bay Desalination Facility is not included (shown in document as a joint discharge with the WWTP) and the WWTP flow information is outdated. The Desalination Facility intake and discharge systems are separate from the WWTP and would appropriately be included in this section.

L-17-4 There is inadequate data on the chemical constituency of the proposed waste stream. A previous document provides a listing of certain chemical constituents of the proposed waste stream (Plan Formulation Report, Table 3.4-2). This table includes many of the contaminants discussed in the draft EIS (i.e. selenium, salinity, boron), but does not provide data on other materials we could expect to see in agricultural waste, such as pesticides. There needs to be much more information about the precise chemical characteristics of the proposed discharge.



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HARBOR DEPARTMENT
ATTORNEY
POLICE DEPARTMENT
RECREATION AND P

L-17-4 cont. whatever the point of disposal may be. The lack of complete chemical analyses of the waste stream has been previously commented on in other letters, but it should be re-emphasized that without such complete data, it is not possible to fully assess the potential risks of the discharge. Once the information is provided, additional review and comment would be warranted.

L-17-5 Section 7: Biological Resources: This section states that the biological resource analysis was based in large part upon an "appraisal-level overlay analysis of 1:24000 scale USGS topographic maps" By any standard, this cannot be considered adequate for the purpose of quantifying potential impacts of the construction and operation of the proposed disposal system. The conclusion that no significant effect to biological resources is anticipated by the construction of the Ocean Disposal Alternative may not be supported by a physical investigation of the route.

L-17-6 Section 10: Energy Resources: This Section states the Ocean Disposal Alternative will use significantly more energy than any other option, including almost three times the use of the next highest option (one that utilizes energy-intensive reverse osmosis). While the energy consumption would initially be 81,400,000 kilowatt-hours per year and is predicted to go over 110,000,000 by 2050, the impacts are stated as minimal and incremental at worst (based upon loads at nearest electrical substation).

It seems that the consumption of these levels of electrical energy would constitute a significant increase in new electrical demand. There is no discussion of the ability of the existing power generating facilities to accommodate the electrical demands or whether new production facilities would be needed. This much demand could be partially mitigated by installing one or more power generating facilities along the pipeline route. There is but one mention of an appurtenant electrical generation facility, and that in reference to lawnmower emissions. Additional information and analysis of the electrical demand of the proposed facilities are needed. If there is though of installing one or more power generating facility, there needs to be detailed environmental analysis of such a proposal.

L-17-7 Section 11: Air Resources: The critical statement in this Section, page 11-16, is "the products of combustion would be expected from any lawn maintenance, which would be required on the pumping plant and power plant sites." This is the first and only reference to a "power plant site" Is there one or more power plants proposed? If so, a full analysis of such a plant(s) should be prepared and distributed for public review and comment.

L-17-8 In this section is also the statement that employee's personal vehicles and site landscaping lawnmowers would produce the most air emissions, not the generation of 110,000,000 kilo-watt hours of new electricity per year. This seems more a facetious comment on the part of the document writers than facts substantiated by evidence.

Thank you for the opportunity to comment on this document. If you have any questions, please contact me at this office.

Sincerely,

William T. Boucher
Capital Projects Manager

cc: Honorable Mayor and City Council
City Manager
Director of Public Services
City Attorney
Jerry Robbins, Reclamation Project Manager

wtb:c:\bill\water\san luis drainage letter 083005

RESPONSES TO COMMENT L-17

L-17-1

As discussed in Master Response ALT-P3, no other dischargers have been identified, and any other users of the pipeline would have to meet all applicable regulations and permit requirements.

L-17-2

The PFR discusses the screening and selection of the Point Estero alternative in more detail. "Other factors" included environmental impacts.

L-17-3

The text in Section 5 correctly described the status of the Chevron facility. The description of the City of Morro Bay Desalination Facility has been revised in the Final EIS to state that it has a separate intake and discharge system from the WWTP.

L-17-4

More detailed information has been included in the Final EIS to identify the range of contaminants likely to be contained in discharge under the Ocean Disposal Alternative. See Master Response SW-13.

L-17-5

See Master Response GEN-1 in regard to the level of detail of the pipeline route. If the Ocean Disposal Alternative were selected as the preferred alternative, additional feasibility and final design studies would provide more detailed information about biological resources in the vicinity of the pipeline route and other project facilities.

L-17-6

The forecast electrical demand for the most energy-intensive alternative, the Ocean Disposal Alternative, is approximately 81.4 GW hours per year. Assuming that 80 percent of the peak energy demand is typically required (the utilization factor), this demand represents an additional system load of approximately 12 MW. The loads associated with the Ocean Disposal Alternative would be physically located in the PG&E North and South market areas, which are reported to have an existing load of 18.5 GW and a projected load growth of approximately 3.0 GW over the next 9 years. Thus, the incremental load associated with the Ocean Disposal Alternative represents approximately 0.06 percent of the current system load and less than 0.5 percent of the near-term load growth forecast. As noted in the Draft EIS, the expected demand profile for each of the disposal options is relatively constant. Generating facilities that serve these types of base loads are typically constructed in increments of 500 MW or more. Therefore, one can conclude that new generation built to serve the expected 3 GW total load growth within the PG&E service area will have sufficient capacity to serve the 12 MW additional load required for the disposal

options. The construction of power-generating facilities that would be dedicated to serving this project would generally be considered economically inefficient due to the lack of economies of scale.

L-17-7

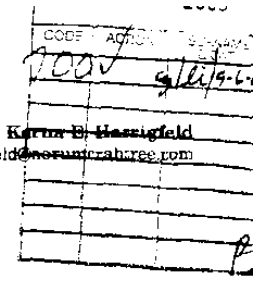
No new power sources are proposed for the alternatives. Power would be provided from the existing utility grid.

L-17-8

Employees' personal vehicles and site landscaping lawnmowers are the primary factors in increasing air emissions in the immediate, local, in-valley vicinity of the project location compared to power plants' regional and likely remote extra generation requirements due to the project. The electrical energy resources used within the study area are anticipated to be delivered through the existing electrical transmission and distribution system. However, the ultimate source of electrical power generation within the California energy market could be from a mix of generating assets, including hydroelectric, nuclear, and fossil-fueled power generation, which are owned and operated by either PG&E or some other power- generating entity potentially located hundreds of miles from the project area. Additionally, power plants are subject to extensive air quality regulations designed to protect public health and welfare at all times, regardless of generation requirements.

COMMENT L-18. HERUM CRABTEE BROWN (FOR STOCKTON EAST WATER DISTRICT), KARNA E. HARRIGFELD

HERUM CRABTREE BROWN
Attorneys At Law



Karna E. Harrigfeld
kharrigfeld@herumcrabtree.com

August 31, 2005

VIA FACSIMILE and U.S. MAIL
(916) 978-5094

Ms. Claire Jacquemin
U.S. Bureau of Reclamation
2800 Cottage Way, MP-700,
Sacramento, California 95825

Re: Comments on San Luis Drainage Feature Re-Evaluation Draft Environmental Impact Statement

Dear Ms. Jacquemin:

These comments are submitted on behalf of Stockton East Water District (SEWD) to the U.S. Department of the Interior – Bureau of Reclamation (Reclamation) San Luis Drainage Feature Re-Evaluation (Re-evaluation) Draft Environmental Impact Statement (Draft EIS) dated May 2005. In order to set the context for the following comments, it is important to note that SEWD's primary interest is in improving water quality on the San Joaquin River. SEWD's interest in water quality arises because of its contract with the Reclamation for water from the New Melones Reservoir on the Stanislaus River. As Reclamation is well aware, substantial releases of water for water quality purposes are made from New Melones Reservoir throughout the year to meet the salinity water quality objective at Vernalis. SEWD believes that the use of high quality water for dilution flows is an unreasonable use of water and in violation of state and federal law. The effect of these releases and other actions taken by the Reclamation has been to deprive SEWD of its full contractual entitlement for water from New Melones Reservoir.

GENERAL COMMENTS

The purpose for the Re-evaluation is to formulate a plan that provides agricultural drainage service to the San Luis Unit that "achieves long term, sustainable salt and water balance in the root zone of irrigated lands." Fundamental to this purpose must be for Reclamation to mitigate the past and future harm that it has caused to the San Joaquin River from the lack of provision of drainage to the San Luis Unit and other neighboring districts.

For all intent and purposes, the San Joaquin River has been used as the "out of Valley Drain" since irrigation began in the San Joaquin Valley. It is no secret that the San Joaquin River experiences serious water quality problems. The degradation of the San Joaquin River has been an ongoing concern since the early 1960s. The salinity problem in

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the San Joaquin River began with the reduction of flows due to upstream development and the advent of irrigated agriculture that was exacerbated when the Central Valley Project, including the San Luis Unit, was constructed.

The San Joaquin River is affected by the salt load and quantity of flow on the Lower San Joaquin River from a combination of upstream diversions, discharges of saline drainage water to the San Joaquin River and subsurface accretions to the river from groundwater. Despite the fact that only a small percentage of the salinity concentration of the San Joaquin River is due to uses within San Joaquin County, San Joaquin County interests have historically borne the burden of remedying the water quality problems of the San Joaquin River before they reach the Bay-Delta Estuary by releasing significant quantities of water from New Melones Reservoir to meet the water objectives at Vernalis. As a direct result of the dilution flows provided from New Melones Reservoir, the CVP Contractors, which includes SEWD, do not receive their full contractual entitlement from New Melones Reservoir.

L-18-1 The Draft EIS is woefully inadequate in its discussion of how any of the alternatives will affect the San Joaquin River water quality and quantity either in the short term or long term. Fundamental to development of a drainage plan for implementation must be to

L-18-2 mitigate the past and future harm that it has caused to the San Joaquin River from the lack of provision of drainage to the San Luis Unit and other neighboring districts, and improve water quality in the San Joaquin River.

SPECIFIC COMMENTS

Section 1 – Purpose and Need for Action

Section 1.1: Purpose and Need for Action

L-18-3 This section describes four related project objectives used to develop the alternatives to be evaluated in the Draft EIS to achieve the overall purpose and need for the project. In addition to the four identified in this section, the Draft EIS must also include the objective of no re-directed impacts to other water users within the Project Area. It is essential in implementing the Preferred Alternative that other water users are not adversely impacted,

L-18-4 in specific, SEWD is concerned that implementation may have an adverse impact on flows in the San Joaquin River. Any reduction in flows in the San Joaquin River must be

L-18-5 mitigated in some manner which will not impact other water users in the San Joaquin Valley.

Section 1.3.1: Areas Needing Drainage

L-18-6 There is a discussion in this section that "not all of the landowners within the drainage service area would install on-farm drainage systems. Some farmers would elect not to install drains based on localized conditions and economic considerations" and therefore only two-thirds of the acreage was included in the "areas needing drainage." How does this factor into the overall drainage solution? Currently, lands within the Northerly

L-18-7/8 Area drain in the San Joaquin River. Will this practice continue and what will be the affect

L-18-9 on water quality in the San Joaquin River? The Draft EIS must include an analysis of how the continuation of landowners' current practices will affect the overall drainage solution.

Section 1.4: Related Projects and Activities

L-18-10 This section discusses related projects that would directly affect drain water quality and quantity or are programs attempting to address drainage needs. Congress authorized HR 2828 which became Public Law 108-361 when President Bush signed the law on October 25, 2004. HR 2828 contains important direction for the Secretary of the Interior (Interior) and the Bureau of Reclamation regarding operation of New Melones Reservoir. HR 2828 requires not later than one year from the enactment, the Secretary must develop **and initiate implementation** of a program (Program) to meet all existing water quality standards and objectives for which the CVP is responsible. This is an important related program which should be included in the Draft EIS discussion.

In specific this new Program must include the following (1) Recirculation program to provide flow, reduce salinity concentrations and **reduce the reliance on New Melones Reservoir for meeting water quality and fishery objectives through the use of excess capacity in export pumps and conveyance facilities**; (2) Best Management Practices Plan that focuses on reducing water quality impacts from discharges from wildlife refuges. The BMP plan is to be coordinated with other entities discharging water into the San Joaquin River to reduce salinity concentrations discharged into the River, including the timing of discharges to optimize their assimilation.

L-18-11 The purpose of the Program is to provide Interior with greater flexibility in meeting the existing standards **so as to reduce the demand on water from New Melones Reservoir used for that purpose, and to assist the Secretary in meeting any obligations to CVP contractors from the New Melones project.** Because this Program will be implemented in the short term, the effects of implementing any Preferred Alternative must include an analysis of its effects on this Program.

Section 2 – Alternatives

L-18-12 The discussion under Reverse Osmosis Treatment under the In Valley Disposal Alternative assumes that product water generated from the RO treatment would be conveyed to and blended with CVP water in a nearby canal. This is an improper assumption because mitigation in the form of releases of "product water" into the San Joaquin River must be utilized because of the adverse affect of the drainage reduction on San Joaquin River flows.

Section 5 – Surface Water Resources

Section 5.1.2 Water Quality in San Joaquin River Reaches and Tributaries

L-18-13 The Draft EIS uses water quality data from 1986 through 1997 for its analysis of the effects of implementation of the various Alternatives. This water quality data is suspect because of the significant changes that have occurred in the San Joaquin River system over

the past 10 years. Probably the two most significant actions on the San Joaquin River that have influenced water quality and flow have been the reduction in return flows entering the San Joaquin River from the development of irrigation efficiencies and reuse of water and increased water deliveries to the wildlife refuges which changes the timing and magnitude L-18-14 of water quality and flow in the San Joaquin River. These changes in San Joaquin River hydrology and its effect on water quality and flow have been included in the most recent version of Reclamation's CALSIM II model. At a minimum, this preliminary model must be used in order to determine the effect on San Joaquin River water quality and flow of implementation of any of the proposed Alternatives.

This point is highlighted by the statement in this section that the Vernalis water quality objective for April to August has been exceeded over 50 percent of the time from L-18-15 1986 through 1997. Curiously, Reclamation now reports that there has been NO violations of the Vernalis water quality objective since 1995 to date. How is it that there were frequent violations during one time period and all have been eliminated during a subsequent time period? Clearly something has changed in the baseline flows. As such, the L-18-16 entire analysis in this section needs to be done utilizing the new CALSIM II modeling inputs.

L-18-17 The reference on page 5-17 to the low dissolved oxygen levels being measured on the Calaveras River is not accurate. First, low dissolved oxygen levels have only been measured in a five-mile segment within the urban area of Stockton, and the cause has been identified as urban runoff.

L-18-18 The reference on page 5-27 to the location of the Modesto Reservoir should be Stanislaus County, not San Joaquin County.

L-18-19 On page 5-44 in Table 5.1.14 an "H" should be placed in the column for San Joaquin River – Electrical Conductivity as it is a high priority constituent for TMDL implementation.

Section 5.2 Environmental Consequences

Section 5.2.2 – Modeling Method and Assumptions

L-18-20 This section indicates that because the results of the Regional Board comparison showed water quality in the river improving from the withdrawal of direct discharges to the river, no additional model comparisons were performed of the existing conditions. First, the Regional Board analysis in this section refers to the Salt and Boron L-18-21 TMDL modeling which is not based on the new more accurate depiction of San Joaquin River in CALSIM II, as such, its accuracy is highly questionable. Secondly, additional L-18-22 modeling is necessary to assess the impact of implementation on the reduction in flows in the San Joaquin River. Simply stating that there will be no adverse to water quality is not L-18-23 sufficient; Reclamation must evaluate the effects of its actions on flow in the San Joaquin River.

Section 5.2.4: In Valley Disposal Alternative

The effect of implementation of any of the seven proposed Alternatives on water quality is stated in the Draft EIS to be the same. In fact, in every section of analysis for the varying Alternatives in Section 5 identical language is used to describe the affect on the San Joaquin River water quality. As such, these comments apply to all of the seven proposed Alternatives and will not be repeated. The stated language is as follows:

> Under the In Valley Disposal Alternative permitted discharges from the GDA to the Lower San Joaquin River as part of the Grasslands Bypass Project would be discontinued and placed in evaporation basins. Removal of the water and chemicals from the River is expected to result in a significant beneficial effect to the concentration of Se in the Lower San Joaquin river (see Appendix D4). Improvements to the concentrations of slat and boron would also be significant although not as great as Se, due to the existence of other significant sources of these chemicals to the River.
>
> Removal of drainwater associated with the Grasslands Bypass Project from the Lower San Joaquin River would reduce the amount of dilution water required to be released from New Melones Reservoir to achieve the EC water quality objective at Vernalis. Modeling results shown in Appendix D4 indicate for the 10 year period from 1985 through 1995 the average reduction in dilution flows would be 21, 00 AF/year. This is a significant beneficial effect to New Melones Reservoir Operations.

L-18-24 We agree relieving the burden on New Melones Reservoir to make water quality releases to any degree is beneficial and we support all actions taken to further this most important goal. However, the approach and methodology of the modeling used in Appendix D4 - San Joaquin River Modeling raises many questions. First, why were the historical

L-18-25 monthly discharges from the GDA modified so they were in compliance with the TMDLs during a 9-year flow record? Neither the State Water Resources Control Board nor the U.S.

L-18-26 EPA has approved the TMDL. Moreover, should these releases actually be achieved, would

L-18-27 it impact actual operations? Simply modifying a model does not mean that releases would occur in that fashion? What happens when more water is required to be held back because

L-18-28 of load limits, will that cause degradation at a subsequent time? What impact will there be on flow in the river?

L-18-29 Secondly, the modeling for water quality and flows used is from October 1985 to September 1994, many things have changed on the San Joaquin River since 1994. There have been large reductions in return flow from irrigation discharges into the river due to increased irrigation efficiencies and reuse of water. Additionally, there has been an increase delivery to wildlife refuges that discharge into the San Joaquin River. As was discussed above, there is a new model that has more recent depiction of operations on the San Joaquin River in CALSIM II. This new model shows a tremendously different picture of water quality and flow in the San Joaquin River. Now, much more water is needed during the late winter and early spring for dilution of poor water quality in the San Joaquin River, not much is needed in the summer. The modeling results in Table D4-5 show that

L-18-29 cont. the majority of the releases for water quality are seen in June, July and August; this simply does not hold true under new real time conditions. These results raise real concerns about the validity of the analysis and the conclusion that there will be "a significant beneficial effect to New Melones River Operations."

L-18-30 In order to properly evaluate the effects on water quality and flow in the San Joaquin River from implementing any of the proposed Alternatives and any corresponding reduction in the need for New Melones Reservoir releases, the most current valid data must be used. Additionally, implementation will be phased over a number of years; the analysis

L-18-31 must show the incremental effects as well as the long term effects on implementation of the proposed action.

Section 5.2.14 Mitigation Recommendations

L-18-32 The Draft EIS conclusion that there are no significant environmental effects on surface water resources, and therefore no mitigation measures are required is simply unsupported by the analysis contained in the Draft EIS. The Draft EIS fails to evaluate the

L-18-33 effects of the drainage reduction measures and reuse facilities will have on flow in the San Joaquin River. How will this reduction in water quantity impact the San Joaquin River water quality? In addition, Reclamation's water right permits, issued by the State Water

L-18-34 Resources Control Board and conditioned by the State Board in Decision 1641, impose on Reclamation the obligation to meet the flow objectives for the San Joaquin River. How will this reduction in drainage reduce the flow in the San Joaquin River? The analysis must

L-18-35 include an evaluation of how Reclamation will meet its on-going regulatory requirements and the associated impacts of these changes in drainage rates. The absence of analysis of

L-18-36 this issue renders the Draft EIS legally deficient. The Draft EIS must be revised to address this issue, and once proper analysis is conducted to determine the impact on flow in the

L-18-37 river, Reclamation must mitigate these impacts, and should evaluate the potential use of any "product water" generated by RO treatment into the San Joaquin River for such mitigation.

We appreciate the opportunity to provide these comments and look forward to working with Reclamation on implementation of an alternative that dramatically improves water quality in the San Joaquin River.

Very truly yours,

KARNA E. HARRIGFELD
Attorney-at-Law

KEH:rl

cc: Kevin Kauffman

RESPONSES TO COMMENT L-18

L-18-1

See Master Response SW-1 regarding the analysis of impacts of the alternatives on San Joaquin River water quality and quantity.

L-18-2

The comment is noted. Mitigation for any past harm is not the subject of this EIS. Mitigation for future effects is included (see Section 20 and Appendix O).

L-18-3 - 5

The requested change in the purpose and need discussion (Section 1.1) does not directly arise from the Federal action to provide drainage service to the San Luis Unit. It should be noted that the EIS has been supplemented to include an analysis of the change in flow in the San Joaquin River at Vernalis as a result of the No Action and action alternatives (see Section 5.2). No significant changes in flow of the San Joaquin River at Vernalis were found for any action alternatives compared to No Action.

L-18-6

The PFR describes drainage rates and preliminary flows in Section 3.1. Groundwater modeling and agricultural productivity were used to evaluate on-farm, in-district, and regional drainage facilities. If one farmer installs drains but a neighbor does not, the farmer with the installed drains will be collecting more drainwater in his system at a different rate than if all farmers installed drains. The in-district system provided by Reclamation would still be collecting the total drainage.

L-18-7

The fate of Northerly Area drainage and whether it will continue to be discharged into the San Joaquin River depends upon the chosen alternative. See Section 2 of the Final EIS for a description of each alternative.

L-18-8

Section 5.1 of the Final EIS has been updated to reflect water quality and flow data for the San Joaquin River based on the most recent monitoring information available. In addition, Appendices D4 and D5 include updated water quality modeling to assess changes in the river compared to existing conditions. It should be noted that the No Action Alternative and all of the action alternatives will have similar effects on the San Joaquin River due to removal of the Grassland Bypass Project discharge from the river following expiration of the Use Agreement in 2009. Also see Master Response SW-16.

L-18-9

The PFR describes drainwater reduction optimization and various drainwater reduction options in Section 3.2.1. Since on-farm reduction options are not a Federal action, the specific farmers' actions cannot be certain. However, the net results of those actions must comply with the drainage rate restrictions placed on the system by Reclamation. Flows were estimated and analyzed for each alternative. Section 3.2.2 of the PFR shows that choosing drainwater reduction scenarios is an iterative process since each measure can affect another measure (i.e., irrigation system improvements reduce the need for seepage reduction). The most cost-effective scenario

of drainage reduction was used for each alternative, and effects were analyzed for each alternative in the EIS.

L-18-10, 11

The purpose and need discussion has been revised to include a discussion of PL 108-361. See Section 1.4.6 of the Final EIS.

L-18-12

Results of the analysis of changes in San Joaquin River flows are presented in Section 5.2. Compared to No Action, the action alternatives did not have a significant effect on flows in the San Joaquin River at Vernalis.

L-18-13

Section 5.1 of the Final EIS has been updated to reflect water quality and flow data for the San Joaquin River based on the most recent monitoring information available. See Master Response SW-16 for additional information.

L-18-14

Section 5 has been updated with additional CALSIM II modeling information regarding impacts to the water quality and quantity in the San Joaquin River due to changes in the Grassland Bypass Project discharges. As a part of the development of CALSIM II, assumptions regarding probable future projects were included to reflect changes in water system demand, system operation rules, and infrastructure improvements expected to occur by 2030. Also see Master Response SW-16.

L-18-15

Section 5.1 of the Final EIS has been updated to reflect water quality and flow data for the San Joaquin River based on the most recent monitoring information available. See Master Response SW-16 for additional information.

L-18-16

Section 5.2 and Appendix D2 of the Final EIS have been revised to include results from CALSIM II modeling of the changes in flow and EC in the San Joaquin River.

L-18-17

The referenced text in Section 5.1.2 has been modified to indicate that low DO conditions in the Calaveras River have been observed following storm events.

L-18-18

Section 5.1.5.1 of the Final EIS has been corrected to state that Modesto Reservoir is located in Stanislaus County.

L-18-19

Table 5.1.14 of the Final EIS has been revised to indicate that electrical conductivity is a high-priority constituent for TMDL implementation in the San Joaquin River.

L-18-20

See Master Response SW-16 in regard to the TMDL modeling described in Section 5.2.2 and the San Joaquin River data used in that modeling.

L-18-21 - 23

See Master Response SW-16 in regard to effects on San Joaquin River flows.

L-18-24

Comment noted. No response necessary.

L-18-25

As the commenter noted, historical monthly discharges from the GDA were modified to comply with TMDLs during a 9-year flow record even though the TMDLs had not been approved. The program to implement TMDLs in the San Joaquin River was adopted by the Regional Board in a 1996 Basin Plan Amendment for the Control of Agricultural Subsurface Drainage Discharges. Included in this program is a compliance time schedule for meeting the four-day average and monthly mean water quality objectives for selenium. To evaluate future scenarios, Reclamation assumed that the compliance time schedule would be met. The discharges were modified because reducing flow is the only way to meet the TDML if water quality is to remain the same.

L-18-26

The assumption that the GDA discharge would meet salt and boron TMDLs has been removed due to the uncertain regulatory status of these TMDLs. Revised modeling assumed compliance with the Se TMDLs that have been approved. Also see Master Response SW-16.

L-18-27

See the Response to Comment L-18-25. When no other specific plans are available for water quality data, then assumptions have to be made.

L-18-28 - 30

See Master Response SW-16.

L-18-31

The comment states that because project implementation will be phased, San Joaquin River water quality and flows should be analyzed to show both incremental and long-term effects. See Master Responses CUM-1, SW-17, and SW-1.

L-18-32

Reclamation believes the environmental analysis in the Final EIS supports the conclusions stated in all sections. Mitigation is described in Section 20 of the Final EIS.

L-18-33 - 37

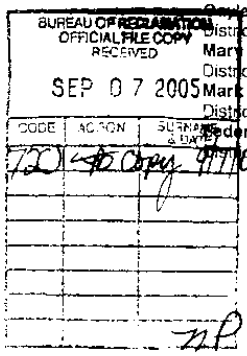
See Master Response SW-16 in regard to effects on San Joaquin River flows. No mitigation is proposed because the changes in flow due to the action alternatives are not significant compared to the No Action Alternative.

COMMENT L-19. CONTRA COSTA COUNTY WATER AGENCY, ROBERTA GOULART

Water Agency

County Administration Building
651 Pine Street
4th Floor, North Wing
Martinez, California 94553

Contra Costa County



September 1, 2005

Ms. Claire Jacquemin
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Fax: 916-978-5094
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RE: Comments San Luis Drainage Feature Re-evaluation and EIS

Dear Ms. Jacquemin:

Thank you for the opportunity to comment on the San Luis Drainage Feature Re-evaluation Draft EIS. These comments from Contra Costa County and the Contra Costa County Water Agency address a variety of concerns, including what we believe is an understatement in the EIS of the environmental impacts and economic costs of the Delta discharge options. Likewise, the County and Water Agency urge the Bureau to follow through with what is anticipated in the Draft EIS, that is, selection of an in-valley alternative as the preferred alternative.

L-19-1

L-19-2

Contra Costa County is an urban, suburban, and agricultural county of approximately one million residents situated at the juncture between San Francisco Bay (Bay) and the Sacramento-San Joaquin Delta (Delta). The Contra Costa County Water Agency is a special district created by the California Legislature in 1957 and governed by the Contra Costa County Board of Supervisors (Board of Supervisors). Acting through the Water Agency, the Board of Supervisors has actively participated in shaping California water policy over the last several decades, particularly as this policy relates to the health of the Bay and Delta.

Located at the confluence of California's major rivers and at the hub of the developed water system for the state, the Bay-Delta is a natural resource of national significance. For Contra Costa County, the Bay-Delta is a defining feature of our landscape, a crucial source of drinking water, and a scenic and recreational asset contributing to the quality of life of County residents. For these reasons, Contra Costa County has historically opposed the construction of a drain to the Delta for agricultural wastewater. Most recently, on July 26, 2005, the Board of Supervisors reaffirmed its opposition to the San Luis Drain. Any solution to the drainage problem of the San Joaquin Valley must not harm water quality in the Delta and must not include construction of a drain to export agricultural wastewater. Give these circumstances, it is disappointing that the Draft EIS does not rule out the delta discharge alternatives as the preferred alternative.

L-19-3

L-19-4

Classification ENV 2.00

In addition to a continued, fundamental opposition to construction of a drain to the Bay/Delta, Contra Costa County and the Water Agency submit the following additional comments on the Draft EIS:

The EIS underestimates environmental impacts to the Bay/Delta

- The Bay-Delta system is the largest freshwater estuary on the west coast of the continental United States[1]. The mixing of fresh and salt water in the Bay-Delta creates productive nurseries for fish, supporting approximately 150 fish species[2]. The wetlands and waterways of the area are also part of the "Pacific Flyway", providing wintering habitat for millions of ducks and geese[3]. Some delta fisheries are plummeting due to a combination of factors -- including pollutants. Increasing pollutants further jeopardizes an impaired ecosystem and threatened species.

- The unfortunate events at the Kesterson National Wildlife Refuge in the 1980s demonstrated that selenium discharged by the partially-constructed San Luis Drain could kill and deform wildlife. Selenium bioaccumulates in the food chain and poses added risks for species near the top of the food chain. Even without the Drain, selenium concentrations in the Bay-Delta waters are already high enough to prompt public health warnings for the consumption of ducks, oysters, fish, and other wildlife taken in some sections of the Bay/Delta. Selenium discharges from the San Luis Drain are estimated to be an order of magnitude or more larger than the current discharges to the Bay-Delta from oil refineries and the San Joaquin River[3]. The Water Agency helped to fund a study by the United States Geological Survey (USGS) in 2000 forecasting the selenium impacts of the proposed San Luis Drain. That study[4] included the following statement in its conclusion:

L-19-5

> The model and forecasts demonstrate that many of the most likely combinations of load, hydrology, climate, Se [selenium] reactivity, and Se bioavailability pose a significant ecological risk to the Bay-Delta. In general, SLD [San Luis Drain] discharges that would meet the demands for drainage pose risks to fish and bird reproduction and the risk of fish extinction via contamination of their invertebrate food.

L-19-6

There is no environmentally acceptable increase in discharge of selenium into the Bay/Delta.

L-19-7

The EIS does not fully acknowledge the deleterious environmental impacts of exporting drainage to the Bay/Delta.

The EIS underestimates economic impacts of drain construction

L-19-8

- Substantial public funds are already being spent on restoring the Bay-Delta. Constructing expensive facilities that will degrade resources actively being restored does not make fiscal sense. More than $500 million has already been spent through the CALFED program to

1 California Bay – Delta Authority, http://calwater.ca.gov/Regions/BayRegion_RP1.shtml, 7/24/2005
2 Water Education Foundation, Bay-Delta Briefing, http://www.water-ed.org/calfeddeltabriefing.asp, 2004, accessed 7/24/2005
3 While most of the drainage problem area on the westside of the San Joaquin Valley does not drain naturally to the San Joaquin River or the Delta, the Grasslands drainage area north of the Westlands Water District does drain to the San Joaquin River and is the primary source of selenium in the San Joaquin River.
4 *Forecasting Selenium Discharges to the San Francisco Bay-Delta Estuary: Ecological Effects of a Proposed San Luis Drain Extension*, by Samuel N. Luoma and Theresa S. Presser, U.S. Geological Survey Open-File Report 00-416.

L-19-8 cont.

restore the health of the Bay-Delta, and significant future expenditures are planned. The Draft Environmental Impact Statement for the San Luis Drainage Feature Re-evaluation estimates the net present cost of constructing and operating the San Luis Drain at $300 million. This estimate reflects the cost of the Chipps Island disposal alternative, including associated treatment facilities and limited land retirement, but does not include the baseline cost of the core drainage program. The full net present cost is approximately $560 million when the costs of collector drains and regional drainage reuse facilities are incorporated. The drain cost estimate is very low and does not reflect current real estate constraints, current pipeline construction costs in the area, or design features needed to construct a wastewater pipeline through an urban area and adjacent to drinking water supply facilities.

- Salts and other undesirable constituents of agricultural drainage could harm drinking water. In addition to selenium impacts, discharge of subsurface agricultural drainage from the westside of the San Joaquin Valley to the Bay-Delta would increase concentrations of total dissolved solids, bromides, and total organic carbon at drinking water intakes. These constituents are a significant concern for drinking water quality. The rate payers of the Contra Costa Water District spent $450 million to construct the Los Vaqueros Reservoir (completed in 1998), a water storage project that is primarily intended to improve drinking water quality by allowing water to be diverted and stored when conditions in the Delta are good. Constructing the San Luis Drain would harm drinking water quality and undermine the rate payers' investment in the Los Vaqueros Reservoir. In addition to providing drinking water to the CCWD service area, the Delta is a source of drinking water for approximately 22 million people across the state, or two-thirds of California residents[5].

L-19-9
L-19-10

L-19-11

Though the Draft EIS did not select a preferred alternative, Bureau staff has indicated that an in-valley alternative would be selected as the preferred alternative. We encourage the Bureau to select an alternative that maximizes land retirement and source reduction. A sustainable solution will reduce the volume of pollutants over time and avoid unnecessary environmental and economic impacts.

L-19-12

If you have any questions regarding Contra Costa County's comments, please contact John Kopchik at (925) 335-1227, or me at (925) 335-1226.

Sincerely,

Roberta Goulart
Executive Officer
Contra Costa County Water Agency

cc: Congresswoman Tauscher
Congressman Miller
Assemblyman Canciamilla

5 California Bay - Delta Authority.

RESPONSES TO COMMENT L-19

L-19-1

Mitigation costs for all alternatives are provided in Appendix O.

L-19-2

Comment noted. No response necessary.

L-19-3

The comment is noted. Modeled water quality impacts in the Delta show an insignificant change due to operation of the San Luis Drain. Reclamation will consider all alternatives for providing drainage service to the San Luis Unit, including the In-Valley Alternatives that do not include construction of a pipeline to export the drainage.

L-19-4

See Master Response ALT-A1 regarding the selection of a preferred alternative.

L-19-5

See Master Response SW-2, which discusses the assessment of impacts to fisheries and waterfowl populations in the Bay-Delta.

L-19-6

The comment expresses concerns that the EIS understates the environmental impacts and economic costs of the Delta Disposal Alternatives. As noted throughout the EIS, considerable uncertainty exists regarding prediction of impacts, and many of these uncertainties are noted in the EIS. In general, when a high level of uncertainty occurs, the EIS tends to err on the side of caution (i.e., determination of significant effects).

L-19-7

Impacts of the Delta Disposal Alternatives on water quality and biological resources in the Bay-Delta are presented in Sections 5 through 8.

L-19-8

The cost of real estate was included in the cost estimate. The estimated unit prices were based on appraisal-level engineering design quantities and pay item descriptions. Appraisal estimates are approximate since they are based on incomplete specifications and rough general design criteria. The estimate was developed at July 2004 price levels and reflected current market conditions at that time. Appraisal estimates are intended to be used as an aid in comparing and selecting among alternate project features. Additional field investigations, engineering designs, specifications, and cost estimates that describe each major construction activity will be

developed as the project progresses in phases from appraisal to feasibility through prevalidation. During subsequent project phases, estimates will be prepared using time-sensitive cost information.

The estimate assumed that the pipeline would be constructed using high-density polyethylene pipe and that the pipeline would have fusion-welded joints. The appraisal-level engineering design considered construction of the new pipeline adjacent to drinking water supply facilities and this information is reflected in the cost estimate.

See Master Response GEN-1 for an explanation of the appraisal level of design.

L-19-9

Modeling results predict that any increase in contaminant concentrations from the proposed project would be negligible compared to the existing concentrations, and the EIS analysis has concluded that effects to drinking water quality would not be significant. See Appendix C in regard to the quality of effluent water that would be discharged under the out-of-valley disposal options and Section 5 for water quality modeling results.

L-19-10

Section 5.2.9.5 discusses the effect of the Delta-Chipps Island Disposal Alternative on operations of Los Vaqueros Reservoir. According to detailed water quality modeling results, changes in water quality due to construction of the San Luis Drain would only minimally increase concentrations of most discharged constituents and should not undermine the use of Los Vaqueros Reservoir.

L-19-11

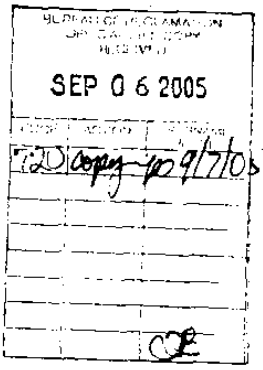
Comment noted. No response necessary.

L-19-12

All In-Valley Alternatives reduce the volume of drainage and environmental impacts through treatment and disposal in a cost-effective manner.

COMMENT L-20. WESTLANDS WATER DISTRICT, THADDEUS L. BETTNER

Westlands Water District
3130 N. Fresno Street, P.O. Box 6056, Fresno, California 93703-6056, (559) 224-1523, FAX (559) 241-6277



September 1, 2005

Claire Jacquemin
Bureau of Reclamation
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Sacramento, CA 95825
cjacquemin@mp.usbr.gov

SUBJECT: San Luis Unit Drainage Feature Re-Evaluation Draft Environmental Impact Statement, May 2005

Dear Ms. Jacquemin:

Westlands Water District (Westlands or District) has provided comment letters on the Bureau of Reclamation's recent plan regarding San Luis drainage issues dated August 7, 2001, November 30, 2001, March 13, 2002, February 28, 2003, and August 13, 2004. This letter reinforces and supplements Westlands' previous comments, and provides specific comments to Reclamation's *San Luis Unit Drainage Feature Re-Evaluation Draft Environmental Impact Statement*, May 2005 (DEIS).

Westlands has been actively engaged in providing information to Reclamation for the DEIS and has participated in Reclamation workshops, public meetings, plan and document review, and interaction with staff. To this end, Westlands is committed to insuring that as a drainage alternative is selected it will be a solution that can be implemented, is permanent, is cost effective, and is environmentally sound. If these conditions are not met, drainage service will not be viable.

Westlands still has concerns with the alternatives described in the DEIS. These comments are organized into general comments addressing broader concerns with the DEIS, followed by specific comments addressing particular issues, errors, and corrections in the DEIS document itself.

General Comments

L-20-1 No-Action Description/Baseline

The No-Action Alternative has been described incorrectly and inaccurately. The No-Action Alternative is defined as "existing conditions for drainage management in 2001 with individual farmers and districts making limited changes in management in the absence of drainage service." (Section 2.2.) The "limited changes" are described as

"individual actions related to (1) drainage control and reuse and (2) cropping practices." (Section 2.2.1.) Most significantly, the No-Action Alternative assumes that only 109,106 acres would be retired or idled by the year 2050, all as a result of existing statutes and litigation settlement agreements. (Section 2.2.1.2.) The remaining lands would continue to be farmed subject to various "on-farm/in-district activities." (Section 2.2.1.3.)

L-20-2 As an initial matter, there is little difference, if any, between the described No-Action Alternative and conditions as they exist today. However, the DEIS assumes that "existing conditions" are the conditions that existed in 2001, when the Notice of Intent was first published. (Section 2.2, footnote 1.) In the past few years, most or all of the land acquisition programs described in the No-Action Alternative have been fully implemented. The No-Action Alternative should be revised to incorporate these

L-20-3 conditions in order to more accurately evaluate the potential impacts under that Alternative.

L-20-4 An even more pressing problem with the No-Action Alternative is the assumption regarding productivity of the remaining drainage-impaired lands. Westlands believes that, based on currently existing conditions, the DEIS cannot assume that most or all of the non-retired drainage-impaired lands would continue to be farmed over the 50-year planning time frame without federal drainage service. Without an effective drainage solution, the productivity of the drainage-impaired lands will continue to degrade, eventually becoming too low to sustain viable farming operations. As the DEIS notes, by the year 2050 there will be approximately 379,000 acres that would be affected by shallow groundwater without drainage service. (Section 13.2.3.) In some areas, irrigated farming would become "nearly impossible" due to salt sink areas and shallow groundwater. (Section 13.2.3.) Overall, "agricultural productivity in the area would continue to decline." (Section 13.2.3.).

L-20-5 Even assuming, though the DEIS does not, that the 109,106 "retired" acres would be the most significantly degraded, Westlands believes it is likely that some or all of the approximately 270,000 remaining drainage impaired acres identified in the No-Action Alternative would degrade beyond viable agricultural production well before 2050. The No-Action Alternative should be revised to include additional lands that will go out of production absent federal drainage service.

L-20-6 As a result of the underestimate of the acres that would be removed from production (and the overestimate of the acres that would continue to be farmed) under the No-Action Alternative, much of the impacts analysis contained in the remainder of the DEIS is skewed. The DEIS generally compares the effects of each Action Alternative to the effects of the No-Action Alternative. In most cases, the effects of the Action Alternatives, L-20-7 particularly those involving land retirement, are overstated. For example, the impact of the land retirement alternatives on various biological resource criteria (i.e., terrestrial L-20-8 resources), as compared to the No-Action Alternative, appears to be greater than it would if the effects of the No-Action Alternative were correctly analyzed. (See Table ES-10 and Section 7.) Similarly, the socioeconomic impacts of the in-valley alternatives, L-20-9 particularly to the agricultural employment sector, are overstated. (Section 13.) These examples are by no means exhaustive but simply show how the current characterization of the effects of the No-Action Alternative will not provide a balanced description of the effects of each Action Alternative.

Timing

L-20-10 One of the four project objectives described in Section 1.1 of the DEIS is that, "[d]rainage service must be provided for in a timely manner". Westlands is very concerned about when the federal government would be able to provide drainage service. Under the timeframes outlined in the draft EIS, the earliest date for providing drainage service would be 2009. Alternatives that do not involve land retirement have longer projected timelines, extending to 2014. Note too that this would not be completion of drainage service for all lands needing drainage; rather, these are dates for providing approximately half the needed drainage service. Given the history of the drainage issue, Westlands expects that these estimates are likely optimistic. Given the track record here, and the issues surrounding drainage, there is serious doubt whether L-20-11 the federal government is capable of providing drainage within the timeframes desperately needed. Additionally, it is possible that some interests may attempt to L-20-12 obstruct this process legally which will only result in the process being delayed further.

Costs

L-20-13 A second project objective described in Section 1.1 of the DEIS is that, "Drainage service must be.....cost-effective". Table ES-9 of the DEIS provides a summary of the federal costs of the various alternatives identified to date [note that the costs in the Table exclude the local costs being contributed through improved irrigation efficiencies and drain water recycling]. The range of alternatives is $562 Million for In-Valley treatment to $857 Million for the In-Valley/Drainage Impaired Area. On balance, the most cost-L-20-14 effective alternative appears to be the Ocean Disposal Alternative, although there are substantial questions surrounding the political viability of that alternative. All the L-20-15 alternatives exceed Reclamation's current spending authority, and Congressional action L-20-16 and funding would be needed to fund federal implementation. Reclamation's need to obtain this authorization could also affect the timing of implementation. Additionally, the L-20-17 DEIS is silent on how project costs would be repaid and if it is affordable. Finally, the L-20-18 alternatives that include land retirement fail to include potential mitigation costs based on socio-economic impacts.

Uncertainty

A third project objective described in Section 1.1 of the DEIS is that, "Drainage service must be technically proven.....". An important feature of each of the In-Valley and Delta discharge alternatives analyzed by Reclamation is the use of selenium biotreatment in order to minimize the discharge of selenium to evaporation ponds or to the Delta. The ocean disposal alternative does not include selenium biotreatment. To date, Reclamation has contracted with Applied Biosciences, Inc. to install and test small scale pilot treatment facilities both in Westlands and Panoche Water Districts. While this L-20-19 process may work on wastewater from mines and/or at low flow rates, the treatment flow is insignificant and it is questionable if whether the process can be "scaled up" to meet the flow and volume treatment levels required for drain water. Appendix B shows L-20-20 that the system barely functioned at 3 gallons per minute (gpm), yet the system will need to treat up to 29 CFS (13,000 gpm). Additionally, since this a patent system, the cost could L-20-21 fluctuate significantly based how Applied Biosciences chooses to market the treatment, which could also affect the overall project costs. In the DEIS, Reclamation fails to L-20-22 identify contingencies that will be needed if the treatment process does not work as anticipated and how the cost of treatment will be affected. Since most of the alternatives L-20-23 utilize selenium biotreatment, it is possible that the costs could increase significantly and

L-20-23 cont. the time needed to complete drainage service could be extended if the system does not function as expected.

Specific Comments

The following comments are specific to sections, pages, tables, etc. within the DEIS:

L-20-24 1. Section ES3.1. The discussion of the Sagouspe settlement should describe the acquired lands as either fallowed or dryland farmed, not retired. The term "retired" implies that the lands has been taken out of production permanently, which is incorrect. The Sagouspe settlement does not require the permanent retirement of lands acquired by Westlands. Instead, these lands are currently being dryland farmed, grazed, and maintained in a good husbandry manner to minimize impacts to neighboring lands.

L-20-25 2. Section ES3.2. The DEIS should state that the environmentally preferred alternative is the ocean discharge alternative. This alternative provides for maintenance of the salt balance in the drainage service area with the least environmental impacts resulting from salt disposal. This alternative includes no selenium treatment, which as discussed earlier may not "scale up" adequately, and the ocean discharge can be mitigated through diffusers.

L-20-26 3. Section ES3.2.1. The DEIS summary should include an estimate of how much drain water will be reduced through the implementation of On-Farm, In-District Actions.

L-20-27 4. Sections ES3.2.3-3.2.5. These sections, which include land retirement as part of the drainage alternative, currently exclude any discussion and costs for socio-economic impacts associated with removing lands from production. This should be addressed in the Executive Summary as well as the main body of the DEIS.

L-20-28 5. Tables 1-1, 1-2. The DEIS identifies Northerly Areas Outside of the San Luis Unit, which includes the Exchange Contractors and Delta-Mendota CVP contractors. Westlands has acquired, through approved assignments, the CVP contract supply from some Delta-Mendota CVP contractors. That should reduce the drainage study area and area needing drainage service.

L-20-29 6. Section 1.4.4. Westlands land acquisition program has resulted in land fallowing/idling, not land retirement. As noted in Comment 1 above, the term "retried" implies that the land has been taken out of production permanently, which is incorrect. Land fallowing under Westlands' land acquisition program is temporary and short term and should not imply that the land has been retired or that the land use changed significantly.

L-20-30 7. Section 2.2.1.2. See Comment 1 above. The lands acquired in the Sagouspe settlement have been temporarily fallowed/idled, not permanently retired. These lands are currently being dryland farmed, grazed, and maintained in a good husbandry manner to minimize impacts to neighboring lands. The term "retired" implies that the land has been taken out of production permanently, which is incorrect.

L-20-31 8. Table 2.3-1. Footnote 4 should be corrected to replace "retired" with fallowed/idled.

L-20-32 9. Section 2.4.2. The DEIS states that only 50% of the total capacity would be constructed initially, with the remaining 50% constructed when needed. Westlands is concerned that if the system is not completed now, there could be additional environmental reviews, permitting, etc. that could stall or prevent the additional 50% phase from being constructed.

L-20-33 10. Section 2.5. The DEIS states that the cost of acquiring land for land retirement purposes and to locate facilities is estimated at $2,600/acre. It is Westlands' understanding that land values have recently exceeded this value, so there may need to be an adjustment based on inflation or appreciation in the real estate market in general. In addition, Westlands believes that this price may change, and perhaps increase significantly, as drainage service is provided or expected to be provided in the area.

L-20-34 The DEIS assumes that one-third of the retired lands which are not used for drainage facilities will be used for dry land farming, one-third for grazing, and one-third fallowed. The DEIS provides no basis for this assumption, yet the future uses of the retired lands is a major component of the evaluation and cost of the alternatives.

L-20-35 11. Section 2.11.4.1. In the second screening process, the scenario which proposed to retire all lands in Westlands with Se concentration greater than 20 ppb, resulting in 129,051 acres in Westlands being retired, is an alternative that warrants further examination. It is unclear why this alternative was removed from the selected scenarios.

L-20-36 12. Section 2.11.4.3. The DEIS states that Ocean disposal alternative with land retirement was studied but was not selected because it was more expensive than in-valley. However, as has been discussed, if the selenium treatment does not work as expected, the cost of the in-valley solution could escalate resulting in the ocean disposal and land retirement alternative being similar in costs or possibly less expensive. Reclamation should give more serious consideration to this alternative.

L-20-37 13. Section 5.1. The DEIS fails to state that selenium quantity continues to be added to the affected area through annual storm runoff from the coastal range, specifically from Panoche-Silver Creek and Little Panoche Creek. Even if drainage was provided and selenium was leached from the soil, there would continue to be a new annual load that would be added. This new annual load should be considered in the baseline affects.

L-20-38 14. Section 5.2.12.3. This section seems to contradict itself on the benefits of refuge discharges to the San Joaquin River. The first paragraph states that the discharge could increase the assimilative capacity of the river. The second paragraph states that although the refuge discharges contain high levels of constituents of concern to downstream users, the Action Alternatives here could beneficially affect

downstream delta users. It is unclear how the Action Alternatives, which would reduce discharges to the San Joaquin River, would result in this beneficial effect relative to refuge discharges. Further, the discharges to the river are now being regulated by the Central Valley Regional Water Quality Control Board agricultural waiver program. The monitoring may show that refuges will need to decrease or eliminate their discharges to the San Joaquin River.

L-20-39 15. Figure 6-5. The westerly limit of the geohydrologic cross section is not cefined. If in fact it represents the westerly limit of the San Luis Unit and/or the base of the Coastal Range, the cross section is not correct. The Corcoran Clay does not extend that far west and the Figure should be corrected.

L-20-40 16. Section 6. Westlands disagrees with the description of the existing condition for groundwater. Generally, the Section states that the No-Action Alternative will be beneficial compared to existing conditions since there will be additional permanent land retirement in Westlands under existing statutes and litigation settlements. This is incorrect. Many of the lands that Westlands has acquired are currently being either fallowed and/or dryland farmed, but could be put back into irrigated production in accordance with Westlands' Board policies. The DEIS should not assume that the lands acquired by Westlands under the No-Action Alternative will be permanently retired from irrigated agriculture. Thus, the description of the existing condition for groundwater should be revised to include the potential for future irrigation on acquired lands.

L-20-41 17. Sections 6.2.4.3, 6.2.5.3, 6.2.6.3, 6.2.7.3. The paragraph that discusses the lateral flow resulting from the evaporation basins is confusing. The DEIS states that the estimated seepage through the evaporation basin would be 1 foot/year. On page 6-2, the DEIS states that the downward velocity of drain water is about 0.6 feet/year (note Appendix E1.2.4 states 0.7 feet/year), thus over 50 years, the water originating from the basin would only reach a depth of 30 feet. The excess flow of 0.4 feet/year is assumed to move laterally and if that were converted to a volume (based on the basin size) and then distributed around the perimeter of the basin, it would assume that lateral movement of 500 feet is excessive. Additionally, this

L-20-42 modeling assumes that the depth of groundwater is 40 feet, which is not correct. Westlands requests that the modeling information be presented to the San Luis Unit contractors for further evaluation. It is also likely that as the basins are used,

L-20-43 and based on the influent, the basins would seal up over time with the seepage rate of 1 foot/year being overestimated.

L-20-44 18. Section 7.2.3.1. The 65,000 acres under the Westlands settlement should refer to the lands as fallowed or dryland farmed and not permanently retired. These lands are currently being dryland farmed, grazed, and maintained in a good husbandry manner to minimize impacts to neighboring lands. The term "retired" implies that the land has been taken out of production permanently, which is incorrect.

L-20-45 The Summer-Peck and Britz lands are currently owned by Westlands and are not under Federal ownership as described.

L-20-46

19. Section 7.2.4.1. The discussion of Retired Lands, on page 7-19, states "a total of 44,106 acres of active and fallowed agricultural land would be acquired and permanently retired under the In-Valley Disposal Alternative, an increase of 23,588 acres over current (2002) conditions, but 65,000 acres less than would be expected over the next 50 years under No-Action." This statement is confusing and introduces a difference in existing conditions and no-action. Currently or in 2005, the existing conditions are equal to the No-Action Alternative in terms of land retirement and/or fallowed acreage. Thus, the inclusion of a comparison to current (2002) doesn't seem warranted. Further, if the current (2002) condition or baseline is to be used, that should more prominently noted in the front of the DEIS.

    This comment also applies to subsequent sections that include a discussion on Retired Lands and includes a comparison to current (2002) conditions.

L-20-47

The No-Action impacts have been underestimated, as discussed in the general comments above. Therefore, comparisons of the alternatives to the No-Action Alternative should be reevaluated.

L-20-48

20. Tables 7-6 thru 7-13. Each table includes a comparison of the affected resource and area of potential effect to the No-Action Alternative and existing conditions. However, the only difference between the No-Action Alternative and existing conditions appears to be the difference in retired land. The tables reflect the DEIS assumption that the existing conditions will be the same as the No-Action Alternative throughout the fifty year planning cycle. Absent drainage service, it would seem logical there would more differences than have been identified in these tables between existing conditions and the No-Action Alternative.

L-20-49

21. Section 8. The DEIS fails to state that selenium continues to be added to the affected area through annual storm runoff from the coastal range and specifically Panoche-Silver Creek. Even if drainage is provided and selenium is leached from the soil, there will continue to be a new annual load that will be added into the drainage system.

L-20-50

22. Section 10. The DEIS states that purchased energy would be used for the project. Is the use of Project Use Power from Reclamation not available for this purpose?

L-20-51

23. Section 12.2.3.2. Page 12-7 states that natural drainage is estimated at 0.25 AF/acre/year. That seems to conflict with page 6-2, which states that the downward velocity of drain water is about 0.6 feet/year.

L-20-52

24. Figures 12-2 and 12-6. These charts are problematic. There is little difference between soil water quality between a drained and undrained field under the actions alternative and the No-Action Alternative. If drainage service is needed to keep lands in production, these charts provide little evidence that drainage will improve soil and water quality conditions. Additionally, it would be expected that over time the land would be reclaimed and salt removed that has accumulated over time, however, Figure 12-6 does not show this occurring.

L-20-53

L-20-54

25. Section 13.1 The DEIS states that, "Based on the Westlands 2002 crop report (www.westlandswater.org), it appears that about 100,000 acres of land are now idle or fallowed. Many of these lands appear to be idle because of salinity and drainage problems." Assuming this is the case, why has the DEIS only assumed only 20,518 acres fallowed/retired under existing conditions and not 100,000 acres.

L-20-55

26. Section 17.2.3. The DEIS states that, "Approximately 65,000 acres of land within the drainage-impaired area of Westlands would be retired from agricultural production and land retirement payments of $100 million would be paid by Westlands to compensate landowners for lost farm revenues." The statement should state that Westlands utilized $100 million in district financing to acquire up to 100,000 acres within the district which includes the lands under the Peck, Britz, and Sagouspe settlements. The lands acquired under the Peck and Britz settlement will no longer be irrigated; however, the balance of the acquired lands are temporarily fallowed/idled, but may be irrigated in the future.

L-20-56

27. Figure 17-2, Table 17-3. The results shown fail to recognize any additional land fallowing/idling/retirement that may occur under the No-Action Alternative from lack of drainage service being provided. The information presented should include some assumption that additional land will go out of production under the No-Action Alternative.

L-20-57

28. Appendix E1.2.4. Comment 17 also applies here. The model results shown in this section appear to be based on an effective depth of groundwater assumed to be equal to 40 feet, from Section E1.1. However, nowhere in the drainage service area where the evaporation basins will be sited is groundwater depth 40 feet. Accordingly, the estimates of lateral seepage are overestimated, and further, if there is a saturated aquifer under the evaporation basins it is unlikely the infiltration rate will be 1 foot/year; rather it will be closer to 0.7 feet/year.

Westlands appreciates the opportunity to provide comments on this DEIS and looks forward to working with Reclamation through this environmental review process. Do not hesitate to call me at 559-241-6215 if you have any questions or want to discuss our comments.

Sincerely,

Thaddeus L. Bettner, PE
Deputy General Manager-Resources

806017.1

RESPONSES TO COMMENT L-20

L-20-1 - 3

See Master Response ALT-N1 in regard to the description and assumptions used for the No Action Alternative.

L-20-4

The No Action Alternative assumes that more than 109,000 acres of the most affected lands would already be idled and out of production. The analysis indicates that remaining lands in the drainage-affected area could continue to be farmed, but at a restricted crop mix, lower revenues, and higher costs.

It is extremely difficult to predict when and how much land might go out of production solely due to drainage conditions. Some lands in the drainage-impaired area have continued in production for many years without drainage service, though crop mix, revenues, and costs are affected. Decisions to idle land would be influenced by a combination of factors, including drainage conditions, water-supply availability, and economic conditions (e.g., crop prices and input costs).

Section 12 of the Final EIS has been amended to describe how impacts would change if more land were idled under the No Action Alternative.

L-20-5

See Response to Comment L-20-4.

L-20-6 - 8

See Master Response ALT-N1 in regard to assumptions used for the No Action Alternative.

L-20-9

Reclamation disagrees that the impacts to agricultural production are underestimated in the No Action Alternative. While uncertainties exist in any impact analysis, analysis of the action alternatives was conducted using the same methodology as that used for the No Action Alternative. Therefore, comparison of No Action to action alternatives provides a reasonable assessment of the effects of the action alternatives on agricultural production.

L-20-10

The project schedule is as aggressive as possible.

L-20-11, 12

See Master Response ALT-M1 in regard to project funding.

L-20-13

Comment noted. No response necessary.

L-20-14

Cost effectiveness, ability to implement, and acceptability of the Ocean Disposal Alternative were all important factors that contributed to the preference for In-Valley Alternatives over Out-of-Valley Disposal Alternatives. The process for this evaluation is described in the EIS and previous Plan Formulation Reports. See Master Response ALT-A1.

L-20-15

The comment is noted. Since all of the action alternatives would exceed the current Federal spending limit authorized under the San Luis Act, Reclamation is required to obtain Congressional authorization to increase the project funding ceiling for the San Luis Unit. In addition to authorizing an increase in the spending limit for the San Luis Unit, Congress must also provide annual appropriations to fund the final design, construction, and acquisition phases required to implement the features of the selected alternative.

L-20-16

See Master Response ALT-M1 in regard to funding and authorization.

L-20-17

See Master Response EC-3 in regard to repayment of project costs.

L-20-18

See Master Response ALT-L1 in regard to socioeconomic impacts of land retirement.

L-20-19

See Master Response ALT-T1 for a discussion of the evaluation of treatment technologies.

L-20-20

Appendix B of the Final EIS has been updated to provide more recent information on pilot biotreatment system performance. Reclamation is confident that the system will remove Se to < 10 µg/L.

L-20-21

As with any commercially available technology or product, market conditions determine pricing. Recent cost data for new biotreatment plants under contract indicate that costs are coming down.

L-20-22, 23

See Master Responses MIT-1, ALT-T1, and GEN-1, which discuss adaptive management and monitoring, the evaluation of treatment technologies, and the level of design of the Draft EIS, respectively.

L-20-24

The discussion of the Sagouspe settlement in Section ES3. 1 has been revised to describe the acquired lands as "temporarily fallowed."

L-20-25

Comment noted. The environmentally preferred alternative has been identified in the Final EIS.

L-20-26

Table ES-1 shows that the reduction in drainwater due to on-farm, in-district actions ranges from 9,000 to 27,000 AF/yr (subtracting Row 2 from Row 1).

L-20-27

The analysis of Land Retirement Alternatives indicated that economic and social/environmental justice effects would not be significant, as discussed in Sections 17.2 and 18.2. Therefore, socioeconomic effects were not included in the Executive Summary description of adverse impacts (Table ES-10).

L-20-28

Broadview Water District lands acquired by Westlands are assumed to be retired under the In-Valley Alternatives and have been included in the estimates of drainage volumes requiring service. Additional changes in other adjacent lands in the Northerly Area would serve to reduce the requirements for service. Therefore, disclosed impacts may be greater than those that may actually occur, which is in compliance with NEPA requirements. Additional information from actions occurring during the EIS preparation would be considered in the preparation of the Feasibility Study and subsequent construction documents for the selected and funded alternative.

L-20-29

The discussion of Westlands' land acquisition program in Section 1.4.4 has been revised to use land "acquisition" instead of "retirement."

L-20-30

The discussion in Section 2.2.1.2 on page 2-5 of the Draft EIS has been revised to explain the status of the lands and differentiate the terms "fallowed" and "retired."

L-20-31

The text of footnote 4 in Table 2.3-1 has been revised to say "affected by" rather than "retired under."

L-20-32

While unforeseen events may trigger changes in the proposed action that require additional analysis, it is the intent of Reclamation to provide full NEPA compliance with this Final EIS.

L-20-33

Costs per acre for non-irrigation covenants shown in the EIS are based on recent appraisals conducted by Reclamation. While land values may vary over time, costs for non-irrigation covenants are not necessarily reflected in these varying land costs.

L-20-34

Reclamation based its assumptions about land use on retired lands upon current conditions at other retired lands in the San Joaquin Valley. These assumptions were needed to evaluate operations and maintenance costs for retired lands and to reasonably account for land management costs needed to avoid nuisance conditions. Alternative land uses could be proposed for the retired lands in the future, and at that time the proposed actions would be required to undergo environmental review as required by NEPA and/or CEQA.

The O&M costs for lands retired under the In-Valley Alternatives would not be significantly affected by the distribution of land uses among dryland farming, grazing, and fallowing.

L-20-35

The scenario that proposed to retire all lands in Westlands with Se concentrations greater than 20 ppb was eliminated from the list of alternatives because it was similar to the In-Valley/Water Needs Land Retirement Alternative and was subsequently combined with that alternative.

L-20-36

As discussed in Master Response ALT-T1, Reclamation considers that Se treatment is technically reliable and effective to the level described in the EIS. It is not expected that costs of the In-Valley Disposal Alternative would increase such that the Ocean Disposal Alternative would become more economically attractive.

L-20-37

The commenter noted that the Draft EIS failed to state that Se quantity continues to be added to the affected area through annual storm runoff from the coastal range. Section 5.1 has been revised to reflect the continuing load from runoff.

L-20-38

The action and No Action alternatives all assume removal of Grassland Bypass Project flows from the San Joaquin River. Removal of the discharge would have a beneficial effect on river water quality. Discharges from Westlands and wildlife areas may increase under CVPIA. These increases would result in increases in salt loads and flows in the San Joaquin River but would dilute Se concentrations. The analysis of water quality and flow in the San Joaquin River has been supplemented in the Final EIS with the results from CALSIM II in Section 5.

L-20-39

The geohydrologic section of the western San Joaquin Valley (Figure 6-5) is modified from USGS publications reporting results from the San Joaquin Valley Drainage Program. The USGS geohydrologic section was developed from previous USGS and DWR reports and new data collected as part of the San Joaquin Valley Drainage Program.

The USGS reference for the original geohydrologic section is cited in the Draft EIS. The authors show that their section line extends from I-5 in the west to the San Joaquin River in the east; the section line is generally aligned with Panoche Creek. In this portion of the drainage study area, previous studies show that the Corcoran Clay extends westward as shown in the geohydrologic section of Figure 6-5. Belitz and Heimes (1990) show the presence of the Corcoran Clay at the western edge of this section. South of the section line location are some areas where the Corcoran Clay does not extend as far west.

L-20-40

Existing conditions for groundwater are those conditions occurring in 2001, whereas the No Action Alternative defines conditions through the planning time frame if drainage service is not provided to the San Luis Unit. Under No Action, a mix of permanently retired lands and lands retired through the Westlands land acquisition program is assumed. The analysis recognizes that acquired lands can practice dryland farming or irrigate with non-CVP water (for example, local groundwater, transfer water, and so forth); for the Draft EIS, 10 percent of the acquired lands were assumed irrigated in any given year. Therefore, the No Action Alternative does not assume acquired lands are permanently retired. Furthermore, it is important to note in the analysis that land retirement, whether permanent or through the Westlands land acquisition program, were assumed to occur after 2001. Removal of any quantity of irrigated land after 2001 produces a beneficial effect relative to 2001 conditions.

L-20-41

Seepage through the evaporation basin bottom is under ponded conditions (unit gradient), and, therefore, determined by the assumed basin bottom vertical hydraulic conductivity (1 foot/year). Once past the pond bottom, water can continue moving vertically downward or move laterally away from the pond; if shallow water table conditions occur adjacent to the pond (depth to water less than 7 feet below land surface), a portion of the pond seepage can also be evaporated.

Page 6-2 of the Draft EIS cites “the downward velocity of the poor quality groundwater at about 0.6 foot/year” – no reference is made to drainwater – which is different from the seepage across the evaporation basin bottom. Specifically, the groundwater velocity is the average specific

discharge across the Corcoran Clay (0.27 foot/year) divided by the average porosity (0.42), which is 0.64 foot/year.

Appendix E1, Section E1.2.4 does not reference a value for drainwater or groundwater velocity; however, Section E1.1.2 references 0.7 foot/year as the net vertical downward groundwater flow (not velocity) past the 50-foot aquifer depth. The vertical groundwater flow past the 50-foot depth is different from pond bottom seepage and groundwater velocity and, therefore, subtracting groundwater velocity from seepage rate does not equal "excess flow," and any conclusions based on this calculation are incorrect.

L-20-42

Two models were used to evaluate the evaporation basins: a site groundwater-flow model assessed the extent of lateral seepage, and a geochemical model assessed groundwater quality changes. The site groundwater-flow model was developed from information provided by the USGS groundwater-flow model. Vertical and lateral boundary conditions are therefore reflective of the current understanding of the westside San Joaquin Valley geohydrology. The geochemical modeling assessed salinity changes in four 10-foot-depth intervals of the upper saturated groundwater system; it does not assume groundwater beneath the evaporation basins is 40 feet deep. The 40-foot analysis depth coincides with the estimated depth of water-quality changes beneath the basins during a 50-year operation period. Graphs showing changes in groundwater quality presented in the report indicate minimal changes at the 40-foot depth after 50 years. Therefore, extending the model to depths below 40 feet is unnecessary and would not provide additional information. Substantial detail on the modeling is provided in Appendix E3.

L-20-43

The Draft EIS uses a maximum assumed seepage rate based on a unit gradient and saturated basin bottom vertical hydraulic conductivity (1 foot/year). The Draft EIS acknowledges that basin bottom vertical hydraulic conductivity most likely will decrease with time as a result of mineral coatings, swelling and dispersion, and so forth. The Draft EIS calculations are therefore considered conservative, and estimate maximum potential impacts attributed to maximum assumed seepage rates. Appendix E1 describes the modeling and the evaluation of lower seepage rates from the basins. Figure E1-2 in Appendix E1 shows the sensitivity of water quality impacts to reduced seepage rates.

L-20-44

The statement in Section 7.2.3.1 regarding the 65,000 acres in Westlands has been modified to include a reference to the full description of these lands presented in Section 2.2.1.2, which states: "The [Westlands Settlement Agreement] would allow these lands to come back into production if and when Reclamation provides drainage service."

L-20-45

The Final EIS has been revised to indicate that the Sumner Peck and Britz lands are owned by Westlands.

L-20-46

See Master Response ALT-N1 regarding assumptions for existing conditions and No Action.

L-20-47

See Response to Comment L-20-6.

L-20-48

Tables 7-6 through 7-13 present an accurate depiction of changes between No Action and existing conditions. Removal of 65,000 acres from irrigation under No Action is a large change compared to existing conditions. This analysis is consistent with the results of the impacts on agricultural production and economics shown in Section 12.

L-20-49

See Response to Comment L-20-37.

L-20-50

All project power currently being produced is fully subscribed. Therefore, any project power needed for additional drainage features would reduce the energy available to current power customers and would need to be replaced. It is not necessary to identify whether project power would be used to operate the drainage features in order to determine the impacts that would occur as a result of project-related energy use. Realistically, the regional energy impact can be described as the amount of energy (acquired on the spot market) needed to operate the project drainage facilities.

L-20-51

“Natural drainage” is the net outflow from the shallowest groundwater, which is percolating irrigation water that migrates past crop roots and, if present, tile drains. Page 6-2 of the Draft EIS cites “the downward velocity of the poor quality groundwater at about 0.6 foot/year.” No reference is made to drainwater. The groundwater velocity cited is the average specific discharge across the Corcoran Clay (0.27 foot/year) divided by the average porosity (0.42), which is 0.64 foot/year. “Drainwater” is the water produced by tile drains, which is different from natural drainage and groundwater velocity.

L-20-52

Groundwater analysis indicates that, even with drainage, the level and quality of shallow groundwater improves relatively slowly. Soil salinity is affected to an important degree by salt moving up from the shallow groundwater, so if the shallow groundwater level and quality improves only slowly, soil salinity trends will reflect that.

More importantly, the installation of drains is not the only difference in the comparison of conditions with drains versus without drains. The No Action Alternative analysis indicates that other important management costs must be incurred to keep the soil in a marginally productive

condition. Specifically, higher irrigation management costs are incurred, crop mix is restricted, and revenues are lower.

For these reasons, the soil water-quality trend over time is only one of the indicators for judging agricultural impacts. The soil EC values shown in Table 12-4 are a better indicator of the improvement in soil conditions with drainage compared to no drainage. These EC changes allow for a much wider selection of crops and improved net crop revenues. Aggregate salt balance changes are also shown in Table 12-6, and overall benefits to crop net revenues are shown in Table 12-7. The interaction and importance of these indicators is discussed in Section 12.

L-20-53

See Response to Comment L-20-52.

L-20-54

The comment questions whether the assumptions listed in Table 2.3-1 for the number of acres retired in Westlands for 2002 (20,518) are consistent with Section 13.1 of the Draft EIS, which states that as of 2001 approximately 100,000 acres were idle or fallowed in Westlands. Idle or fallow land is not necessarily retired land, and therefore the two values are not necessarily comparable.

L-20-55

The discussion in Section 17.2.3 has been modified to include the information provided in the comment.

L-20-56

The No Action Alternative assumes that more than 109,000 acres of the most affected lands would already be idled and out of production. The analysis indicates that remaining lands in the drainage-affected area could continue to be farmed, but at a restricted crop mix, lower revenues, and higher costs.

It is extremely difficult to predict when and how much land might go out of production solely due to drainage conditions. Some lands in the drainage-impaired area have continued in production for many years without drainage service, though crop mix, revenues, and costs are affected. Decisions to idle land would be influenced by a combination of factors, including drainage conditions, water-supply availability, and economic conditions (e.g., crop prices and input costs).

Section 12 of the Final EIS has been amended to describe how impacts would change if more land were idled under the No Action Alternative.

L-20-57

Two models were used to evaluate the evaporation basins: a site groundwater-flow model assessed the extent of lateral seepage, and a geochemical model assessed groundwater quality changes. The site groundwater-flow model was developed from information provided by the

USGS groundwater-flow model. Vertical and lateral boundary conditions are therefore reflective of the current understanding of the westside San Joaquin Valley geohydrology. The geochemical modeling assessed salinity changes in four 10-foot depth intervals of the upper saturated groundwater system; it does not assume groundwater beneath the evaporation basins is 40 feet deep. The 40-foot analysis depth coincides with the estimated depth of water-quality changes beneath the basins during a 50-year operation period. Graphs showing changes in groundwater quality presented in the report indicate minimal changes at the 40-foot depth after 50 years. Therefore, extending the model to depths below 40 feet is unnecessary and would not provide additional information. Substantial detail on the modeling is provided in Appendix E3.

COMMENT L-21. WESTSIDE RESOURCE CONSERVATION DISTRICT, SARGE GREEN AND VASHECK CERVINKA

WESTSIDE RESOURCE CONSERVATION DISTRICT
P.O. BOX 38
TRANQUILLITY, CA 93668
"Serving over one million acres of the San Joaquin Valley with leadership in the wise use of resources."

August 30, 2005

Ms. Claire Jacquemin
USDI – Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825
MP-700

VIA FACSIMILE – 916-978-5094

SUBJECT: San Luis Drainage Feature Re-evaluation

Thank you for extending the comment period for the subject "draft" EIS. Westside Resource Conservation District has contracted with a consultant to provide us with drainage management expertise and our contract consultant recommended we provide the attached comments for your consideration. Please consider the attached as the comments of the District.

Thank you again and should you have any questions please call me or Mr. Cervinka at the numbers on the letterhead.

Sincerely,

Sarge Green
Secretary-Manager

Enc. Comments from Vashek Cervinka

Reclamation—San Luis Drainage Statement □EIS (May 2005)

Reviewed by Vashek Cervinka
July 19, 2005

Comments and suggestions:

L-21-1 Sustainable agriculture in the San Luis Unit and in the region is the objective of the project. A technically appropriate statement would specify the objective as "sustainable agriculture on land that was not retired". The Reclamation EIS (REIS) indicates these potential percentages of retired land: 11.6 %, 19.2 %, 24.4 %, 51.2 %, and 81.3 %.

L-21-2 Another objective of the project is to provide a complete drainage solution from production to disposal, and avoid a partial solution or a solution with undefined components. The REIS's planning period is 50 years and it estimates the amount of salt from 100,000 to 700,000 t/year. The amount of salt accumulated in evaporation basins would be within the range 5,000,000 to 35,000,000 tons during this planning period. Sustainable agriculture must operate well beyond this period. REIS is suggesting the disposal of drainage water into evaporation basins, salt crystallization and salt burial. The

L-21-3 experience of the Westside RCD (Mendota project) and AndrewsAg project indicates that handling of even a small volume of salt is very expensive. The evaluation of drainage alternatives need to include the costs of salt handling and burial.

L-21-4 REIS considers recycling drainage water. This method is not compatible with sustainable farming.

L-21-5 REIS considers the risky concept of disposing drainage water into evaporation basins. Selenium biotreatment is proposed before disposing the drainage water into evaporation basins. REIS should evaluate potential conditions when biotreatment facilities would either not operate at expected

L-21-6 performance or would malfunction. Would drainage water at a given Se

L-21-7 content be discharged into evaporation basins? What would be the

L-21-8 economic and ecological consequences? This is a realistic concern; even the advanced science and technology in the space program does not always

L-21-9 function at expected performance levels. Can the Federal government guarantee funds for the service and operation of biotreatment plants for the

L-21-10 next 50 (plus) years? Could growers service and operate these biotreatment selenium plants in the case government funds are not available or government policies are changed?

L-21-11 REIS describes a drainage program that is energy intensive. This proposal indicates that energy requirements will not significantly increase the demand on the PG&E electricity supplies. However, REIS does not evaluate the effect of increasing energy costs.

L-21-12 It is realistic to anticipate continuous increase of energy costs. How will this increase affect water treatment and conveyance systems?

L-21-13 Could growers pay for the operation of these systems for water treatment and conveyance in the case government funds are not available any longer or government policies are changed? REIS should evaluate the potential effect of increased energy costs.

L-21-14 REIS describes several drainage options. "No action" is one of these options. This option should be preferably named "No action by the Bureau of Reclamation."

L-21-15 REIS should consider including an additional drainage option named "Growers driven drainage program (supported by government agencies)". This option would recognize recent salinity and selenium control activities on farms in the San Joaquin Valley.

L-21-16 Energy and overall operating costs are a function of the volume of drainage water to be managed. REIS is suggesting to receive drainage water from farms and manage (reuse) it in the reuse areas. The construction and operating (incl. energy) costs would be significantly reduced if the first reuse was performed on farms. This would not be a new concept, as many growers have been operating in this way. Panoche Water District receives all drainage water in the reuse area. REIS could consider both options with significant savings in construction and operational costs.

L-21-17 Water conveyance is the essential component in REIS. Drainage water will be transported on large distances in 6" to 16" pipes. REIS considers neither the technical problems nor costs associated with these pipes.

L-21-18 REIS estimates the average drainage rate at 0.25 af/ac/yr. The results of the WRCD Demonstration project (RRR) indicate that the drainage rate after the 1st reuse is about 0.05 - 0.06 af/ac/yr. This offers the potential of reducing drainage water flow in conveyance facilities to reuse/treatment areas by 4-5 times when the 1st reuse would be performed on farms. REIS also mentions that the reuse reduces the volume of drainage water by about 75 percent. This would reduce the construction and operational costs as well as energy demand.

L-21-19 REIS does not include trees as a component of drainage systems. Trees lower water tables, use drainage water (as "vertical drains"), intercept subsurface flows of groundwater, can be harvested as saline biomass for energy and industrial uses, create opportunities for improving socio-economic conditions, enhance the aesthetic value of farming areas, and improve air quality.

L-21-20 REIS has tried to base its alternatives on proved technologies. Thus, it recommends applying old and energy intensive methods for the next 50 (plus) years. This creates a certain contradiction, as experience indicates that the sustainability of future farming cannot be achieved by old

L-21-21 practices. Further, it should be noted that some recommended technologies have not yet been sufficiently tested in agriculture.

For the benefit of future farming, REIS could consider the following conditions and options:

L-21-22 Use bio-engineering methods, effective and less energy intensive, for the concentration of salts in drainage water.

L-21-23 Control potentially hazardous selenium by producing selenium-enriched crops, by using appropriate irrigation practices, and by discharging the final volume of concentrated drainage water in disposal areas that are not attractive for wildlife.

L-21-24 Value farmland as a very important resource for future generations.

L-21-25 Use solar energy for pumping drainage water.

L-21-26 Use trees for the management of drainage water, and for economic, ecological and aesthetic reasons.

L-21-27 Concentrate salt in drainage water through its reuse by salt tolerant energy and industrial crops.

L-21-28 Develop salt tolerant crops, reusing drainage water, for industrial and energy markets.

L-21-29 Evaluate the government capability, both economic and political, to fund drainage activities for the next 50 (plus) years. If this capability cannot be

L-21-30 guaranteed, then develop drainage (salt and selenium) methods that would be economically feasible for growers.

RESPONSES TO COMMENT L-21

L-21-1

The purpose and need (Section 1.1) and objectives have been reviewed extensively and formulated with input from all cooperating agencies. Reclamation believes they are accurate and appropriate as written.

L-21-2

Reclamation agrees with the comment that agriculture should be sustainable. For the purpose of this EIS, a 50-year planned period was selected.

L-21-3

Costs of salt handling and burial are included in the total project costs.

L-21-4

Previous recycling projects in the Northerly Area have demonstrated that with careful management of blended water EC, agriculture can be sustained. See Section 2.2.1.1 for a discussion of reuse facilities in operation since 2001.

L-21-5

See Master Response ALT-T1 for a discussion of the evaluation of treatment technologies.

L-21-6

In regard to whether drainwater at a given Se content would be discharged into evaporation basins, drainwater would be reused, and drainage from the reuse area would be treated and discharged to evaporation basins. Existing Se treatment data suggest that Se concentrations would be less than 10 mg/L in treated drainwater.

L-21-7

The economic evaluation is discussed in Section 17, and mitigation cost estimates are provided in Appendix O.

L-21-8

Se bioaccumulation and biological impacts are discussed in Sections 7.2 and 8.2 of the EIS.

L-21-9

See Master Response ALT-M1 in regard to project funding.

L-21-10

Reclamation analyzed drainage service as a Federal project pursuant to the San Luis Act. It is outside of the scope of this EIS to evaluate the potential actions of individual growers and to analyze for all future situations such as status of Federal funds.

L-21-11

See Master Response EC-1 in regard to the economic analyses of the project alternatives. Costs and escalation factors for energy were developed based on accepted practices for Reclamation projects.

L-21-12

See Master Response EC-1 in regard to the economic analyses of the project alternatives.

L-21-13

Reclamation analyzed drainage service as a Federal project pursuant to the San Luis Act. It is outside of the scope of this EIS to evaluate the potential actions of individual growers and to analyze for all future situations such as status of Federal funds.

L-21-14

"No Action" is NEPA terminology and represents no action by the lead Federal agency to address the identified need. We believe that "by the Bureau of Reclamation" is sufficiently implied.

L-21-15

The comment is noted. Ongoing programs in drainage and salinity management were considered in the development of the project alternatives.

L-21-16

On-farm reuse was considered but not incorporated directly into the drainage service alternatives for several reasons. The purpose of the project, as described in Section 1.1, is to provide agricultural drainage service to the San Luis Unit and the general area. Reclamation has no authority, mechanism, or desire to dictate cropping decisions or on-farm management decisions to individual farmers. Reclamation determined reasonable source control that districts and farmers could be expected to accomplish, without impairment to agricultural productivity, and the quantity of drainwater accepted into the drainage system is limited to that determined necessary to maintain salt and water balance in the root zone of irrigated lands. Farmers and districts can choose to implement source control actions, including on-farm reuse, as appropriate, given individual conditions and circumstances. Additionally, a significant advantage of regional reuse is the greater control, and cost savings, for management and monitoring in fewer locations.

L-21-17

Costs for drainwater pipelines to reuse areas are included in the project cost estimate. Also see Master Responses GEN-1 and SW-15.

L-21-18

See Response to Comment L-21-16.

L-21-19

Section 2.3.2.3 lists a variety of crops that would be considered suitable for any reuse area. Specific directives about which crop types should be grown are not intended but are left up to the management of each reuse facility. Adaptive management would allow changes in crops in response to salinity or economic conditions in the future. Tree varieties are included in Section 2.3.2.3 as a part of the potential crop mix.

L-21-20

See Master Response ALT-T1 for a discussion of the evaluation of treatment technologies.

L-21-21

See Master Response ALT-T1 for a discussion of the evaluation of treatment technologies.

L-21-22

Reclamation considered a variety of treatment methods to concentrate salts in the drainwater and selected the one that best fit the project needs for inclusion in the Draft EIS. Reuse areas accomplish the salt concentration objectives stated in the comments. Reclamation believes that biotreatment is the best method for Se treatment.

L-21-23

Valley crops do not have adequate capacity to control Se through enrichment. Drainage service alternatives include improved irrigation efficiencies and evaporation basin designs that minimize attraction to wildlife. See Appendices G and J for a description of design and management measures that will be used to minimize impacts to wildlife. See Master Response ALT-T1 for a discussion of the evaluation of treatment technologies.

L-21-24

Reclamation agrees with the comment. As stated in Section 1.1, the purpose of the proposed project is to provide agricultural drainage service to achieve a long-term sustainable salt and water balance needed to ensure sustainable agriculture in the San Luis Unit and the region. Farmland resources, including Prime and Unique Farmlands and Farmlands of Statewide Importance, are discussed in Section 13 and Appendix I of the EIS.

L-21-25

Appraisal-level designs in the EIS are limited in some technical details, as discussed in Master Response GEN-1. Final designs for drainage service will consider using solar-powered pumps.

L-21-26

See Response to Comment L-21-19.

L-21-27

The drainwater reuse areas are expected to be developed with a variety of crop types. Management of each reuse area would be flexible enough to adapt to changes in crop types to fit water use requirements or provide economic return to offset reuse operations cost. Salt-tolerant crops that have large irrigation water demands would make up the bulk of the crop types because they can use up drainwater without requiring a large land area (reuse size).

L-21-28

See Response to Comment L-21-27.

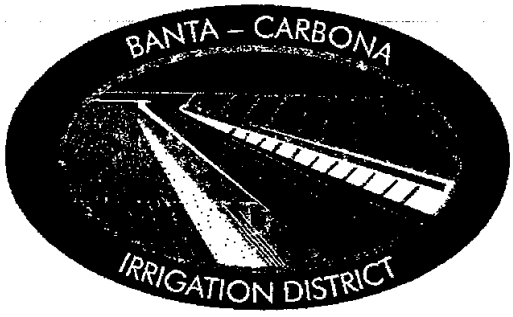
L-21-29

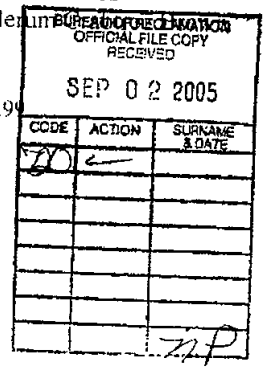
See Master Response ALT-M1 in regard to project funding.

L-21-30

The comment is noted.

COMMENT L-22. BANTA-CARBONA IRRIGATION DISTRICT, DAVID WEISENBERGER





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August 31, 2005

VIA FACSIMILE AND U.S. MAIL
(916) 978-5094

Ms. Claire Jacquemin
U.S. Bureau of Reclamation
2800 Cottage Way, MP-700,
Sacramento, CA 95825

Re: Comments on San Luis Drainage Feature Re-Evaluation Draft Environmental Impact Statement

Dear Ms. Jacquemin:

These comments are submitted on behalf of Banta-Carbona Irrigation District (BCID) to the U.S. Department of the Interior – Bureau of Reclamation (Reclamation) San Luis Drainage Feature Re-Evaluation (Re-evaluation) Draft Environmental Impact Statement (Draft EIS) dated May 2005. BCID's interest in commenting on the Draft EIS is twofold. First, BCID has senior water rights to divert water from the San Joaquin River:

1. Pre 1914 rights obtained pursuant to a Water Appropriation Notice filed in 1911 by T.C. MacChesney for 200 cfs for irrigation, domestic, power, and all other applied uses on the westerly side of the San Joaquin and other Counties of California.

2. License 5404 with a priority date July 23, 1920, gives the District the right to divert 179.69 cfs from February 1 through November 30 of each year.

3. License 5476 with a priority date of October 29, 1926, authorizes the diversion of 25.14 cfs from the San Joaquin River for irrigation from February 1 through November 30 of each year.

Because BCID exercises these rights by diverting directly from the San Joaquin River, it is very concerned with ensuring that the water quality is of a sufficient quality for their agricultural production, and water levels in the San Joaquin River are sufficient to allow them to run their pumps.

GENERAL COMMENTS

The purpose for the Re-evaluation is to formulate a plan that provides agricultural drainage service to the San Luis Unit that "achieves long term, sustainable salt and water balance in the root zone of irrigated lands." Fundamental to this purpose must be for Reclamation to mitigate the past and future harm that it has caused to the San Joaquin River from the lack of drainage to the San Luis Unit and other neighboring districts. However, such mitigation cannot come at the expense of other downstream diverters with priority water rights on the San Joaquin River.

L-22-1a

The San Joaquin River is affected by the salt load and quantity of flow on the Lower San Joaquin River from a combination of upstream diversions, discharges of saline drainage water to the San Joaquin River and subsurface accretions to the river from groundwater. The State Water Resources Control Board recently summarized the situation on the San Joaquin River this way:

> ". . .the SWRCB finds that the actions of the CVP are the principal cause of the salinity concentrations exceeding the objective at Vernalis. The salinity problem at Vernalis is the result of saline discharges to the river, principally from irrigated agriculture, combined with low flows in the river due to upstream water development. The source of much of the saline discharge to the San Joaquin River is from lands on the west side of the San Joaquin Valley which are irrigated with water provided from the Delta by the CVP, primarily through the Delta-Mendota Canal and the San Luis Unit. The capacity of the lower San Joaquin River to assimilate the agricultural drainage has been significantly reduced through the diversion of high quality flows from the upper San Joaquin River by the CVP at Friant. The USBR, through its activities associated with operating the CVP in the San Joaquin River basin, is responsible for significant deterioration of the water quality in the southern Delta." D 1641 at p. 83.

BCID, a senior water rights holder, has historically borne a disproportionate burden as a diverter on the San Joaquin River, both from a water supply and water quality perspective.

L-22-1b

The Draft EIS is inadequate in its discussion of how any of the alternatives will affect the San Joaquin River water quality and quantity either in the short term or long term.

SPECIFIC COMMENTS

Section 1 – Purpose and Need for Action

Section 1.1: Purpose and Need for Action

L-22-2

This section describes four related project objectives used to develop the alternatives to be evaluated in the Draft EIS to achieve the overall purpose and need for the project. In addition to the four identified in this section, the Draft EIS must also include the objective of no re-directed impacts to other water users within the Project Area. It is essential in implementing the Preferred Alternative that other water users are not adversely impacted, in specific, BCID is concerned that implementation may have an adverse impact on flows in the San Joaquin River. Any reduction in flows in the San Joaquin River must be mitigated in some manner that will not impact other water users in the San Joaquin Valley.

L-22-3

L-22-4

Section 1.3.1: Areas Needing Drainage

There is a discussion in this section that "not all of the landowners within the drainage service area would install on-farm drainage systems. Some farmers would elect not it install drains based on

L-22-5 localized conditions and economic considerations" and therefore only two-thirds of the acreage was included in the "areas needing drainage." How does this factor into the overall drainage solution?

L-22-6 Currently, lands within the Northerly Area drain in the San Joaquin River. Will this practice continue and

L-22-7 what will be the affect on water quality and flow in the San Joaquin River? The Draft EIS must include

L-22-8 an analysis of how the continuation of the landowners' current practice will affect the overall drainage solution.

Section 2 – Alternatives

L-22-9 The discussion under Reverse Osmosis (RO) Treatment under the In Valley Disposal Alternative assumes that product water generated from the RO treatment would be conveyed to and blended with CVP water in a nearby canal. This is an improper assumption. Mitigation in the form of releases of "product water" into the San Joaquin River may be required in order to mitigate for the adverse affect of the drainage reduction on San Joaquin River flows, and this alternative must be evaluated.

Section 5 – Surface Water Resources

Section 5.1.2 Water Quality in San Joaquin River Reaches and Tributaries

L-22-10 The Draft EIS uses water quality data from 1986 through 1997 for its analysis of the effects of implementation of the various Alternatives. This water quality data is suspect because of the significant changes that have occurred in the San Joaquin River system over the past 10 years. Probably the two most significant actions on the San Joaquin River that have influenced water quality and flow have been the reduction in return flows entering the San Joaquin River from the development of irrigation efficiencies and reuse of water and increased water deliveries to the wildlife refuges which changes the timing and magnitude of water quality and flow in the San Joaquin River.

L-22-11 These changes in San Joaquin River hydrology and its effect on water quality and flow have been included into the most recent version of Reclamation's CALSIM II model. At a minimum, this preliminary model must be used in order to determine the effect on San Joaquin River water quality and flow of implementation of any of the proposed Alternatives.

L-22-12 This point is highlighted by the statement in this section that Vernalis water quality objective for April to August has been exceeded over 50 percent of the time from 1986 through 1997. Curiously, Reclamation now reports that there have been NO violations of the Vernalis water quality objective since 1995 to date. How is it that there were frequent violations during one time period and all have been eliminated during a subsequent time period? Clearly something has changed in the baseline flows. As

L-22-13 such, this entire analysis in this section needs to be done utilizing the new CALSIM II modeling inputs for the San Joaquin River.

Section 5.2 Environmental Consequences

Section 5.2.2 – Modeling Method and Assumptions

L-22-14 This section indicates that because the results of the Regional Board comparison showed water quality in the river improving from the withdrawal of direct discharges to the river, no additional model comparisons were performed of the existing conditions. First, the Regional Board analysis that this section refers to is Salt and Boron TMDL modeling, which is not based on the new more accurate depiction of San Joaquin River in CALSIM II, consequently, the accuracy of this analysis is questionable.

L-22-15 Secondly, additional modeling is necessary to assess the impact of implementation on the reduction in

L-22-16 flows in the San Joaquin River. Simply stating no adverse impact to water quality is not sufficient;
L-22-17 Reclamation must evaluate the effects of its actions on flow in the San Joaquin River. BCID is a senior
L-22-18 water right holder on the San Joaquin River, how will the District be impacted by reduction in flow? Will there be sufficient water in the San Joaquin River for BCID to divert under its senior water rights?

Section 5.2.4: In Valley Disposal Alternative

The effect of implementation of any of the seven proposed Alternatives on water quality is stated in the Draft EIS to be the same. In fact, in every section of analysis for the varying Alternatives in Section 5 identical language is used to describe the affect on San Joaquin River water quality. As such, these comments apply to all of the seven proposed Alternatives and will not be repeated. The stated language is as follows:

> Under the In-Valley Disposal Alternative permitted discharges from the GDA to the Lower San Joaquin River as part of the Grasslands Bypass Project would be discontinued and placed in evaporation basins. Removal of the water and chemicals from the River is expected to result in significant beneficial effects to the concentration of Se in the Lower San Joaquin river (see Appendix D4). Improvements to the concentrations of salt and boron would also be significant although not as great as Se, due to the existence of other significant sources of these chemicals to the River.
>
> Removal of drainwater associated with the Grasslands Bypass Project from the Lower San Joaquin River would reduce the amount of dilution water required to be released from New Melones Reservoir to achieve the EC water quality objective at Vernalis. Modeling results shown in Appendix D4 indicate for the 10 year period from 1985 through 1995 the average reduction in dilution flows would be 21,000 AF/year. This is a significant beneficial effect to New Melones Reservoir Operations.

L-22-19 The approach and methodology of the modeling used in Appendix D4 - San Joaquin River Modeling raises many questions. First, why were the historical monthly discharges from the GDA modified so they were in compliance with the TMDLs during a 9-year flow record? Neither the State Water Resources Control Board nor the U.S. EPA has approved the TMDL. Moreover, should these
L-22-20 releases actually be achieved, would it impact actual operations? Simply modifying a model does not
L-22-21 mean that releases would occur in that fashion. What happens when more water is required to be held back because of load limits, will that cause degradation at a subsequent time? What impact will there be
L-22-22 on flow in the river?

L-22-23 Secondly, the modeling for water quality and flows used is from October 1985 to September 1994, many things have changed on the San Joaquin River since 1994. There have been large reductions in return flow from irrigation discharges into the river due to increased irrigation efficiencies and reuse of water. Additionally, there has been an increase delivery to wildlife refuges that discharge into the San Joaquin River. As was discussed above, there is a new model that has more recent depiction of operations of the San Joaquin River in CALSIM II. This new model shows a tremendously different picture of water quality and flow in the San Joaquin River. Now, much more water is needed during the late winter and early spring for dilution of poor water quality in the San Joaquin River, not much is needed in the summer. How will this reduction in flow impact BCID's ability to divert water under the District's senior water right?

L-22-24 In order to properly evaluate the effects on water quality and flow in the San Joaquin River from implementing any of the proposed Alternatives, the most current modeling data must be used.

L-22-25 Additionally, implementation will be phased over a number of years; the analysis must also show the incremental effects as well as the long-term effects on implementation of the proposed action.

Section 5.2.14 Mitigation Recommendations

L-22-26 The Draft EIS conclusion that there are no significant environmental effects on surface water resources, and therefore no mitigation measures are required is simply unsupported by the analysis
L-22-27 contained in the Draft EIS. The Draft EIS fails to evaluate the effects of the drainage reduction measures and reuse facilities will have on flow in the San Joaquin River. How will the senior water right holders
L-22-28 on the San Joaquin River be ensured that there will be an adequate supply of water to divert? The
L-22-29 absence of analysis of this issue renders the Draft EIS legally deficient. The Draft EIS must be revised to address this issue, and once proper analysis is conducted to determine the impact on downstream
L-22-30 diverters, Reclamation must mitigate these impacts, and should evaluate the potential use of any "product water" generated by RO treatment into the San Joaquin River for such mitigation.

We appreciate the opportunity to provide these comments and look forward to working with Reclamation on implementation of an alternative that improves water quality and flow in the San Joaquin River.

Very truly yours,

DAVID WEISENBERGER
General Manager

cc: Board of Directors
Jeanne M. Zolezzi, Esq.
State Water Resources Control Board

RESPONSES TO COMMENT L-22

L-22-1a

The comment is noted. Mitigation for any past harm is not the subject of this EIS. Mitigation for future effects is included (see Section 20 and Appendix O).

L-22-1b

See Master Response SW-1 regarding the analysis of impacts of the alternatives on San Joaquin River water quality and quantity.

L-22-2 - 4

The requested change in the purpose and need discussion (Section 1.1) does not directly arise from the Federal action to provide drainage service to the San Luis Unit. It should be noted that the EIS has been supplemented to include an analysis of the change in flow in the San Joaquin River at Vernalis as a result of the No Action and action alternatives (see Section 5.2). No

significant changes in flow of the San Joaquin River at Vernalis were found for any action alternatives compared to No Action.

L-22-5

The PFR describes drainage rates and preliminary flows in Section 3.1. Groundwater modeling and agricultural productivity were used to evaluate on-farm, in-district, and regional drainage facilities. If one farmer installs drains but a neighbor does not, the farmer with the installed drains will be collecting more drainwater in his system at a different rate than if all farmers installed drains. The in-district system provided by Reclamation would still be collecting the total drainage.

L-22-6

The fate of Northerly Area drainage and whether it will continue to be discharged into the San Joaquin River depends upon the chosen alternative. See Section 2 of the Final EIS for a description of each alternative.

L-22-7

Section 5.1 of the Final EIS has been updated to reflect water quality and flow data for the San Joaquin River based on the most recent monitoring information available. In addition, Appendices D4 and D5 include updated water quality modeling to assess changes in the river compared to existing conditions. It should be noted that the No Action Alternative and all of the action alternatives will have similar effects on the San Joaquin River due to removal of the Grassland Bypass Project discharge from the river following expiration of the Use Agreement in 2009. Also see Master Response SW-16.

L-22-8

The PFR describes drainwater reduction optimization and various drainwater reduction options in Section 3.2.1. Since on-farm reduction options are not a Federal action, the specific farmers' actions cannot be certain. However, the net results of those actions must comply with the drainage rate restrictions placed on the system by Reclamation. Flows were estimated and analyzed for each alternative. Section 3.2.2 of the PFR shows that choosing drainwater reduction scenarios is an iterative process since each measure can affect another measure (i.e., irrigation system improvements reduce the need for seepage reduction). The most cost-effective scenario of drainage reduction was used for each alternative, and effects were analyzed for each alternative in the EIS.

L-22-9

Results of the analysis of changes in San Joaquin River flows are presented in Section 5.2. Compared to No Action, the action alternatives did not have a significant effect on flows in the San Joaquin River at Vernalis.

L-22-10

Section 5.1 of the Final EIS has been updated to reflect water quality and flow data for the San Joaquin River based on the most recent monitoring information available. See Master Response SW-16 for additional information.

L-22-11

Section 5 has been updated with additional CALSIM II modeling information regarding impacts to the water quality and quantity in the San Joaquin River due to changes in the Grassland Bypass Project discharges. As a part of the development of CALSIM II, assumptions regarding probable future projects were included to reflect changes in water system demand, system operation rules, and infrastructure improvements expected to occur by 2030. Also see Master Response SW-16.

L-22-12

Section 5.1 of the Final EIS has been updated to reflect water quality and flow data for the San Joaquin River based on the most recent monitoring information available. See Master Response SW-16 for additional information.

L-22-13

Section 5.2 and Appendix D2 of the Final EIS have been revised to include results from CALSIM II modeling of the changes in flow and EC in the San Joaquin River.

L-22-14

See Master Response SW-16 in regard to the TMDL modeling described in Section 5.2.2 and the San Joaquin River data used in that modeling.

L-22-15 - 17

Section 5.2 and Appendix D2 have been revised to include CALSIM II modeling of flow and EC in the San Joaquin River. See Master Response SW-16 in regard to effects on San Joaquin River flows.

L-22-18

No significant impacts to flow were found for the action alternatives as compared to the No Action Alternative. Therefore, no impacts to water rights holders are expected.

L-22-19 - 24

As the commenter noted, historical monthly discharges from the GDA were modified to comply with TMDLs during a 9-year flow record even though the TMDLs had not been approved. The program to implement TMDLs in the San Joaquin River was adopted by the Regional Board in a 1996 Basin Plan Amendment for the Control of Agricultural Subsurface Drainage Discharges.

Included in this program is a compliance time schedule for meeting the four-day average and monthly mean water quality objectives for selenium. To evaluate future scenarios, Reclamation assumed that the compliance time schedule would be met. The discharges were modified because reducing flow is the only way to meet the TDML if water quality is to remain the same.

The assumption that the GDA discharge would meet salt and boron TMDLs has been removed due to the uncertain regulatory status of these TMDLs. Revised modeling assumed compliance with the Se TMDLs that have been approved. Also see Master Response SW-16.

L-22-25

The comment states that because project implementation will be phased, San Joaquin River water quality and flows should be analyzed to show both incremental and long-term effects. See Master Responses CUM-1, SW-17, and SW-1.

L-22-26

Reclamation believes the environmental analysis in the Final EIS supports the conclusions stated in all sections. Mitigation is described in Section 20 of the Final EIS.

L-22-27

See Master Response SW-16 in regard to evaluating the effects of drainage reduction measures and reuse facilities on San Joaquin River flows.

L-22-28 - 30

See Responses to Comment L-22-18 and L-22-26.

COMMENT L-23. SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING, ELLEN CARROLL

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PLANNING AND BUILDING

BUREAU OF RECLAMATION OFFICIAL FILE COPY RECEIVED
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Date: August 31, 2005

To: Claire Jacquemin
U.S. Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

Subject: **Comments on the San Luis Drainage Feature Reevaluation Draft EIS**

The purpose of this letter is to provide the U.S. Bureau of Reclamation (USBR) with comments regarding the San Luis Drainage Feature Reevaluation Draft EIS, pursuant to NEPA Guidelines. The Draft EIS evaluated a total of eight alternatives for the purpose of providing agricultural drainage service to the San Luis Unit of the Central Valley Project.

L-23-1 This comment letter points out substantive inadequacies with respect to the Draft EIS, including the lack of a policy consistency analysis. This letter focuses on the inadequate project description and
L-23-2 impact analysis provided for the Out of Valley/Ocean Disposal ("Ocean Disposal") Alternative.

The County of San Luis Obispo would like to take this opportunity to thank the USBR for inviting the general public as well as concerned agencies to participate in a public hearing held on July 14, 2005 in the community of Cayucos. The primary concerns stated in the public hearing will be reflected in this comment letter. It is clear that the "Ocean Disposal" alternative would have severe and significant negative environmental and economic impacts on the resources and communities of San
L-23-3 Luis Obispo County. As such, San Luis Obispo County remains strongly opposed to the "Ocean Disposal" alternative.

CF

One serious concern echoed by almost all who attended the hearing revolved around the length of the comment period. Due to the complicated nature of the proposed project, in combination with inadequate noticing and document availability, it was requested that the deadline to submit comments for publishing in the Final EIS be extended by 60 days. Although the USBR has agreed to extend the comment period by 30 days, this extension is insufficient given the breadth of the project scope and
L-23-4 the innumerate amount of stakeholders that have a direct interest in this project (including members of the general public, property owners and a litany of public agencies that have jurisdiction over the project alternatives).

The comments provided in this letter reflect the concerns of the County of San Luis Obispo, in addition to public and other agency concerns, and provides the USBR with a comprehensive review of the San Luis Drainage Feature Reevaluation Draft EIS. In particular, the focus of these comments revolves around the proposed "Ocean Disposal" alternative that would culminate in the disposal of polluted agricultural drainage water off of the coast in the Estero Bay area. The comments on this "Ocean Disposal" alternative consist of three key issue areas including:

- Economics and Cost;
- Environmental Impacts; and

Classification	ENV-6.00
Project	[illegible]
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- Substantive and Policy Consistency

L-23-5 As the comments below indicate, the Draft EIS is insufficient because it does not fully disclose the environmental effects of the proposed "Ocean Disposal" alternative according to the standards set forth in NEPA.

Economics and Cost:

1. L-23-6 The Environmental Justice/Economic Impact analysis in the EIS makes no mention of the degradation of fishing, abalone farming, kelp harvesting, and tourism industries (including surfing, kayaking, diving, etc.) valuable to San Luis Obispo County coastal communities and to San Luis Obispo County as a whole. The EIS only mentions the increase in temporary construction jobs for "minority and low-income employment". In addition, there is no analysis of the economic impacts to private landowners along the proposed pipeline route. How would landowners be compensated for the use of their land and the loss of agricultural viability associated with possible pipeline failure? In the event of a pipeline failure, how many acres of farmland would be impacted and what mitigation measures are available to decontaminate the polluted soil? The pipeline is proposed to cross many miles of agricultural land, yet no analysis of impacts is included. We understand that exact numbers are difficult to obtain. However, in order to fully address each issue, reasonable estimates must be made.

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2. L-23-11 The EIS does not consider the costs of maintaining the "Ocean Disposal" alternative pipeline and does not include an analysis of the costs and impacts associated with pipeline failure.

Environmental Impacts:

3. L-23-12 The baseline and environmental setting for the "Ocean Disposal" alternative have not been accurately characterized. The setting discussion does not give a sufficient description of the environment; therefore, the subsequent impact analysis is incomplete and inadequate.

4. L-23-13 The project description and impact analysis is incomplete because there is no discussion of how the polluted water will be handled in the event of a pipeline failure or the closure of pipeline segments during maintenance. If pipeline segments were ruptured, what would happen to the polluted water? Will catch basins or off-site storage areas be utilized? If so, the EIS needs to provide an analysis of the environmental impacts of such facilities.

L-23-14
L-23-15

5. L-23-16 The EIS does not contain any bathymetric analysis of ocean current dynamics (i.e., "closed ocean current cell" may not allow quick dispersion within Estero Bay, but rather concentrate pollutants near shore). The EIS needs to analyze the effect of ocean current dynamics on plume dispersion and the impacts associated with the dispersion of the wastewater plume. The EIS admits lack of real-time localized data on page 5-53 and –54.

6. L-23-17 This EIS does not provide any analysis of the potential impacts associated with thermal pollution. Would the ocean outfall facility contribute to a change in the thermal characteristics of the offshore environment? If so, how would this effect the marine environment and how would this impact be mitigated?

L-23-18

7. L-23-19 The impacts associated with the possible introduction of non-native invasive species and organisms into the marine ecosystem were not identified in the EIS.

8. L-23-20 The EIS failed to address the potential environmental, health and economic impacts associated with the stimulation of localized algal blooms (including blooms toxic to marine mammals and humans) caused by the introduction of polluted water at the proposed ocean discharge site.

2

L-23-21 9. The EIS contains inadequate analysis of other pollutants outside of selenium that will be in the water (e.g., organic pesticides, herbicides, phosphate, nitrates, chromium, etc.).

L-23-22 10. The route identified for the proposed "Ocean Disposal" pipeline was not sufficiently identified and analyzed. The EIS indicates a very general area but the alignment is not shown and the resulting environmental impacts and subsequent mitigation measures of the pipeline corridor are not analyzed. A partial list of potentially significant impacts relating to pipeline alignment include, but are not necessarily limited to: the take of federally- and state-listed plant and wildlife species; permanent loss of commercial agricultural lands; and the permanent loss of archaeological resources.

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L-23-25

L-23-26 11. The Ocean Disposal alternative should discuss why no treatment of the polluted water is included for this alternative. Although the two Delta Disposal alternatives (consisting of ocean disposal in the San Francisco Bay Delta) analyzed in the EIS include wastewater treatment prior to dumping, the wastewater under the Ocean Disposal alternative would be dumped into the Estero Bay area without any filtration and/or treatment. Feasible technologies exist to provide various levels of treatment to reduce harmful constituents. A thorough analysis of treatment options must be included in order for the EIS to provide full disclosure of the impacts and feasible mitigation measures. Economic costs to accomplish this should also be included in the analysis.

L-23-27 12. The proposed pipeline crosses the San Andreas Fault. This alternative represents the greatest hazards with regards to impacts related to earthquakes, landslides, subsidence, slope instability, soil expansion and tsunami impacts at the coast. However, the EIS provides no mitigation for impacts related to the likely pipeline failure from earthquake events.

L-23-28 13. The EIS does not indicate that the USBR has an action plan for the purpose of responding to possible pipeline failures. The EIS should provide the public with a contingency plan for pipeline failure and an analysis of the environmental impacts associated with such a plan.

L-23-29 14. There is no discussion of alternative disposal using new/experimental technologies.

L-23-30 15. The "Ocean Disposal" alternative represents the highest energy cost (81.4 million kilowatts per hour per year) compared to the next highest alternative at 14 million kw/hr/yr. This alternative represents the most energy/fossil fuel consumptive alternative.

L-23-31 16. There is a glaring lack of detail regarding biological impacts resulting from the installation of the extensive pipeline/conveyance network required (refer to Section 7.2.8, starting on page 7-42). There is no specific alignment identified. All analysis is given in very general terms and lacks any data, models or quantitative analysis to back up the generalities discussed.

L-23-32 17. The EIS analyzed Selenium bioaccumulation, concluding that tests indicate that mussels and clams sampled were below thresholds for Selenium bioaccumulation, concluding that as a result there is no significant risk to human health. However, the EIS gives no information on what those thresholds are and what they mean. What are the health risk thresholds for Selenium intake and how does that relate to the Selenium levels discovered in the clam/mussel tests. In addition, there is no analysis of the long-term impacts associated with Selenium exposure over the life of the proposed "Ocean Disposal" alternative.

L-23-33

L-23-34 18. No analysis or mitigation is offered for impacts to soil quality resulting from pipeline failure. What would happen to prime and/or statewide importance soils within the proposed pipeline corridor if the pipeline failed? How would this impact be mitigated?

3

L-23-35
L-23-36
19. No air pollution models or quantitative analysis was used to determine air quality impacts. The EIS does not include any data to back up the determination of no significant impacts. In addition, with regards to air quality impacts resulting from construction activities, consultation with the San Luis Obispo County Air Pollution Control District should have been initiated and documented in the EIS in order to determine appropriate mitigation measures.

L-23-37
20. No cultural resource surveys were done for the pipeline alignment although a records search indicated 92 known cultural resources within a 1-mile radius of the alignment. The mitigation required in the EIS is minimal and would be considered deferred mitigation (relying on future studies). There is no mention of requirements in the event that human remains (or any other cultural resources) are uncovered during project implementation.

L-23-38
21. There is no mitigation mentioned for the aesthetic impacts resulting from the construction of pump houses and support facilities along the pipeline alignment.

L-23-39
22. The EIS does not adequately describe the impact to public water systems. Impacts resulting from possible pipeline failure in proximity to Whale Rock Reservoir and Cayucos drinking water intakes were not considered in the EIS.

L-23-40
23. The impacts to the living resources of the Morro Bay National Estuarine Research Reserve and the Monterey Bay National Marine Sanctuary will be significant. The EIS should include a thorough discussion of these significant impacts.

Substantive and Policy Consistency:

L-23-41
24. NEPA mandates coordination and collaboration among federal and state agencies prior to making a detailed environmental impact statement. The "Ocean Disposal" alternative conflicts with many of the policies of the following agencies: NOAA, USEPA, U.S. Fish and Wildlife, California Coastal Commission, Cal EPA, SWRCB, RWQCB, California Department of Fish and Game and even the President's Council on Environmental Quality. In addition to the lack of discussion of the local, State and Federal permit processes; the EIS lacks a discussion of CEQA documentation requirements.

L-23-42
25. The EIS must provide a policy consistency analysis with respect to County of San Luis Obispo policies, standards and ordinances that would apply to the implementation of the proposed "Ocean Disposal" alternative.

L-23-43
26. The Monterey Bay National Marine Sanctuary has permit authority over discharges outside Sanctuary boundaries of "any material or other matter that subsequently enters the Sanctuary and injures a Sanctuary resource or quality." 15 CFR §§ 944.5(a)(3), 944.5(e). The EIS should examine the permitting authority of the Monterey Bay National Marine Sanctuary and provide a policy consistency analysis for all permits required.

L-23-44
27. Section 2.11.3 (page 2-71) of the Draft EIS states that other ocean outfall locations were eliminated because "the more southerly alignment of the Point Estero conveyance has the potential for other drainage producers to utilize the conveyance and disposal facilities." This suggests significant cumulative impacts resulting from the additional and continued use of the ocean outfall for any number of other pollution generators into the future. The EIS completely lacks a discussion of such cumulative impacts.

L-23-45
28. Mitigation is deferred in most cases pending the results of the various environmental surveys required. The EIS does not offer a "menu of mitigation options" commonly used to avoid deferred mitigation (i.e. "if this impact is encountered, then the following measures would

reduce impacts to less than significant levels. "). Any environmental surveys required as mitigation should have been completed and analyzed prior to publishing the Draft EIS so that the environmental impacts can be disclosed to the public and decision makers.

L-23-46 29. In cooperation with the Ocean Conservancy, the Central Coast Regional Water Quality Control Board has adopted a program that requires Central Coast farmers to take significant steps to address farm runoff. Implementation of the "Ocean Disposal" alternative would result in unfair standards given that local agriculture is closely regulated with regards to non point-source pollution regulations. Why would in-valley agricultural operations get to do something that local operations could not? Given the Central Coast farmers' recent commitment to reducing agricultural pollution, any proposal to export polluted agricultural wastewater into this sensitive coastal area is particularly egregious.

Overall Conclusions and Additional Requirements:

L-23-47 As the comments indicate, this EIS is not considered sufficient for the purpose of disclosing the environmental impacts associated with the various proposed project alternatives. As the lead agency responsible for this project, the USBR has the obligation to provide due diligence in analyzing these impacts and to provide reasonable measures intended to mitigate impacts to less than significant levels.

L-23-48 Due to the fact that serious flaws have been identified in the baseline information, environmental setting and project description provided for the "Ocean Disposal" alternative, the subsequent impact analysis and mitigation measures are considered inadequate and insufficient.

L-23-49 The County of San Luis Obispo urges the USBR to provide a published response to all of the above comments.

L-23-50 In addition, the County of San Luis Obispo requests the provision of all of the additional studies and analysis discussed above, prior to the finalization of this EIS.

L-23-51 After a thorough review of this document, it is apparent that the impacts associated with the construction and operation of a pipeline and an outfall structure off of Estero Bay have not been analyzed in enough detail to provide either the public or decision makers with enough information to move forward with the "Ocean Disposal" alternative. As such, it is clear that a Revised Draft EIS needs to be prepared and re-circulated for at least a 90-day public review period.

L-23-52 In order to ensure that the County of San Luis Obispo is informed on all future decision making with regards to this project, we are requesting that all future hearings, documents, meeting notices and any subsequent decision making processes be copied and noticed to the following addresses:

Shirley Bianchi
Chairperson, District 2 Supervisor
County Board of Supervisors
County Government Center, D430
San Luis Obispo, California 93408

Jeff Oliveira
Environmental Resource Specialist
Planning and Building Department
Room 310, County Government Center
San Luis Obispo, California 93408

Thank you for the opportunity to comment on this Draft EIS. If you have any questions, please feel free to contact Jeff Oliveira, Environmental Resource Specialist, or Ellen Carroll (805-781-5010).

Sincerely,

Ellen Carroll
Environmental Coordinator

Cc: Each Member, San Luis Obispo County Board of Supervisors

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Congressman Bill Thomas
Congresswoman Lois Capps
Senator Able Maldonado
Assemblyman Sam Blakeslee
Roger Briggs, RWQCB
Laura Fuji, EPA
Cayucos Citizen's Advisory Council
North Coast Advisory Council
Los Osos Community Advisory Council
Sierra Club, Santa Lucia Chapter
City Council, City of Morro Bay
Charles Lester, Coastal Commission
Monterey Bay National Marine Sanctuary
Morro Bay National Estuary Program
Surfrider Foundation, San Luis Bay Chapter
ECOSLO
Farm Bureau, San Luis Obispo County
California Cattlemans Association, San Luis Obispo County
Cayucos Land Conservancy

RESPONSES TO COMMENT L-23

L-23-1

Without more information on the perceived "inadequacies," no response is possible. Specific comments on the Draft EIS from this comment are addressed in subsequent responses. The Final EIS includes a policy consistency analysis in Section 4.

L-23-2

The impact analysis for the Ocean Disposal Alternative is considered adequate for an appraisal-level comparison of alternatives, as discussed in Master Response GEN-1. For additional information about effects from the Ocean Disposal Alternative, see Master Responses SW-8 through SW-13 and SE-1.

L-23-3

Comment noted. No response necessary.

L-23-4

The public review period, which extended from June 2, 2005, to September 1, 2005, exceeded the minimum time requirements set forth by NEPA and is sufficient for a review of the EIS.

L-23-5

Impacts to the ocean environment are disclosed to the same level of detail as other project alternatives. The analysis provides adequate information for a comparison of impacts among alternatives. See Master Responses SW-8 through SW-11 and SE-1.

L-23-6

See Master Responses SW-8, SW-13, SW-9, SE-1, and SW-10 regarding the effects of the Ocean Disposal Alternative. Note that the Draft EIS analysis did not indicate a significant impact to fisheries; therefore, no economic impact is expected to result.

L-23-7

Land acquisition and right-of-way costs were estimated and included in the construction costs of all alternatives in the Draft EIS. Economic impacts to landowners along pipeline routes would be compensated through land acquisition and right-of-way payments.

L-23-8

Land acquisition and right-of-way payments include compensation to landowners per established Reclamation policies and practices. Pipeline spills and breaks are not considered reasonably foreseeable circumstances (see Master Response GEN-3).

L-23-9, 10

See Master Responses GEN-3 and SW-15 in regard to the potential for pipeline failure.

L-23-11

See Master Responses GEN-1 in regard to cost estimates for the Ocean Disposal Alternative and GEN-3 in regard to the analysis of pipeline failure impacts.

L-23-12

The descriptions of the affected environment in Sections 5 and 7 have been revised to include additional information for the Ocean Disposal Alternative. Also see Master Responses SW-8, SW-10, and SW-12.

L-23-13

See Master Response GEN-1 in regard to the project description for the Ocean Disposal Alternative and Master Responses GEN-3 and SW-15 for a discussion of the pipeline impact analysis. If the pipeline had to be emptied for maintenance, most of it would either be drained to the ocean or drained within the pipeline. The pipeline operators may need tanks or tanker trucks to hold/transport the drainwater. Strategically located sectionalizing valves may be needed to decrease the drainwater being evacuated. Drainwater would not be discharged to a nearby stream.

L-23-14, 15

See Master Response SW-15. The use of catch basins or off-site storage areas is not envisioned at this time.

L-23-16

An extensive 3-dimensional analysis of ocean current dynamics was not conducted as part of the EIS analysis, as it was the judgment of the EIS preparers that this detailed level of analysis was not warranted (see Master Response GEN-1). However, it is important to note that a substantial quantity of ocean current data was collected and utilized in the EIS analysis. Temperature, salinity, and current velocity data were gathered from four sources to form the basis of the discharge diffusion analysis (see Section 5.2.2.1, page 5-52; note that over 200,000 data points were analyzed). These data indicated that currents in the vicinity of the proposed outfall location would afford substantial effluent dilution, and that the location would not be a "closed ocean current cell" that would lead to high localized concentrations. It is also instructive to note that rough estimates suggest that "stagnant" conditions–i.e., conditions under which current speeds are less than 0.02 meter per second–occur in the diffuser vicinity only 1 percent of the time, and for durations of around 1 hour (though in some cases up to 3 hours). This rough estimate is based on analysis of acoustic Doppler current profiler (ADCP) data at the NOAA Point San Luis station for the years 1997-2002. This further analysis bolsters the claim that the diffuser would not be located in a "closed ocean current cell." If the Ocean Disposal Alternative were chosen as the preferred alternative in the Record of Decision, a more detailed analysis of local ocean currents would be conducted.

L-23-17

Differences between ambient and effluent temperatures are relatively small; therefore, there would be no noticeable thermal changes that might affect the offshore environment. See Master Response SW-14 for additional discussion of thermal changes under the Ocean Disposal Alternative.

L-23-18

Since the thermal change is predicted to be negligible outside the zone of initial dilution (ZID) (see Response to Comment L-23-17), there would be no noticeable thermally induced impact on the marine environment surrounding the discharge. See Master Response SW-14 for a discussion of how changes in temperature within the ZID could affect the marine environment.

L-23-19

It is unlikely that any invasive species that are not already carried by the San Joaquin River, or any other stream outfalling in the ocean, would be carried from the San Luis Unit to the ocean outfall via pipeline.

L-23-20

See Master Response SW-11 regarding the potential for the Ocean Disposal Alternative to stimulate algal blooms.

L-23-21

See Master Responses SW-13 and SW-11.

L-23-22, 23

See Master Response GEN-1 in regard to the level of detail of the pipeline route. If the Ocean Disposal Alternative were selected as the preferred alternative, additional feasibility and final design studies would provide more detailed information about effects to special-status species and other biological resources in the pipeline vicinity.

L-23-24

The comment is noted. Impacts that would result from construction of the Ocean Disposal Alternative pipeline have been considered and weighed by Reclamation during the preferred alternative selection process. The Draft EIS was prepared at the appraisal level of design, which means that the final route and exact location of the pipeline would not be determined unless the Ocean Disposal Alternative were advanced for further consideration and subject to a feasibility-level design assessment. Therefore, a detailed environmental review of the specific pipeline location is not being considered at this time. The Draft EIS provided adequate information on the environmental impacts of the project to facilitate the selection of the preferred alternative. If the Ocean Disposal Alternative were advanced for further consideration, additional environmental review would be conducted as necessary.

L-23-25

Impacts to archeological resources will be addressed after a preferred alternative is selected, the alignment is inventoried, and identified cultural resources are evaluated for inclusion in the National Register of Historic Places. If historic properties are adversely affected, a memorandum of agreement (MOA) would be negotiated among Reclamation, SHPO, and other consulting parties about stipulations to mitigate adverse effects.

L-23-26

See Master Response SW-6 in regard to treatment of drainwater and associated costs under the Ocean Disposal Alternative.

L-23-27

Potential effects of geologic hazards on the Ocean Disposal Alternative are discussed in Section 9.2.8. Seismic effects on the Ocean Disposal Alternative pipeline from the San Andreas or other faults can be made negligible with adequate mitigation and construction according to current codes and state-of-the-practice techniques, as discussed in Sections 9.2.8 and 9.2.12. With construction based on adequate design criteria, the effects of pipeline failure can be minimized. See Master Responses GEO-1, GEO-2, and GEO-3 for additional discussion of seismic activity, surface disruption, and mitigation of geologic hazards, respectively.

L-23-28

See Master Responses GEN-3 and SW-15 for discussion of impact analysis and planning for the Ocean Disposal Alternative.

L-23-29

See Master Response ALT-T1 for a discussion of the evaluation of treatment technologies.

L-23-30

Comment noted. No response necessary.

L-23-31

See Response to Comment L-23-23.

L-23-32, 33

See Master Responses SW-10 and SE-1.

L-23-34

See Master Response GEN-3 in regard to the potential for pipeline failure.

L-23-35

Reclamation performed an adequate analysis of impacts to air resources. A quantitative analysis using numeric modeling was not necessary to assess impacts. See Master Response AIR-1 in regard to emissions estimates for construction activities.

L-23-36

The project area is within the jurisdiction of the San Joaquin Valley Air Pollution Control District. As such, District-recommended Regulation VIII mitigation measures for construction emissions were included in the EIS (Tables 11-11 and 11-12). See Master Response GEN-1.

L-23-37

In accordance with Section 106 of the Historic Preservation Act and related California laws, site-specific cultural resource field surveys are not required at this stage of environmental review. These surveys would be conducted for the preferred alternative during engineering design. Mitigation can only be determined once historic properties are identified and Reclamation makes a determination of effect for historic properties within the area of potential effect. Specific mitigation measures will be determined through negotiation of a MOA, as noted in the Response to Comment L-23-25. Cultural resources and human remains will be considered if they are encountered. As described in Section 15.1.1, State law must be followed in the event that human remains are found during project activities. Reclamation Directives and Standards, 36 CFR Part 800, and State law have provisions to address the discovery of cultural resources during construction activities.

L-23-38

Aesthetic effects associated with construction and operation of the pumping plants and support facilities were found to be moderate and permanent. None of the effects was found to be significant. However, as stated in Section 2.8.1, the facilities would be designed to comply with applicable regulations. For example, within the coastal zone, the counties in which project facilities would be constructed would review the facilities' design for compliance with California Coastal Commission regulations. Other local jurisdictions may have similar requirements.

L-23-39

See Master Response GEN-3 in regard to the potential for pipeline failures.

L-23-40

If the Ocean Disposal Alternative were selected as the preferred alternative, additional feasibility and final design studies would provide more detailed information about impacts to species in the outfall vicinity. As stated in Master Response SW-13, water quality impairment of the MBNMS is unlikely given its distance from the outfall and the rapid dilution of effluent that occurs immediately after discharge.

L-23-41

See Master Responses REG-1 and REG-2 in regard to regulatory compliance for the Ocean Disposal Alternative and the need for CEQA compliance, respectively.

L-23-42

Consistency of the action alternatives with local policies is discussed in Section 4, Section 21, and Appendix L.

L-23-43

See Master Response REG-4 in regard to permit authority of the MBNMS.

L-23-44

No additional users of the Ocean Disposal Alternative conveyance have been identified. Additional users would require supplemental environmental documentation. See Master Response CUM-1.

L-23-45

See Master Responses GEN-1 and MIT-2 in regard to the level of analysis presented in the Draft EIS and mitigation, respectively.

L-23-46

The comment is noted. More extensive runoff controls are required for in-valley farmers than for coastal farmers. For example, no discharge of tailwater (surface return flow) is currently allowed in the Northerly Area. As discussed in the project description (Section 2), extensive source controls to minimize drainage production are also required.

L-23-47

Reclamation has provided a sufficient level of detail in the impact analyses to allow an adequate environmental review of the project alternatives. Mitigation cost estimates are provided in Appendix O of the Final EIS.

L-23-48

Reclamation has provided a sufficient level of detail in the baseline information, environmental setting, and project description for the Ocean Disposal Alternative to allow an adequate environmental review and comparison with other project alternatives. Mitigation cost estimates are provided in Appendix O of the Final EIS.

L-23-49

Responses to comments are provided in the Final EIS in accordance with NEPA.

L-23-50

The EIS was prepared according to NEPA requirements that require “reasonable research” needed to inform evaluations of environmental impacts. These studies and analyses are available in accordance with government policy.

L-23-51

Reclamation does not believe that additional public review of the Draft EIS is necessary or appropriate, as the Draft EIS meets the NEPA requirements for environmental analysis.

L-23-52

The comment is noted.

COMMENT L-24. LINNEMAN, BURGESS, TELLES, VAN ATTA, VIERRA, RATHMAN, WHITEHURST & KEENE ON BEHALF OF PANOCHE WATER DISTRICT, PANOCHE DRAINAGE DISTRICT, AND PACHECO WATER DISTRICT, DIANE V. RATHMAN

LAW OFFICES OF
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September 1, 2005

Claire Jacquemin
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cjacquemin@mp.usbr.gov

Re: San Luis Drainage Feature Re-Evaluation Draft Environmental Impact Statement, May 2005

Dear Ms. Jacquemin:

We are writing on behalf of Panoche Water District, Panoche Drainage District, and Pacheco Water District to provide comments on the San Luis Drainage Feature Re-Evaluation Draft Environmental Impact Statement, Mary 2005 (DEIS). This letter presents an overview of comments and also presents updated background information on these Districts and the Northerly Area, and describes the logical fit between ongoing activities within the Northerly Area and the In-Valley Disposal Alternative identified in the DEIS.

Overview of Comments:

L-24-1 1. Clearly a huge amount of work went into preparation of the DEIS. Despite its enormous size, the DEIS and much of its analysis is based upon summarized and generalized information that makes the document hard to follow. Sometimes the most basic underlying principles, such as what is contemplated after 2010 in the Northerly Area under the No Action Alternative, simply are not stated. Descriptive terms are sometimes not consistent throughout, and there is some inconsistency in the assumptions used in different places in the document. Key points are supported only by reference to documents that may not be readily available to most readers. Succinct explanation in the text is needed to provide context and guide consistent analysis.

L-24-2 2. Utilizing 2001 information as the basis for existing conditions makes the document significantly out of date concerning, among other things, the area under irrigation, the level of local development of drainage management activities, the quantity of drainage, and the water quality effects of drainage. The effect is to make the analysis performed inaccurate. Information

on current conditions needs to be added.

L-24-3 3. The No Action Alternative, besides utilizing outdated existing conditions, assumes that only actions which are fully funded are "reasonably foreseeable." The DEIS therefore ignores both the positive effects of drainage reduction and management that have occurred since 2001 and also existing plans and programs for locally-driven drainage management activities that are necessary to meet future regulatory requirements. It instead assumes that as a response to regulatory requirements, there will be no significant additional local agency or on-farm actions to meet the regulatory requirements and that drainage will build up and cause damages in the Northerly Area or arising from the Northerly Area. These assumptions in the No Action Alternative are not reasonable in the face of post-2001 developments and available information.

L-24-4 4. There needs to be a discussion of how the DEIS alternatives for In-Valley Disposal for the Northerly Area link up with ongoing local actions that may take effect before any DEIS alternative is available for implementation.

L-24-5 5. Conclusions as to effects of the No Action Alternative and other alternatives described in various tables are often not explained in the text. For example, the text contains no description at all of population level effects of any aspect of any alternative on any species, but several tables display these conclusions, which do not appear to have support or justification. In general, the tables become too summary and frequently identify adverse effects or significant adverse effects, when at most the text analysis would indicate at most the possibility of such effects and most often, no adverse effects with the implementation of standard practices, such as pre-construction surveys for protected species. Either the supporting analysis must be provided and the tables revised or else the tables should be eliminated as misleading.

Background on the Northerly Area

L-24-6 For the Northerly Area, the DEIS is superimposed upon a complex set of existing entities with historic relationships and activities. Neither the text nor any appendix systematically discusses this background, and as a result, the DEIS mixes various terms and groupings without clearly describing the Northerly Area entities and relationships. This makes it difficult to follow the analysis and in fact, may lead to the analysis itself applying inconsistent assumptions.

L-24-7 Furthermore, selection of a 2001 baseline and failure to consider current conditions means that the DEIS overstates the difference between the No Action and Action alternatives. Providing a better framework also would assist the reader in recognizing that the SLDFRE does not begin to pre-empt the field of drainage management within the Project Area and that its analysis and conclusions cannot appropriately be applied out of context.

Panoche Water District is a CVP water service contractor served through the San Luis Unit. Its entire 38,000-acre service area is included within the project area of the DEIS. Panoche Water

District has had a drainage outlet (i.e., drainage service) since the receipt of CVP water, which began as service from the Delta-Mendota Canal in the 1950's. 22,000 acres are improved with subsurface drainage systems. Panoche Water District coordinates policies and activities with Panoche Drainage District (PDD), and participates in the Grassland Bypass Project and San Joaquin River Improvement Project (SJRIP) through PDD.

Panoche Drainage District is consists of 44,000 acres. PDD has no water supply function and no CVP water service contract. PDD includes the 38,000 acres of Panoche Water District (all San Luis Unit), along with approximately 6,000 acres in Mercy Springs, Oro Loma, and Eagle Field Water Districts (outside the San Luis Unit). Panoche Drainage District is the largest participant of the Grassland Bypass Project and actually operates the project on behalf of the group. PDD also owns and is the primary operator of the San Joaquin River Improvement Project (SJRIP), comprised of approximately 4,000 acres, the reuse project that serves Panoche Water District and the other participants in the Grassland Bypass Project. SJRIP is referred to variously in the DEIS as the GDA reuse facilities, San Joaquin River Improvement Project, and existing Northerly Area reuse facilities.

Pacheco Water District is comprised of approximately 4410 acres, of which approximately 2750 acres have tile drainage systems. In addition, approximately 830 tiled acres in the San Luis Water District receive drainage service based upon an historical Pacheco contract and share drainage facilities. Drainage from these acres is managed together with Pacheco's drainage, for example, in participation in the Grassland Bypass Project. The balance of the organized drainage area in San Luis Water District is within Charleston Drainage District, of 4300 acres, although the DEIS also refers to an undescribed number of acres for which drainage is managed by private parties. SLDFRE DEIS Appendix C refers to 5,000 acres in Pacheco and 6,000 acres in San Luis as the projected acreage requiring drainage, which appears similar in scope, but somewhat overstated for both districts.

L-24-8

The non-San Luis Unit areas considered in the study that have been irrigated through CVP water service contracts include the 6,000 acres of PDD within Oro Loma, Mercy Springs and Eagle Field Water District, in addition to 9505 acres in Broadview Water District. The final areas within the Northerly Area that are outside the San Luis Unit are a portion of CCID and Firebaugh Canal Water District. All of these areas have participated in the Grassland Bypass Project. They are all lands covered by the Westside Regional Drainage Plan (Exhibit "B"), which includes as well a portion of Westlands Water District. Application of surface water in the non-San Luis Unit area has significantly changed since 2001, in that CVP contractual supply of Broadview contractual supply has been assigned to Westlands and is no longer applied in Broadview. Oro Loma Water District's CVP contractual supply is in the process of being assigned, and only about 90 acres within the District were irrigated in 2005. Mercy Springs contract has been assigned from all but 716 acres, and permanent assignment of that remaining supply outside of

the Northerly Area is anticipated. The balance of Mercy Springs is now owned by PDD and operated as part of the SJRIP. Clearly such changes are likely to have the effect of significantly decreasing drainage produced within the Northerly Area and need to be considered.

L-24-9

Integration of SLDFRE DEIS with Ongoing Activities in the Northerly Area

The DEIS recognizes that Panoche and Pacheco Water Districts are supporting on-farm irrigation efficiency improvements, on-farm maintenance of return flows, district-wide recycling of subsurface drainage, and district and regional projects for reducing operational spills and canal seepage. Appendix C includes some of this information, although it is almost impossible to determine what drainage reduction accomplishments were attributed to such actions in each of the various estimates contained in that Appendix. On the other hand, the DEIS does not recognize that PDD is funding an Initial Study on near-term (e.g. 2006) and long-term expansion (2006-2010) of the existing SJRIP (including planting with salt-tolerant plantings and implementation of water quality and biological monitoring) or that the WRDP has identified and begun activities to secure funding to assist with development of additional reuse areas for the long-term SJRIP expansion (including through CalFed grant applications and efforts to settle long-term drainage litigation), treatment and disposal options for implementation within the next approximately 5-10 years. These plans proceed on a district level, through cooperative management strategies, through the existing Grassland Bypass Project organization, and through the Westside Regional Drainage Plan, the most recent version of which is attached as Exhibit "A."

L-24-10

The final level on which the drainage plans proceed is through integration with Reclamation's SLDFRE DEIS In-Valley Disposal Alternatives, with or without land retirement components.[1] The United States is under court order to provide drainage service and in addition, has contractually committed to do so. Ideally, therefore, the preferred alternative that results from the DEIS will converge with the ongoing district and regional activities into one drainage management plan, based upon adaptive management principles, and therefore the In-Valley Disposal Alternative is the principal focus of the following comments. Nonetheless, given the deadline of 2010 to deal with the scheduled end of the Grassland Bypass Project and the likely need for cessation of drainage discharges, Panoche, Pacheco, PDD and other Grassland Bypass/Westside Regional Drainage Plan participants have no recourse but to proceed separately from Reclamation's SLDFRE and are in fact taking steps to accomplish this goal. The DEIS

L-24-11

[1] Note that for the Northerly Area, the DEIS considers only the retirement of approximately 10,000 acres in Broadview Water District, not retirement of land based on groundwater quality or based on drainage impacts. While CVP irrigation water is likely to be removed from some additional non-San Luis Unit acreage within PDD because of contract assignments, Panoche, PDD and Pacheco's support of the In-Valley Disposal Alternative is based on the concept that the drainage service to be provided to the Northerly Area does not consist of any land retirement proposal that would result in the land becoming non-productive nor in the involuntary removal of the CVP water supply for other project purposes.

L-24-11 cont. needs to acknowledge, not ignore, how it must fit together with these ongoing activities. That includes being as accurate as possible in its presentation of information, thereby avoiding the creation of additional controversies or barriers for San Luis Unit contractors in related venues, such as expansion of the SJRIP. Given the environmental challenges and unknown mitigation demands for evaporation basins and the acknowledge possibility that treatment other than through biological processes may develop, the DEIS needs to more clearly state that the final

L-24-12 treatment and disposal options may be changed based upon adaptive management and following site-specific environmental review.

Thank you for the opportunity to present these comments. We appreciate that preparation of a document like the SLDFRE DEIS is an enormous task and appreciate Reclamation's ongoing efforts to timely conclude this process.

Very truly yours,

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By 
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General Comments

L-24-13 GC1: Panoche Water District, Panoche Drainage District and Pacheco Water District (jointly referred to as "Districts") support inclusion of the expanded reuse, treatment and disposal elements for the Northerly Area in the analysis of the alternatives for In-Valley Disposal in the San Luis Drain Feature Revaluation ("SLDFR") Draft Environmental Impact Statement ("DEIS") Those same elements are included in the Westside Regional Drainage Plan (see Exhibit A), which the Northerly Area districts agree can provide needed regional drainage service and can be implemented from a political standpoint, however preferable out-of Valley solutions may be. The actual features analyzed by Reclamation, including biotreatment of selenium and evaporation basins, serve to provide a "worst case" analysis. The document should more clearly indicate that treatment and disposal mechanisms that have fewer environmental effects are under development and

L-24-14 final options will be selected, in time to be implemented through Reclamation's plan. The specifics for treatment and disposal in the SLDFR Alternatives should be revised through such adaptive management following site-specific environmental reviews.

GC 2: The selection of 2001 to define existing conditions results in outdated information compared to actual existing conditions. This is particularly true of the information utilized concerning the status of the existing reuse project in the Northerly area, concerning the status and effects of the Grassland Bypass Project, and concerning water quality data. Updating this information would provide a more accurate assessment of the

L-24-15 costs and effects of implementing a preferred alternative. If Reclamation does not intend to change the gross assessment level it is using in the DEIS, at a minimum the disconnect between the 2001 baseline utilized and current data must be expressly acknowledged and the more current information disclosed. Again, the effect on the comparative analysis for the Northerly Area and for the In-Valley Disposal Option is the same as discussed in comment GC3 below—adverse impacts of the No Action Alternative are overstated, and beneficial impacts of the In-Valley Disposal alternative compared to No Action are overstated as well.

GC3: The ("DEIS") No Action Alternative assumes that actions will be taken to meet future regulatory requirements, such as 2010 selenium objectives in Mud Slough North

L-24-16 that likely can be met only by terminating all discharges from the Northerly Area into Mud Slough North. Reclamation has acknowledged the local regional planning efforts such as the Westside Regional Drainage Plan, but does not regard its implementation as "reasonably certain," and therefore discounts that there will be **any** significant increases in district or on-farm actions to manage drainage after 2010. While narrow definitions of "reasonable certainty" can be used to exclude activities that are not fully funded, it is also not reasonable for the DEIS to assume that, but for implementation of a SLDFR alternative, water users and districts charged with meeting regulatory requirements will stop their current course of action and investments so that they do nothing while drainage builds up in their soils, resulting in adverse environmental effects. The combination of

L-24-16 cont.

such assumptions and the outdated baseline for existing conditions makes the analysis inaccurate. As a result, the effects conclusions concerning the No Action Alternative overstate possible adverse effects as compared to the Action Alternatives and also overstate the benefits of implementing the Action Alternatives as compared to No Action. More information on the current conditions and ongoing plans for local regional actions on drainage should be provided . Also see GC-4.

L-24-17

GC-4: Text sprinkled through the document acknowledges that the analysis provided is extremely "conservative," as well as a recitation of the uncertainties involved in the modeling on which effects conclusions were based. However, the DEIS needs additional work to be more accurate where possible. It should also contain discrete subsections in the Executive Summary and in the introduction of the major sections that prominently and clearly indicate the conservative nature of the projected effects, the overstated effects in the No Action Alternative, and the uncertainties of the groundwater and selenium bioaccumulation modeling performed for the DEIS. This will fully disclose what the document does and does not do and will assist readers in understanding that these conclusions are not generally applicable science and do not predict the environmental consequences of site-specific implementation or conditions that will result from other projects or actions.

L-24-18

GC 5: In addition to the issues described above, the "No Action" assumptions in various chapters of the DEIS are not completely consistent. The assumptions for what actions will or will not be taken under No Action conditions in the different analyses contained in Section 6 are not internally consistent and also are not consistent with the balance of the document (See Page 6-14 Comment).

L-24-19

GC 6: In Section 8, "Selenium Bioaccumulation" of the SLDFR DEIS a model is created that develops a generalized, worst-case analysis for selenium bioaccumulation at evaporation basins and also for the Bay-Delta Region. The report strongly indicates that it is not possible to generalize selenium bioaccumulation effects in disparate areas but still purports to do so. We are attaching as Exhibit B to these comments the report and analysis prepared by Dr. Thomas Mongan addressing both the nature of selenium in the only discharges that reach the Delta from the San Luis Unit at the present time, describing the speciation and distribution of selenium from that source. These data and analyses suggest that selenium from the San Joaquin River is not a major contributor to elevated food chain selenium in the Delta or Bay.

L-24-20

GC-7: The Tables included in Sections 2 and 7 need significant revision. The categories under consideration are sometimes amalgamations of various significance criteria such as those in 7.2.1, pages 7-11 and 7-12. Other categories purport to summarize conclusion relating to "individual effects" and "population level effects." However, much of the effects discussion in Section 7 and Section 8 is general and not clearly tied to support conclusions in these various categories. For example, there is no discussion anywhere

about what constitutes "population level effects." Next, many of the cells contain flat statements such as "significant adverse effect." The text analyzing effects never concludes that there will be a significant adverse effect, and the supporting information at most states that the In-Valley Disposal Action "could have a significant adverse effect" and in many cases, instead states that the action with appropriate management is "unlikely" to have a significant effect. Although the initial column is titled, "Affected Resources and Areas of Potential Effects," the bald statement of "significant adverse effects" in other columns will not likely be interpreted as qualified unless those actual entries state, "Possible adverse effect." Where the "mitigation" is incorporated in construction requirements as standard practice, such as pre-construction surveys or management actions to control noxious weeds, those measures should simply be discussed as part of the proposed action to distinguish them from any after-the fact mitigation requirements. Thus, the Tables tend to oversimplify and thereby overstate the expected adverse significant effects of the proposed No Action and Action alternatives. Also, cells with information based on Section 8 modeled conclusions need to have footnotes explaining the uncertainties associated with the analysis. Unless these tables are systematically revised, they should be eliminated because they do not portray an accurate view of the study's conclusions and yet will be made into overheads and utilized as authoritative for years to come. **See Comments on Table 2-13 and 7-6 and 7-7.**

L-24-20 cont.

GC-8: Appendix M, the February 2005 Draft Fish and Wildlife Coordination Act Report prepared by US Fish and Wildlife Service has multiple significant problems. It states that the evaluation that the draft Report is supposed to make cannot be completed without a large amount of additional information. Therefore, the final report must be carefully scrutinized to assure that it indeed meets the requirements under the Fish and Wildlife Coordination Act for the proposed actions. **See Comments on Appendix M below.**

L-24-21

Specific Comments

The balance of these comments is directed to providing corrected or updated information relevant to the Northerly Area and the In-Valley Disposal alternative and to pointing out areas where the SLDFR DEIS needs clarification or correction.

Section 1 Comments

Page 1-6, ff: Table 1-2 identifies Northern San Luis Unit Districts' "Area Needing Drainage Service" as 45,000 over the 50-year planning horizon. The document should identify Appendix C, Table C1-3 as the source of the 45,000 acre figure and in addition, the figure should be adjusted downward to 29,000 acres. **See Page 2-12 Comment.** Furthermore, actual no-action conditions will include significantly increased acreage on high-efficiency irrigation systems, reducing the number of drainage-impaired acres projected in the DEIS, so the number will be smaller still. The same types of comments concerning actual no-action conditions are true for at least a portion of the Northerly Area

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Outside of the San Luis Unit, much of which no longer receives CVP water. **See Page 2-12-Comment**. All of this illustrates the inaccuracy created by utilization of a 2001 existing conditions baseline that overstates the drainage impaired lands and therefore costs of implementing alternatives, and also that overstates potential adverse impacts of the No Action alternatives and both adverse and beneficial impacts of In-Valley Drainage Disposal.

L-24-23

Page 1-9, Section 1.3.2: Panoche strongly agrees with the assumption that existing CVP and local supplies would continue to be available according to existing contracts. This is the correct assumption and provides the appropriate link between the SLDFR DEIS analysis and analysis that will be performed for San Luis Unit Long-Term Renewal Contracts.

L-24-24

Page 1-10, 1.3.2: The DEIS states that sizing of drainwater collection, reuse, treatment and disposal facilities were based on implementation of various cost-effective actions. One "drainwater reduction measure" is recycling. In Panoche's experience, drainwater recycling is implemented both on farm through return systems and at the District level, but such actions are to manage drainage after it has been produced, whereas such actions as systems to increase irrigation efficiency and the elimination of seepage are drainage reduction measures.

L-24-25

Page 1-11, 1.4.1: This section needs consistent terminology. The Grassland Bypass Project involves local activities to meet selenium and salinity load reductions during the term of the Agreement for Use of the San Luis Drain, the current version of which expires December 31, 2009. Some of the local activities include development and implementation of a 4,000-acre reuse area, operated by Panoche Drainage for the benefit of Grassland Bypass Project participants and commonly referred to as the San Joaquin River Improvement Project. Continuation of the SJRIP is a component of the Westside Regional Drainage Plan. The EIS states that continued development and use of the reuse area are in the No Action alternative. Expansion of that area, treatment and disposal are treated as part of the action alternatives. For clarity, these should be referred to as future elements of the Westside Regional Drainage Plan, not of the "Grassland Bypass Project" as stated in this part.

L-24-26

Page 1-13, 1.4.5: The most recent iteration of the updated Westside Regional Drainage Plan prioritizes actions and updates cost estimates and timelines and is attached as Exhibit A to these comments. As indicated on Exhibit A, Pacheco is a stakeholder participating in the Plan. Again, because this is an ongoing local project it will be implemented as funding becomes available, based upon independent environmental review where appropriate. Accomplishments under the WRDP prior to finalization and implementation of drainage service under the SLDFR DEIS will reduce costs and change the comparative impacts analysis between the No Action and the In-Valley Disposal alternatives.

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Section 2 Comments

L-24-27

Page 2-1, 2.2: The No Action Alternative is described as the "future without project" alternative that includes individual farmers and districts making limited changes in drainage management. 2.2.1 on page 2-2 states that "Water districts and landowners would continue to address drainage problems within institutional, regulatory and financial constraints currently in effect." No Action therefore projects without-Project drainage conditions as largely frozen at 2001 levels, except that the drainage outlet is eliminated as of 2010. While we strongly disagree that it is an appropriate assumption, **the DEIS needs to much more clearly state that its key No-Action assumption for the Northerly Area is that the drainage that continues to be produced will be managed by over-saturating irrigated land and the existing reuse area. Such a direct statement would make Reclamation's analysis of** various adverse environmental effects far more coherent and understandable than it is at present.

L-24-28

The central problem with No Action is the with the extremely constrained future management actions assumed in the DEISFuture institutional, regulatory and financial constraints will continue to propel other actions for drainage management by local entities and individuals and in particular, local implementation of the Westside Regional Drainage Plan, whether or not the SLDFR actions are implemented. The No Action Alternative should be revised to take into account reasonably identifiable activities within the Northerly Area or the text should expressly acknowledge that the No Action Alternative is constrained to fit the structure of this DEIS, that and conclusions drawn about the comparative effects of various actions vs. No Action are likely overstated and that the conclusions are not valid as tools for assessing expected effects of such actions as renewal of contracts, expansion of the existing Northerly (SJRIP) reuse area, or implementation of the Westside Regional Drainage Plan., all of which require more site-specific analysis based on current conditions.

Page 2-2, 2.2.1.1:

L-24-29

First paragraph, final two sentences should read: "Under the current Use Agreement, expiring December 31, 2009, the Grassland Area Farmers must meet their selenium (SE) load requirements within 20 percent of the annual and monthly targets or pay a fine. If the annual target is exceeded by more than 20 percent, the Use Agreement can be terminated and allow no further discharges." The Use Agreement does not terminate because of monthly target exceedance so long as the annual targets are not exceeded by 20%, absent evidence of unacceptable adverse environmental impacts from the monthly exceedance.

L-24-30

Numbers in the first bullet should be updated and corrected to show that 3,100 of the 4,000 acres have been planted; subsurface drainage systems have been installed on 1,200

L-24-30 cont.

planted acres and 465 additional acres have existing subsurface systems but have not been planted. The third bullet should show that the reuse facility in its current condition can reduce drainage discharge needs by 8,200 AF (9,100 AF applied, 1,000 AF discharged).

L-24-31

The DEIS has constructed the No Action Alternative as preventing discharge by the GDA after 2009. The Mud Slough North water quality objective for selenium in critical years is tantamount to a prohibition of discharge, should the compliance schedule remain unchanged, so the assumption is logical for No Action. However, there are alternatives outlined in the Use Agreement that could lead to a different discharge point and neither Reclamation nor the Grassland Area Farmers have concluded that there is no possibility of a future Use Agreement or discharge of drainage.

L-24-32

Page 2-5, 2.2.1.1, first paragraph: Reference to the GDA's In-Valley Treatment/Drainage Reuse Facility is confusing because there is no other mention of that Facility. For consistency, this should be termed either the "existing Northerly Area reuse facility" or the "San Joaquin River Improvement Project." The local plan for future expansion, treatment and disposal is the Westside Regional Drainage Plan, The remaining components of the WRDP include land acquisition of 200 acres, additional drainage systems for 2,300 acres, and the installation of treatment and disposal facilities. Again, this implementation of portions of the WRDP have already begun, so completely ignoring it in the No Action is not reasonable even though funding and technology are not yet final. Note that the sizing of features in this section is inconsistent with the larger sizing included in Appendix C (see comment on page 2-12).

L-24-33

Page 2-6, 2.2.1.3: In the second bullet, increased on-farm system improvements are not limited to Westlands. Significant expansions of drip and other high-efficiency technologies are ongoing in Panoche and Pacheco Water Districts. The fifth bullet acknowledges that drainwater reduction measures will be used at current or increased levels and include seepage reduction, drainwater recycling, shallow groundwater pumping, and shallow groundwater management. **See page 6-14 Comment regarding inconsistency in Section 6 No Action assumptions.**

L-24-34

Page 2-8, 2.3.2.2: The Firebaugh Sumps feature as a proposed common element is confusing. The Firebaugh Sumps are features of the Delta-Mendota Canal, not part of the San Luis Unit. The Delta-Mendota Canal is operated to in large part to deliver to the San Joaquin River Exchange Contractors their substitute supply of water, exchanged for San Joaquin River water benefiting the Friant Unit. The Delta-Mendota Canal is a central feature of the Central Valley Project authorized and constructed before the San Luis Unit facilities. Analysis of a disposal option for drainage collected through these sumps needs to be conducted, and given the location of the sumps, is logically addressed as part of this study. However, sump operation is not a San Luis Unit feature or responsibility and should not be included as a "drainage service" feature that is reimbursable by San Luis

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Unit Contractors. Furthermore, the EIS does not make at all clear whether or not the projected 1,100 AF/year drainage added to the burden of the Northerly Reuse Area is included in the sizing and in the impacts analysis. There needs to be a separate analysis of the incremental cost and impacts of disposing of this additional water because it is a proposed solution to a CVP-wide operational issue and is not an obligation of the San Luis Unit or of only those San Luis Unit lands in the Northerly Reuse Area.

L-24-36

Page 2-8, 2.3.2.3: The concept of reuse facilities serving as an underground regulating reservoir needs clarification. In the Northerly Reuse Area, crop demand from mid-November through January is extremely low. While there is virtually no irrigation during this period, rainfall and seepage from the San Luis Canal, for example, are collected through the drainage system and produce water that must be managed if there is no available discharge. Thus, small applications to the reuse area could increase water in the soil profile for a 2-3 month period of time until drain sumps in the reuse area can be turned on. At that point the water pumped out through the tile system will be applied to meet crop demand, along with irrigation from additional drainwater sources developed in the service area during the irrigation season. Due to the limited application and limited timeframe, this storage will have minimal effects on any resource. If the EIS intends some other form of underground regulating reservoir or proposes construction of some different system, this needs to be spelled out and analyzed.

L-24-37

Page 2-12, 2.3.2.3, Northerly Reuse Area: The DEIS states that the expansion area for the Northerly Reuse Area is "up to 4,300 acres." As noted above, the WRDP current sizing is 2,200 acres of expansion area. The DEIS indicates that the Northerly Reuse Area needs to serve 81,000 acres. Table C1-3 in Appendix C should be updated because this figure is too large, and Panoche believes that a more accurate number is 63,000 acres. This would include 29,000 acres combined in Panoche (21,000, in lieu of 27,000), Pacheco (5,000) and Charleston (3,000) within the San Luis Unit, but not the 10,000 acres in Broadview that no longer receive CVP contract water. The 6,000 acres of lands in Panoche Drainage District outside the San Luis Unit should be reduced to approximately 1,400 because CVP contract water is no longer applied in Mercy Springs or in Oro Loma Water Districts. These figures need to be carefully reviewed and the sizing updated throughout.

L-24-38

Page 2-16, Table 2.4-1: The sizing changes outlined above need to be incorporated into Table 2.4-1.

L-24-39

Page 2-20, 2.4.1.2, Selenium Biotreatment: The Northerly Area flow rate will likely be significantly lower than 4,428 AF/yr. Panoche's assumption for the Northerly area is that the flow rate to treatment will be 3,350 AF/year once full on-farm and in-district source control measures have been implemented. See Comment on Appendix C, Page C-7.

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L-24-40 Page 2-24, 2.4.2: Panoche strongly supports the adaptable approach outlined by Reclamation in this section. However, this small section gets lost in the weight of the pages. The EIS should more prominently and repeatedly state that drainage needs may change and that biotreatment and evaporation is a surrogate for future treatment alternatives. Biotreatment has a poorer Se removal capability and may create more potential environmental risks than RO-based treatment modalities, and the testing results may not in fact yet indicate that biotreatment can successfully treat high volumes of drainage at the required rates. Work continues on evaporation basin alternatives, so in light of regulatory difficulties, potentially high mitigation costs, and the ability to utilize reuse areas for a period of years without permanent adverse effects to soil or water quality before treatment and disposal is required, the EIS should emphasize and that final modalities will be selected and implemented following site-specific environmental review.

Page 2-28, 2.5.1.1: **See Page 2-24 Comment.**

Page 2-73:2.11.3: **See Page 2-24 Comment.**

L-24-41 **Page 2-85, Table 2.13-2: See GC7.** This table purports to list environmental effects of the alternatives compared to the No Action Alternative. A significant problem is that the conclusion as compared to the actual no action alternative is overstated, at least for the In-Valley Disposal Alternatives, because the No Action alternative excludes actions that will take place to manage drainage in almost the exact same way as the In-Valley Disposal Alternatives.

L-24-42 A second major problem is that in presenting the summary, Reclamation draws conclusions without including appropriate qualification (e.g., "possible significant adverse effect" vs. "significant adverse effect," in some instances based upon an overstated Selenium Bioaccumulation analysis. If the qualification on whether or not significant effects may occur is intended to be covered by the first column title, "Affected Resource and Area of Potential Effect," that is not clear enough and readers will be mislead into thinking the tables are stating the such effects will occur.

L-24-43 Also, since Section 8 does include assessment of effects, those should be included in relevant tables in Sections 2 and 7, rather than cross-referenced, although the caveat regarding the very conservative analysis in Section 8 must be footnoted or otherwise pointed out.

L-24-44 Page 2-86, Table 2.13-2: The entry under "In Valley Disposal," Significant adverse effects to San Joaquin kit fox and bald eagle from construction or operation of project facilities/Section 7 consultation required," is not documented or justified. At most the conclusion should be "possible significant effects."

L-24-45 Page 2-87, Table 2.13-2: The entry under "In Valley Disposal," "Individual-level effects to federally listed special status species due to Se bioaccumulation in the San Joaquin Valley/Significant adverse effects to San Joaquin kit fox/Section 7 consultation

L-24-45 cont. required," is not documented or justified and is based upon a worst case scenario analysis that is over generalized. At most the conclusion should be "possible significant effects," which is the appropriate conclusion to trigger consultation.

L-24-46 The entry under "State Listed Species, Adverse effects resulting in take of a listed terrestrial species or loss, degradation , fragmentation or disturbance of its habitat(s)" in the In-Valley Disposal column, "Significant adverse effects to San Joaquin kit fox, Swainson's hawk, peregrine falcon, bald eagle, California black rail, western yellow-billed cuckoo, and burrowing owl, with mitigation – no significant effect": At most the conclusion should state "possible significant effects, with mitigation – no significant effect."

L-24-47 Page 2-88, table 2.13-2: Entry for Adverse effects resulting in take of a listed freshwater aquatic/wetland species or loss, degradation, fragmentation or disturbance of its habitat(s) in the In-Valley Disposal column, "Significant effect to giant garter snake and California red-legged frog from construction activities, with mitigation= no significant effects:" At most the conclusion should state "possible significant effects, with mitigation – no significant effect." Note that the text concludes that red-legged frog is noted not to be located in the Project area and that the GGS habitat is located to areas adjacent to Mendota Pool. Thus, for the Northerly Area, there is no documentation of likely effect on either species from implementing the In-Valley Disposal Option. There should be a text discussion of why the Project would or would not affect these species that are located outside the Project area.

L-24-48 Entry for Individual-level effects to state-listed special status species due to Se bioaccumulation in the San Joaquin Valley, in the In-Valley Disposal column, Significant adverse effects to the American peregrine falcon, Swainson's hawk, greater sandhill crane, and San Joaquin kit fox, potentially unavoidable": The conclusion is not documented or justified and is based upon a worst case scenario analysis that is over generalized. At most the conclusion should be "possible significant effects, potentially unavoidable."

Section 5 Comments

L-24-49 Page 5-4, Section 5.1.2, Selenium: The comment that Se concentrations exceeded water quality criteria ignores that fact that the Basin Plan and the Waste Discharge Requirements for the Grassland Bypass Project have a compliance schedule to meet water quality objectives, and the levels in the compliance schedule have not been exceeded.

L-24-50 Page 5-15, Section 5.1.2, Salinity, first bullet on page: This bullet is over generalized and therefore extremely confusing. First, the role of sourcewater in adding salts and selenium to the San Joaquin River is misstated. While all irrigation supplies have salt in the water,

L-24-50 cont.

the supply from the Central Valley Project does not contribute above normal amounts, and most of the Northerly Area districts prohibit discharges of tailwater, so the direct contribution of sourcewater to discharged salts is very limited. Stormwater runoff (sheetflow) from the Northerly Area does not necessarily contribute any more salts than storm runoff from other irrigated areas reaching the San Joaquin River. Salts in source water contribute to saline subsurface discharges through the Grassland Bypass Project, which all alternatives treat as terminating after 2009. Concerning selenium, irrigation supplies in the Northern Area do not have high selenium levels. In the Panoche and Pacheco areas of the San Luis Unit, irrigation supplies are almost exclusively CVP surface supplies, generally below 2 ppb Se. On the other hand, stormwater flows from natural creeks or high flows from storm events causing unmanageable discharges from sumps may indeed continue to add selenium to natural watercourses under virtually all alternatives, including existing conditions.

L-24-51

Page 5-15, Section 5.1.2.1, San Joaquin River – Merced River to Crows Landing: Again this section talks about exceedance of the 5 ug/l 4-day running average. This neglects that fact that there is a compliance schedule to meet this objective.

L-24-52

Page 5-17, Section 5.1.2.2, San Joaquin River at Vernalis: The discussion identifies low dissolved oxygen as a problem in the section discussing discharges from the GDA. If this parameter is going to be mentioned, the text needs to point out that the primary cause is the geometry of the Stockton Deepwater Ship Channel and discharges from nearby wastewater treatment plants. While the Regional Board's proposed TMDL also assigns responsibility to upstream discharges of nutrients or algae, there is no demonstrated linkage to the GDA and studies to determine the sources, quantities and effects of upstream contributions of algae and nutrients are only now getting under way.

L-24-53

Page 5-57, 5.2.3, No Action Alternative: This discussion of the effects on surface water of the No Action Alternative is consistent with the analysis that **excludes** local actions currently in the planning and environmental review stages. The assumption is **inconsistent** with ongoing local planning and environmental review efforts. Because of these local actions, the effects analyzed for surface water resources below are theoretical and overly conservative. Preferably, the DEIS should incorporate more reasonable no action assumptions. At a minimum, the DEIS must provide the caveat that because of the constrained assumptions, the conclusions re impacts do not apply in other contexts, such as contract renewal, to depict conditions that will exist if federal drainage service is not provided (see GC-2).

L-24-54

Page 5-58, 5.2.3.2, Operational Effects: This discussion talks about the effects of groundwater quality and increased salinity and selenium from "unplanned uncontrollable seepage discharges." The basis for predicting such discharges is not explained and must be. Further, if the "no action" discussion is for cessation of discharge from the GDA, it seems highly unlikely that seepage would cause increases in the amount of salts or

L-24-54 cont. selenium over and above the amounts discharged under the Grassland Bypass Project, which is the existing condition. Finally, it is once again unrealistic to conclude that there would not be ongoing local actions to manage drainage so as to avoid impacts to groundwater quality that could lead to the projected seepage. **See Page 5-57 and 6-14 Comments.**

L-24-55 Page 5-61, 5.2.4.1, Construction Effects: There is no support for the conclusion that in the Northerly Area construction effects could increase sediment in local creeks and waterways or soil erosion due to land disturbance and is not clear that the mentioned permit requirements would even apply. The analysis also is inconsistent with the analysis of the Aquatic and Wetland Resources effects of construction of In-Valley Disposal, which concludes that construction will take place on disturbed agricultural parcels, not creeks or waterways (Page 7-21, 7.2.4.2).

L-24-56 Page 5-61, 5.2.4.2, Operational Effects: While the In-Valley Disposal alternative will have the beneficial effects described, the No Action Alternative also assumes the termination of subsurface drainage discharges after 2010, with the same beneficial effect. **See Page 5-57 and 5-58 Comments.**

L-24-57 Page 5-129, 5.2.12, Cumulative Effects: **See Comment GC3 and Page 2-1, 2.2.** The assumption that the Northerly Area will do nothing to manage drainage, beyond current levels, but will end discharges by 2010 is inconsistent with the statement:" For future projects, such as implementation of TMDLs for Se in the San Joaquin River Basin, it was assumed that required actions needed to comply with discharge requirements would be taken under both the action and no action alternatives."

L-24-58 Page 5-129, 5.2.12.1, Development of Total Maximum Daily Loads for Salt and Boron: Again, the analysis assumes the Grassland Area Farmers will participate in the TMDL, which will require local actions that will not be limited as assumed in the No Action Alternatives (See Comment GC 3). Furthermore, the DEIS needs to point out the uncertainty of projecting effects where there is no final TMDL in the Basin Plan and no implementation schedule or strategy. Explain how and why load allocations in the draft TMDL are included in the San Joaquin River model baseline—do you mean existing CalSim modeling, or something developed for this Project?

L-24-59 Page 5-132, 5.2.13.2, In-Valley Disposal Alternative: In this paragraph summarizing Environmental Effects, the DEIS claims a beneficial effect compared to No-Action because water from the GDA will be disposed of at the facilities. The No-Action Alternative also assumes no discharge from the GDA, so there is no difference in effect.

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L-24-59 cont. **Page 5-136, Table 5.2-13. Improper conclusions of significant beneficial effects from In-Valley Disposal compared to No Action.** See Page 5-132 Comment.

Section 6 Comments

L-24-60 This Section is not well presented and does appear well integrated into other portions of the DEIS in terms of the numbers used for analysis and of many of the assumptions. One intrinsic problem is the inadequate explanation of what No Action apparently means, e.g.,

L-24-61 oversaturation of irrigated land and existing reuse area by recycling to hold back all drainage that is produced (See Page 2-1 Comment). If that is the assumption, it needs to be clearly and prominently stated to provide context. A second issue is the No Action Alternative's exclusion of local/regional continuing activities to manage groundwater in

L-24-62 the existing Northerly Reuse Area serving the Grassland Drainage Area (Northern Area) after 2009 that are planned for implementation by local agencies (See Exhibit A). The exclusion causes the conclusion of adverse effects from the No Action on groundwater or soils to be overstated. Apart from that, the effects of the No Action within the GDA on groundwater and soils are not well explained in the Section 6 text. For example, as best we can tell, the only information on "uncontrolled discharges" relates to an assumed 15,400 AF/year mentioned in Appendix C on page C-13. Appendix C itself gives no explanation but refers to a different document not readily available to the reader, and the

L-24-63 text just needs to state what this represents. We understand the sources to be Aqueduct seepage, underground flows from the Coastal Range, and upslope activities, none of which arise from irrigation in the Northerly Area. If we are correct, then such flows are included both in existing conditions and No Action conditions. Therefore, if a change in the No Action is cessation of existing subsurface discharges in 2010, it seems highly unlikely that the uncontrolled flows themselves or any increment of seepage they cause could increase drainage production or worsen downstream conditions over existing conditions that include both subsurface discharges and the "uncontrolled flows." Furthermore, this reference to "uncontrolled discharges," appears to be the only basis for certain other conclusions on adverse environmental effects in other parts of the document, unjustifiably making it appear that but for the Project, serious environmental consequences will result to groundwater and from groundwater seepage once the Grassland Bypass Project expires at the end of 2009. The impact is doubly damaging

L-24-64 since, without explanation of the nature of the "uncontrolled discharges," many readers will assume that such adverse effects originate with Northerly Area irrigation. The "uncontrolled discharges" assumption needs to be clarified throughout, Appendix C needs to be revisited as to whether or not the assumption is correctly carried through, and **any effects** attributed to the "uncontrolled discharge" throughout the document need to be either corrected or explained.

L-24-65 Page 6-14, 6.2.2, No Action Alternative: The assumptions for the No Action Alternative for the GDA (Northerly Area) set out in the text do not match the assumptions in any other portion of the No Action analyses: "Irrigation System improvements and practices

L-24-65 cont. on farmed lands in the GDA and Westlands remain the same as existing conditions." That is not correct, since the No Action elsewhere assumes termination of existing discharges in 2010. Also, Footnote 2 on Page 6-14 states "In the Northerly Area, the reported existing condition recharge rates were increased to 0.04 foot/year to include seepage from

L-24-66 unlined canals." Is the seepage from unlined canals different from the "uncontrolled discharge"? See preceding Comment on Section 6. Further, the No Action Alternative chapter assumes ongoing or increased drainwater reduction, recycling and groundwater management, as well as district actions to reduce seepage. See pages 2-2 and 2-6 and Comment for page 2-6. Therefore, the assumption of increasing recharge rates for seepage for No Action is not explained and does not appear to be valid. This is especially

L-24-67 true when footnote 2 for Existing Conditions, Appendix E4, Page E4-5 reduces rates due to seepage reduction. Efforts to get clarity on this issue by a careful review of Appendix C proved fruitless. The assumptions for drainflow do not seem to be the exact same assumptions used in the drainwater reduction measures/drainage system buildup sections (see, e.g. C-13 vs Table C1-12 footnote, etc).

L-24-68 Page 6-15, 6.2.2, No Action Alternative: The numbers utilized are incorrect. The existing reuse facility is 4,000 acres, not 3,000 acres, has been in operation since 2000, and currently can reduce drainage discharge needs by 8,200 AF, not 7,200 AF **(see Page 2-2, 2.2.1.1 Comment)**. The problem with the inclusion of 14,000 acre feet of what it calls "uncontrolled discharge not managed by the Grassland Bypass Project" is discussed under the Section 6 Comment above. Why is this 14,000 acre feet, when Appendix C uses 15,400 AF? Is this something else? .

L-24-69 Page 6-16, In-Valley Disposal Options, second bullet: seepage reduction projects are projected by the Grassland Area Farmers to decrease water table recharge by up to 12,000 AF/year over this planning horizon, rather than only 4,200 AF.

L-24-70 Page 6-17, In-Valley Disposal Options, final bullet and page 6-18, third, seventh and last bullets on page: The existing 4,000-acre Northerly Area reuse facility is already in operation; no other reuse facilities will be online in 2005, so the assumptions of reuse in 2005 appear erroneous.

L-24-71 Page 6-17, 4th bullet on page: Panoche anticipates only about 1,100 possible additional acres of tile drain systems. Pacheco is fully tiled. Approximately 1,750 acres in Mercy Springs Water District and Oro Loma Water District are no longer receiving CVP contract water supplies and no new tile drain systems are anticipated in those areas. Therefore, unless the authors are projecting 4900 additional tiled acres within the Firebaugh service area (which includes Camp 13); the projection of 6,000 acres of new tile systems is too high.

L-24-72 Page 6-35, 6.2.12.1 No Action Alternative: A general review of Section 6 and its appendices supports the conclusion that the environmental effects set forth in the "Effects

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L-24-72 cont. Summary" for soil salinity on may well overstate the effects of No Action, especially compared to data collected in Westlands that suggests no changes over the past 18 years.

Section 7 Comments

L-24-73 Page 7-11, 7.2, Environmental Consequences: The section states: "It is assumed that if a project feature or activity affects a mappable area of a given habitat type or vegetation community, the individual species or guilds of species that commonly use that habitat would also be affected." **If this is intended to state the criteria for determination of "population level effects," that must be clearly stated because there is no other such definition of population level effects in the text.** The text acknowledges that **there were no detailed surveys to determine whether or not particular species, populations or occupied habitats exist in the proposed project areas. Therefore,** Reclamation needs to make clear that any conclusions contained in the DEIS that Action or No Action Alternatives will have significant environmental effects is a gross level, worst-case evaluation and that site-specific work may well indicate that no such effects, for example, from the In-Valley Disposal Alternative or the Westside Regional Drainage Plan, will occur.

L-24-74 Page 7-11, 7.2.1, Evaluation Criteria: Add qualifying statements at end of introductory paragraph: "Any conclusions contained in the DEIS that Action or No Action Alternatives could have significant environmental effects is an appraisal level evaluation. Site-specific assessment would be required to determine whether or not any such significant adverse effects are likely to occur.

L-24-75 Page 7-14, 7.2.3.1, Terrestrial Resources: The No Action Alternative description of the existing Northerly Area reuse facility should be updated to show that it is a 4,000-acre facility, of which 3100 acres are currently developed with a current inflow capacity of 9,100 AF/year.

L-24-76 Page 7-16, 7.2.3.2: The next to last paragraph in this section starts by talking about cessation of drainage discharges from the GDA, which is assumed for the No Action Alternative. The final sentence states that "unmanaged drainage flows of poor quality would "degrade aquatic habitat conditions." Either the flows from the Grassland Bypass Project cease or they don't. The final sentence should be eliminated, along with any conclusion of adverse effects from such flows. If this is referring to assumptions about unmanaged seepage, **see Section 6 and Page 6-14 Comments.**

L-24-77 Page 7-17-7-21, 7.2.4.1, In-Valley Disposal Alternative, Terrestrial Resources: These sections generally analyze factual information in a common sense manner. **See comment on Page 8-15, 8.2.2.5 concerning lack of explanation of purported impacts from soil Se concentrations**. Also, the cross-references to Section 8.2.2.1 regarding selenium bioaccumulation effects from evaporation ponds introduce far more theoretical and

L-24-77 cont. overstated impacts, than the factual analysis included in Section 7, and this discrepancy should be noted each time it occurs.

L-24-78 Page 7-21 and -22, 7.2.4.2, Aquatic and Wetland Resources, Reuse Areas and Evaporation Basins: The lead-in sentence states: "Construction of the proposed reuse facilities and evaporation basis could result in a significant loss of natural aquatic or wetland habitat." This should be changed to indicate that it is **unlikely** that construction could result in such significant loss, given the significance criteria listed in 7.2.1.2 on page 7-12 and the balance of the discussion. The text consistently points out that reuse areas will be on existing agriculturally developed areas where aquatic resources are not present and the area is large enough to permit sitting to avoid wetland impacts.

L-24-79 Page 7-22, 7.2.4.2, Operation Effects, Reuse Areas: **See comment on Page 8-15, 8.2.2.5 re impacts from soil Se concentrations**; Evaporation Basins: the reference should be to Section 8.2.4.2, which discusses evaporation basins.

L-24-80 Page 7-23, 7.2.4.3, Special Status Species: We note the final sentence in the first paragraph: "For those Federally listed species with "may adversely affect" determinations, Reclamation would engage in consultation with the Service under Section 7 of the ESA to identify measures or avoid or minimize potential effects." **This sentence accurately depicts the consultation requirement and also the extent of the likely findings from this level of review and appears to sharply contrast with conclusory statements in Tables 2-13 and 7-6 through 7-13 that flatly state, "significant adverse effects." The Tables should be revised to omit any reference to consultation with the cells of the table and instead to include a footnote, "Consultation to be Requested Where Appropriate" on each page.**

L-24-81 Page 7-24, Table 7-2: See Comment on Page 7-23; change "Effect column" entries for San Joaquin kit fox, Swainson's hawk, American peregrine falcon; Bald eagle; California black rail; Western burrowing owl; Western yellow-billed cuckoo; giant garter snake and California red-legged frog to "May have significant effect; mitigation feasible."

Page 7-24 and 7-24, 7.2.4.3, Construction Effects: The text does a good job of discussing the likelihood of presence, potential exposure and available avoidance mechanisms for the various species.

L-24-82 Page 7-26, 7.2.4.3, Operation Effects: The sentence, "No mappable units of native or sensitive terrestrial habitat types, as identified in the CNDDB (CDFG 2003), would be affected by the In-Valley Disposal Alternative features" is important and should be moved to its own paragraph in the general "Special Status Species" paragraph of 7.2.4.3. It is buried here and doesn't appear to relate solely to Operation Effects. **See Page 8-26, 8.2.4.3 Comment.**

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Second paragraph, first sentence: **See Page 8-26, 8.2.4.3 Comment** re San Joaquin Kit Fox.

Page 7-27, 7.2.4.3: Concerning the first paragraph discussing use of the reuse areas by Swainson's hawk and greater sandhill crane, **see Page 8-26, 8.2.4.3 Comment.**

L-24-83

Page 7-74, 7.2.11, Cumulative Effects: **See GC3 Comment.** The DEIS should disclose that, because the Cumulative Effects include the narrow view of "reasonably certain" future drainage management actions outside of implementation of an Alternative under the SLDFRE, the Cumulative Impacts of the In-Valley Disposal Option and the No Action Alternative are overstated.

L-24-84

Page 7-76, 7.2.12., Environmental Effects Summary: The "Summary of Effects" in Section 7, Biological Resources does not relate cleanly to the rest of that Section. **There is no explanation as to why the comparisons to Existing Conditions is included, and it** is unclear why 2002 is the existing conditions date,, vs. 2001 in the rest of the DEIS. If the DEIS is going make such comparisons, then there must be discussion somewhere in the text of the differences between the effects on biological resources between the Action Alternatives and Existing Conditions. We cannot locate any such discussion. Therefore, at present, there is no explanation or justification in the text for the summary conclusions about differences between existing conditions and the No Action and Action Alternatives for biological resources. The lack of clear analysis is made worse by further summarizing conclusions in Tables 7-17 through 7-13, and then using them for further summarizing in Table 2-13. This happens, for example, on Table 7-7 where the In-Valley Disposal Alternative is characterized as having a "significant adverse effect" on San Joaquin Kit Fox and bald eagle vs. No Action but having a "significant effect" vs. Existing Conditions (e.g., on page 7-95). Since the discussion on No Action specifically states it would have no effect on special status terrestrial species (page 7-77), why does the summary say there will be a "significant effect"? These tables need to be carefully compared to the actual conclusions in the text and only conclusions with supporting information should be included.

L-24-85

Page 7-77, 7.2.12.1, No Action Alternative, Aquatic and Wetland Resources: This analysis is incorrect. **See Page 5-58, 5.2.3.2, Operational Effects, Comment.**

L-24-86

Federally Listed and State-Listed Species Special Status: Because the assumption that No Action means no construction but in fact, implementation of the Westside Regional Drainage Plan will continue, the actual effects of No Action are essentially the same as the In-Valley Drainage Disposal Option.

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L-24-87 Page 7-78, 7.2.12.2, In Valley Disposal Alternative, Terrestrial Resources 4th bullet: Preconstruction surveys and appropriate conservation measures and construction practices should be considered part of the project, rather than listed as mitigation.

L-24-88 Page 7-78, 7.2.12.2, Aquatic and Wetland Resources: The summary discussion of adverse effects to wintering waterbirds is inadequate to explain any population level effects, yet conclusions as to population effects are extrapolated in Table 2.13-2. Even if based on the criterion stated in Section 7.2, such conclusions appear to be entirely speculative. This is a good example of over-summarizing leading to unsupported conclusions.

Page 7-79, 7.2.12.2, Federally and State-Listed Special Status Species. **See GC7. See Comments on Section 8.**

Tables 7-6 and 7-7: See Comment GC7 and Page 7-76, 7.2.12 Comment on need to revise Tables.

L-24-89 Page 7-93, Table 7-6, "No Action Alternative Compared to Existing Conditions/Aquatic and Wetland Resources:" There is no justification anywhere in the document for the statement: "Water quality of refuge water in supply channels would deteriorate after December 2009." The No Action Alternative assumes that discharges from the Grassland Bypass Project would cease after December 2009 and nothing in this DEIS supports the conclusion that existing conditions would worsen by that cessation. **See Page 5-58, 5.2.3.2 and Section 6 Comment.**

L-24-90 Page 7-94 thru 7-96, Table 7-7 (In-Valley Disposal vs. No Action and vs. Existing): **See Comments GC7.**" Since the No Action alternative assumes that there would be no development of treatment or disposal facilities on existing reuse areas and current conditions would have to include the existing facilities (which should be reflected as of 2005, not 2001), why would the construction of the In-Valley Disposal Option result in "Significant adverse effects as compared to No Action, but only "adverse effects" compared to Existing Conditions"? The same unexplained conclusion is drawn in the rows for Federally listed species: "Adverse effects resulting in take of a listed *terrestrial species* or loss, degradation , fragmentation or disturbance of its habitat(s) and in State listed species: "Adverse effects resulting in take of a listed *terrestrial species* or loss, degradation , fragmentation or disturbance of its habitat(s). There is no explanation anywhere in the document for such conclusion. **As noted in GC7**, it is confusing to refer to Section 8 separately, and any conclusions regarding selenium bioaccumulation effects should be wrapped into the same tables, with appropriate caveats for the uncertainties in the studies performed. Finally, under Federally Listed Special-Status Species, the table should not include the entry, "Section 7 consultation will be initiated."

L-24-91

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L-24-91 cont. Instead, Section 7.2.12 in the text and a footnote to these tables should indicate: "Section 7 consultation will be initiated as appropriate." This is not the Biological Assessment and no statements about initiating consultation should be inserted into these summary tables, in particular in light of the deficiencies discussed above.

Section 8 Comments

L-24-92 Section 8 "Selenium Bioaccumulation" of the SLDFR Draft EIS correctly recognizes that bioaccumulation through the food chain is the key issue regarding the environmental effects of selenium, and that serenity bioaccumulates more readily than selenate. Because the "detailed risk assessment" in Appendix G analyzes only the evaporation basin feature of the In-Valley Disposal Alternative, for clarity, the following phrase should be added after "Appendix G," in the final sentence: "which examines the potential for adverse ecological effects to avian receptors from evaporation basins."

L-24-93 Page 8-2, 8.1.1, In-Valley Disposal Area: Is this general discussion supposed to be background or to describe "existing conditions" for purposes of comparison to action conditions? If it is supposed to describe existing conditions, it should say so but also should be updated from 2001. .

L-24-94 **Page 8-5:** The second sentence in the first full paragraph reads: "Particulate Se concentrations ranged from 0.2 to 1.1 micrograms per gram, with the highest concentrations seen in the Delta and more than 75 percent of particulate SE was the most bioavailable form, organic selenide." This sentence should be followed by: "However, as regards effects in Suisun Bay, it must be noted that Cutter and Cutter (Estuarine, Coastal and Shelf Science 61, 463, 2004, page 474) state that "most organic selenides in marine systems appear to be relatively unavailable."

L-24-95 Page 8-6, 8.1.4 Delta Disposal Alternatives Area: The document points out that selenium concentrations in diving ducks in Suisun Bay are lower now than in 1989 and 1990, before discharge controls reduced selenite discharges to Suisun Bay. The DEIS also should note that the same is true for sturgeon ("Selenium in San Francisco Bay - Conceptual Model/Impairment Assessment, Clean Estuary Partnership, June 2005, Figure 14, page 43). These important data underscore the fact that *selenite* discharges and concentrations are the key factor in selenium bioaccumulation, and the DEIS should specifically recognize that factor in this discussion.

L-24-96 Page 8-7, 8.2.1 Evaluation Criteria: The DEIS states that it is "impossible to quantitatively predict changes in Se bioaccumulation for the No Action Alternative," but does not indicate why. Therefore the action alternatives are compared to 2001 baseline conditions to determine the likely significance of effects of Se bioaccumulation.

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L-24-97 Page 8-7, 8.2.2, Modeling Methods and Assumptions. This introductory paragraph needs to include the sentence from page 8-23: "Most of the criteria and parameters used in this assessment are intended to provide a conservative (high end) evaluation of potential effects. Next, the uncertainties discussion in 8.2.2.6 on pages 8-16 and 8-23 should be set out in this section so that the reader can consider the limitations of the modeling and assessment before reading the conclusions drawn by the authors.

L-24-98 Page 8-8, 8.2.2.1, In-Valley Disposal Alternative: The discussion appropriately explains why only waterbirds that feed on plants and invertebrates in the proposed evaporation ponds are considered, rather than a wider range of species.

L-24-99 Page 8-10: The note following Table 8-2 appears to be a holdover from an earlier draft.

L-24-100 Page 8-10, 8.2.2.4, Delta Disposal Alternatives: The discussion of selenium speciation does not make clear what proportion of selenium species was presumed. As noted in elsewhere in Section 8, the speciation is critical to the actual Se bioaccumulation.

L-24-101 Page 8-11: "SPM" is nowhere defined in the text. Does it mean "Se Particulate Matter"?

L-24-102 Page 8-12 through 8-14, Biota-Sediment Accumulation Factor: The discussion repeatedly points out the limited quantity and quality of available data, the use of averaging instead of determining more site-specific factors, and the selection of multiplication factors based upon very limited data. This information points to the uncertainty associated with the conclusions.

L-24-103 Page 8-14, Bioconcentration Factor: The discussion appropriately dismisses the applicability of Bioconcentration Factors for analyzing selenium effects in the Bay , after a long and perhaps unnecessary discussion (pages 8-11 and 8-12). Under the circumstances where there is little data on selenium speciation under different alternatives, the Biota-Sediment Accumulation Factor approach based on estimated total selenium concentration in suspended particulates seems a reasonable first step towards estimating bioaccumulation in the Bay. Again, the limited effect of agricultural discharges is likely because of the low percentage of selenite in the water as compared to industrial discharges. **See Exhibit B.**

L-24-104 Page 8-15, 8.2.2.5, Reuse Facilities: The summary statements regarding the threat of selenium directly from soils lack explanation, background, or scientific documentation. Either an explanation about why soils are a separate concern must be included, or any concerns about the interaction between soil selenium and bioaccumulation through exposure of soils to water and an explanation of the appropriate management (i.e., monitoring) must be included. Again, Panoche's experience in the field has not shown that soil selenium per se has adverse effects on any resource. As a precautionary measure, Panoche does conduct monitoring of seeds and other products

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Page 8-24 and 8-25, 8.2.4.2, Aquatic Resources: Appendix G produces a worst case scenario. Therefore, as regards the discussion of the effects of the In-Valley Disposal Alternative, the last five paragraphs in Section 8.2.4.2 should be replaced by:

L-24-104 cont.

> There is the potential for bioaccumulation of selenium in birds at evaporation ponds. It is very difficult to accurately estimate selenium concentrations in food organisms in evaporation ponds because of the variations in selenium speciation and biological species assemblages in those ponds. However, selenium concentrations in food organisms in these ponds would probably result in harmful selenium levels in birds in the absence of mitigation measures [Appendix G]. However, mitigation measures to limit or prevent bird feeding at these ponds can reduce impacts to levels that are not significant at the population level.

L-24-105

Page 8-26, 8.2.4.3, Special Status Species: The discussion of the predatory effects on water birds at the Tulare Lake Drainage District is exactly the good data that should be presented in this analysis. Of note is that birds of prey showing elevated selenium recovered fully when fed a diet with normal Se concentration. In contrast, the document references Appendix G as the source of "evidence" that birds of prey "may experience" significant adverse effects. The assumption in Appendix G is the extreme—that the feeding will be exclusively on evaporation ponds for an extended period of time. Thus, while Appendix G is useful as a worst case analysis tool, the conclusions of Appendix G should not be utilized without application of the common sense approaches of avoidance and likely behaviors that are otherwise integrated into most of the Section 7 discussion. Failure to integrate actual data leads to the unqualified conclusions in some tables that there will be "significant adverse effects" from implementation of the In-Valley Disposal Option, when at most there "may be" such effects.

L-24-106

Page 8-26. The statement that the San Joaquin kit fox would favor sites nearest the eastern edges of the drainage areas seems like it was extrapolated from some other source and location. What does "drainage areas" refer to? Please identify with more specificity what location you are speaking of, e.g. with reference to which reuse site or sites?

L-24-107

Page 8-26. The discussion of the **California black rail** and **western yellow-billed cuckoo** should add: "Habitat types (emergent marshlands and riparian forest) **do not exist within the proposed reuse area and no other emergent marshlands or riparian forest areas** utilized by these species would be affected by operation of any In-Valley Disposal Alternative facility."

L-24-108

Page 8-27, 8.2.4.3: In the Discussion of Chinook salmon and other fish, the In-Valley Disposal Alternative is no different from No Action in assuming no discharges from the Grassland Bypass Project. Thus, it is incorrect to say that a reduction in Se load

L-24-108 cont. entering the San Joaquin River is "as direct result of this Project." In light of this fact, the final sentence is irrelevant and should be omitted.

Appendix C

L-24-109 Page C-7 C1.1.4.1, Drainage Rates: The first paragraph does not make sense. The annual field drainage rates for the Northerly Area are assumed to be .42 AF/tiled acre, but after application of source control measures (which include seepage reductions), the rate is assumed to increase to .54 AF/tiled acre, apparently for "uncontrolled seepage." There is no explanation as to why either the seepage or the field drainage rate should increase.

L-24-110 Page C-8, C.1.4.1: The assumption as to crop mix is outdated, and clearly utilizing the crop with the most water table recharge over-estimates the water recovered into the drainage system. More and more acreage in Panoche is going into drip systems for permanent crops.

L-24-111 Page C-9, C.1.4.1: The projected amount of drainage flowing to the Northerly Reuse Area of 29,460 AF/year is approximately 10% larger than the actual amount of drainage for 2005, which was 27,000 AF. With assumed on-farm and in-district drainage reduction measures, the projected flows should be even smaller, and Panoche currently estimates the Northerly Area volume of water flows to reuse at 14,200 AF with full implementation of on-farm and district source control measures.

L-24-112 Page C-17, C.1.1.5: The reuse area should be consistently named, e.g., "the existing Northerly Area reuses area." Also, experience is now that the reuse can continue without disposal for 5 years. Using a 5-year timeline for the lag between reuse implementation and facilities for treatment and disposal is much more realistic and will allow appropriate adaptive management and time for development of treatment and disposal alternatives with a higher confidence of their performance capability.

Appendix G

L-24-113 "Ecological Risk Assessment - In-Valley Disposal Alternative" of the SLDFR Draft EIS is a "worst-case scenario" because it assumes that there is no mitigation and all birds using the evaporation basins get 100% of their food from the evaporation basins (page G-2).

Appendix M

L-24-114 The analysis contained in Appendix M, the February 2005 Draft Fish and Wildlife Coordination Act Report prepared by US Fish and Wildlife Service is based on assumptions that are speculative, misstate facts or law, and in some instances, are drastically different than the proposed project. For example, the Report more or less

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L-24-114 cont. accurately outlines the No Action alternatives on page 7, but then assumes that under No Action, two-thirds of the Northerly Area will be "retired" by rising groundwater over the 50-year planning horizon and that the 50% of the contractual water supply from that acreage will be reallocated to fish and wildlife purposes (pages 18 and 19 of the Report).

L-24-115 Those assumptions are not included in the DEIS and are so inconsistent with the data in the DEIS and from the ongoing Grassland Bypass Project's record of drainage reduction as to lack credibility. The groundwater effects are speculative and assume implementation of particular management practices (2 years fallowing followed by cotton) that lack both practicality and legal or institutional implementation mechanisms.

L-24-116 The statements about the CVPIA and Reclamation's obligations about contract supplies, are flatly wrong and entirely inconsistent with existing or proposed renewal contracts or CVPIA. Therefore it is not clear how the purported analysis of the No Action Alternative can serve as an evaluation of Reclamation's No Action Alternative for this project.

L-24-117 The Report's analysis of the In-Valley Disposal Alternatives in general does seem to analyze the potential effects of the alternatives presented by Reclamation. However, the credibility of the document is weakened when it raises completely unsubstantiated "concerns" about water from retired land going to convert native habitat and talks about non-existent legal obligations of Reclamation to provide substitute water for drain water reaching the San Joaquin River. Reclamation is not required to consider an alternative that in lieu of providing drainage service to lands served by CVP water pursuant to contracts with water districts, retires half of the entire San Luis Unit service area through a mandatory program and usurps the water supply. In all these respects, the Report is a lobbying document more than a scientific analysis of Reclamation's projected action.

L-24-118 Appendix M also asserts that a large amount of additional work is required before the evaluation can be completed, including complete negotiation of mitigation. It then concludes that the required mitigation for the evaporation pond mitigation is so exorbitant that it would be infeasible (Page 45). Who are the Mitigation Working Group and the Land Retirement Planning Team, and what input do affected San Luis Unit representatives have? A Project that is not economically feasible and that amounts to involuntary land retirement is not drainage service, which is what the DEIS evaluates.

L-24-119 All in all, the final version of this Report needs to be dramatically revised and carefully scrutinized to make certain that it provides adequate coordination with regard to Reclamation's proposed project alternatives and satisfies the statutory requirement.

August 31, 2005 22

Note: The remainder of this submittal contains material that does not comment on the Draft EIS and therefore requires no response from Reclamation. Because it is not comment material, it is

not included in the Final EIS, but it will be included in the administrative record for this project and is available upon request.

RESPONSES TO COMMENT L-24

L-24-1

This comment is a general summary of the specific comments included later in the commenter's letter. Responses to specific comments are provided below. No response is necessary to this summary comment.

L-24-2, 3

See Master Response ALT-N1 regarding the use of 2001 information for existing conditions and assumptions used for the No Action Alternative.

L-24-4

Inclusion of the requested discussion in the Draft EIS is premature because no decision had been made on which alternative was to be implemented. Such integration would take place during the final design phase, following preparation of the Feasibility Study and the request for funding.

L-24-5

Without more information about which tables are not supported in the text, no response is possible. Specific comments on the Draft EIS from this comment letter are addressed in subsequent responses.

L-24-6

Additional background information on entities within the Northerly Area has been added to Section 1.3.1.

L-24-7

See Master Response ALT-N1 in regard to assumptions used for the No Action Alternative.

L-24-8

The comment is noted. Including more acres requiring drainage service will serve to disclose more impacts than are likely to occur, thereby resulting in a conservative NEPA analysis.

L-24-9, 10

See Master Response ALT-N1 in regard to project assumptions.

L-24-11

See Response to Comment L-24-4.

L-24-12

See Master Responses MIT-1 and ALT-T1, which discuss adaptive management and monitoring and the evaluation of treatment technologies, respectively.

L-24-13

Comment noted. No response necessary.

L-24-14

See Master Responses MIT-1 and ALT-T1, which discuss adaptive management and monitoring and the evaluation of treatment technologies, respectively.

L-24-15

Changes in existing conditions have occurred since 2001. However, for the purpose of the NEPA review and impact analysis, the existing conditions description used in the Draft EIS is adequate to assess impacts among project alternatives because the new projects that have occurred since 2001 would serve to lessen the adverse impacts disclosed in the EIS, as discussed in Master Response ALT-N1. NEPA requires comparison to No Action. The description of existing conditions may be updated for subsequent CEQA documents.

L-24-16 - 18

See Master Response ALT-N1 in regard to assumptions used for the No Action Alternative.

L-24-19

The EIS needs to make a determination of impacts with the information that is currently available, while recognizing that uncertainty exists and identifying specific sources of uncertainty. The EIS does not attempt to evaluate whether the San Joaquin River is currently a major contributor to elevated food-chain Se in the Delta or Bay, as such an evaluation is not the objective of the EIS.

L-24-20

The tables, text, and significance conclusions in Section 7 of the Final EIS have been revised for clarity and consistency.

L-24-21

See Master Response BIO-1 in regard to Appendix M of the Draft EIS.

L-24-22

The recommended change to Table 1-2 has been made in the Final EIS.

The change in projected acres needing drainage for the Northerly Area based on the improvements to irrigation efficiency that have occurred during EIS preparation was considered in the Feasibility Study. If an In-Valley Alternative is selected and funded, the number of acres needing drainage would be refined during the final design. For the purpose of environmental impacts evaluation, Reclamation has assumed that 45,000 acres will require service to provide a worst-case estimate of adverse environmental impacts.

L-24-23

Comment noted. No response necessary.

L-24-24

"Drainwater reduction" is a general term applied to both drainwater prevention and recycling. Source control was included in the estimates of drainage service rates, and reuse of drainwater is a component of all action alternatives considered in the EIS.

L-24-25

The sentence "Future components of the Grassland Bypass Project have been incorporated into the action alternatives evaluated in this EIS, specifically expanded reuse, treatment, and disposal components" has been deleted from Section 1.4.1, revised to say "Westside Regional Drainage Plan" instead of "Grassland Bypass Project," and moved to Section 1.4.5.

L-24-26

See Master Response ALT-N1 in regard to assumptions used for existing conditions and the No Action Alternative.

L-24-27

On-farm, in-district activities assumed to take place under the No Action Alternative are presented in Section 2.2.1.3. Impacts from these actions are presented in the different resource sections.

L-24-28

See Master Response ALT-N1 in regard to assumptions used for the No Action Alternative.

L-24-29

The text of Section 2.2.1.1 has been revised as indicated in the comment.

L-24-30

See Master Response ALT-N1 in regard to changes to the affected environment and existing conditions discussions.

L-24-31

The commenter pointed out that alternatives outlined in the Use Agreement could lead to a different discharge point for the Grasslands Drainage Area and neither Reclamation nor the Grassland Area Farmers have concluded that no possibility exists of a future Use Agreement or discharge of drainage. For the purpose of this NEPA analysis, none of the alternatives described in the Use Agreement are "reasonably foreseeable."

L-24-32

The facility identified in the comment was previously referenced on Page 2-2 of the Draft EIS. References to the GDA's "In-Valley Treatment/Drainage Reuse Facility" have been changed to "existing Northerly Area reuse facilities" in the Final EIS.

L-24-33

The comment is noted.

L-24-34

Providing drainage for sump flows from Firebaugh Water District is in accordance with Section 5 of the San Luis Act, which authorizes Reclamation to evaluate lands adjacent to the San Luis Unit for drainage service needs.

L-24-35

The drainage flow from the Firebaugh sumps was included in the design of project features and the environmental impacts analysis.

L-24-36

With the addition of water treatment and a disposal facility, the reuse sumps would be operational all year to pull the winter water table down and provide some underground space for groundwater storage. The installation of deep tile drains (at 10- to 11-foot depths) under the reuse area would provide additional groundwater storage space under the Westlands reuse sites. Due to the existing San Joaquin River Improvement Project drainage systems in the Northerly Area and partially due to the timing of inflows to reuse, only a part of the Northerly Area reuse site would have tile drains installed at deeper depths to provide a groundwater storage reservoir.

L-24-37 - 39

The segment of the Northerly Area that would contribute to the reuse area is considered to be a subset of this 81,000 acres. This distinction is important, since not all 81,000 (or 63,000) acres

have on-farm tile drains that produce drainwater to be reused. The current estimate for the contributing area is an existing 48,000 acres of tile-drained land plus approximately 6,000 additional tile-drained acres. The ultimate size of the future reuse site would be based on estimated inflow from this tile-drained area. The estimated inflow would also be adjusted to include source control measures such as improved on-farm efficiency, recycling drainwater, and other ongoing drainage reduction measures. The area that would be served by reuse does not need to include recently fallowed districts such as Broadview, Eagle Field, or Mercy Springs.

L-24-40

The comment is noted. See Master Response ALT-T1 for a discussion of the evaluation of treatment technologies.

L-24-41

See Response to Comment L-24-20.

L-24-42

The summary necessarily uses general language. The analysis of Se bioaccumulation in Section 8 presents appropriate detail and qualifications.

L-24-43

In the interest of developing as concise a document as possible, Reclamation has not repeated resource area impact summaries in sections where they were not developed.

L-24-44 - 48

Note that Table 2.13-2 was created for the Draft EIS and uses both NEPA-specific terminology and evaluation criteria (e.g., page 7-12). As stated in Master Response BIO-2, the ESA Section 7 consultation process for these species has been completed for the In-Valley Alternatives.

L-24-49

The comment is noted. Section 5.1.2 has been revised to include a reference to the compliance schedule. In addition, more recent data have been included.

L-24-50

Section 5.1.2 has been modified to clarify the contribution of salt and Se in irrigation supply water and from upslope stormwater runoff to the San Joaquin River.

L-24-51

See Response to Comment L-24-49.

L-24-52

The text in Section 5.1.2.2 has been revised to clarify that the geometry of the Stockton Deepwater Ship Channel and discharges contributes to the low dissolved oxygen problem. Nutrients and discharges are already referenced in Section 5 of the EIS and it is not necessary to specify the many discharge sources.

L-24-53

See Master Response ALT-N1 in regard to assumptions used for the No Action Alternative.

L-24-54

The reader comments that seepage impacts to the water quality in the San Joaquin River from the No Action Alternative are likely to be less than current discharges from the Grassland Bypass Project. The seepage is likely to affect channels draining to the Grassland wildlife and wetland areas and could adversely affect birds that use the areas. Section 5.2.3.2 of the Final EIS has been modified to indicate that under No Action, uncontrolled seepage would likely degrade Grassland wildlife management areas but improve water quality in Mud Slough and San Joaquin River due to removal of the Grassland Bypass Project discharge compared to existing conditions.

L-24-55

According to Section 5.2.4.1, construction effects of the In-Valley Disposal Alternative could include increased sediment in local creeks and waterways or soil erosion due to land disturbance, but that would be the case without permitting and required water erosion control mitigation measures (BMPs) that would be incorporated prior to construction activities as part of the required permits. Section 5.2.4.1 lists the permit requirements (the Construction General Permit 99-08-DWQ and Section 404) that would include mitigation for erosion and sedimentation. Assuming that the permit requirements are satisfied, construction effects on surface water resources would not be significant. Construction would not take place on or along creeks or waterways. Without permitting and mitigation (BMPs), construction on agricultural parcels could cause sediment to be eroded from the soils and transported into creeks and waterways.

L-24-56

The comment is noted. Reclamation agrees that the In-Valley Disposal Alternative and the No Action Alternative will both have beneficial effects on San Joaquin River water quality compared to existing conditions (see Sections 5.2.3.2, 5.2.4.2, 5.2.5.2, 5.2.6.2, and 5.2.7.2).

L-24-57

The sentence cited in the comment has been changed to read: “For future projects, it was assumed that TMDLs for Se in the San Joaquin River Basin will be implemented under both the action and No Action alternatives.”

L-24-58

The text has been modified to clarify the assumption that GDA discharges were not modeled assuming compliance with the TMDLs for salt and boron due to the uncertain regulatory status. However, note that compliance with the Se TMML will likely achieve compliance with the currently proposed TMDL for salt and boron.

L-24-59

The No Action Alternative would meet the Regional Board compliance time schedule for water quality objectives for the Grassland Bypass Project (Basin Plan 1998, Table IV-4, Compliance Time Schedule for Meeting the 4-day Average and Monthly Mean Water Quality Objective for Selenium); therefore, there would be GDA discharge through 2009. The In-Valley Disposal Alternative assumes that the GDA drainage will be disposed of in-valley.

L-24-60

Comment noted. No response necessary.

L-24-61

The No Action Alternative defines conditions in the project area through the planning time frame if drainage service is not provided. No Action includes only regional treatment, conveyance, and disposal facilities that existed in 2001 or are authorized and funded projects. Section 6 states that irrigation is assumed to continue at existing recharge rates and after 2009 drainwater is no longer discharged to the river but instead managed within the GDA (Draft EIS page 6-14). Management actions could include increased irrigation management, recycling, or crop changes. Impacts to agricultural production due to lack of drainage disposal under No Action are described in Section 12.

L-24-62

The No Action Alternative defines conditions in the project area through the planning time frame if drainage service is not provided. It represents existing conditions (2001) with limited management changes in the absence of Federal drainage service. No Action includes only regional treatment, conveyance, and disposal facilities that existed in 2001 or are authorized, funded projects. Planned projects as of 2004 (Exhibit A of Comment L-24) would not be included as part of the No Action Alternative.

Note: Exhibit A, Grassland Drainage Area In-Valley Drainage Solutions Project Summary Brief (Summers Engineering, October 2004), is not a comment on the Draft EIS and therefore requires no response from Reclamation. Because it is not comment material, it is not included in the Final EIS, but it will be included in the administrative record for this project and is available upon request.

L-24-63

"Uncontrolled discharges" exist in the Northerly Area. These discharges are associated with the relatively deep, unlined open-channel collection system. The collection system adds yield in addition to what comes out of the subsurface drains. The additional yield may include aqueduct seepage, underground flows from the Coast Ranges, and upslope activities, as well as shallow groundwater seepage directly into the unlined channel, tailwater inflows, discharge from ricefields, and other flows originating within the Northerly Area. Uncontrolled discharge is any channel flow in addition to metered sump flow. Uncontrolled discharge was estimated by the difference between observed discharge to the San Joaquin River (by way of the Grassland Bypass Project) and measured Northerly Area sump discharge. Under existing and drainage project conditions, these discharges are controlled and managed as part of the Grassland Bypass Project. In contrast, under No Action conditions these discharges would continue but would no longer be managed after the Bypass Project expires. These assumptions and the potential effects are similar to those made as part of the Grassland Bypass Project EIR/EIS.

The effects of the No Action Alternative on groundwater resources compared with existing conditions are shown in Section 6.2.3.

L-24-64

See Response to Comment L-24-63. Section 6 of the Final EIS has been updated to include this definition of uncontrolled discharges.

L-24-65

Termination of existing discharge after 2009 refers to drainage management actions (i.e., the removal and discharge of subsurface water), whereas "irrigation system improvements and practices" refers to the application of water to grow crops. The No Action Alternative for the Northerly Area, therefore, assumes that water application practices remain the same, but drainage discharge (i.e., the Grassland Bypass Project) ceases.

L-24-66

Seepage from unlined water delivery canals contributes to groundwater recharge, which in turn may contribute to uncontrolled discharge (i.e., seepage into unlined drainage channels) as well as increased drainage sump flows and general shallow groundwater table conditions. As part of the action alternative assumptions, existing condition recharge rates are assumed to decrease as a result of source control measures designed to reduce groundwater recharge (seepage reduction from unlined water delivery canals, irrigation system improvements, and so forth).

The recharge rates represent input data to the groundwater-flow model utilized to analyze changes in water table and groundwater storage conditions. In the Northerly Area, simulated groundwater recharge under project conditions is assumed to decrease 0.04 foot/year as a result of seepage reduction projects and an additional 0.10 foot/year as a result of irrigation system improvements. Under No Action conditions, it is assumed that no seepage reduction projects will occur and, therefore, the 0.04 foot/year of recharge that is removed for the action alternatives is replaced.

L-24-67

Under No Action conditions, drainwater recycling continues at current levels and the planned reuse facility begins operations in 2005. However, no new seepage reduction projects are assumed to occur. Appendix E4, Table E4-4, Footnote b is intended to explain that recharge rates are reduced under the action alternatives as a result of seepage reduction projects (0.04 foot/year reduction owing to lining the unlined water delivery canals), and irrigation system improvements (0.10 foot/year).

Recharge rates reported in Appendix E4 represent input data to the groundwater-flow model utilized to analyze changes in water-table depth, groundwater storage, and drainflow conditions. As drainflow is explicitly simulated by the model, there are no assumptions regarding drainflow quantities as a result of "drainwater reduction measures/drainage system buildup."

L-24-68

When the Draft EIS was prepared, 2,200 acres of the reuse facility had already been planted, and another 500 acres were in the process of being planted; an additional 300 acres had subsurface drainage but had not yet been planted (3,000 acres of the total 4,000 acres planned). Without additional funding, the remainder of the 4,000 acres would not be planted and no additional subsurface drainage systems would be installed. In its condition at the time, the reuse facility could reduce drainage discharge needs by 7,200 AF (8,100 AF applied drainwater, of which 900 AF would be discharged). Since the Draft EIS was prepared additional development has occurred on the San Joaquin River Improvement Project (the existing reuse area, SJRIP). Of the existing 4,000 acres, only about 500 acres are currently fallow, with plans in the works to develop some of those fields in the near future. In 2005, almost 8,200 AF of drain water was reused on the SJRIP, along with 2,250 AF of supplemental fresh water. It is anticipated that two pump stations and pipelines will be constructed this spring that will allow for more drain water to be reused on the SJRIP. Panoche Drainage District estimates that it could reuse nearly 10,000 AF on the current planted acreage, given sufficient infrastructure. It should be noted these numbers continue to evolve over time. For the purpose of the environmental analysis, the assumptions regarding the projected increase in reuse area acreage and the reduction in drainwater for disposal are considered conservative. If additional reuse areas are not needed or if the reuse areas consume more drainwater than projected in the Draft EIS, environmental effects would be less than disclosed in the Draft EIS. However, these changes are not likely to change the significance of the impacts already disclosed in the Draft EIS.

Appendix C cites 15,400 AF of uncontrolled discharge under "Current Recharge" conditions. Section 6 (page 6-15) of the Draft EIS erroneously cites 14,000 AF of uncontrolled discharge. This has been corrected to 15,400 AF in the Final EIS, which is the uncontrolled discharge rate under moderate reductions in recharge (Table C1-12). The different values cited in Section 6.2.2 of the Draft EIS do not impact the conclusions of the groundwater analysis summarized in Section 6.

L-24-69

Section 6 assumes that seepage reduction projects (i.e., lining of water delivery canals) decrease water-table recharge from canal seepage by 4,200 AF/year (see Draft EIS page 6-16). This assumption is consistent with the project description presented in Section 2. Seepage reduction projects and estimated benefits continue to evolve since the Draft EIS was developed. Panoche and Pacheco Water Districts have recently identified almost 20 miles of canals that they are interested in lining or piping. A number of seepage studies have been performed throughout the area with varied results, but the estimated average water loss to seepage is 2 AF/mile per day. Assuming a typical water run of 300 days, this seepage loss amounts to 12,000 AF/year in seepage reduction. The incentive to upgrade these delivery systems is driven by both the need to manage drainage and the recent increase in microirrigation systems, which require a more reliable supply system. If additional canal seepage reduction is identified as technically and economically beneficial during final planning/design/permitting, it will be considered for inclusion in the drainage management program as appropriate.

L-24-70

The Draft EIS assumes regional reuse facilities will be online by 2005 in both the Northerly and Westlands subareas; reuse areas are currently (October 2005) in operation in the Northerly subarea, but regional reuse areas are not yet operating in the Westlands subarea.

The Draft EIS analyzes groundwater impacts at the end of the 49-year analysis period, and the impacts are assessed relative to the No Action Alternative. A similar situation exists with the assumed installation dates for new drainage systems. The action alternatives assume that new drainage systems in the Westlands subarea begin to operate in 2005. However, no drainage systems have been installed as of October 2005.

The actual year these projects come online is not critical to the Draft EIS analysis. Rather, the analysis depends on the relative impacts identified after a specified time following project implementation (in this case, impacts are compared after 45 years of reuse facility and new drainage system operation).

L-24-71

The groundwater analysis described in Section 6 assumed 6,000 acres of new drainage systems in the Grasslands Drainage Area randomly located within the presently undrained portions of the 81,000-acre drainage-impaired area. The Grasslands Drainage Area (Northerly Area) includes the following water districts: Broadview, Camp 13, Charleston, Firebaugh, Pacheco, and Panoche (water district and drainage district). These numbers were provided to the project team by the Grassland Drainage Area Manager during the plan formulation phase of the project. The issue of how much additional land needs drainage also continues to evolve. New issues such as local and upslope land retirement and the recent installation of drip irrigation systems affect the estimated tiled acres and the actual number of acres may decrease from the originally estimated 6,000 acres. Recent conversations with growers within Camp 13 Drainage District have indicated a desire to tile a significant portion of that ground, though an exact acreage has not been identified. For the purpose of the EIS, 6,000 acres is the maximum number of acres likely to be

tiled in the Northerly Area. If fewer acres were tiled, project costs and impacts would be less than identified in the Draft EIS.

L-24-72

Wellwater samples collected in Westlands Water District showed no systematic or significant change in constituent concentration levels during the period 1984 to 2002. The Draft EIS concluded that land retirement combined with the possible dilution of shallow groundwater by irrigation water in adjacent cropped areas may have had a beneficial effect on groundwater salinity. Specifically, land retirement resulted in water-level declines in 2002 relative to 1984, which probably reduced evaporative concentration of shallow groundwater. However, land retirement is not considered for the Northerly Area, and the estimated 10 percent groundwater salinity increase reflects conditions where land retirement is not implemented. This increase in salinity is the result of evaporative concentration of shallow groundwater in undrained areas.

L-24-73

The comment is noted. Revisions have been made to address these issues in Section 7 of the Final EIS.

L-24-74

Section 7.2 of the Final EIS has been revised to indicate that the analysis was conducted at the appraisal level and presents a worst-case scenario of potential effects.

L-24-75

See Master Response ALT-N1 in regard to assumptions used for the No Action Alternative.

L-24-76

Section 5.2.3 describes impacts to surface water resources for the No Action Alternative. Also see Section 6.2.3, which states that the undrained area underlain by the shallow water table would increase to 74 square miles (a net increase of 5 square miles) and result in an increase of seepage into canals.

L-24-77

The comment is noted. Uncertainties in the bioaccumulation analysis are described in Section 8 and Appendix G.

L-24-78

The EIS assumes the worst-case scenario. Since only appraisal-level site plans for facilities are available and mapping of wetland features has not been completed, the project could potentially significantly impact these resources based on the significance criteria established in Section 7.2.1.2.

L-24-79

The referenced section should be 8.2.4.2, as stated in the comment. This correction has been made in the Final EIS.

L-24-80, 81

Section 7 of the EIS has been revised to avoid conclusionary statements and now refers to potential effects on special-status species as "may have significant effects" as the comment suggests. Additionally, Tables 7-6 through 7-13 have been revised to include a note concerning the formal consultation for listed species that may be adversely affected. See Master Response BIO-2 for information regarding ESA consultation.

L-24-82

The requested change to Section 7.2.4.3 is not needed. The facility operations would have not have significant effects on special-status species; however, the construction of the facilities would have significant effects on special-status species. The requested change would contradict Reclamation's impact analysis.

L-24-83

Section 7.2.11 has been revised to reflect the assumption that activities were included in the cumulative analysis if they were deemed "reasonably foreseeable" and, as such, the analysis may present a worst-case scenario of potential effects if additional beneficial actions are undertaken apart from those already considered.

L-24-84

These issues have been clarified in the Final EIS. Also see Master Response ALT-N1 regarding existing conditions.

L-24-85

Reclamation disagrees with the comment. Implementation of the Westside Regional Drainage Plan is not "reasonably foreseeable" based on the uncertainties of funding.

L-24-86

See Response to Comment L-24-85.

L-24-87

The Final EIS has been revised to reflect these issues.

L-24-88

Both locations cited in the comment disclose the possibilities of significant unavoidable adverse effects to wintering waterbirds. These conclusions are consistent with documented effects at other evaporation facilities within the study area.

L-24-89

See Response to Comment L-24-76.

L-24-90

See Master Response ALT-N1 regarding existing conditions. Because this document is an EIS, not an EIR, we are not concluding significance according to the CEQA baseline (hence the use of adverse affects instead of significant adverse affects).

L-24-91

The comment is noted. Table 7-7 remains as presented with regard to references to Section 8. However, Tables 7-7 through 7-13 have been modified to include a note in the table headings for Federally listed special-status species to indicate the status of the ESA consultation with the Service. In addition, text describing the findings of the Service consultation has been added to Section 7 where appropriate. Also see Master Response BIO-2 with regard to ESA consultation.

L-24-92

As suggested by this comment, the following phrase has been added after "Appendix G" in the final sentence of the first paragraph of Section 8: "which examines the potential for adverse ecological effects to avian receptors from evaporation basins."

L-24-93

The Affected Environment discussion that appears in Section 8.1 and every other resource area section is required under NEPA to allow an understanding of the resources that may be impacted by the project. Representative data on Se concentrations in bird eggs were taken from peer-reviewed documents located in the scientific literature.

L-24-94

The statement that this comment refers to appears to be made in reference to Se bioavailability in open ocean environments. Cutter and Cutter (2004) cite Cutter and Bruland (1984) and Cutter and Cutter (1998) to support this statement, and both of those references pertain to studies conducted in deep open ocean environments with conditions very different than the estuarine environment of the San Francisco Bay-Delta.

L-24-95

A discussion of recently collected data on Se in sturgeon has been added to Section 8.1.4; however, considerable uncertainty exists in the factors that affect Se bioaccumulation in particular species the Bay-Delta.

L-24-96

The following language has been added to Section 8.2.1, last paragraph: "Because considerable uncertainty exists in how Se bioaccumulation in the Bay-Delta will change under No Action conditions due to changes in the food web, hydrology, etc., baseline conditions are used to represent the No Action Alternative."

L-24-97

As suggested in this comment, the following language has been added to the introductory paragraph of Section 8.2.2: "Most of the criteria and parameters used in this assessment are intended to provide a conservative (high-end) evaluation of potential effects. Uncertainties are discussed in Section 8.2.2.6." The uncertainties discussion in Section 8.2.2.6 will remain in its present location to maintain consistent document structure.

L-24-98

Comment noted. No response necessary.

L-24-99

The note below Table 8-2 reads "Note: Post-treatment Se concentrations at final project buildout were used in this analysis. For the Public Draft EIS, an additional analysis should be conducted to evaluate initial effluent conditions." This footnote is an error and has been deleted from the Final EIS; it was inadvertently placed here and is not related to Table 8-2, which presents dietary compositions for bird categories. It was determined that the EIS will consider the worst-case condition for effluent, which occurs at final buildout.

L-24-100

In the absence of information to predict changes in speciation in the Bay-Delta due to projected Se discharges, the EIS analysis assumes that Se speciation and bioaccumulation rates in the Bay-Delta would remain consistent with historical conditions. As discussed in Section 8.2.26, this assumption is identified as an uncertainty in the results.

L-24-101

SPM, suspended particulate matter, is defined in Section 8.1 (Draft EIS page 8-1).

L-24-102, 103

Comment noted. No response necessary.

L-24-104

See Master Response GW-2 regarding the uptake of Se from soils. A discussion of data from Panoche Drainage District has been added to Section 8.1.5. The suggested rewording of Section 8.2.4.2 was considered, and it was determined that the original language should be retained. The EIS must make a determination of project effects in the absence of mitigation.

L-24-105

The comment expresses concern that the determination of significant effects to the American peregrine falcon is a "worst-case" scenario, and points out that "birds of prey showing elevated Se recovered fully when fed a diet with normal Se concentration." However, as noted in Section 8.2.4.2, one of the birds recovered was found in a condition too weak too fly, and it is possible that both birds would have died in the absence of intervention. While it is not certain that these birds were poisoned by Se, it is possible that (given the size of the proposed evaporation basins) falcons could obtain a substantial percentage of their prey from evaporation basins. Given the lack of conclusive data, the EIS errs on the side of caution in determination of significant effects.

L-24-106

The statement cited in the comment refers to the general location of the drainage-impaired lands on which all proposed facilities would be located (see Figure 2.4-1), in relation to natural grassland areas where the predominance of recent kit fox observations have been concentrated. Although the vast majority of kit fox observations have occurred in the foothill grasslands west and northwest of the project area, it is anticipated that existing barriers to kit fox travel (the I-5 corridor, the California Aqueduct, and the expanses of intensively managed non-impaired croplands upslope of the drainage-impaired lands) would continue to severely restrict kit fox entry from the west into sites that have been proposed for in-valley disposal facilities. Kit fox entry from the east, particularly from adjacent natural habitat in the Grasslands and Mendota areas, would continue to be much less restricted, particularly if large areas are retired or less intensively farmed as a result of project implementation. At present, the potential for future kit fox use of individual reuse facility sites has not been quantitatively evaluated; however, based on their general proximity and connectivity to suitable grasslands, potential kit fox use of proposed facilities in the Northerly Area and Westlands North would be most likely.

L-24-107

The text referenced in the comment has been revised to clarify that habitat for these species does not exist in the area of the In-Valley Alternative facilities.

L-24-108

It is assumed that the comment intended to refer to Section 8.2.8.3. The commenter is correct in that both the No Action and action alternatives result in removal of drainwater from the San Joaquin River. The Draft EIS will be revised to omit the reference to this benefit as resulting from any action alternative.

L-24-109

Field drainage rates do not include "uncontrolled discharges," which are included in the 0.54 AF/tiled acre rate. Uncontrolled discharges exist in the Northerly Area. These discharges are associated with the relatively deep, unlined open-channel collection system. The collection system adds yield in addition to what comes out of the subsurface drains. The additional yield may include aqueduct seepage, underground flows from the Coast Ranges, and upslope activities, as well as shallow groundwater seepage directly into the unlined channel, tailwater inflows, discharge from ricefields, and other flows originating within the Northerly Area. Uncontrolled discharge is any channel flow in addition to metered sump flow. Uncontrolled discharge was estimated by the difference between observed discharge to the San Joaquin River (by way of the Grassland Bypass Project) and measured Northerly Area sump discharge. Under existing and drainage project conditions, these discharges are controlled and managed as part of the Grassland Bypass Project.

L-24-110, 111

See Master Response ALT-N1.

L-24-112

The terminology in Section C1.1.5 has been revised as recommended in the comment.

The appraisal-level designs and implementation schedule in the EIS are adequate for the evaluation of alternatives. Subsequent, more detailed designs and schedules will consider the potential of a 5-year lag between reuse implementation and construction of treatment and disposal facilities.

L-24-113

Comment noted. No response necessary.

L-24-114 - 119

See Master Response BIO-1 in regard to Appendix M of the Draft EIS.

COMMENT L-25. HERUM CRABTEE BROWN (FOR PATTERSON IRRIGATION DISTRICT), JOHN SWEIGARD

September 1, 2005

VIA ELECTRONIC and U.S. MAIL

Ms. Claire Jacquemin
U.S. Bureau of Reclamation
2800 Cottage Way, MP-700,
Sacramento, California 95825

Re: Comments on San Luis Drainage Feature Re-Evaluation Draft Environmental Impact Statement

Dear Ms. Jacquemin:

These comments are submitted on behalf of Patterson Irrigation District (PID) to the U.S. Department of the Interior – Bureau of Reclamation (Reclamation) San Luis Drainage Feature Re-Evaluation (Re-evaluation) Draft Environmental Impact Statement (Draft EIS) dated May 2005. PID's interest in commenting on the Draft EIS is twofold. First, PID has senior water rights to divert water from the San Joaquin River:

1. Pre-1914 right (State Board listed as S009320) 150 cfs from the San Joaquin River for irrigation from March 1 through September 1 of each year.

2. Application 4237/Permit 2255. Priority date September 26, 1924. 27.36 cfs (54.25 acre feet per day) from the San Joaquin River using two pumps. February 15 through October 15 of each year (13,020 acre feet maximum if pumped at full rate for entire diversion period). Place of Use: 2189.29 acres, Purpose of Use: Irrigation.

3. CVP contract for 16,000 af of project water and 6,000 af of replacement water.

Because PID exercises these rights by diverting directly from the San Joaquin River, it is very concerned with ensuring that the water quality is of a sufficient quality for their agricultural production, and water levels in the San Joaquin River are sufficient to allow them to run their pumps.

GENERAL COMMENTS

The purpose for the Re-evaluation is to formulate a plan that provides agricultural drainage service to the San Luis Unit that "achieves long term, sustainable salt and water balance in the root zone of irrigated lands." Fundamental to this purpose must be for Reclamation to mitigate the past and future harm that it has caused to the San Joaquin River from the lack of drainage to the San Luis Unit and other neighboring districts. However, such mitigation cannot come at the expense of other downstream diverters with priority water rights on the San Joaquin River.

The San Joaquin River is affected by the salt load and quantity of flow on the Lower San Joaquin

River from a combination of upstream diversions, discharges of saline drainage water to the San Joaquin River and subsurface accretions to the river from groundwater. The State Water Resources Control Board recently summarized the situation on the San Joaquin River this way:

> "...the SWRCB finds that the actions of the CVP are the principal cause of the salinity concentrations exceeding the objective at Vernalis. The salinity problem at Vernalis is the result of saline discharges to the river, principally from irrigated agriculture, combined with low flows in the river due to upstream water development. The source of much of the saline discharge to the San Joaquin River is from lands on the west side of the San Joaquin Valley which are irrigated with water provided from the Delta by the CVP, primarily through the Delta-Mendota Canal and the San Luis Unit. The capacity of the lower San Joaquin River to assimilate the agricultural drainage has been significantly reduced through the diversion of high quality flows from the upper San Joaquin River by the CVP at Friant. The USBR, through its activities associated with operating the CVP in the San Joaquin River basin, is responsible for significant deterioration of the water quality in the southern Delta." D 1641 at p. 83.

PID, a senior water rights holder, has historically borne a disproportionate burden as a diverter on the San Joaquin River, both from a water supply and water quality perspective.

L-25-1 The Draft EIS is inadequate in its discussion of how any of the alternatives will affect the San Joaquin River water quality and quantity either in the short term or long term.

SPECIFIC COMMENTS

Section 1 – Purpose and Need for Action

Section 1.1: Purpose and Need for Action

L-25-2 This section describes four related project objectives used to develop the alternatives to be evaluated in the Draft EIS to achieve the overall purpose and need for the project. In addition to the four identified in this section, the Draft EIS must also include the objective of no re-directed impacts to other
L-25-3 water users within the Project Area. It is essential in implementing the Preferred Alternative that other water users are not adversely impacted, in specific, PID is concerned that implementation may have an
L-25-4 adverse impact on flows in the San Joaquin River. Any reduction in flows in the San Joaquin River must be mitigated in some manner that will not impact other water users in the San Joaquin Valley.

Section 1.3.1: Areas Needing Drainage

There is a discussion in this section that "not all of the landowners within the drainage service area would install on-farm drainage systems. Some farmers would elect not to install drains based on localized conditions and economic considerations" and therefore only two-thirds of the acreage was
L-25-5 included in the "areas needing drainage." How does this factor into the overall drainage solution?
L-25-6 Currently, lands within the Northerly Area drain in the San Joaquin River. Will this practice continue
L-25-7 and what will be the affect on water quality and flow in the San Joaquin River? The Draft EIS must
L-25-8 include an analysis of how the continuation of the landowners' current practice will affect the overall drainage solution.

Section 2 – Alternatives

The discussion under Reverse Osmosis (RO) Treatment under the In Valley Disposal Alternative

L-25-9 assumes that product water generated from the RO treatment would be conveyed to and blended with CVP water in a nearby canal. This is an improper assumption. Mitigation in the form of releases of "product water" into the San Joaquin River may be required in order to mitigate for the adverse affect of the drainage reduction on San Joaquin River flows, and this alternative must be evaluated.

Section 5 – Surface Water Resources

Section 5.1.2 Water Quality in San Joaquin River Reaches and Tributaries

L-25-10 The Draft EIS uses water quality data from 1986 through 1997 for its analysis of the effects of implementation of the various Alternatives. This water quality data is suspect because of the significant changes that have occurred in the San Joaquin River system over the past 10 years. Probably the two most significant actions on the San Joaquin River that have influenced water quality and flow have been the reduction in return flows entering the San Joaquin River from the development of irrigation efficiencies and reuse of water and increased water deliveries to the wildlife refuges which changes the timing and magnitude of water quality and flow in the San Joaquin River.

L-25-11 These changes in San Joaquin River hydrology and its effect on water quality and flow have been included into the most recent version of Reclamation's CALSIM II model. At a minimum, this preliminary model must be used in order to determine the effect on San Joaquin River water quality and flow of implementation of any of the proposed Alternatives.

L-25-12 This point is highlighted by the statement in this section that Vernalis water quality objective for April to August has been exceeded over 50 percent of the time from 1986 through 1997. Curiously, Reclamation now reports that there have been NO violations of the Vernalis water quality objective since 1995 to date. How is it that there were frequent violations during one time period and all have been eliminated during a subsequent time period? Clearly something has changed in the baseline flows. As

L-25-13 such, this entire analysis in this section needs to be done utilizing the new CALSIM II modeling inputs for the San Joaquin River.

Section 5.2 Environmental Consequences

Section 5.2.2 – Modeling Method and Assumptions

This section indicates that because the results of the Regional Board comparison showed water quality in the river improving from the withdrawal of direct discharges to the river, no additional model

L-25-14 comparisons were performed of the existing conditions. First, the Regional Board analysis that this section refers to is Salt and Boron TMDL modeling, which is not based on the new more accurate depiction of San Joaquin River in CALSIM II, consequently, the accuracy of this analysis is

L-25-15 questionable. Secondly, additional modeling is necessary to assess the impact of implementation on the

L-25-16 reduction in flows in the San Joaquin River. Simply stating no adverse impact to water quality is not

L-25-17 sufficient; Reclamation must evaluate the effects of its actions on flow in the San Joaquin River. PID is a senior water right holder on the San Joaquin River, how will the District be impacted by reduction in

L-25-18 flow? Will there be sufficient water in the San Joaquin River for PID to divert under its senior water rights?

Section 5.2.4: In Valley Disposal Alternative

The effect of implementation of any of the seven proposed Alternatives on water quality is stated

in the Draft EIS to be the same. In fact, in every section of analysis for the varying Alternatives in Section 5 identical language is used to describe the affect on San Joaquin River water quality. As such, these comments apply to all of the seven proposed Alternatives and will not be repeated. The stated language is as follows:

> Under the In-Valley Disposal Alternative, permitted discharges from the GDA to the Lower San Joaquin River as part of the Grasslands Bypass Project would be discontinued and placed in evaporation basins. Removal of the water and chemicals from the River is expected to result in significant beneficial effects to the concentration of Se in the Lower San Joaquin River (see Appendix D4). Improvements to the concentrations of salt and boron would also be significant although not as great as Se, due to the existence of other significant sources of these chemicals to the River.
>
> Removal of drainwater associated with the Grasslands Bypass Project from the Lower San Joaquin River would reduce the amount of dilution water required to be released from New Melones Reservoir to achieve the EC water quality objective at Vernalis. Modeling results shown in Appendix D4 indicate for the 10 year period from 1985 through 1995 the average reduction in dilution flows would be 21,000 AF/year. This is a significant beneficial effect to New Melones Reservoir Operations.

L-25-19 The approach and methodology of the modeling used in Appendix D4 - San Joaquin River Modeling raises many questions. First, why were the historical monthly discharges from the GDA modified so they were in compliance with the TMDLs during a 9-year flow record? Neither the State Water Resources Control Board nor the U.S. EPA has approved the TMDL. Moreover, should these releases actually be achieved, would it impact actual operations? Simply modifying a model does not mean that releases would occur in that fashion. What happens when more water is required to be held back because of load limits, will that cause degradation at a subsequent time? What impact will there be on flow in the river?

L-25-20

L-25-21

L-25-22

L-25-23 Secondly, the modeling for water quality and flows used is from October 1985 to September 1994; many things have changed on the San Joaquin River since 1994. There have been large reductions in return flow from irrigation discharges into the river due to increased irrigation efficiencies and reuse of water. Additionally, there has been an increase delivery to wildlife refuges that discharge into the San Joaquin River. As was discussed above, there is a new model that has more recent depiction of operations of the San Joaquin River in CALSIM II. This new model shows a tremendously different picture of water quality and flow in the San Joaquin River. Now, much more water is needed during the late winter and early spring for dilution of poor water quality in the San Joaquin River, not much is needed in the summer. How will this reduction in flow impact PID's ability to divert water under the District's senior water right?

L-25-24 In order to properly evaluate the effects on water quality and flow in the San Joaquin River from implementing any of the proposed Alternatives, the most current modeling data must be used.

L-25-25 Additionally, implementation will be phased over a number of years; the analysis must also show the incremental effects as well as the long-term effects on implementation of the proposed action.

Section 5.2.14 Mitigation Recommendations

L-25-26 The Draft EIS conclusion that there are no significant environmental effects on surface water resources, and therefore no mitigation measures are required, is simply unsupported by the analysis

L-25-27 L-25-28 L-25-29 L-25-30

contained in the Draft EIS. The Draft EIS fails to evaluate the effects of the drainage reduction measures and reuse facilities will have on flow in the San Joaquin River. How will the senior water right holders on the San Joaquin River be ensured that there will be an adequate supply of water to divert? The absence of analysis of this issue renders the Draft EIS legally deficient. The Draft EIS must be revised to address this issue, and once proper analysis is conducted to determine the impact on downstream diverters, Reclamation must mitigate these impacts, and should evaluate the potential use of any "product water" generated by RO treatment into the San Joaquin River for such mitigation.

We appreciate the opportunity to provide these comments and look forward to working with Reclamation on implementation of an alternative that improves water quality and flow in the San Joaquin River.

Very truly yours,

ORIGINAL SIGNED

JOHN SWEIGARD
General Manager

cc: Board of Directors
Jeanne M. Zolezzi, Esq.
State Water Resources Control Board

RESPONSES TO COMMENT L-25

L-25-1

See Master Response SW-1 regarding the analysis of impacts of the alternatives on San Joaquin River water quality and quantity.

L-25-2 - 4

The requested change in the purpose and need discussion (Section 1.1) does not directly arise from the Federal action to provide drainage service to the San Luis Unit. It should be noted that the EIS has been supplemented to include an analysis of the change in flow in the San Joaquin River at Vernalis as a result of the No Action and action alternatives (see Section 5.2). No significant changes in flow of the San Joaquin River at Vernalis were found for any action alternatives compared to No Action.

L-25-5

The PFR describes drainage rates and preliminary flows in Section 3.1. Groundwater modeling and agricultural productivity were used to evaluate on-farm, in-district, and regional drainage facilities. If one farmer installs drains but a neighbor does not, the farmer with the installed drains will be collecting more drainwater in his system at a different rate than if all farmers installed drains. The in-district system provided by Reclamation would still be collecting the total drainage.

L-25-6

The fate of Northerly Area drainage and whether it will continue to be discharged into the San Joaquin River depends upon the chosen alternative. See Section 2 of the Final EIS for a description of each alternative.

L-25-7

Section 5.1 of the Final EIS has been updated to reflect water quality and flow data for the San Joaquin River based on the most recent monitoring information available. In addition, Appendices D4 and D5 include updated water quality modeling to assess changes in the river compared to existing conditions. It should be noted that the No Action Alternative and all of the action alternatives will have similar effects on the San Joaquin River due to removal of the Grassland Bypass Project discharge from the river following expiration of the Use Agreement in 2009. Also see Master Response SW-16.

L-25-8

The PFR describes drainwater reduction optimization and various drainwater reduction options in Section 3.2.1. Since on-farm reduction options are not a Federal action, the specific farmers' actions cannot be certain. However, the net results of those actions must comply with the drainage rate restrictions placed on the system by Reclamation. Flows were estimated and analyzed for each alternative. Section 3.2.2 of the PFR shows that choosing drainwater reduction scenarios is an iterative process since each measure can affect another measure (i.e., irrigation system improvements reduce the need for seepage reduction). The most cost-effective scenario of drainage reduction was used for each alternative, and effects were analyzed for each alternative in the EIS.

L-25-9

Results of the analysis of changes in San Joaquin River flows are presented in Section 5.2. Compared to No Action, the action alternatives did not have a significant effect on flows in the San Joaquin River at Vernalis.

L-25-10

Section 5.1 of the Final EIS has been updated to reflect water quality and flow data for the San Joaquin River based on the most recent monitoring information available. See Master Response SW-16 for additional information.

L-25-11

Section 5 has been updated with additional CALSIM II modeling information regarding impacts to the water quality and quantity in the San Joaquin River due to changes in the Grassland Bypass Project discharges. As a part of the development of CALSIM II, assumptions regarding probable future projects were included to reflect changes in water system demand, system operation rules, and infrastructure improvements expected to occur by 2030. Also see Master Response SW-16.

L-25-12

Section 5.1 of the Final EIS has been updated to reflect water quality and flow data for the San Joaquin River based on the most recent monitoring information available. See Master Response SW-16 for additional information.

L-25-13

Section 5.2 and Appendix D2 of the Final EIS have been revised to include results from CALSIM II modeling of the changes in flow and EC in the San Joaquin River.

L-25-14

See Master Response SW-16 in regard to the TMDL modeling described in Section 5.2.2 and the San Joaquin River data used in that modeling.

L-25-15 - 17

Section 5.2 and Appendix D2 have been revised to include CALSIM II modeling of flow and EC in the San Joaquin River. See Master Response SW-16 in regard to effects on San Joaquin River flows.

L-25-18

No significant impacts to flow or EC were found for the action alternatives as compared to the No Action Alternative. Therefore, no impacts to water rights holders are expected.

L-25-19 - 24

As the commenter noted, historical monthly discharges from the GDA were modified to comply with TMDLs during a 9-year flow record even though the TMDLs had not been approved. The program to implement TMDLs in the San Joaquin River was adopted by the Regional Board in a 1996 Basin Plan Amendment for the Control of Agricultural Subsurface Drainage Discharges. Included in this program is a compliance time schedule for meeting the four-day average and monthly mean water quality objectives for selenium. To evaluate future scenarios, Reclamation assumed that the compliance time schedule would be met. The discharges were modified because reducing flow is the only way to meet the TDML if water quality is to remain the same.

The assumption that the GDA discharge would meet salt and boron TMDLs has been removed due to the uncertain regulatory status of these TMDLs. Revised modeling assumed compliance with the Se TMDLs that have been approved. Also see Master Response SW-16 in regard to effects on San Joaquin River flows.

L-25-25

The comment states that because project implementation will be phased, San Joaquin River water quality and flows should be analyzed to show both incremental and long-term effects. See Master Responses CUM-1, SW-17, and SW-1.

L-25-26

Reclamation believes the environmental analysis in the Final EIS supports the conclusions stated in all sections. Mitigation is described in Section 20 of the Final EIS.

L-25-27 - 30

See Master Response SW-16 in regard to effects on San Joaquin River flows. No mitigation is proposed because the changes in flow due to the action alternatives are not significant compared to the No Action Alternative.

COMMENT L-26. MINASIAN, SPRUANCE, MEITH, SOARES & SEXTON, LLP (FOR VARIOUS WATER DISTRICTS), PAUL R. MINASIAN

MINASIAN, SPRUANCE, MEITH, SOARES & SEXTON, LLP

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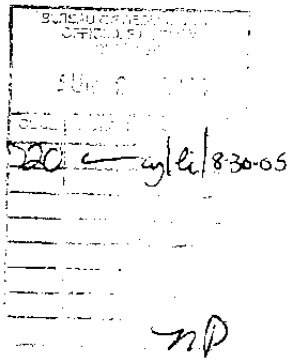

August 26, 2005

Ms. Claire Jacquemin
Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825

By FAX 916-978-5094, and U.S. mail

Re: San Luis Unit Drainage Feature Reevaluation EIS

Ladies and Gentlemen:

This office represents Central California Irrigation District, Columbia Canal Company, Firebaugh Canal Water District, and San Luis Canal Company ("the Exchange Contractors"). We make these comments and inquiries on their behalf regarding the San Luis Unit Drainage Feature Reevaluation Environment Impact Statement.

L-26-1

1.0 The EIS does not discuss the possible, likely or cumulative impacts from the economic effects of incurring $400 million to $700 million in capital costs for drainage facilities and the cost of future operation and maintenance. The Exchange Contractors' lands are located outside of the San Luis Unit. Because the Bureau of Reclamation has delayed providing for drainage to the San Luis Unit, and, in the case of the limited drainage facilities to dispose of drainage from 42,000 acres in the northern part of Westlands Water District that were operated until 1986, terminated the use of such drainage facilities, large amounts of poor-quality water have escaped the San Luis Unit, causing extreme hydrologic pressures to drive poor-quality water into the shallow aquifers in the Exchange Contractors' service area.

L-26-2 1.1 While we are heartened to see that the collection and transportation facilities for the Northern area which would serve these lands will be Federal facilities, we are concerned that the Draft EIS does not explain how the Bureau of Reclamation would finance the installation of drainage facilities and provide for their operation and maintenance.

1.2 A draft EIS that does not examine the environmental consequences arising from economic impacts would not seem to comply with NEPA. If the Bureau intends to treat these expenses as non-reimbursable by the San Luis Unit contractors or by the landowners and farmers within the Exchange Contractors' service area, then, obviously, no cumulative or direct impacts would arise. However, if the Bureau and the Department of Justice, the agencies which we believe are responsible for the economic

L-26-3 damages arising from the failure to provide for drainage for these many decades, plan to attempt to require farmers or landowners within the San Luis Unit to pay for costs of drainage, the EIS should describe the impacts and should attempt to mitigate those impacts. A drainage plan and alternatives that would effectively stop food production on certain lands because the costs of drainage would prevent the profitable farming of these

L-26-4 San Luis Unit properties is exactly the type of environmental impacts, alternatives and mitigation measures that are supposed to be examined under NEPA.

2.0 The Exchange Contractors have for many years attempted to cause the installation and operation of drainage works by the Bureau. In desperation, the Exchange Contractors and some of the San Luis Unit contractors have developed the Westside Regional Drainage Plan. The Bureau has received copies of the plan and detailed briefing

L-26-5 in regard to its possible implementation. The initial capital cost of that plan and its operation and maintenance costs are far less than any of the alternatives discussed in the EIS. The EIS, however, recognizes that portions of the general alternatives may be implemented in phases. We enclose another copy of the Westside Regional Drainage Plan.

2.1 We question whether the Bureau believes that the implementation and operation of the Westside Regional Drainage Plan provides an alternative which will

L-26-6 fully satisfy all of the goals and objectives of the Drainage Reevaluation EIS as to the areas within the Northerly part of Westlands, and in Broadview and Panoche Water Districts and Panoche and Charleston Drainage Districts. If not, why not?

2.2 If the Bureau agrees that the Westside Regional Drainage Plan will likely succeed in providing drainage and treatment of drainage in accordance with the

goals, standards, and objectives of the alternatives specified in the EIS, does the Bureau agree that, if the EIS is adopted and provides for in-Valley disposal, the Westside
L-26-7 Regional Drainage Plan provides a feasible plan to implement alternatives of the EIS should the Record of Decision choose those alternatives, or either of them, as the preferred alternative?

2.3 If the Bureau believes that implementation of the measures described
L-26-8 in the Westside Regional Drainage Plan is inconsistent with the alternatives described in the EIS providing for in-Valley disposal, because its implementation would cause greater adverse environmental impacts, please explain why that would be the case.

3.0 The Exchange Contractors have waited some 40 years for the Bureau to install and operate its drainage facilities to prevent drainage waters reaching our lands which are downslope of the San Luis Unit, and to prevent the pollution of our underground waters and aquifers. We are pursuing legal actions to collect damages and to cause the installation and operation of the drainage facilities that now must collect waters and dissipate groundwater pressures caused by the lack of drainage for 40 years, but now, additional facilities are required to collect and treat poor-quality water which has escaped the San Luis Unit lands. Moreover, we have to deal with poor-quality water which is now appearing in the shallow aquifers underlying the Exchange Contractors' service area. We would strenuously object should the United States argue in any of those
L-26-9 legal proceedings that the Exchange Contractors, their landowners and farmers are in any way estopped, barred or subject to the doctrine of laches or similar legal theories because of a failure to comment in a particular manner in this EIS process. For this reason, the Exchange Contractors point out that they and their landowners and farmers do not waive,
L-26-10 relinquish or in any manner elect remedies by any comments made or not made in this process. The United States should complete its EIS process, and attempt to mitigate for the harm that has been done and the damages caused by its failure to comply with the San Luis Act drainage requirements. This should be at the sole cost and expense of the
L-26-11 United States, and the United States should immediately get on with a process of installing and operating drainage facilities that should not have taken this long. The Bureau facilities required to drain the CCID Camp 13 area and the Firebaugh Canal
L-26-12 Water District service area should immediately be installed, and the collection of poor-quality water for treatment and transportation should commence forthwith at the cost of the United States, and under permits acquired by the United States. At such time as the detrimental impacts to the Exchange Contractors caused by irrigation of the San Luis Unit lands lying upslope have been ameliorated and reduced to the level of groundwater pressures and the shallow aquifer downslope migration which existed prior to the

commencement of Bureau surface deliveries to the San Luis Unit, negotiations may begin regarding any betterment that is to be achieved over pre-1960's conditions, and for the payment for any such betterment that is provided to the lands located outside the San Luis Unit.

L-26-13 4.0 The EIS describes a collection system and treatment or disposal from the Northern area which includes Camp 13 and Firebaugh. Poor-quality water from the San Luis Unit is entering the groundwater aquifers and appearing in deep wells on the East side of the San Joaquin River within Columbia Canal Company. What plans does the Bureau have to prevent poor-quality water from polluting the groundwater underlying these areas further East?

L-26-14 5.0 The project's financing is not discussed in the EIS. Yet for 40 years, the failure to appropriate funds has been the practical focus of the environmental impacts of drainage. No EIS was ever done regarding the environmental harm from not building and operating a drainage system. An EIS must be an accurate reflection of the environmental background. How can this EIS be accurate unless it includes the project's financing plan and the phasing plan for that financing? Are the lower lands such as Camp 13 and

L-26-15 Firebaugh where the pressures and subsurface flows accumulate to be drained first? Is Congress to be asked to appropriate $54 million to implement these facilities and SJRIP treatment in the years 2006 - 2009 in order to comply with the California Regional Water Quality Control Board's prohibition of selenium discharges? If Congress refuses to

L-26-16 appropriate funds, what is the Bureau's plan and project? To accurately describe the environmental condition and baseline, one must describe the financial sources and resources required when for 40 years these financial resources have dictated the drainage conditions that must now be remedied.

Thank you for the opportunity to provide these comments on behalf of the Exchange Contractors and its member entities.

Very truly yours,

MINASIAN, SPRUANCE,
MEITH, SOARES & SEXTON, LLP

By: _____
PAUL R. MINASIAN

PRM:df / Enclosure: Westside Regional Drainage Plan
cc letter only: Exchange Contractors
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Note: The remainder of this submittal contains material that does not comment on the Draft EIS and therefore requires no response from Reclamation. Because it is not comment material, it is not included in the Final EIS, but it will be included in the administrative record for this project and is available upon request.

RESPONSES TO COMMENT L-26

L-26-1

Economic impacts of estimated capital expenditures, as well as the cost of ongoing operation and maintenance for each alternative, are presented and discussed in Section 17.

L-26-2

See Master Response EC-3 in regard to repayment of project costs.

L-26-3

See Master Response EC-3 in regard to repayment of project costs. The requirement to repay the Federal government for the cost of constructing, maintaining, and operating drainage facilities is not considered an impact to farmers and landowners. Rather, it is a contractual condition required for drainage service to be provided.

L-26-4

Project repayment analyses will be conducted as a part of the Feasibility Study. Ability to pay will be assessed in accordance with Reclamation policy for water resource projects and direction from Congress. Impacts to agricultural production are presented in Section 12. Project costs, including mitigation costs, will be allocated and repaid according to project authorizing legislation and Reclamation policy.

L-26-5

The Westside planning period is much shorter than that for the SLDFR. In addition, the Westside Plan does not include lands in Westlands South and Central.

L-26-6

The Westside Regional Drainage Plan provides many of the same features as SLDFR for these areas with the exception of groundwater pumping, which is not part of the SLDFR.

L-26-7

See Response to Comment L-26-6. Also, note that the Westside Regional Drainage Plan includes neither drainage service for all of Westlands nor final disposal for residual salts.

L-26-8

The Westside Regional Drainage Plan is consistent with the In-Valley Alternatives, and elements of the plan have been incorporated into the In-Valley/Water Needs Land Retirement Alternative.

L-26-9

The comment is noted but does not address an issue relative to the adequacy of the EIS.

L-26-10, 11

Comment noted. No response necessary.

L-26-12

Phased construction of the In-Valley Alternatives is described in Appendix J. Additional details on project construction will be developed after publication of the Final EIS and Record of Decision. The construction schedule indicates facilities in the Northerly Area would be constructed first.

L-26-13

Irrigation water delivered by the San Luis Unit enters the aquifer as deep percolation past crop roots. The quality of the delivered water is significantly higher than local groundwater. In the drainage-impaired area, dissolution of soil salts and minerals, plant transpiration, and evaporation from the shallow water table are the primary factors producing poor quality groundwater. The Draft EIS notes that salinity trends in the City of Mendota Well No. 5 may be attributed to [eastward] movement of shallow, saline groundwater (see Sections 6.1 and 6.2.3).

Note that the Draft EIS has a typographical error that incorrectly states shallow, saline groundwater impacting the Mendota well is moving in a "westward" direction (Sections 6.1 and 6.2.3). The Final EIS has been revised to correctly state that groundwater movement is in an eastward direction.

The Draft EIS analysis showed that water table and salinity conditions in the drainage study area are improved by the capture and control of subsurface drainage. Hence, the action alternatives considered represent a beneficial effect on groundwater and drinking supplies relative to the No Action Alternative and existing conditions. While planned drainage facilities will not affect poor quality groundwater that will have already moved past the influence of the drainage systems, the drainage systems will prevent the additional movement of poor quality shallow groundwater to the east.

L-26-14

See Master Response EC-3 in regard to repayment of project costs. The No Action Alternative describes the conditions that would exist if drainage service was not provided.

L-26-15

Phased construction of the In-Valley Alternatives is described in Appendix J. Additional details on project construction will be developed after publication of the Final EIS and Record of Decision. The construction schedule indicates facilities in the Northerly Area would be constructed first.

L-26-16

See Master Response ALT-M1 in regard to project funding.