APPENDIX P7

Individual Comments and Responses

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COMMENT I-01. EDGAR A. IMHOFF

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

July 7, 2005

Dear Ms. Jacquemin:

The following statement is submitted for the public record of comments on the Draft EIS for the San Luis Drainage Feature Re-Evaluation

I-01-1 As a geohydrologist and former manager of the San Joaquin Valley Drainage Program, I find fault with the lack of emphasis on ground-water management in the alternatives presented in the San Luis Feature Re-evaluation reports. Perhaps this omission is due in part to many water planners still harboring the erroneous belief that the high water table in the San Luis Unit is due primarily to the presence of an extensive, shallow layer of clay that prevents surface-applied water from percolating downward. This belief has not been substantiated by scientific investigations. Though "tight soils" do retard the downward movement of surface applied water—in some areas - aquifer tests have shown that in most areas pumping of deep wells will pull down the shallow water table. There are only a few places that exhibit subsurface conditions scientists would term "perched water." (Admittedly, some confusion has been created by cross-sections USGS scientists have drawn showing that an extensive formation called the Corcoran Clay underlies the San Luis Unit. But any careful reading of these cross-sections shows that the Corcoran Clay lies a few hundred feet below land surface.)

I-01-2 The EIS is replete with useful data on the shallow ground water (0-40 feet in depth), however, the creative concepts that ground-water scientists like Deverel, Belitz, and Quinn proposed seem to have been discarded without serious consideration and in-depth evaluation. (See references below.) Through field observations, analysis and modeling these scientists reconstructed the origin of the present conditions in the regional ground water systems that underlie the San Luis Unit, and suggested ways to employ ground-water pumping to draw the shallow water table below crop root zones.

The scientists identified two regional aquifer systems that are separated by the Corcoran Clay: (1), above the Corcoran, a semi-confined system composed of Coast Range alluvium interfingered with Sierran Sand; and (2), below the Corcoran, a confined aquifer penetrated by wells as deep as 1,000 feet. The water-use history, which scientists unraveled through the time dating of constituents in water, reads like this succession of events:

- First, extensive, uncontrolled pumping of the aquifer systems
- Causing subsidence of land and deterioration, in some locations, of the quality of ground waters

- Leading to importation of San Luis Unit surface water—of lower cost and generally better quality
- Encouraging over-application of SLU water to the point that the ground water systems became fully saturated through recharge in excess of pumping discharge—i.e., filling up like a bathtub beneath the middle slopes of the alluvial fans, extending eastward into the valley floor, and above the Corcoran
- Creating an "evaporation factory" at the top of the full bathtub of the semi-confined ground water (mistakenly called "perched") in which salts become concentrated in the root zones of crops, prompting the need for drainage.

In the SJVDP, we asked the ground water scientists if this imbalancing---first toward overdraft and then toward too much recharge could be corrected. The answer was that it could, if the following steps were taken:

- Accept the evidence that large volumes of ground water suitable for irrigation exist under several areas in the San Luis Unit.
- Instead of viewing these resources as private funds to be dipped into by individual growers in times of surface water shortage, look upon ground water as a common-good resource that can be used, under controlled conditions, for the benefit of all growers in SLU.
- Strengthen the existing scientific knowledge of ground water by study of private wells and by drilling test boreholes to round out information on ground water quality and quantity.
- Based on this knowledge and extension and use of the Belitz model, design wells fields with the capacity to lower the shallow water table below crop root zones, while providing ground water to supplement surface water deliveries
- Create a San Luis Unit ground water management district to plan, construct, and operate well fields with the objective of reducing the volume of on-farm drainage waters while extending the useful life of the aquifer systems.

I-01-2 cont.

When these concepts were first proposed, some water managers objected on the grounds that this drawdown of the high water table, particularly under "hot spots" containing high selenium, salt and boron, would shorten the life of the underlying semiconfined aquifer. That is true, unless such hot spots are retired; for, even under controlled conditions, the useful life of the aquifer under hot spots may be only 30 to 40 years. But in many other locations, the useful life of the aquifers under controlled pumping may be hundreds of years. There will be no such longevity for the aquifers, however, if growers resort to the kind of extreme pumping that has occurred in drought years. In 1992, Westlands' growers pumped 600,000 AF. That kind of drawdown has more potential to shorten the life of underground aquifers than a steady, carefully monitored pull-down of the top of the full bathtub.

Similar to each of the alternatives for providing drainage service to the SLU, there are potential downsides to this concept-- legal ramifications, loss of grower autonomy, costs, information needs, etc. Certainly the concept has sufficient potential to merit more investigations and inclusion in the Final EIS.

I-01-3

Great amounts of time, money, and analyses have been spent on the evaporation pond concept—despite the proven hazards and potential long-term problems that attach to creating more large evaporation ponds. The Bureau's work is incomplete without investigating controlled ground-water pumping as a possible component of a drainage service plan. Whatever Bureau water planners do, they must discard a myth that has been repeated so much it has become a mantra: "An ancient layer of clay buried below the surface blocks the percolation of water." NOT TRUE.

References:
Barlow, Paul M., Brian J. Wagner and Kenneth Belitz. (1996). "Pumping Strategies for Management of a Shallow Water Table": Ground Water 34, no.2: 305-317.

Quinn, Nigel W.T. (1991). "Ground-Water Pumping for Water Table Management and Drainage Control in the Western San Joaquin Valley." In The Economics and Management of Water and Drainage in Agriculture: Kluwer Academic Publishers.

Deverel, S.J. and S.K. Gallanthine, (1989). "Relation of Salinity and Selenium in Shallow Ground Water to Hydrologic and Geochemical Processes, Western San Joaquin Valley, California: Journal of Hydrology, 109: 125-149.

Sincerely,

Edgar A. Imhoff

Edgar A. Imhoff

RESPONSES TO COMMENT I-01

I-01-1

Analysis of hydrogeologic conditions and drainage was performed using the Belitz Model originally developed by the USGS. This model has an accurate representation of the depth and conductivity of Corcoran Clay. Groundwater management was considered but not emphasized in the final description of alternatives. The comment is correct in the description of work by the USGS and others that pointed to the physical probability of groundwater management for reducing drainage volumes. The primary uncertainty is groundwater quality. Salinity, boron, and selenium are the primary constraints on use of pumped groundwater. Available data indicated sufficient uncertainty as to prevent development of specific plans for pumping and distribution of the pumped water without substantial additional data collection and analysis. Specifically, a general lack of commitment to use the pumped water occurred among local interests without more water quality data. Prior to large-scale implementation of groundwater management, additional data for the distribution of groundwater quality are needed.

I-01-2

Groundwater management was considered at length in the development of the EIS. After some deliberation, it was concluded that additional data collection and analysis are required to fully develop a project that effectively integrates extensive groundwater pumping into current water management practices. Proposal of groundwater management as part of the action alternatives requires commitments on the part of local entities to accept and use the groundwater and additional analysis for development of optimal pumping and delivery relative to groundwater quality constraints.

I-01-3

The future solution to the drainage problems in the San Joaquin Valley may indeed require consideration of managed groundwater pumping. See PFR Section 3.2.1 for a discussion of the cost effectiveness of groundwater management compared to other source control methods. However, with the lack of additional information (i.e., water quality and well field design), managed groundwater pumping could not effectively be integrated into the drainage solution alternatives.

COMMENT I-02. NANCY LESLIE

366 Mitchell Dr
Los Osos, CA 93402

July 12, 2005

Ms. Claire Jacquemin
Department of Reclamation
2800 Coffey Eller
MP 700
Sacramento, CA 95825

Dear Ms. Jacquemin,

I-02-1

I was horrified to read in today's Tribune that the Federal Bureau of Reclamation is considering dumping Selenium leaden water into the ocean off Cayucos. Treated or non-treated, this is a threat to our environment to say nothing of our fish.

We in Los Osos are being mandated to build a $185 million sewer (no financial help from anyone. It will cost over $200 a month) to clean up the Estuary and our ground water. Morro bay, the next town, has been told that their twice treated sewer water can no long be dumped beyond the Morro Bay Rock. The Morro Bay Fishing Industry has been all but depleted in order to rebuild the fish supply. Our Regional Water Quality Board has run off its feet off up and down the coast fining everyone and anything that overflows in to streams and therefore wends its way to the ocean. An elementary school being built in Cambria was just fined over $300,000 for silt that ran into a stream during our horrendous rain storms last spring. So much for acts of God. Just hand over the money, the majority of which is going into a bank account the rest is to build a fish ladder for the steel head salmon. So much for little kids and education. Follow the money. This same Water Quality Board is also threatening Los Osos with $10,000 a day fines if the sewer is not started by September. All this to clean up the water, and here you are considering dumping gallons of poison water into the ocean. I don't know whether to laugh or cry

In fairness to the Regional Water Quality Board, they are as much against this plan as I am. One frightening thing however, was that the young man to whom I spoke said that it depended a lot on how far out you wished to dump.

In the early 1960's they dumped DDT far out off of the Palos Verdes Peninsula. All our birds died. Pelicans laid eggs so fragile that the young died before birth. Our surfers suffered testicular cancer and my own ocean swimming youngest daughter succumbed to gastric cancer. We had ten cases of various cancers on our block alone. Many of my friends had breast cancer.

We have enough fertilizer and cattle droppings in our creeks coming off our own farms which is a hazard to our bay. We are striving for solutions to clean this up without hindering our farmers. We don't need any more. The Central Coast of California is a

I-02-1 cont.

beautiful place. Palos Verdes was a beautiful place. Twice in a life time is twice too many. Please reconsider this option. What happens in the San Joaquin valley, stays in San Joaquin valley or please find another solution away from hurting anyone or anything

Many thanks for any efforts in our behalf

Sincerely,

Nancy Leslie

RESPONSE TO COMMENT I-02

I-02-1

Comment noted. No response necessary.

COMMENT I-03. TERRI DUNIVANT

>>> Terri Dunivant <gaia@charter.net> 07/13 10:48 AM >>>

Dear Mr. Robbins,

I-03-1

Exporting the selenium problem amounts to spreading the pollution, not solving the problem.

The tourism industry on the Central Coast is based on a clean environment. As well, many people really care about Estero Bay, and the estuary at the south end where the tainted water would collect. Morro Bay is a bird sanctuary, and everybody remembers what happened at Kesterson when birds had to live with selenium-tainted water.

You will find that the great majority of locals see this proposal as a huge threat, and reject it.

Sincerely,

Terri Dunivant

1130 Islay Street
San Luis Obispo, CA 93401
805/544-9676 or cell 704-5433

RESPONSE TO COMMENT I-03

I-03-1

Comment noted. No response necessary.

COMMENT I-04. JOYCE RENSHAW

>>> Joyce Renshaw <jrenshaw@mac.com> 07/13 11:37 AM >>>

I-04-1 Please do not allow the dumping of agricultural run-off from the valley to ruin our beautiful coast. According to research, it is filled with selenium which will cause health problems for both humans and wildlife. It is also much to close to the Monterey Bay National Marine Sanctuary.

I live in Cambria and I do not wish to see our ocean and coast polluted any more than it already is.

Joyce Renshaw

RESPONSE TO COMMENT I-04

I-04-1

Comment noted. No response necessary.

COMMENT I-05. MARIE SMITH

From: Marie Smith <smithmarie@charter.net>
To: <cjacquemin@mp.usbr.gov>
Date: 7/14/2005 7:19:14 AM
Subject: dumping of water from the San Joaquin Valley

Hello!

It has come to my attention that the Federal Bureau of Reclamation is considering dumping approximately 55 Million gallons per day (20 Billion/year) of contaminated irrigation water from the San Joaquin Valley into the ocean near Cayucos or elsewhere. Isn't this the same selenium tainted water that contaminated the Kesterson Reservoir in the early 1980's, leading to well publicized mortality and deformities in waterfowl at that previously rich wetland. In addition to potentially toxic levels of selenium, the water would likely contain high levels of other salts as well as nutrients and pesticides typical of drain water from intensive agricultural operations.

I-05-1

I believe that the water should be cleaned up at the source for eventual reuse, not just dumped!

Cayucos is near Morro Bay where there is a National Estuary. Many fragile life forms are dependent on this Estuary where ocean water comes in twice a day! Fish "hang out" near the coast before coming into the estuary. This area is also on the Pacific Flyway where hundreds of birds travel. Let us remember that the ocean is not an infinite dumpsite.

In an age where we know that fresh water is valuable, let us take care of both problems: don't pollute and reuse water too!

Thank you for your efforts in keeping our planet a place to live!

Marie Smith
Los Osos, CA

RESPONSE TO COMMENT I-05

I-05-1

Comment noted. No response necessary.

COMMENT I-06. RAY FIELDS

7/14/05

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

Dear Ms. Jacquemin

I-06-1

I am writing to you to voice my serious opposition to the option under consideration for pumping contaminated irrigation wastewater to the Cayucos area for ocean disposal. I am the president of The Abalone Farm, Inc., the oldest and largest abalone farm in the US. We have been culturing abalone south of Pt Estero for over 30 years now. Our business relies on the pristine waters of the Pacific Ocean to provide an adequate growing environment for our abalone. Abalone larvae are extremely susceptible to even very small amounts of pollutants, and in fact are used in many EPA laboratories to test for the presence of some pollutants. We are very concerned that if the contaminated water from the Central Valley was disposed near our farm we could suffer devastating consequences. Pollutants in the contaminated wastewater could directly wipe out our crops of abalone, or they could render them unfit for human consumption. In addition, we rely on the local kelp beds to provide the feed for our abalone, and we are concerned that the kelp plants could also become contaminated from this wastewater.

I-06-2

I must also say that it is hugely irresponsible for one group of people, Central Valley farmers, to create a serious environmental problem and then attempt to export their problem to an area hundreds of miles distant. I think it is incumbent on them, and the Department of Reclamation, to address the issue of clean-up at the source of the problem, and not to create problems for other businesses that have nothing to do with the original source of the pollution.

Thank you for this opportunity to comment. If you have any questions or would like any further information on abalone aquaculture here on the central coast, please feel free to contact me at 805 995 2495.

Sincerely,

Ray Fields, President
The Abalone Farm, Inc.
PO Box 136
Cayucos, CA 93430

RESPONSES TO COMMENT I-06

I-06-1

See Master Responses SW-8, SW-13, SW-9, SE-1, and SW-10 in regard to the effects of the Ocean Disposal Alternative.

I-06-2

See Master Response ALT-S1 for a discussion of source control planning and analysis.

COMMENT I-07. LISA OWENS VIANI

>>> Lisa Owens Viani <lowensvi@earthlink.net> 07/19 2:04 PM >>>
Dear Mr. Robbins,

I-07-1 I urge the Bureau to consider additional land retirement as a solution to the drainage problem. This contaminated, selenium and salt-laden water should not be dumped into the S.F. Bay/Delta, Morro Bay or elsewhere, and evaporation problems are an equally bad idea that have proven to be a complete disaster in the past, including in the Tulare Basin.

I-07-2 I have never seen ANY evidence that the damage and impacts to wildlife from these ponds can be mitigated, and I do not believe "hazing" birds away from the ponds is at all a viable, long-term solution. Please retire this contaminated land, the only real solution to the problem.

I-07-3 Whatever happened to BurRec's demo land retirement projects???????? What about buying farmers out using the government's land conservation/wildlife habitat programs? There are better solutions out there, but they are going to take will power and creativity on the part of the Bureau.

Sincerely,

Lisa Owens
1108 Chaucer St.
Berkeley, CA 94702

RESPONSES TO COMMENT I-07

I-07-1

The In-Valley Alternatives all include land retirement components. The proposed retirement of additional drainage-impaired land is discussed in Master Response ALT-L2.

I-07-2

See Master Response MIT-2 in regard to mitigation planning.

I-07-3

Although Reclamation is incorporating wildlife protection actions where appropriate, the purpose of the proposed project is to provide drainage service. The project is not intended to function as a conservation program.

COMMENT I-08. ERIC WISEMAN

>>> <wisefish@charter.net> 07/19 3:16 PM >>>
Attn: Jerry Robbins (USBR)

I am strongly opposed to any alternative that does not include land retirement. Irrigating land that is naturally polluted with selenium makes no sense. Westlands Water District has over 200,000 acres of agricultural land that has been deemed unfarmable due to natural selenium accumulations. This represents 1/3 of all the agricultural land within that district. The retirement of these lands makes more sense than simply trying to dilute the toxic runoff or ship it somewhere else. Kesterson was a complete catastrophe...don't try that approach again. The current situation of dumping ag. effluent into the San Joaquin **I-08-1** River (once CA's 2nd longest river)is more than likely causing adverse biological reactions of paramount signifigance and should be halted immediatly. Dumping into the ocean is also an outdated and nonsensical approach that ignores contemporary science. The current dogma no longer regards the solution to pollution as dilution. Please seriously consider land retirement as an option. It makes sense for everyone...unless you **I-08-2** are Westlands Water District. My children, your children, and countless future generations will benefit if a land retirement option is presented and enacted. Please put an end to corporate ag welfare and the wanton waste of our precious water resources.

Eric Wiseman

RESPONSES TO COMMENT I-08

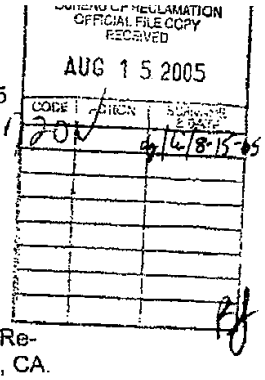
I-08-1

An analysis of the benefits of phasing out drainage discharge into the San Joaquin River is presented in the Grassland Bypass Project Final EIS/EIR. The phaseout of the discharge from the Drain into Mud Slough is assumed to occur under both the action and No Action alternatives. The discontinuation of discharges to Mud Slough is necessary because the 5 µg/L water quality objective for Se in that location becomes enforceable on October 1, 2010, and the current Se concentrations are approximately 50-70 µg/L. In addition, the current Use Agreement for the Drain expires in 2009, as described in Section 2.2.1.1.

I-08-2

Comment noted. No response necessary.

COMMENT I-09. FELIX E. SMITH



August 11, 2005

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

Dear Ms. Jacquemin:

Subject: Draft Environmental Impact Statement – San Luis Drainage Feature Re-Evaluation – San Luis Unit CVP. Westside of the San Joaquin Valley, CA. Draft EIS Comment Period Extended for San Luis Drainage Feature Re-Evaluation to Thursday September 1, 2005. BR release of August 1, 2005

These comments and recommendations replace my comments of July 15, 2005, on subject, sent to Mr. Gerald Robbins, Project Manager.

Project purpose is to:

Provide drainage services (the construction and operation of facilities) to lands of the San Luis Unit (SLU) in order to achieve long-term sustainable salt and water balance in the root zone. (Note: There are other lands suffering from drainage impacts, the result of importing Federal CVP water and applying it to lands of the Westside of the San Joaquin Valley (WSJV).

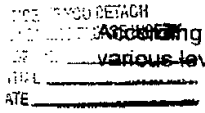
Project objectives:

1. Drainage service will consist of measures and facilities to provide a complete drainage solution, from production through disposal, and avoid a partial solution with undefined components.
2. Drainage service must be technically proven and cost effective;
3. Drainage service must be provided in a timely manner;
4. Drainage service should minimize adverse environmental effects and risks.

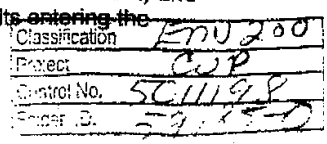
Based on the first objective, the selected action or set of actions must strive for a complete and integrated solution from the actions that produce selenium contaminated drainage to the handling and disposal of the selenium / trace elements / salt chemical brew with it many associated problems. (Underlining added for emphases.)

The Bureau of Reclamation (Bureau) defines drainage services as the removal of shallow groundwater from irrigated lands in order to maintain long-term sustainable salt and water balance in the root zone of the irrigated lands. (DEIS-ES-7). In the document there is little recognition that irrigation upslope can cause downslope lands to become water logged.

As a condition of this activity, the drainage services must be technically proven, must be provided in a timely manner and should minimize adverse environmental impacts. The DEIS discusses a No Action Alternative; In Valley Disposal (Evaporation ponds); In Valley / Groundwater Quality Land Retirement (44,100 to 308,000 acres (DEIS pg. 2-77); In Valley / Water Needs Land Retirement; Ocean Disposal (Estero Bay); Delta-Chipps Water Disposal; and Delta-Carquinez Strait Disposal. Note on DEIS-ES-7 an estimated 379,000 acres are classed as drainage impaired and constitute the drainage service area.



According to the Notice – All alternatives would include common elements (land retirement) and various levels of drainwater treatment to control the amount of Selenium / salts entering the



I-09-1 environment. These so-called "common elements" leads to a mix of management options that cannot be evaluated because related information are missing. The preferred alternative should be described and public review comments requested.

I-09-2 Under the No Action Alternative –the irrigation of the SLU and adjacent lands would continue. This application of water to irrigate the upper slope lands of the SLU will continue to generate down slope hydrostatic pressure, causing the shallow groundwater to move to the San Joaquin Valley bottomlands and waterways including the San Joaquin River. This drainage / leachate of Selenium, Boron, Molybdenum, other trace elements, sulfates and chloride salts are contaminating the soils, groundwater, aquatic and wetland habitats on the WSJV. Apparently there is the assumption that the CVP long-term contracts that serve the SLU and adjacent lands will be renewed as a birthright with little environmental review. Such contract renewals with the use of applied water and resultant impacts should be tested against the State Board's broadened definition of what is a reasonable use of water.

I-09-3 The record of the Hearing before the Subcommittee on Water and Power Resources of the Committee on Interior and Insular Affairs – House of Representatives on Agricultural Drainage Problems and Contamination at Kesterson Reservoir held in Los Banos, CA, on March 15, 1985, should be reviewed because some of the information is still very pertinent.

I-09-4 The Department of the Interior (DOI) policy, 43 CFR, Part 24.1 (b) reads; The Secretary of the Interior reaffirms that fish and wildlife must be maintained for their ecological, cultural, educational, historic aesthetic, scientific recreational, economic and social values to the people of the United States, and that these resources are held in public trust by the Federal and State governments for the benefit of present and future generations of Americans (pg. 253 of Hearing Record). (Underlining added for emphases.)

DOI agencies, as public trustees, are empowered to do everything necessary to see that fish and wildlife resources are protected and managed so they are passed to future generations improved or at least not diminished in value. The same applies to State resource agencies.

I-09-5 The presentation by Carol Hallet, representing the Secretary, Department of the Interior, (pg. 150-151), and the comments of David Houston and Joe Blum are very pertinent to this entire drainage issue today. (Also see pgs. 10-52 of Hearing Record.)

I-09-6 The DOI, in 1985, was concerned that the grotesque mutations, maiming, massive die-off and killing of migratory birds as a result of selenium poisoning caused by selenium contaminated food chain could be a violation of the Migratory Bird Treaty Act (MBTA). Such poisoning would then be deemed a Federal criminal act. The nexus is the Federal irrigation water delivered by the Bureau to irrigate the saline – seleniferous soils on the Westside of the San Joaquin Valley (WSJV). The State Board already had a finding that the selenium-contaminated wastewater at Kesterson NWR was in fact a hazardous waste. (See Houston, pg 13. of Hearing Record.)

Secretary of the Interior Hodel concerned about violating the MBTA ordered closing Kesterson NWR evaporation ponds and plugging the drains that were the source of the selenium drainage flowing to the Kesterson Evaporation ponds. The Secretary did not want to violate the MBTA because DOI officials could be held liable, a Federal offense.
See U.S. v FMC Corporation, 572 f2d 902 (1978).

Mr. Joe Blum, FWS representative, verified that any action that resulted in a taking or mortality to migratory birds, which was the result of selenium in the drainage and wastewater that impacted the migratory birds themselves, their food chain or their habitat would violate the MBTA. This was the collective finding of the DOI Solicitor and Department lawyers. (See Hearing Record pg 23, 31, 32.)

2

Mr. Houston, Regional Director of USBR, indicated that if you continue to deliver water to irrigate these saline seleniferous soils, the underground drainage system would continue to serve as a conduit to transfer the drainage to localized areas. (See Hearing Record pg. 13-14.) The downslope movement of selenium-contaminated drainage would, at some time and some place, come to the surface. This would result in severe ponding and contamination of those bottomlands. The selenium leachate was already contaminating Salt and Mud sloughs, tributary to the San Joaquin River, flowing then downstream to the Delta. Selenium contamination of these lands and waters continues today.

I-09-6 cont.

From Mr. Houston's statement it was apparent to all present, that instead of having just one Kesterson killing field (Selenium evaporation ponds) there could be several Kesterson like killing fields where selenium drainage could raise havoc with migratory birds and other wildlife. Any location where selenium poisoning and habitat contamination was found would be a violation of the MBTA. The Federal nexus is CVP water delivered by the Bureau and applied to saline seleniferous soils. DOI officials could be in violation of the MBTA, a Federal criminal offense.

In 1984, the State Water Resources Control Board in a general policy stated: "Failure to take appropriate measures to minimize excess application, excess incidental loss or degradation of the water quality constitutes unreasonable use of water". (See Division of Water Rights, California State Water Resources Control Board, Agriculture Water Management for Water Purveyors, September.)

I-09-7

There are many problems involving the drainage and wastewater issue. Presently the drainage problem is being transferred from one geographic area (the land owner / farm operator) to another, i.e. to the down slope lands and down stream resources, affecting public and private users of land and water. Of major concern is the contamination of the various habitats and resources including soil, groundwater, wetlands and aquatic environments. The cost of cleaning up, treating or reclaiming this massive area should be included in any economic analysis associated with continued irrigation of saline seleniferous soils. Some of the alternatives continue to transfer to problem – drainage pollution to other geographic areas of the state.

Please note the Convention on Wetlands of International Importance (Ramsar Convention represented by 144 nations) meeting February 2005, designated The Grasslands Ecological Area of Merced County, California, as a "Wetland of International importance." This Grasslands Ecological Area consists of more than 160,000 acres of wetlands in Federal, State and private ownership (Fish and Wildlife News - USFWS, Spring 2005).

I-09-8

Impounded waters such as that used in commercial fish rearing, and impounded wetlands on private duck clubs, on lands of Federal National Wildlife Refuges and State Wildlife Management Areas are very susceptible to adverse affects from only moderately elevated concentrations of waterborne Selenium in the supply. Such lands and waters and the waters of the lower San Joaquin River downstream to the Delta with their respective fish and wildlife resources have been impacted by Selenium and other trace elements in agricultural drainage and wastewater for years.

In 1987, Lemly (Cycling of Selenium in the Environment: in Selenium and Agricultural Drainage: Implications for San Francisco Bay and the California Environment – Bay Institute of San Francisco, 1989) described Selenium cycling and mobilization processes in the aquatic environment. It can be from sediments through plant root to various parts of the plant. It can be from sediments directly into the water column by wind induced mixing. It can be from the water column into aquatic life. However the direct uptake of sediment-associated Selenium by benthic invertebrates is especially important because of its ramification in the aquatic food chain.

3

I-09-8 cont.

Biomagnification is the progressive increase of the concentration of Selenium at the successive trophic levels. Selenium bioaccumulation and toxicity from a waterborne concentration from 5 to 30 Selenium parts per billion would be as follows: In plankton an order of 500 to 800 times the water borne concentration; in sediment about 200 to 400 times the water borne concentration; in benthic invertebrates about 800 to 2,000 times the water borne concentration; and in fish depending on species and tissue sampled from 1,000 to 35,000 times the water borne concentration. Thus the bioaccumulation factor – the measure of concentration of Selenium in the organism verses that of that of the water borne concentration typically ranges between 500 to 35,000 times. These figures are comparable with the data gathered by FWS and USGS from the Kesterson, and Volta ponds and other ponding areas of the WSJV.

I-09-9

Apparently it is Bureau of Reclamation policy to allow continued irrigation of saline seleniferous soils even when the drainage from such a use (soil leaching and irrigation) produces drainage and wastewater so severely degraded by chemicals, various salts and trace elements (Selenium, Boron, and Molybdenum, sodium chloride and sulfate salts, etc.) that it is unfit for other beneficial uses. This DOI policy must be openly questioned. This is because when such a chemical mix – pollutes State waters, it prevents others from making beneficial use of their water rights for domestic and agricultural uses; are unsuitable or unusable for fish and wildlife propagation and conservation purposes; such waters impact the health and renewability of fish and wildlife populations or renders the tissues of fish and wildlife unfit for human consumption, or harmful to wildlife if consumed; or renders aquatic habitat to near lifeless or with very low biotic diversity. Such impacts were graphically brought to people's attention in 1983, by pictures of grossly deformed young of migratory birds on TV during the dinnertime news.

The USGS Report "Forecasting Selenium Discharges to the San Francisco Bay-Delta Estuary; Ecological Effects of a Proposed San Luis Drain Extension" by Drs. Samuel N. Luoma and Theresa S. Presser –2000), indicates that the reservoir of Selenium on the WSJV is sufficient to provide loading at an annual rate of about 42,500 pounds of Selenium to the Bay-Delta disposal point for 63 to 304 years at the lower range of its projection. This is with the influx of Selenium from the Coast Range curtailed. Also according to USGS disposing drainage and wastewater outside of the WSJV annually, may slow the degradation of valley soil resources, but drainage alone cannot alleviate the buildup of various salt and Selenium, at least within a century. There were other projections extending the loading range from 45,000 to 128,000 pounds of Selenium annually.

The DEIS, Fig. 2.4-1 indicates that the non-drainage impaired lands are upslope of the drainage-impaired lands. The DEIS, Figures F6-1 thru F6-4 show the concentration of various salts (Selenium, Boron, Molybdenum, sodium chloride and sulfate salts, etc.) in the shallow groundwater of the San Luis Unit and adjacent lands. Tidball – 1986 indicates soils sampled through out the area shows that there is no significant difference in findings between those taken at 0 to 12 inches in depth compared to those taken 66 - 72 inches in depth. (See Tidball. R.R., R.C. Severson, J.M McNeal and S.A. Wilson –distribution of Selenium, Mercury and other Elements in the Soils of the San Joaquin Valley and Parts of the San Luis Drain Service Area, in Proceedings of the Third Selenium Symposium, Selenium and Agricultural Drainage: Implications for San Francisco Bay and the California Environment, Berkeley California – The Bay Institute of San Francisco and Department of Conservation and Resource Studies, University of California, Berkeley, March 1986.)

I-09-10

It is irrigating such upslope lands and specifically the resultant leachate drainage that are polluting downslope soils and causing these downslope lands to be drainage impaired. It is this drainage pollution that must be controlled at their source. Simply put, the Bureau should not be a part of the deliver water to irrigate lands that are the known sources of the Selenium, Boron, and Molybdenum, sodium chloride and sulfate salt problems.

4

I-09-11

The location and acreage of the soils upslope of the drainage impaired lands that can be irrigated without impacting down slope lands and ecosystems should be identified. A water budget and cropping plan should be developed for such areas. The irrigation efficiency should be determined for each area. A program to monitor the movement of groundwater downslope should be implemented as a project cost. The upslope lands, the drainage of which is found to be impacting the downslope lands should be taken out of irrigated production. Dry farming such lands is always an option. A program for buying the irrigation rights of those lands upslope of the drainage-impaired lands should be instituted.

I-09-12

The Bureau, by continuing to supply water to irrigate saline / seleniferous soils, is contributing to the ongoing contamination of shallow groundwater of the downslope lands, lands, waters and associated habitats used by resident and migratory birds, other wildlife, many species of fish and other aquatic life. Drainage and wastewater along with shallow groundwater are continuing to contaminate habitat, adversely affecting basic elements of the food chain, which in turn are affecting the upper trophic levels of the aquatic food chain, and extends to herbivores, reptiles, mammal and avian predators. This irrigation use of water has resulted in a potential public

I-09-13

nuisance and an unreasonable use of water under California law.

Today the laws of physics have not been repealed by the Administration or the CVPIA. The situation Mr. Houston discussed (see Hearing Record), is happening today. Selenium contaminated drainage and wastewater is still flowing from the irrigated upslope lands down slope to saturate bottomland soils. Also some of this water is also creating mini Kesterson evaporation ponds. Deformities to migratory birds have been found at such private mini Kesterson evaporation ponds. These areas are hazardous waste sites the result of Federal water irrigating saline seleniferous soils.

The Bureau must remember that the use of CVP water acquired under Section 8 of the 1902 Reclamation Law states - -" the Secretary of the Interior in carrying out the provisions of the Act shall proceed in conformity with state law; - - Provided, that the right to the use of water acquired under the provision of this Act shall be appurtenant to the land irrigated, and beneficial use shall be the basis, the measure, and the limit of the right."

I-09-14

A hazardous waste situation caused or resulting from irrigating saline seleniferous soils with CVP water is clearly not in conformity with California state law. Also a Federal criminal action could be pursued under the MBTA against private evaporation pond operators.

Today there is the potential to have the longest Selenium hazardous waste site know to man, extending through the Grasslands (starting at the Mendota Pool) near the town of Mendota, downstream via the San Joaquin River to the Bay-Delta, Suisun Bay and adjacent marshlands. This Selenium / salt leachate composite puts at risk the fish and wildlife species that utilize the area. This includes food chain organisms such as zooplankton, thru filter feeders such as clams, and to sturgeon that feed on such clams. The Sacramento Bee of July 3, 2005 in the article "Delta Danger", the decline of Delta fish and food chain organisms and "a broad ecosystem collapse" is discussed. The possible collapse of the Delta ecosystem is not an acceptable management option by the managers of the Federal CVP and or California's SWP.

Besides the limitations of Section 8 of the 1902 Reclamation law, one must note that the August 26, 1937 Act (H.R. 7051) authorizing a multitude of river and harbor improvement works, including the Central Valley Project, the last phrase of the policy pronouncement states "said investigations and improvements shall include due regard for wildlife conservation". This occurred well before the CVPIA of 1992.

5

Reclamation law prohibits delivery of water to lands that the Bureau considers unsuitable for sustained irrigation (Reclamation's Irrigation Suitability Land Classification System (DEIS Pg.13-7). This does not tell the full story. In DEIS Pg 6-11 reference is made that in the upslope areas, the water table is typically located several hundred below the land surface. Water applied to such lands soon moves below the root zone to the ground water that then moves downslope. The slope of the land and the depth to the underlying clays prevents the build up of the water table. However when this drainage moves downslope to areas underlain with clays within 7 feet of the land surface, the drainage will soon surface to create ponds with a chemical brew including Selenium.

Under natural conditions of low average rainfall coupled with high evaporation rates, runoff from the Coast Range was soon lost by evaporation. However with the application of 1 to 2 feet per acre of subsidized water to the saline seleniferous soils containing a mother lode of Selenium, Boron, Molybdenum, sodium chloride and sulfate salts, the downslope movement of groundwater soon water logged downslope and bottomlands. In many areas the white powdery material generally called "alkali" can be readily found as the drainage and wastewater puddles and then evaporates leaving a precipitate of Selenium, Boron, Molybdenum, sodium chloride and sulfate salts, and other materials. The once naturally rich bottomland soils, the heart of the old Miller and Lux holdings, have become water logged with this Selenium, Boron, Molybdenum, sodium chloride and sulfate salt leachate rendering them unfit for historical agricultural uses, for fish and wildlife purposes and recreational values associated with the public and private lands and waters of the area. (See- The Kesterson Effect: Reasonable Use of Water and the Public Trust, by Felix E. Smith, in San Joaquin Agricultural Law Review, Volume 6, Number 1-1996, San Joaquin College of Law.)

I-09-15

One is reminded that in 1895, the California Court stated in People ex rel Ricks Water Co. v Elk River Mill and Lumber Co. (40 Pac Rpt 486 –1895); ***if the conformation of the defendant's land is such that he cannot carry on a dairy without putting such filth directly into the water, then he must find some other use for the land*** (emphases added). This rational thinking of 110 years ago is particularly relevant to today's Selenium and saline drainage and wastewater issues. Following the thinking of this Court, if the Westside farmers cannot carry on their operations without polluting the local ground and surface waters and down slope lands and habitats, then **they must find some other use for the land**. And according to Audubon there is no taking issue. (National Audubon Society v. Superior Court Alpine County (33 Cal. 3d 419, 189 Cal. Rpt. 346 – 1983).

It then follows that the best control of this Selenium, Boron, Molybdenum, sodium chloride and sulfate salt leachate is not to make this chemical mix – a hazardous waste in the first place. The old adage is "that if you don't make the mess, you have anything to clean up".

The area of the SLU is about 713,000 acres with (550,000 plus 80,000) 630,000 acres irrigated (DEIS pg.12-1). Total arable is 699,9479 acres. (DEIS pg.13-2/3). The area is naturally water short (low rainfall) but has a long growing season for climatically adapted and salt tolerant crops. Early on the local groundwater was mined to help build the economic value of the area. It was this economic value that was used to justify building the SLU. While corporate entities were waiting for a federal water supply to arrive, the Department of Water Resources released its Bulletin No. 89, Lower San Joaquin Valley Water Quality Investigation – 1960. This document discusses concerns about the chemicals, and various salts in the soils and drainage from the area. The soils and parent material extend throughout the Westside, south to the end of the Valley. The sodium ion was a major concern, not just simple chloride. A variety of sulfates, boron and numerous trace elements also were a concern. Drainage from the Panoche area was "highly concentrated from a quality standpoint and unusable for beneficial purposes" (see pg. 95 of Bulletin No. 89). The Panoche Area is about mid-point on the WSJV. In 1960, the San Joaquin River was already seriously polluted from agricultural drainage and wastewater.

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The observation that the drainage was "highly concentrated from a quality standpoint and unusable for beneficial purposes", came to the attention of a few people, but had little impact. The justifiers of the SLU were concerned about whether lending institutions would loan funds on SLU lands, if they knew about the potential soil chemistry / water quality problems. Such problems could require massive expenditures to support agriculture on upslope lands without loosing the productivity of downslope and bottomlands, their respective fish and wildlife habitats and open space values.

I-09-16 In DEIS -Section 12 "Agricultural Production and Economics", much is mentioned about the economic impacts. The SLU of the CVP is clearly a public subsidy of agri-business. Irrigating saline soils having high concentrations of Selenium, Molybdenum, Boron, sodium chloride and sulfate salts, etc., in drainage and wastewater, is a liability, not an asset to agriculture, fish and wildlife resources. If this SLU were an agricultural asset, the associated benefits would be able to cover the cost of mitigation and clean-up measures. The Federal subsidy (public investment using 1978 figures and dollar values) was put at $770 million, or $1,540 per acre for the SLU. This is the part the farmers do not pay back. The value of the land has increased about $800.00 per acre while the project cost was $1,540.00 per acre. This does not include the subsidized cost of electrical energy to pump water from the Delta. This does not include the annual OM & R expenses associated with the distribution and drainage system because they are the responsibility of the local users. (See pages 38 & 39 -Special Task Force Report on San Luis Unit, CVP, CA. Bureau of Reclamation 1978). Also Appendix D of this Report presented a false picture of SLU soils.

I-09-17 In Turning off the Tap on Federal Water Subsidies, Volume 1, by Dr. E Phillip LeVeen and Laura King for The Natural Resources Defense Council, Inc and California Legal Assistance Foundation, San Francisco, CA –1985. the combined intended and unintended subsidies to Westlands WD amounts to a non-reimbursable cost of $2,869.00 per acre irrigated. The water and power subsidy was put at $217.00 per acre per year, while the contractors pays about $34.00 per acre per year. These figures are in 1985 dollars. The full cost of providing water should be repaid.

I-09-18 The above subsidy values do not include the cost of damages to public trust resources, uses and values in the waters of the area of origin, such as fish resources of the Trinity River. Nor does it include the cost of aquatic resources - ecosystem impacts to the Lower American River Chinook salmon and steelhead because temperature (sufficient cold water pool reserve in Folsom Reservoir) are not provided in many years to provide conditions to protect steelhead and provide temperature and flow conditions for Fall-run Chinook salmon. These costs do not include the damages to trust interests of the Grasslands, degraded surface and groundwater supplies or the cost of replacement water supplies or of any clean-up costs. The total dollars spent on the greater Selenium irrigation / drainage issue is probably now over $250 to $300 million dollars since 1983. I do not see where these costs have been factored into any of the Bureau's analyses.

I-09-19 In addition there is no economic / allocation efficiency evaluation regarding the amount of water used for irrigating saline / seleniferous soils and its resultant drainage. Such an evaluation would address the value of that water as a limited resource having alternative values, such as M&I water supply, ecosystem restoration, fish and wildlife, aesthetic and recreation values, and as an ecosystem that benefits all of society and future generations. It must include the obligation to protect the public trust (for present and future generations), protect water quality and the renewability of fish and wildlife populations dependent on that water as an ecosystem. This must include dollar and non-dollar values of this water. It must include meeting water needs at the least cost over time. **AND** it also must involve using water for reasonable and beneficial uses at the source of supply (area of origin) in dollar and non-dollar values.

For example, it would include the dollar and non-dollar value of an additional 100,000 to 200,000 acre feet of cold water in Folsom Reservoir to help provide year long biological needs to protect and provide conditions for steelhead (listed as ***threatened*** under FESA) and improve the conditions for

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I-09-19 cont.

holding and naturally spawning fall / late fall-run Chinook salmon (candidate species under the ESA). Another example, it would include the dollar and non-dollar value for releasing an additional 100,000 to 250,00 acre feet of water from Trinity Reservoir to the Trinity River to provide or to meet year long biological needs for naturally spawning steelhead, Coho salmon and Chinook salmon; for recreation, ecological, and aesthetic values throughout the Trinity and Klamath Rivers.

It should also include the dollar and non-dollar value of holding an additional 250,000 to 500,000 acre-feet (depending on the acreage retired) in Shasta Reservoir to provide the added temperature control of releases made to the Sacramento River in order to fully protect the winter-run Chinook salmon listed as ***endangered*** under the Federal Endangered Species Act.

I-09-20

It could also be valued as the cost of providing a new water supply at today's cost. The 379,000 acres retired from irrigation production should provide at least 1 acre-foot of water per acre of land retired. Therefore the amount would be 379,000 acre-feet. This is especially so if Westlands WD contract is for 1.15 MAF acre-feet for irrigating 630,000 acres. Even using the DEIS figure, about 230,000 acre-feet could be reallocated for other uses. The saving of 230,000 acre feet of water through land retirement could be valued at what it could cost to provide an additional 230,000 acre feet of new CVP yield. A new dam to provide a base supply (230,000 AF) would have to come from an Auburn Dam (American River) or a dam at Temperance Flat (San Joaquin River) the costs of which could easily be $2 billion to $4 billion dollar tax payer subsidized water supply.

I-09-21

The acreage of land taken out of irrigation production has some economic and environ-mental benefits. These include the amount of water not pumped out of the Delta, the amount of fertilizer not applied, the amount of pesticides and carriers not applied, and the amount of energy not used to pump or manage water and the funds not spent to manage the contaminated wastewater and drainage should be incorporated into the economic analysis. The water, about 200,000 to 225,000 acre-feet for each 100,000 acres taken out of irrigated production (this includes delivery and evaporation losses) would have significant values for ecosystem mitigation and restoration purposes, irrigation and M&I purposes.

I-09-22

One wonders how many more millions of dollars must be spent before the Bureau, this Administration, federal and state regulators say that is enough. One also has wonders how many dollars must be spent to keep the saline seleniferous soils in irrigated production as a benefit to the Nation. It is clear to me that a purpose of this effort is to bleed the affected farmers / agri-business corporations and taxpayers of additional dollars as land managers and friends try to meet Selenium criteria in 2009 or until the political stars line up to arrange for a buyout – land (irrigation reduction) retirement program at tax payer expense.

According to E. Phillip LeVeen, with a Ph.D. in agricultural economics from the University of Chicago, the only cost effective solution is to shut off the water because the high-tech solutions are all far more expensive than the agriculture in the region is worth. And that was in 1985. (See Kesterson as a Turning Point for Irrigated Agriculture – Selenium and Agricultural Drainage: Implications for the San Francisco Bay and the California Environment, 1986 – the Bay Institute of San Francisco.)

I-09-23

In order to ascertain the effectiveness of various clean up and remediation means and measures, and to ascertain if additional lands should be retired or other actions to be undertaken in order to attain the desired objective, a monitoring program must be undertaken for the life of the project, for at least the next 100 years, with status reports prepared every five years and released for public review and comment.

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Conclusion

The primary project objective --Drainage service will consist of measures and facilities to provide a complete drainage solution, from production through disposal, and avoid a partial solution with undefined components – is not being met. Taking the saline seleniferous soils out of irrigation production is not described in the DEIS. Apparently the only cost effective solution is to shut off the water because the high-tech solutions are all far more expensive than the agriculture in the region is worth. In addition development cost are far exceeding benefits, and environmental costs are going to be weighing against the project far exceed project benefits.

I-09-24 As a matter of public policy, the DOI and the Bureau should seek to promote a cooperative solution that will protect soil productivity and the renewability of natural resources (read fish and wildlife and there dependent habitats) of the San Joaquin Valley while meeting the Valley's real water needs without transferring environmental problems to another area.

Clearly the Bureau should not be involved in any project action that results in such negative issues and costs while the benefits are dubious at best. The Bureau must avoid any action that moves the problem / solution to another geographic area. The Bureau must avoid any action that results in adding the chemical leachate of Selenium, Molybdenum, Boron, sodium chloride and sulfate salts, etc. to downslope lands, waters and habitats, including the San Joaquin River, the Bay-Delta and Pacific Ocean.

It is self evident that source control – reduction measures constitute the best management action. Therefore there are several actions that need immediate implementation.

I-09-25 1. The Bureau should select the preferred alternative and ask for public comments.

I-09-26 2. The Bureau should not be a part of the deliver water to irrigate lands that are the known sources of the Selenium, Boron, and Molybdenum, sodium chloride and sulfate salt problems. The irrigation of all such upslope lands should cease. (This would reduce the need to have new evaporation ponds, or new reused facilities and reduce the negative effects of disposal actions.)

I-09-27 3. There should full land retirement of at least 379,000 acres (DEIS – ES-7) identified as drainage impaired lands.

I-09-28 4. The extent (location and acreage) of the acreage upslope of the drainage impaired lands that can be irrigated without impacting down slope lands and ecosystems should be identified. A program for buying the irrigation rights of those lands and the water that was used on the lands upslope of the drainage-impaired lands should be undertaken to reduce the Selenium / salt drainage impacting the downslope lands.

I-09-29 5. The irrigation use of water with resultant drainage and wastewater are a potential nuisance as well as an unreasonable use of water under California law. All water contracts for irrigating saline / seleniferous soils should be reviewed relative to the reasonable and beneficial use of water under California State Law.

I-09-30 6. The amount of water Westlands WD contracts for from the Bureau should be adjusted, because of the land retirement program, in order to be consisted with the intent of Reclamation law i.e. "Provided, that the right to the use of water acquired under the provision of this Act shall be appurtenant to the land irrigated, and beneficial use shall be the basis, the measure, and the limit of the right."

9

I-09-31

7. A detailed monitoring program must be formulated as an integral part of the preferred alternative. The monitoring program must be funded and implemented for the life of the project. This is necessary to determine if the action or measure is doing what it was supposed to be doing. The effectiveness of various clean up and remediation means and measures must be determined and if any additional actions are needed to attain the desired objective. Status reports on each means or measures should be prepared every five years for public review and comment.

I-09-32

8. The Bureau should place a high priority on obtaining new long term water service contracts with Westlands Water District, with a price for water service that fully recovers the Bureau's costs.

I-09-33

There should be an admission by the Bureau of Reclamation that with today scientific knowledge and available evidence, the irrigation of the saline seleniferous soils of the SLU and at other WSJV locations should never have been undertaken.

The continued irrigation saline seleniferous soils will result in more Selenium, Molybdenum, Boron, sodium chloride and sulfate salt problems, i.e. polluting the downslope lands, waters and habitats in public and private ownership.

Thank you for the opportunity to provide these comments.

Sincerely

Felix E. Smith

Felix E. Smith
4720 Talus Way
Carmichael, CA 95608

cc: interested parties

SLDFRE-DEISMay2005final

RESPONSES TO COMMENT I-09

I-09-1

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

I-09-2

See Master Response P&N-1.

I-09-3

Reclamation considered the activities described in this comment in developing this EIS.

I-09-4

Comment noted. No response necessary.

I-09-5

The comment is noted. Reclamation continues to evaluate and consider information that is relevant to the drainage project. New information can be forwarded to Reclamation's Project Manager for evaluation.

I-09-6

See Master Response GW-1 in regard to the effect of evaporation basins on migratory waterfowl and other species.

I-09-7

The economic analysis is presented in Section 17.

I-09-8

Comment noted. Existing data on Se bioaccumulation in birds in the Grasslands area, including the San Luis National Wildlife Refuge and the Mendota National Wildlife Refuge, are discussed in Section 8.1.1, and the importance of uptake of sediment-associated Se is discussed in Section 8.2.2.1.

I-09-9

See Master Response P&N-1 in regard to the continued irrigation of drainage-impaired lands.

I-09-10

See Master Responses P&N-1 and ALT-S1 in regard to irrigation of drainage-impaired land and source control, respectively.

I-09-11

The Draft EIS used a three-dimensional numerical groundwater-flow model (originally developed by the USGS) to analyze how shifts in water sources (imported surface water and local groundwater), water application rates, and land use potentially affect groundwater levels and flow in upslope and downslope areas. In general, model results and current hydrologic understanding of the system indicate that continued irrigation of upslope lands will not adversely affect downslope retired or drained areas, because the primary groundwater impact in any given area is irrigation and artificial drainage of that area.

The model uses mean annual recharge and pumpage data to project long-term (49-year) changes in annual water-table elevation. Simulated recharge rates are the consequence of cropping patterns, water supply, and water application technology. Beginning in 2005, the Draft EIS assumes that recharge rates decrease by 0.14 foot/year throughout the Northerly Area due to seepage reduction and irrigation system improvements; recharge rates decrease by 0.10 to 0.20 foot/year throughout the Westlands subarea due to irrigation system improvements (see Appendix E-4). These assumptions are incorporated into the data sets used by the model.

The Draft EIS did not consider the elimination of lands outside of the drainage-impaired area (upslope lands) from irrigated agricultural production. Candidate lands for retirement were located within the drainage-impaired area, and their retirement reduces the estimated drainflow volume produced.

Groundwater monitoring is already conducted to varying degrees by local water districts. Funding to support future monitoring activities has not been included in the project budget.

I-09-12

The Draft EIS recognizes that imported irrigation water contributes to shallow water table conditions and increased soil and groundwater salinity. However, changing water management and land management practices have a large influence on these processes. Available data indicate that increased irrigation efficiency and land retirement can substantially reduce shallow groundwater conditions in downslope areas. For example, in Westlands, an ongoing Reclamation land retirement demonstration project points to local irrigation as the primary influence on shallow groundwater levels; groundwater levels declined underneath the retired lands.

In the drainage study area, groundwater movement is primarily downward resulting from the combined response to deep percolation of irrigation water and pumpage from deep water supply wells. 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 analysis showed that water-table and salinity conditions in the drainage study area are improved by the capture and control of subsurface drainage, increased irrigation efficiency, and land retirement.

I-09-13

See Master Response P&N-1 in regard to reasonable use of CVP water.

I-09-14

Some ponding of drainage water occurred from April to mid-May 2003 when a field in the in-valley treatment area was inadvertently flooded. This was not a "pond" or a "private pond." Some elevated levels were found in eggs gathered near the flood location, but no deformities were observed. Procedures have been put in place to prevent flooding, and a contingency plan has been developed in case flooding occurs.

No surfacing or ponding of upslope drainage water has taken place. On occasion, if field collection sumps are shut off during wet periods, water could run out onto the ground. This is because the upper buried tile drains are at a higher level than the sump. When this situation occurs, the water is not deep enough to create a pond.

See Master Response GW-1 in regard to the effects of evaporation basins on migratory waterfowl and other species.

I-09-15

See Master Response ALT-S1 in regard to source control of drainwater.

I-09-16, 17

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

I-09-18

The comment is outside of the scope of this EIS.

I-09-19

The commenter requests an analysis of "economic/allocation efficiency" for water applied to seleniferous soils. Reclamation is unaware of any procedures for such an analysis. The analysis of impacts from the No Action and action alternatives is presented in Section 12 of the EIS.

I-09-20

The action suggested in the comment is outside of the purpose and need for the project.

I-09-21

Benefits and costs of retiring land from agricultural production, including changes in agricultural inputs and outputs and changes in water requirements for irrigation, are estimated in the National Economic Development (NED) analysis prepared as a part of the Feasibility Study. The NED analysis is used in the identification of the preferred alternative in accordance to the Principles and Guidelines for Water Resources Develop Projects.

I-09-22

Comment noted. No response necessary.

I-09-23

See Master Response MIT-2 for a description of additional mitigation planning details that have been added to the Final EIS.

I-09-24

The retirement of all drainage-impaired lands was considered but screened out, as described in Draft EIS Section 2.11.4.1. See Master Response ALT-L2 in regard to the analysis of land retirement scenarios.

I-09-25

See Master Response ALT-A1. The Final EIS will be available to the public for at least 30 days before a final decision is made concerning which alternative to implement.

I-09-26

The comment is noted. Reclamation is unaware of irrigated upslope lands that will result in serious water-quality problems. Most soils in the western San Joaquin Valley contain some boron and Se. From a water-quality standpoint, problematic areas are in downslope lands where additional drainage and treatment facilities will exist.

I-09-27

See Response to Comment I-09-24.

I-09-28

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 upslope and downslope areas. From a project-wide perspective, the extent of upslope acreage that can be irrigated without impacting downslope lands is determined primarily by the irrigation water source. For example, irrigation with local groundwater can have beneficial effects relative to shallow water table conditions. The extraction and consumption of local groundwater increases the forces that drive groundwater movement into deeper portions of the aquifer, decreases the total volume of water storage beneath the subsurface, and lowers the elevation of the water table. In contrast, upslope irrigation solely with imported surface water reduces local groundwater consumption and can exacerbate shallow water table conditions.

The Draft EIS did not consider elimination (retirement) of lands outside of the drainage-impaired area (upslope lands) from irrigated agricultural production. However, future impacts to downslope groundwater levels anticipated from upslope irrigation were evaluated from a drainage-study-areawide perspective with the groundwater-flow model. This regional analysis did not address specific fields affecting downslope areas as it was beyond model capability.

In the drainage study area, groundwater movement is primarily downward and horizontal movement is less significant. Groundwater level and quality impacts, therefore, occur primarily under the irrigated fields. The Draft EIS showed that movement of water and dissolved constituents are significantly controlled by subsurface drainage systems, improved irrigation efficiency, and land retirement, and a drainage project is, therefore, beneficial to irrigated lands and downslope ecosystems relative to continued irrigation and undrained conditions.

I-09-29

See Master Responses P&N-1 and GEN-6 in regard to reasonable use of CVP water and contract renewals, respectively.

I-09-30

See Master Response GEN-6.

I-09-31

See Response to Comment I-09-23.

I-09-32

The pricing of long-term water contracts is outside the scope of this EIS.

I-09-33

See Master Response P&N-1 in regard to the irrigation of saline seleniferous soils.

COMMENT I-10. ANITA BROUGHTON

>>> Anita Broughton 07/18 11:06 AM >>>

Dear Sirs,

I-10-1 While I understand that the toxic buildup in the valley needs to be addressed, shipping it to the Pacific ocean is unacceptable. There is no such place as "away". The oceans of the world are suffering due to our insistence on using them for a dumping ground for our waste products. This is reflected in polluted water, declining fisheries, diseased aquatic wildlife and countless other manifestations of our shortsighted approaches to problem-solving. I have lived on the California coast my entire life, the declining health of the oceans is obvious to anyone who cares to look. Please continue to work on SOLVING this problem, not just sending it somewhere else.

Sincerely,
Anita Broughton
Cayucos, California

RESPONSE TO COMMENT I-10

I-10-1

Comment noted. No response necessary.

COMMENT I-11. ALAN GELLER

>>> Alan Geller 07/19 11:07 AM >>>

Jerry Robbins
U.S. Bureau of Reclamation

Dear Mr. Robbins,

We know now that the contaminated Valley should never have been farmed in the first place, but since it has the Government should buy the land, take it out of agriculture and resold to be used for factories and housing for people working in them.

No where in the article in the San Francisco Chronicle does it mention what the cost would be for all the remedial measure and who would pay for them, if farming was continued. Does the agriculture that comes off this land come close to paying for the cost of cleaning up after the farmers? And if farming is to continue, how much will the farmers be assessed? I-11-1

Alan Geller

RESPONSE TO COMMENT I-11

I-11-1

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

COMMENT I-12. DONNA FISHER

>>> Donna Fisher 07/19 11:45 AM >>>

My vote is for #3, the in-valley solution. I-12-1

D. Fisher
San Francisco

RESPONSE TO COMMENT I-12

I-12-1

Comment noted. No response necessary.

COMMENT I-13. ROBERT LANE

>>> "Robert K. Lane" 07/20 9:42 AM >>>

Dear USBR: I am concerned that the only press I have seen on this issue is from the newspaper of July 19th. With only two weeks notice it is difficult to assume that you will receive sufficient responses to qualify as having been publicly aired. In any event, the article does not state the quantity of drainage involved, but none of the three options cited include dewatering the drainage. A company in Rio Vista, DES, Inc. is in the business of dewatering such tainted waters and returning the water in a virtually potable state while reducing the cake to near dry for disposal. Such a solution can be performed on a local regional basis without having a state wide collection system and without any of the totally unacceptable options cited in the article. The drainage to the Sacramento River/Delta is outrageous but Rio Vista is such a location where it could be dewatered and THEN released to the river. The drainage to the sea is also unacceptable as we can no longer assume that the ocean is able to absorb all of our effluent! The "in-valley" solution appears to be the least objectionable however what safeguards are proposed for protection of the ground water and water fowl? The solution is extraction before release.

I-13-1, 2

Robert Lane

RESPONSES TO COMMENT I-13

I-13-1

Section 20 presents the mitigation proposed to protect groundwater quality.

I-13-2

See Master Response MIT-2 in regard to mitigation planning.

COMMENT I-14. SUZANNE M. ROGALIN

>>> Suzanne Rogalin 07/20 3:11 PM >>>
Dear Ms. Jacquemin,

I-14-1

I am writing in order to comment on the Bureau's proposed three alternatives to the drain water problem in the San Joaquin valley. None of these proposals is a solution to the problem of selenium-tainted agricultural drain water in the Central Valley. The only solution that will really deal with these dangerous wastes is to stop producing them by retiring the land from agricultural production.

One would hope that this society could learn from its mistakes. Surely the catastrophe of the Kesterson Wildlife Refuge should have shown, once and for all, that it was not worth such devastation to continue to plant cotton that was not needed.

I realize these are difficult times for federal employees, but I strongly urge you and your colleagues to think of the overall public good in this project. Please include the option of retiring the necessary amount of western San Joaquin Valley land from agricultural production to reduce these dangerous wastes.

Thank you for your attention to these comments.

Sincerely,
Suzanne M. Rogalin
1955 Napa Avenue
Berkeley, CA 94707

RESPONSE TO COMMENT I-14

I-14-1

Comment noted. No response necessary.

COMMENT I-15. JAMES MCNAMARA

>>> Barney McNamara 07/25 9:19 AM >>>

I-15-1 It has been brought to my attention that one alternative being investigated for draining the selenium-tainted water in the Central Valley is to pipe it into the ocean. I want to voice my opinion in opposition to this plan. I live in Santa Cruz on the Monterey Bay and strongly oppose any additional pollution being dumped into the Pacific Ocean.

I suggest the selenium-tainted farmland should be retired from irrigation, and the flow of poison stopped.

Thank you - James McNamara
411 Fair Ave
Santa Cruz, CA
95060

RESPONSE TO COMMENT I-15

I-15-1

Land retirement is a component of all of the action alternatives, with the largest retired acreage proposed for the In-Valley/Drainage-Impaired Area Land Retirement Alternative (308,000 acres). Retirement of all drainage-impaired lands was eliminated from consideration because uncontrolled (non-irrigation) flows would continue and result in adverse effects to water quality and wildlife. See Master Response ALT-L2 for additional discussion.

COMMENT I-16. CHARLES RUSSELL OWENS

>>> "Owens, Chuck" 07/25 5:05 PM >>>
Attention: Claire Jacquemin
U.S. Bureau of Reclamation
Planning Division
2800 Cottage Way
Sacramento, CA

Dear Reclamation:

COMMENTS ON DRAFT EIS FOR SAN LUIS FARM WASTEWATER

Please accept my comments on the Draft Environmental Impact Statement for San Luis agribusiness wastewater disposal. I am a licensed hydrogeologist employed by the California Department of Water Resources, but these comments are submitted on my own behalf.

Of the three proposed alternatives under consideration, the two that would discharge the poisonous farm wastewater to the Delta and to the ocean transfer the problem from its place of origin to the new place of discharge where it would adversely impact wildlife, but to a lesser extent due to dilution. These two alternatives should be rejected on that basis, the high cost to taxpayers, and the environmental impacts that would occur constructing facilities and transporting the wastewater over that distance.

The third alternative, the in-valley solution, would certainly kill and deform birds and aquatic life that consume the wastewater discharged to the ponds every growing season long into the future until inevitable legal action eventually forces a new administration to cease. Such discharges could be considered illegal by the Central Valley Regional Water Quality Control Board, which could levy progressively increasing financial penalties on farmers, the water district and USBR, if implemented.

I-16-1

Evidently, the appropriate alternative is not even under consideration. That is, the federal government should recognize that this land with water soluble toxic minerals (e.g., selenium) and low permeability soils that prevent subsurface drainage is simply not suitable for irrigated agriculture. Therefore, the solution is not to irrigate this land. The USBR should permanently cease further water deliveries there and terminate that part of its contract with the local water provider. The land owners do not own the water and should identify non-irrigation purposes for their land -- it is their problem and taxpayers should not be burdened any further.

If you have any questions, please contact me at the numbers provided below.

Sincerely,

Charles Russell Owens, P.G.
6020 Steelhead Lane
Pollock Pines, CA 95726
530/647-9049 (home)
916/651-9224 (office)

RESPONSE TO COMMENT I-16

I-16-1

The retirement of all drainage-impaired lands was considered but screened out, as described in Draft EIS Section 2.11.4.1. See Master Response ALT-L2 for additional discussion.

COMMENT I-17. BJ SEMMES

Turko and BJ Semmes
8007 Toro Creek Road
Atascadero, CA 93422
Fax: 805 462- 8789
Phone: 805 466-8253

BJ Semmes

To: Claire Jacquemin, Bureau of Reclamation
From: BJ Semmes

Fax: 916-978-5094
Pages: 1

Re: Dumping selenium
Date: 7/26/05

Dear Ms. Jacquemin,

I am a resident of San Luis Obispo County and have recently heard of plans by the Bureau of Reclamation to transport selenium laced water from the San Joaquin Valley into the ocean waters off Cayucos. We in this county greatly value the health of our oceans and I am strongly opposed to this idea. Ocean dumping must no longer be an option if the ocean ecosystem is to have any chance of survival. I-17-1

In addition, I live in Toro Creek Canyon where the pipeline exists that would carry this effluent. I'm sure you have heard the "not in my backyard" argument and may find if easy to dismiss. Let me say that my backyard is the only one I can protect. I urge you to find a more sensible solution to disposing of this substance.

Thank you for your attention to this.

Sincerely,

BJ Semmes

RESPONSE TO COMMENT I-17

I-17-1

Comment noted. No response necessary.

COMMENT I-18. SAMUEL J. FALCONE AND JILL FALCONE

Samuel J. Falcone, PhD
Jill Falcone
2240 Emerald Circle
Morro Bay, CA 93442

Ms. Claire Jacquemin
Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way, MP-720
Sacramento, CA 95825

July 26, 2005

RE: Comments Regarding the San Luis Drainage Feature Re-Evaluation Draft EIS

The Draft EIS for the San Luis Drainage Feature Re-Evaluation fails to adequately consider key environmental, regulatory, and economic impacts of the proposed Ocean Disposal alternative. The failure of the Draft EIS to consider these impacts is severe and warrants the removal of this alternative from further consideration.

Many reasonably foreseeable direct, indirect, and cumulative impacts on the marine environment are not considered for the Ocean Disposal alternative, including, but not limited to, the following:

I-18-1 1. Bioaccumulation and biomagnification of selenium and other contaminants in the marine ecosystem are not adequately considered for the Ocean Disposal alternative. Selenium bioaccumulation and biomagnification in marine plankton, shellfish, fish, birds, dolphins, porpoises, harbor seals, and whales has been reported worldwide. This effect is similar to that caused by mercury contamination and can lead to toxic effects in marine wildlife and humans who consume fish and shellfish from contaminated marine waters. Selenium is known to have severe toxic impacts on fish including skeletal, reproductive, and growth abnormalities as well as death. The lessons of the massive bird die-off caused by selenium poisoning at the Kesterson Reservoir in the 1980's should be enough to warn of severe environmental impacts to any aquatic environment. The Draft EIS considers this possibility for the Bay-Delta disposal alternatives, but ignores this impact for the Ocean Disposal alternative;

I-18-2 2. The Draft EIS fails to consider the potential creation of a hypoxic "dead zone" off the Central Coast caused by the proposed discharge of untreated nutrient-laden (including nitrogen compounds and phosphates) agricultural irrigation return waters from the San Luis Unit into Estero Bay at Point Estero. This result would be similar to the massive dead zone now existing in the Gulf of Mexico caused by agricultural runoff from the Mississippi River Valley.

I-18-3 3. The Draft EIS fails to consider stimulation of the growth of harmful algal blooms (also known as "red tide" blooms) toxic to marine mammals and humans that could be caused by the ocean discharge of nutrient and selenium laden agricultural irrigation return waters from the San Luis Unit. The death of sea lions off California's central and southern coasts from domoic acid poisoning is already a serious problem. In 1998, an outbreak on the Central Coast caused the deaths of more than 400 sea mammals. According to a study published by San Francisco State University, harmful algal blooms are fueled by nitrogen compounds found in farm field runoff. A recent red tide outbreak in New England paralyzed New England's shellfish industry and is thought to have been stimulated by excess nutrient enrichment in coastal ecosystems. In addition, selenium has been implicated in playing an important role in harmful algal "red tide" outbreaks such as the outbreak of *Gymnodinium nagasakiense* in Tanabe Bay, Japan. Addition of selenium as well as other trace elements has been shown to increase the growth rate of harmful algae.

I-18-4 4. The Draft EIS fails to consider the introduction of pathogens (bacteria, viruses, and parasitic protozoal cysts) into the marine environment from biosolids, manures, and other fertilizers used on irrigated agricultural fields. These pathogens, potentially introduced by the Ocean Disposal alternative, can impact human and marine wildlife health and safety. A high mortality rate for sea otters from pathogens of fecal origin has already been observed in Morro Bay.

I-18-5 5. The Draft EIS fails to consider the potential introduction of exotic invasive species from agricultural runoff into the marine environment.

I-18-6 6. The Draft EIS fails to consider potential toxic impacts of the Ocean Disposal alternative on giant kelp photosynthesis and chronic toxicity to marine microorganisms and plankton from agricultural irrigation return contaminants including, but not limited to, selenium, boron, pesticides, herbicides, molybdenum, arsenic, chromium, nitrates, phosphates, and other trace metals and organics; and

I-18-7 7. The Draft EIS fails to consider the unpredictable entry of untreated agricultural irrigation return water contamination into Marine Protected Areas of the U.S. located within ten miles of the proposed outfall. This can occur due to complex oceanographic and meteorological forces that can disperse the effluent plume in an uncontrollable manner.

In short, the introduction of untreated agricultural irrigation return water known to be contaminated with selenium, boron, molybdenum, pesticides, herbicides, excess nutrients, as well as other undisclosed pollutants, is unconscionable in light of the state of peril already facing the marine ecosystems off our coast.

The Draft EIS fails to consider the true time, costs, and lack of feasibility associated with the regulatory burden associated with compliance for the Ocean Disposal alternative.

I-18-8 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 the President's Council on Environmental Quality. The Draft EIS does not account for the time, cost, or feasibility of obtaining favorable biological opinions and other consultations from these agencies. The public cannot be assured that this step will be taken and the results made public prior to issuance of the Final EIS. Once the Final EIS has been completed, the Bureau of Reclamation can continue to pursue the Ocean Disposal alternative regardless of the actual impact on the receiving environment. 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.

I-18-9 The Ocean Disposal alternative is in direct conflict with a multitude of federal, state, and local government 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 and regulatory compliance.

The Ocean Disposal alternative conflicts with the following coastal and ocean protections mandated by the federal, state, and local governments:

I-18-10 **1. Public Trust Doctrine** – The government has the obligation to protect the interests of the general public as opposed to the narrow interests of special uses or any particular group. The government has the duty to ensure the public's interest is protected. The natural resources off California's coast are held in public trust and not for the exclusive benefit of agricultural interests in the San Luis Unit. The draft EIS fails to account for impacts to the public trust.

I-18-11 **2. Coastal Zone Management Act (CZMA) and Coastal Zone Reauthorization Amendments (CZARA).** Section 307, "Federal Consistency Requirement" states, "Federal actions that have reasonably foreseeable effects in land use, water use, or natural resources in the coastal zone must be consistent with the enforceable policies of California's federally approved coastal management program. No federal agency activities are categorically exempt from this requirement." The Draft EIS does not account for the time, cost, and lack of feasibility of the Ocean Disposal alternative achieving compliance with California's Coastal Act, Coastal Commission permit requirements, and the California Ocean Plan.

3. The **Marine Mammal Protection Act** includes a moratorium on take of marine mammals in U.S. waters. The Ocean Disposal alternative meets the
I-18-12 "harass" aspects of the take definition because it damages marine mammal habitat and can result in selenium and other toxic bioaccumulation that could reasonably be foreseen to damage the food web and the ultimate health and survival of marine mammals.

4. Endangered Species Act

The Ocean Disposal alternative does not account for the time, cost, or feasibility of obtaining favorable biological opinions from NMFS and U.S. Fish and Wildlife for consideration of the potential jeopardy and habitat modification placed on the large number of special status species that inhabit the coastal and marine waters off Point Estero. Special status species include whales, dolphins, sea turtles, steelhead trout, Southern sea otters, peregrine falcons, and brown pelicans. In this case, NMFS would have the duty to conduct independent research to determine the impacts to these species. The wildlife natural resources of this area are so important that several Marine Protected Areas of the U.S. have been designated to protect these species. The following Marine Protected Areas of the U.S. are all within ten miles of the proposed Ocean Disposal alternative
I-18-13 outfall:

- Atascadero Beach – Pismo Clam Preserve north of Morro Bay
- California Sea Otter Game Refuge
- Morro Bay National Estuary
- Monterey Bay National Marine Sanctuary

It is reasonable to predict that eventually, *as has recently been proposed*, the National Marine Sanctuary will be extended to include the area between the National Marine Sanctuary and the Morro Bay National Estuary which includes Point Estero. This is especially likely In light of the abundance of special status species and its close proximity to coastal protected lands (including the state owned Estero Property) and the four Marine Protected Areas of the U.S. in the near vicinity. If this area is designated as an Area of Special Biological Significance (ASBS), it is highly likely that the Ocean Disposal alternative outfall will be completely prohibited and a cease and desist order issued. Virtually anyone can nominate a site for ASBS designation.

The Draft EIS does not account for the time, costs, and lack of feasibility
I-18-14 associated with an ocean outfall discharging untreated agricultural irrigation return water into an area in close proximity to National and State designated protected areas and an area that has already been proposed as an extension to the National Marine Sanctuary.

I-18-15 **5. Migratory Birds Treaty Act**

Morro Bay is a bird sanctuary famous for its importance as the last major stop-over for migratory birds on the Pacific Flyway. Thousands of migrating birds stop-over in Morro Bay. Morro Bay is also famous as a refuge for the Peregrine Falcon and for its blue heron rookery and brown pelicans.

Predatory birds that eat fish are particularly at risk for selenium poisoning. High levels of selenium have been found in diving ducks in the San Francisco Bay and in the feathers of other birds in many coastal areas around the world. The USEPA national selenium criterion to protect aquatic life is 5 ug/L (5 ppb). The USFWS recommended criterion is 2 ug/L (2 ppb). The selenium concentration of the agricultural irrigation return waters from the San Luis Unit range from 92 to 7,300 ppb.

I-18-15 cont.

The Draft EIS does not account for how the Ocean Disposal alternative can protect migratory birds from reproductive failure and death from selenium poisoning in Estero Bay. Clearly, it is not acceptable to discharge untreated agricultural irrigation return waters into the San Francisco Bay-Delta or into the National Marine Sanctuary, but it is unclear why the birds, fish, wildlife, and humans off the Point Estero coast deserve less protection.

6. National Invasive Species Act

I-18-16 The Draft EIS fails to consider that aquatic nuisance species could be transported from inland waters from land based sources into the marine environment.

7. Magnuson-Stevens Act.

I-18-17 The Draft EIS fails to consider the requirement that *"other actions to conserve and enhance essential fish habit be identified"*. The Ocean Disposal alternative is not consistent with the Magnuson-Sevens Act and does not account for the economic impacts on the area's fishing and shellfish industries.

8. Clean Water Act

I-18-18 Section 401 requires certification that the discharge will comply with state water quality standards for a multitude of contaminants including, but not limited to: selenium, nitrate, phosphate, boron, molybdenum, chromium, coliforms, pesticides, arsenic, lithium, and other trace elements, heavy metals, and organics. The only water quality data included in the Draft EIS indicate TDS concentrations ranging from 3,500-24,000, selenium ranging from 92-7,300 ug/L, molybdenum ranging from 430-4,000 ug/L, and boron ranging from 16,000-120,000 ug/L. These levels do not meet Basin Plan water quality objectives for the beneficial uses for ocean waters off the Central Coast. If the current level of contamination is considered to be a significant threat to drinking water in the Bay-

I-18-18 cont. Delta and to wildlife in the Kesterson Reservoir, it is also highly likely to have a significant impact on marine species, although the Draft EIS fails to consider this. The Draft EIS does not detail how the Ocean Disposal alternative can meet state water quality standards without treatment. Dilution is not an acceptable solution to pollution. The Draft EIS fails to consider the entire range of contaminants that could be present in the discharge and the feasibility that the untreated discharge can meet stringent state water quality standards identified in the Basin and Ocean Plans.

I-18-19 Section 403 of the CWA provides for additional protection of ocean waters from point source discharges. Under section 403(a), EPA or an authorized State may not issue a permit for a discharge into ocean waters unless the discharge complies with the guidelines ("Ocean Discharge Criteria") established under Section 403(c). These guidelines provide a level of protection in addition to the technology-based or water quality-based requirements applicable to discharges into inland waters and are intended to protect the marine environment. The Draft EIS does not account for the time, costs, and lack of feasibility associated with meeting these requirements with untreated agricultural irrigation return waters.

I-18-20 The CWA National Pollution Discharge Elimination System (NPDES) Rules generally exclude "return flows from irrigated agriculture" from regulation; however, the Ocean Disposal alternative is a point source rather than a nonpoint source. It is highly unlikely that a new NPDES permit will be granted for a point source that concentrates irrigated agricultural runoff and dumps it directly into the ocean without treatment. In fact, millions of taxpayer dollars are being spent to eliminate ocean outfall point source discharges from WWTPs and other sources that discharge treated water with far lower levels of contamination than those proposed for the Ocean Disposal alternative. How likely is it that California taxpayers will be willing to subsidize San Luis Unit agriculture by allowing contamination of their coastal waters and the creation of new environmental problems because the San Luis Unit is unwilling to solve an old problem in an environmentally responsible manner.

I-18-21 **9. Beaches Environmental Assessment and Coastal Health Act of 2000 Amendments to CWA** requires assurances that pathogen standards for coastal waters can be met. The Draft EIS does not account for elevated pathogen levels indicated by coliforms and enterococci standards.

I-18-22 **10. The Marine Protection, Research, and Sanctuaries Act including the Ocean Dumping Act** bans ocean disposal of sludge from WWTPs; however, sludge can be applied on agricultural lands and there can be no assurances that sewage sludge would not be a component of the Ocean Disposal outfall discharge.

I-18-23 **11. CERCLA**

I-18-23 cont. The Draft EIS fails to account for the liability and costs under the "polluter pays principle" for groundwater, beach, coastal, and marine water contamination from spills from this 100+ mile pipeline. The Draft EIS does not account for the liability and costs for damages to natural resources over the long-term.

12. RCRA

I-18-24 The Draft EIS fails to account for control of hazardous wastes that may be introduced into the discharge. "Other dischargers" from the San Luis Unit mentioned in the Draft EIS have not been identified for public review (who are they? oil drilling operations, confined animal operations, municipalities, or other potential pollutant sources in the San Luis Unit?).

13. The Oceans Act of 2000 and the US Commission on Ocean Policy:

On September 20, 2004, the U.S. Commission on Ocean Policy completed a thorough and expansive report, "An Ocean Blueprint for the 21st Century." Identifying serious issues with federal oversight of ocean protection.

14. U.S. Ocean Action Plan

On December 17, 2004, President Bush submitted his formal response to Congress as the U.S. Ocean Action Plan. The U.S. Ocean Action Plan describes
I-18-25 the Administration's focus on achieving meaningful results—"making our oceans, coasts, and Great Lakes cleaner, healthier, and more productive". The Plan emphasizes the challenge of developing management strategies that ensure continued conservation of coastal and marine habitats and living resources while at the same time ensuring that the American public enjoys and benefits from those same resources. The Ocean Disposal alternative is not consistent with the intent or meaning of the U.S. Ocean Action Plan.

15. In May 2003 the **Pew Oceans Commission** issued the report, *"America's Living Oceans: Charting a Course for Sea Change"* that presents a stark picture of oceans in trouble and calls for sweeping new oversight measures to reverse decades of ecological decline in marine waters. Chapter Two, "Marine Pollution in the U.S." discusses the severe impacts of nutrient over-enrichment of coastal ecosystems from land based pollutant sources such as agricultural runoff. In
I-18-26 fact, the Pew Commission Report describes nutrient over-enrichment as "the most widespread and measurable effect on living marine resources and biodiversity in U.S. coastal waters". It is inconceivable that a new ocean outfall of untreated agricultural irrigation return water highly enriched with nutrient pollutants would be proposed in light of Pew Commission findings. For all intensive purposes, the Ocean Disposal alternative is equivalent to a massive deliberate discharge of nonpoint source pollution into an ocean outfall. This would seem to be highly immoral and illegal to most citizens. The Draft EIS fails

I-18-26 cont. to consider nutrient over-enrichment as an impact of the Ocean Disposal alternative.

16. The State of California has natural resource protection jurisdiction up to 3 nautical miles from the coast. California Water Code, California Public Resources Code, and California Fish and Game Code apply. The Draft EIS does not adequately address the time, costs, and lack of feasibility of complying with California's coastal protections. In fact, the California Environmental Quality Act (**CEQA)** is listed as a requirement in Section 4 (page 186 of 898) of the Draft EIS; however, it is uncertain who the project partners are and why a joint environmental document was not developed. It would appear that the Draft EIS does not provide all of the information needed for adequate public review and comment.

I-18-27

17. Porter Cologne Water Quality Control Act

Chapters 12.2 and 23 apply to the San Joaquin Valley drainage problem. In essence, the Act requires that there be no discharge to the Bay-Delta or Monterey Bay until all of the conditions of the Clean Water Act have been met. In light of the current concern for marine ecosystems, it is highly likely that the Central Coast RWQCB will apply these same requirements for NPDES permitting for the Ocean Disposal alternative discharge into Estero Bay at Point Estero as well.

The Act encourages cessation of irrigation and land retirement where the land is characterized by low productivity, poor drainability, high levels of dissolved selenium in shallow groundwater, or lands that contribute to subsurface drainage problems. The Act also encourages water recycling. Nowhere in the Act is ocean dumping of this drainage encouraged. In fact, §13142.5 "Coastal Marine Environment", requires wastewater discharges to be "*treated to protect present, future, and where feasible, to restore past beneficial uses of the receiving waters*". The Act requires that baseline studies of the existing marine system and area wide waste treatment plans be conducted to understand the effect of the potential discharge regardless of its convenience to the discharger.

I-18-28

According to §13263.3 D(2) of the Act, pollution prevention is not defined as merely a "shift in medium" by moving pollutants from one environmental medium (San Luis Unit surface and groundwaters) to another (the ocean). In addition, the creation of a potentially new "toxic hot spot" in the ocean with potential hazards to human health and toxic hazards to fish, shellfish, and wildlife conflicts with the intent and meaning of the Act. The Draft EIS fails to consider the time, costs, and feasibility associated with meeting these regulatory hurdles. Clearly, an in-valley alternative is the preferred alternative relative to regulatory requirements.

I-18-29

18. California Coastal Act

Public Resources Code §30230. "Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes."

I-18-30

19. State Coastal Conservancy Law

I-18-31 **20. Marine Life Protection Act,** Fish and Game Code

21. California Ocean Plan

The Ocean Plan provides for protection of ocean water beneficial uses and prevention of nuisance. Compliance with water quality objectives is determined from samples collected at stations representative of the area within the waste field where initial dilution is completed; therefore, the discharge from the outfall must meet water quality standards prior to dilution. Natural light cannot be significantly reduced and no degradation of benthic communities can occur. Concentrations of substances shall not be increased to levels that "degrade marine life". Nutrient materials shall not cause objectionable aquatic growth or degrade indigenous biota. The Ocean Plan includes water quality objectives for metals, pesticides, and organic substances. "Marine communities, including vertebrate, invertebrate, and plant species shall not be degraded and the natural taste, odor, color of fish, shellfish, or other marine resources used for human consumption shall not be altered". Bioaccumulation of substances shall not be harmful to human health.

I-18-32

The Draft EIS does not account for the time, cost, and feasibility of meeting Ocean Plan water quality and chronic toxicity standards. The Draft EIS does not account for the extensive monitoring required. The Ocean Plan prohibits the discharge of sludge digester supernatant directly to the ocean without further treatment. Untreated agricultural return waters may be substantially equivalent to sludge digester supernatant when biosolids and manures are used to fertilize fields.

22. The **Central Coast RWQCB Basin Plan** includes the State's antidegradation policy, objectives for ocean waters, and general objectives for beneficial uses such as marine habitat, shellfish harvesting, recreation, and municipal and domestic supply (such as in the case of desalination). The Basin Plan also provides these requirements for ocean disposal:

I-18-33

I-18-33 cont.

"Federal guidelines for secondary treatment apply to ocean discharges. The State Water Resources Control Board's Water Quality Control Plan for Ocean Waters of California (Ocean Plan) establishes effluent limits achievable by alternative processes, such as advanced primary treatment. The Ocean Plan contains water quality objectives, requirements for effluent quality and management of waste discharges, and discharge prohibitions (including Areas of Special Biological Significance). Effluent quality requirements establish limitations for grease and oil, solids, turbidity, pH, and toxicity. Limits are also established for heavy metals, chlorine residual, various chlorinated pesticides, PCBs, toxaphene and radioactivity outside the zone of initial dilution.

23. California Critical Coastal Area Program

I-18-34

Morro Bay has been identified as Critical Coastal Area #48 by an interagency coalition of 28 state agencies including the Coastal Commission and SWRCB. The CCA program is designed to protect these coastal areas.

24. Governor Schwarzenegger's Ocean Action Policy

The following quote is from an October 18, 2004 News Report that can be found at www. schwarzenegger,com:

"The oceans are in trouble and are in need of help," Governor Schwarzenegger said on June 4, 2005. "In response to this need, actions must take place at the international, national, state, regional and local levels, as these issues are just as important globally as they are to the citizen trying to protect the waters off a local beach." Today, Governor Schwarzenegger unveiled an ocean protection plan that will set a national standard for the management of ocean and coastal resources.

"I asked for this plan because I wanted California to go above and beyond what was being recommended on the federal level," Governor Schwarzenegger said. "I wanted California to have its own ocean action plan because it is a place that we are duty bound to protect, today, tomorrow and forever."

I-18-35

Speaking from a promontory overlooking the Monterey Bay National Marine Sanctuary, Governor Schwarzenegger said the action plan will guide California on its continued course of leading by example in safeguarding the sea.

"California has a proud history and tradition of protecting our ocean," Governor Schwarzenegger said. "And we have the same kind of proud history and tradition of leading the country in our efforts to make sure that all of our oceans are clean, safe and productive."

The action plan has four primary goals:

1. Increase the abundance and diversity of California's oceans, bays, estuaries and coastal wetlands.
2. Make water in these bodies cleaner.
3. Provide a marine and estuarine environment that Californians can enjoy safely and productively.
4. Support ocean-dependent economic activities.

I-18-35 cont. Governor Schwarzenegger is unlikely to support a new ocean outfall of untreated agricultural irrigation return waters at Point Estero. The Draft EIS fails to account for the lack of political support for the Ocean Disposal alternative at the federal, state and local government levels.

25. Local Government Codes and Policies Protecting the Coast

I-18-36 The citizens and local governments of San Luis Obispo County place great value on the preservation of the San Luis Obispo coastline. Millions of dollars have been spent to protect coastal lands in San Luis Obispo County from Sur Sur Ranch in the north to the Guadalupe Oil Field Conservation Easement in the south. The Ocean Disposal alternative strongly conflicts with the community values and desires of the residents of San Luis Obispo County. The Draft EIS does not consider the time, costs, and lack of feasibility of achieving concurrence with the County of San Luis Obispo Coastal Plan and Estero Area Plan, the City of Morro Bay Local Coastal Plan, and the San Luis Obispo Integrated Regional Water Management Plan.

The Draft EIS fails to adequately consider the impacts of damage to the local economy and environmental justice concerns for the Ocean Disposal alternative.

I-18-37 According to the 2000 Census, the median household income of the community of Morro Bay is below 80% of that of the State as a whole; thus qualifying it as "disadvantaged" under State grant guidelines. The Draft EIS does not adequately address the economic impact of damage to the fisheries that the fishing industry in Morro Bay depends upon for its very survival. In addition, the adverse impact to Morro Bay's tourism industry could severely damage the community's standard of living further. The thoughts of selenium-laden water, and contaminated fish and shellfish are not attractive to consumers or tourists alike.

The economic impact to the Cayucos Abalone Farm, the potential risk to public health from contaminated shellfish, and impacts to the tourism industry in Cayucos were not adequately considered in the Draft EIS.

I-18-38 In addition, the Ocean Disposal alternative creates an unfair economic impact to San Luis Obispo County farmers who compete with Central Valley corporate farms that would benefit from "cheap" ocean disposal of their untreated irrigation return waters. This unfair advantage could jeopardize family farms in San Luis Obispo County where farmers are good stewards of their land and comply with costly water quality conditional waiver requirements for irrigated agriculture.

The Draft EIS fails to adequately consider the true time, costs, and lack of feasibility associated with attempting to obtain local public support for the Ocean Disposal alternative.

Massive public protest and legal action is certain to result from further consideration of the Ocean Disposal alternative. There are many coastal, ocean water quality protection, and wildlife advocacy groups and individual citizens that share a great interest in protecting the coast by preventing the construction of an untreated ocean outfall of contaminated agricultural irrigation return water. As one local citizen said during the recent public hearing meeting in Cayucos, *"You better bring your checkbook"*.

I-18-39 The lack of identification of a preferred alternative in the Draft EIS in turn causes public distrust of the project and reduces the public's ability to comment. The lack of adequate time, cost, and feasibility analysis for the Ocean Disposal alternative could result in an unfair, environmentally and economically damaging preferred alternative in the Final EIS.

The Draft EIS fails to adequately consider the true time, costs, and lack of feasibility associated with creating a new point source ocean outfall.

I-18-40 Taxpayers are already spending vast sums to reduce pollution from urban and agricultural runoff. The creation of a new point source ocean outfall of untreated water from, what would typically be a nonpoint agricultural source, is truly a step backward. The Ocean Disposal alternative defeats costly federal, state and local government water quality improvement programs including, but not limited to, urban storm water management programs, the conditional waiver program for irrigated agriculture, watershed restoration projects, and wastewater treatment improvements. It is unlikely that California taxpayers who have been generous and vocal in their desires to protect and improve coastal and ocean water quality will be willing to accept the Ocean Disposal alternative as the best use of their funds.

The Draft EIS fails to adequately consider the true time, costs, and lack of feasibility associated with environmental mitigations and ongoing O&M costs that would be required to implement the Ocean Disposal alternative.

I-18-41 Mitigation costs are not accounted for in the Draft EIS. It is not possible to adequately compare the alternatives on the basis of cost without an understanding of the true mitigation costs. In addition, the Draft EIS fails to consider the ongoing O&M costs of the Ocean Disposal alternative including, but not limited to, escalating energy costs for pumping this contaminated water over long distances.

The Draft EIS fails to adequately consider the impacts of creating a new source of ocean pollution by not preventing pollution at the source.

I-18-42 The recommendations of The Bay Institute's Report, "Drainage Without a Drain" were not adequately considered as an alternative in the Draft EIS. A sustainable solution is one that "*meets the needs of the present without compromising the*

ability of future generations to meet their own needs" (U.N. Bruntland Commission, 1987). In no way can the Ocean Disposal alternative be considered a sustainable solution to the San Joaquin drainage problem. The stated purpose of the San Luis Drainage project is "to achieve a long-term sustainable salt and water balance in the root zone of irrigated lands". The Ocean Disposal alternative fails to meet this definition. In fact, it is an insult to associate the Ocean Disposal alternative with any concept of sustainability to those San Luis Obispo County farmers who do engage in sustainable farming practices.

The Draft EIS fails to adequately consider integrated regional water management, California's Water Plan, and San Luis Obispo County's Integrated Regional Water Management (IRWM) Plan.

I-18-43 The Ocean Disposal alternative is not consistent with the California Water Plan goals and objectives. An integrated regional water management approach is not employed by the Ocean Disposal alternative. Central Valley groundwater basins are in critical need of recharge. Ocean dumping is an extremely wasteful use of this precious water resource. The 2005 Draft California Water Plan calls for an integrated regional water management approach to solving California's water challenges. The Ocean Disposal alternative is not consistent with this approach and is not part of the San Luis Obispo IRWM Plan.

I-18-44 Clearly, from the preponderance of evidence, the Draft EIS does not adequately consider major environmental, economic, regulatory, social, and political impacts associated with the Ocean Disposal alternative. The Ocean Disposal alternative could severely disrupt marine ecosystems and lead to serious consequences for coastal birds, fish, marine mammals, and humans. It is our sincere hope that reason will prevail and this unfortunate alternative will be removed from any further consideration.

Respectfully submitted,

Samuel J. Falcone, PhD and Jill Falcone
Morro Bay, California

RESPONSES TO COMMENT I-18

I-18-1

See Master Responses SW-8 and SE-1.

I-18-2

See Master Response SW-11 in regard to the potential creation of hypoxic "dead zones."

I-18-3

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

I-18-4

The introduction of pathogens (i.e., E. coli bacteria) into the ocean environment from the San Luis Drain effluent water would most likely occur. Due to the nature of current laboratory procedures, many measured bacteria counts are only estimates (e.g., >1.6 million MPN [most probable number]). It is impossible to determine what the concentration of indicator bacteria concentrations would be at the discharge site. However, bacteria concentrations would have to meet the objectives of the California Ocean Plan and the waste discharge permit requirements that would be obtained if the Ocean Disposal Alternative were chosen.

I-18-5

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.

I-18-6

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

I-18-7

See Master Response SW-5 for a discussion of far-field effects of drainwater discharged under the Ocean Disposal Alternative.

I-18-8

See Master Response REG-1 in regard to the cost, time, and feasibility of achieving regulatory compliance for the Ocean Disposal Alternative.

I-18-9

See Master Response REG-1 in regard to the cost, time, and feasibility of obtaining statutory and regulatory compliance for the Ocean Disposal Alternative. Master Response GEN-1 discusses the level of detail of the EIS analysis.

I-18-10

Generally, tidewaters to their farthest reach, tidelands, navigable waters, and permanently submerged lands, including those extending lakeward or seaward to the limit of state ownership, are subject to the Public Trust Doctrine. The Public Trust Doctrine originated as an instrument of federal common law used to ensure protection of the public's interest in navigation, fishing, and

recreation. The Draft EIS addresses potential impacts of project alternatives involving discharge to the ocean on fishing and recreational uses of the ocean. The Ocean Disposal Alternative pipeline, which would extend 1.4 miles offshore, would be located on the bottom of the seabed; therefore, it would have no impact on navigation.

I-18-11

Appendix O provides appraisal-level estimates of permitting and mitigation costs for all alternatives, including costs associated with CZARA and Coastal Zone Act permitting activities. See Master Response REG-1 in regard to the cost, time, and feasibility of achieving regulatory compliance for the Ocean Disposal Alternative.

I-18-12

See Master Responses SW-8, SE-1, and SW-12.

I-18-13

See Master Response REG-1 in regard to the time, costs, and feasibility of obtaining regulatory compliance for the Ocean Disposal Alternative and Master Response BIO-2 in regard to biological opinions. Consultation with the Service and NOAA Fisheries would be initiated if the Ocean Disposal Alternative is selected during the Final EIS and ROD process.

I-18-14

See Master Response REG-1 in regard to the cost, time, and feasibility of the Ocean Disposal Alternative and Master Response SW-7 in regard to the inclusion of the Morro Bay National Estuary in the Monterey Bay National Marine Sanctuary.

I-18-15

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

I-18-16

Aquatic nuisance species were not considered in the Draft EIS. The salinity of the agriculture drainwater is estimated to be 19 ppt, far below the average ocean salinity of 33.5 ppt. Most aquatic species exist and thrive within a narrow salinity range. Some phytoplankton species may grow in the drainwater and be discharged into the ocean; however, they would not be expected to persist once discharged into the marine environment.

I-18-17

The Draft EIS considers a range of alternatives, including in-valley disposal. See Master Responses REG-1 in regard to regulatory compliance for the Ocean Disposal Alternative and SW-10 for a discussion of economic impacts to local fisheries.

I-18-18

Analysis of compliance with Ocean Plan WQOs is presented in Section 5 of the Draft EIS. More detailed information about the constituents in effluent water has been included in the Final EIS. See Master Response SW-13 for a discussion of water quality under the Ocean Disposal Alternative.

I-18-19

See Master Responses REG-1 and GEN-1.

I-18-20

Appendix L describes the regulatory compliance requirements for the proposed project, including the Ocean Disposal Alternative. Reclamation will comply with all necessary regulations during the planning, permitting, design, and construction stages of the project. Any monitoring required by permits will be determined at the time that the permit is obtained.

Point-source discharge would be subject to CWA NPDES permitting and Ocean Plan requirements.

I-18-21

Water quality criteria associated with the Beaches Environmental Assessment and Coastal Health (BEACH) Act apply at the beach; the ocean disposal discharge would be 7,400 feet (1.4 miles) off-shore and approximately 200 feet below the ocean surface. Thus, the beach would be well outside of the ZID. Further, bacteria concentrations are expected to be low because the salinity of the water to be discharged is quite high – 19 ppt. Outside of the ZID (e.g., at the beach), bacteria concentrations would be expected to continue to decrease from dilution and die-off due to exposure to salt water and sunlight (especially near the beaches).

I-18-22

Land application of sewage sludge is regulated under 40 CFR Part 503 to ensure that sewage sludge is used or disposed of in a way that protects human health and the environment. See Master Response SW-13 for a discussion of water quality effects under the Ocean Disposal Alternative.

I-18-23

Reclamation does not anticipate that costs under CERCLA will be incurred in this project. Environmental impacts to natural resources resulting from this project are assessed in the EIS. Also see Master Response SW-15.

I-18-24

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. To attempt to account for pollutants or wastes from future dischargers would be speculative and is not within the scope of this EIS.

I-18-25

See Master Response REG-1.

I-18-26

See Master Response SW-11 in regard to nutrient enrichment from the Ocean Disposal Alternative.

I-18-27

Master Response REG-1 discusses the time, costs, and feasibility of obtaining regulatory compliance for the Ocean Disposal Alternative. CEQA guidelines and other information were used to develop evaluation criteria for determining effects to natural resources; however, because the SLDFR is a Federal action and not a State action, a joint EIS/EIR was not appropriate. As discussed in Sections 21.2.3 and 21.2.4 of the Draft EIS, only the Service elected to become a cooperating agency (the NEPA term for the "project partners" referenced in the comment), which did not change the project's status as a Federal action. Section 4 has been updated to include a policy consistency analysis for the action alternatives.

I-18-28

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

I-18-29

Comment noted. No response necessary.

I-18-30

See Master Response REG-1.

I-18-31

NEPA permits the evaluation of actions that would—if selected—require additional regulatory authorization. Section 4 of the Final EIS has been revised to include a policy consistency analysis.

I-18-32

See Master Responses REG-1 and GEN-1.

I-18-33

As shown in Section 4, the Ocean Disposal Alternative would need to be found consistent with Federal, State, areawide, and local plans and programs. See Master Response REG-1 for additional discussion of regulatory compliance for the Ocean Disposal Alternative.

I-18-34

The California Critical Coastal Area Program is essentially a resource coordination program administered by the California Coastal Commission. Its goal is to protect and improve water quality in coastal areas threatened or degraded by nonpoint-source runoff pollution. Many areas are designated for protection, including Morro Bay. Boundaries are not drawn around each area. Rather, the areas are designated simply as points on a map. Information and maps can be accessed at http://www.coastal.ca.gov/nps/cca-nps.html.

Note that a properly designed diffuser can be used to achieve rapid and efficient dilution, so that constituent concentrations within the initial mixing zone are at levels that are detectable above background for only a short period of time and over only a limited volume of water. The diffuser specified for the Ocean Disposal Alternative is designed to achieve water quality objectives within a reasonably sized zone of initial dilution (ZID). Because water quality objectives, including those in the California Ocean Plan, have been designed to protect beneficial uses, no discernible impacts are anticipated outside the ZID from this discharge. It should be noted that the Porter-Cologne Water Quality Control Act, Section 13000, provides guidelines for use by the Legislature in determining which discharge options are favored: "…[T]he Legislature further finds and declares that activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible…" . Clearly, if the legislature finds that discharge to the ocean provides an environmentally superior discharge option, they are free to select that option.

I-18-35

The comment is noted. The Ocean Disposal Alternative is one of seven project alternatives and has not been identified as the preferred alternative. See Master Response REG-1 in regard to regulatory compliance for the Ocean Disposal Alternative.

I-18-36

The comment is noted. As stated in Section 4, Reclamation will coordinate with State, regional, and local agencies to ensure consistency with relevant regulations, plans, and policies. See Master Response REG-1 for additional discussion of regulatory compliance for the Ocean Disposal Alternative.

I-18-37

See Master Responses SW-8, SE-1, and SW-10 in regard to the effects of the Ocean Disposal Alternative.

I-18-38

As discussed in Master Response AG-1, discharge under the Ocean Disposal Alternative would not be expected to result in tighter restrictions on agricultural discharges in coastal areas. Drainage disposal service costs for Central Valley farmers are likely several times higher than the costs incurred by Central Coast farmers to comply with the conditional waiver requirements for irrigated agriculture. Implementation of the Ocean Disposal Alternative would require compliance with NPDES permit requirements. More extensive runoff controls are already required for in-valley farmers than for coastal farmers. As discussed in the project description (Section 2), extensive new source control measures would also be required. In addition, farmers are required to reimburse the Federal government, up to the farmers' ability to pay, for capital and operations costs of drainage facilities in accordance with Reclamation law. Therefore, no economic impacts to San Luis Obispo County farmers due to changes in agricultural discharge restrictions are expected.

I-18-39

The Ocean Disposal Alternative is one of seven project alternatives and has not been identified as the preferred alternative. See Master Response ALT-A1 in regard to selection of a preferred alternative.

I-18-40

As stated in the comment, water discharged under the Ocean Disposal Alternative would be classified as a point source. As such, it would be subject to Clean Water Act NPDES permit requirements and Ocean Plan requirements designed to maintain beneficial uses and achieve water quality objectives. Conformity of the Ocean Disposal Alternative to specific water quality requirements is discussed in Section 5 and in Master Response SW-13. See Master Response REG-1 in regard to the cost, time, and feasibility of the creating an outfall as part of the Ocean Disposal Alternative.

I-18-41

Mitigation cost estimates are provided in Appendix O of the Final EIS. Operation and maintenance costs, including energy costs, were included for all alternatives analyzed in the Draft EIS, as discussed in Master Response GEN-1.

I-18-42

Reclamation incorporated features recommended in the report *Drainage Without a Drain* into the In-Valley Alternatives. See Master Response ALT-S1 for a discussion of source control planning and analysis.

I-18-43

As stated in Section 4, Reclamation will coordinate with State, regional, and local agencies to ensure consistency with relevant regulations, plans, and policies to the extent possible. See

Master Response REG-1 for additional discussion of regulatory compliance for the Ocean Disposal Alternative.

I-18-44

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.

COMMENT I-19. JOHN A. ALEXANDER (1 OF 2)

San Luis Drainage
Feature Re-evaluation • Public Hearings

Comment Card

John A. Alexander	Name	Address	Box 288
Environmental Scientist PhD	Title	City	Cayucos Ca.
John Alexander Research	Organization	State	Ca.
	E-mail	Zip Code	93430
(805) 995 1109	Telephone No.	Fax No.	

Please provide your comments below – Please print legibly
You can also attach you written comments

To dump Selenium tainted water in the ocean anywhere is catastrophic.

We have demonstrated and put the Program before Numerous Political Enemies that will inexpensively convert the leach water to reuse for growing crops. We can solve the Valley Water shortage.

I resent the reception I received when I met with the Dept of Interior in Washington D.C. The meeting was dismissed when the moderator stated "It's our water and we will do as we wish with it."

The Proposals set forth do not address the real of the Program and only offer poor excuses.

I-19-1

Comments must be received by close of business on Monday, August 1, 2005:

RESPONSE TO COMMENT I-19

I-19-1

Comment noted. No response necessary.

COMMENT I-20. MATT CLARK

San Luis Drainage
Feature Re-evaluation • Public Hearings

Comment Card

MATT CLARK	Name	Address	1613 7th St
owner	Title	City	LOS OSOS
Matt Clark Tile	Organization	State	CA
	E-mail	Zip Code	93402
	Telephone No.	Fax No.	

Please provide your comments below – Please print legibly
You can also attach you written comments

No Dumping of Drainage from Ag / Pollution in the Bay!

Not AT ALL

At any time –

I-20-1

Comments must be received by close of business on Monday, August 1, 2005:

RESPONSE TO COMMENT I-20

I-20-1

Comment noted. No response necessary.

COMMENT I-21. BENJAMIN EBERT ET AL.

San Luis Drainage
Feature Re-evaluation • Public Hearings

Comment Card

Benjamin Ebert	Name	Address	395 North Court St.
Manager	Title	City	Los Osos
Cycle & Surf Rentals	Organization	State	Ca.
mundoben1@yahoo.com	E-mail	Zip Code	93402
805-704-7640	Telephone No.	Fax No.	

Please provide your comments below – Please print legibly
You can also attach you written comments

I-21-1

After review of the EIS and attending the public hearing in Cayucos, I am determined not to let this project take place. The pollutants created by the agriculture industry must be recycled, reused or converted into other materials. The process of shipping pollutants away must end, we must find better ways to dispose of or reuse our waste. I will not, nor will my family and friends, stand by and watch the beaches where I and my family surf become a cesspool of pollution. The following signatures, nine included, are a signal that this community will not stand our local environment being degraded.

X Benjamin Ebert
X
X
X

Comments must be received by close of business on Monday, August 1, 2005:

RESPONSE TO COMMENT I-21

I-21-1

Comment noted. No response necessary.

COMMENT I-22. ALI JORDAN-BROWN

San Luis Drainage
Feature Re-evaluation • Public Hearings

Comment Card

(18)

Name: Ali Jordan-Brown	Address: 842 Main St.
Title: Morro Bay Business owner	City: Morro Bay
Organization: Ocean Outfall Gp	State: CA
E-mail:	Zip Code: 93442
Telephone No.	Fax No. 805-785-0518 daytime only

Please provide your comments below – Please print legibly
You can also attach you written comments

I-22-1

I cannot fathom why this project is even being considered! This is about as environmentally STUPID as can be! This is our home, as is our ocean coastline. Fresno should take care of their own problems. This project is akin to giving my virgin daughter to bathe in sewage and be raped by gang bangers.

We must protect our ocean as much, if not more than our virgin children.

You are corrupt demagogues and deserve to die of the toxins you want to dump in our home. May it happen to you soon.

Ali Jordan-Brown

Comments must be received by close of business on Monday, August 1, 2005:

RESPONSE TO COMMENT I-22

I-22-1

Comment noted. No response necessary.

COMMENT I-23. J.D. MULLEN

San Luis Drainage
Feature Re-evaluation • Public Hearings

Comment Card

J.D. Mullen	Name	Address	985 PACIFIC ST.
	Title	City	MORRO BAY
	Organization	State	CA
JDMullen@charter.net	E-mail	Zip Code	93442
805-772-9193	Telephone No.	Fax No.	

Please provide your comments below – Please print legibly
You can also attach you written comments

I-23-1 PIPELINE OUTFLOW IS NOT A Viable SOLUTION, THIS PROBLEM of Selenium has BEEN STudied Begging IN 1955 — Where HAVE ALL The MONIES and Re Search gone??

Comments must be received by close of business on Monday, August 1, 2005:

RESPONSE TO COMMENT I-23

I-23-1

The Web site for the San Joaquin Valley Drainage Implementation Program (http://www.owue.water.ca.gov/statedrain/index.cfm) lists many of the projects that have been accomplished under the program

COMMENT I-24. DEIRDRE RIEGELHUTH

San Luis Drainage
Feature Re-evaluation • Public Hearings

Comment Card

DEIRDRE RIEGELHUTH	Name	Address	550 PINEY WAY
MOTHER	Title	City	MORRO BAY
FAMILY	Organization	State	CA
	E-mail	Zip Code	93442
(805) 772-5164	Telephone No.	Fax No.	

Please provide your comments below – Please print legibly
You can also attach you written comments

I-24-1

I cannot believe that an oranization whose title includes, "...managing waters in the West..." would even consider simply dumping untreated water contaminated by selenium (does not even address other contaminates from farm run-offs) into the Ocean. While Ocean Disposal is the Alternative maybe attractive on paper because its the lowest cost - it is not a solution. All it does is shift the problem and contaminates a new site.

The Estero Bluffs are nearly pristine; despite the ranching the run off is virtually clean of pollutants. It is a coastline home to many fragile and endangered specils - including the snowy plover, perigrines, elephant seals, orcas dolphins whales, harbor seals, egrets herins, golden & Bald Eagles are regularly

Comments must be received by close of business on Monday, August 1, 2005.

Ms. Claire Jacquemin
Bureau of Reclamation
2800 Cottage Way, MP-720
Sacramento, CA 95825
Or fax to 916-978-5094
Or e-mail to cjacquemin@mp.usbr.gov

Sighted here during winter months. Our fisheries are already in perilous state and severe restrictions are in place on near shore rock cod.

I urge you to build the facilities to treat this water and send the treated water into the Delta, or use the Cen-Valley alternative. DO NOT RID THE VALLEY OF THIS TOXIC SUBSTANCE BY DUMPING IT IN OUR BACK YARD HERE ON THE COAST, THATS NOT WHAT GOOD NEIGHBORS DO! TAKE CARE OF THE PROBLEM WHERE IT BELONGS. I'm sure that once in place a treatment facility in the Westlands Water District will find Continuous uses.

My children and il play & learn in these waters where rare and wonderful creatures share them with us. Please do not destroy our COAST!

Sincerely,
Deidre K. Engelhuth

RESPONSE TO COMMENT I-24

I-24-1

Comment noted. No response necessary.

COMMENT I-25. BRIAN STARK

San Luis Drainage
Feature Re-evaluation · Public Hearings

Comment Card

(19)

BRIAN STARK	Name	Address	915 Pacific St.
	Title	City	Morro Bay
	Organization	State	CA
	E-mail	Zip Code	93442
805-801-0582	Telephone No.	Fax No.	

Please provide your comments below – Please print legibly
You can also attach you written comments

I-25-1 The EIS is deficient because it does not identify a preferred alternative. It is also deficient because there is no treatment of the impacts of construction of a pipeline to the ocean at Pt Estero. The EIS does not discuss the full range of contaminants in the drain water. This makes a full analysis of impacts impossible.

I-25-2 The residents of the Central Coast did not get proper notice of the EIS availability, so I request that the comment period be lengthened by at least 30 days.

I-25-3 The EIS gives scant treatment to the disposition of the outflow water in the ocean – There is no credible discussion of ocean impacts and the potential variety of pollutants to be discharged into the ocean.

I strongly oppose ocean discharge and discharge to the delta. This is a Central Valley problem that needs to be solved at the source.

I-25-4 Cost analysis is faulty – no mitigation cost for ocean outfall – this is an unequal cost comparison among alternatives

Comments must be received by close of business on Monday, August 1, 2005:
Ms. Claire Jacquemin
Bureau of Reclamation
2800 Cottage Way, MP-720
Sacramento, CA 95825
Or fax to 916-978-5094
Or e-mail to cjacquemin@mp.usbr.gov

RESPONSES TO COMMENT I-25

I-25-1

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

Construction impacts associated with the Ocean Disposal Alternative are described for each applicable resource area, and additional information about construction-related effects has been added to Sections 5.2.8.1 and 9.2.8. The analysis of construction impacts is considered adequate for an appraisal-level design (see Master Response GEN-1).

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

I-25-2

Appendix P1, Section P1.2 describes the process by which Reclamation informed the public of the availability of the Draft EIS. In particular, the Draft EIS or a Notice of Availability was mailed to Federal, State, and local representatives for the Central Coast area (see Section 21.4); paper copies of the Draft EIS were sent to public libraries in Cayucos, San Luis Obispo, and elsewhere; and public hearing notices were placed in the *San Luis Obispo Tribune* and *Sun Bulletin* in advance of the hearings. The public notification process and timing were in accordance with NEPA standards (40 CFR 1502.19, 1503.1).

In response to public feedback, the end of the comment period was extended to September 1, 2005.

I-25-3

See Master Responses SW-13, SW-4, and SW-5 in regard to water quality impacts of the Ocean Disposal Alternative.

I-25-4

Appraisal-level project cost estimates were prepared at an equivalent level for all alternatives. Mitigation cost estimates for all alternatives are included in the Final EIS in Appendix O.

COMMENT I-26. JOEY RACANO

San Luis Drainage
Feature Re-evaluation • Public Hearings

Comment Card

Joey Racano | Name | Address
C.O.O.C. | Title | City
Organization | State
StoptheWaiver.com | E-mail | Zip Code
Telephone No. | Fax No.

Please provide your comments below – Please print legibly
You can also attach you written comments

I-26-1

The Ocean Outfall Group will make Dam Sure this never happens. How dare you even dream of this disgusting idea.

-Joey Racano
C.O.O.C.

Comments must be received by close of business on Monday, August 1, 2005:
Ms. Claire Jacquemin

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.

RESPONSE TO COMMENT I-26

I-26-1

Comment noted. No response necessary.

COMMENT I-27. FRANK MERRILL

Frank Merrill
391 Sequoia Street, Unit 13 Morro Bay, CA. 93442 805- 772-8520 lnfrmerrill@charter.net

July 28, 2005

Clair Jaquemin
Bureau of Reclamation
2800 Cottage Way, MP 720
Sacramento, CA. 95825

Re. San Luis Drainage Feature Re-Evaluation

Dear Ms. Jaquemin.

I-27-1 Please include my voice with those opposing the proposal to pipe tainted San Joaquin Valley water to the Central California coast.

Thank You,

Frank Merrill

RESPONSE TO COMMENT I-27

I-27-1

Comment noted. No response necessary.

COMMENT I-28. ALAN E. STRUNK

Alan E. Strunk
1675 Los Osos Valley Road Space 217
Los Osos, California 93402-3045
(805) 528-7336 (home/fax) (805) 440-2877 (cell)
alstrunk@charter.net

Claire Jaquemin
Bureau of Reclamation
2800 Cottage Way MP-720
Sacramento CA 95825

Re: Bureau of Reclamation Project: San Luis Drainage Feature Re-Evaluation

Dear Bureau of Reclamation Member Jaquemin:

I-28-1 Please add my name to the growing number of residents and registered voters of the central coast who are in strong opposition to the dumping of selenium-tainted or otherwise polluted waters into our ocean. Surely the most advanced technological country in the world can find a more effective and less damaging solution than merely transferring the problem to a neighbor's back yard. The waters in question require reclaiming, not relocating.

Thank you for your consideration in this vital matter.

Sincerely,

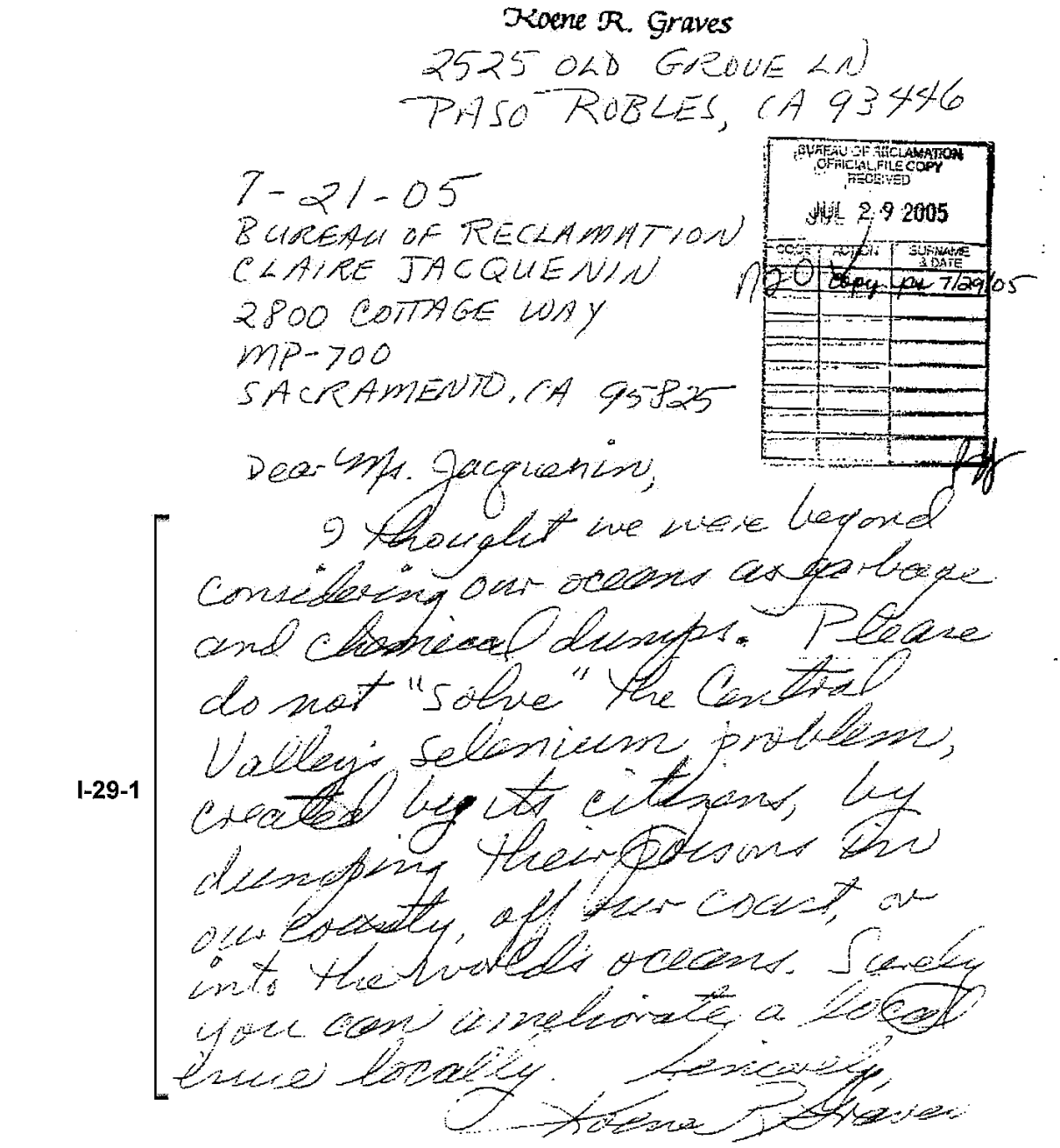
Al Strunk
Los Osos, California

RESPONSE TO COMMENT I-28

I-28-1

Comment noted. No response necessary.

COMMENT I-29. KOENE R. GRAVES



Koene R. Graves
2525 OLD GROVE LN
PASO ROBLES, CA 93446

BUREAU OF RECLAMATION
OFFICIAL FILE COPY
RECEIVED
JUL 29 2005

CODE	ACTION	SURNAME & DATE
120	Copy	7/29/05

7-21-05
BUREAU OF RECLAMATION
CLAIRE JACQUENIN
2800 COTTAGE WAY
MP-700
SACRAMENTO, CA 95825

Dear Ms. Jacquenin,

I thought we were beyond considering our oceans as garbage and chemical dumps. Please do not "solve" the Central Valley's selenium problem, created by its citizens, by dumping their poisons in our county, off our coast, or into the world's oceans. Surely you can ameliorate a local issue locally. Sincerely,

Koene R. Graves

I-29-1

RESPONSE TO COMMENT I-29

I-29-1

Comment noted. No response necessary.

COMMENT I-30. LYNDA MERRILL

Lynda Merrill
391 Sequoia Street, Unit 13 Morro Bay, CA. 93442 772-8520 lnfmerrill@charter.net

July 28, 2005

Clair Jaquemin
Bureau of Reclamation
2800 Cottage Way, MP 720
Sacramento, CA. 95825
9169785094

Re. San Luis Drainage Feature Re-Evaluation

Dear Ms. Jaquemin,

I-30-1 I appeared at the July 14, 2005 meeting in Cayucos to oppose building a pipeline to dump polluted water from the Central Valley to our Central California Coast. Please add my name to those opposing the proposal to pipe tainted San Joaquin Valley water to the Central California coast.

Thank You,

Lynda Merrill

RESPONSE TO COMMENT I-30

I-30-1

Comment noted. No response necessary.

COMMENT I-31. DAVID CARLE

From: carle <carle@qnet.com>
To: <cjacquemin@mp.usbr.gov>
Date: 7/29/2005 2:14:50 PM
Subject: San Luis Drain Reevaluation EIS

Regarding the Reevaluation EIS for the San Luis Drain:

I understand that a court order has required that a drain option be completed, so that land purchase/retirement was not, at first, the focus of the EIS. However, alternatives sending farm runoff water to the Delta, to the ocean, or disposing of wastes in-valley present many insoluble problems (despite the statement that "most" impacts can be mitigated...those that cannot remain significant). So, I am glad that Reclamation broadened its analysis to include land retirement as one means of controlling drainage.

I-31-1 Of the drainage system options, the in-valley disposal alternatives are preferable. The most successful control approach is associated with the maximum land retirement in the "In-valley/drainage-impaired area land retirement alternative" that retires 308,000 acres and brings drainwater flows down to 8,100 AF-year. That seems like the clear "best choice" here.

I have traveled in the affected areas, including on educational tours specifically focused on these agricultural drain issues. While I am supportive of a strong agricultural economy in this state, it seems clear to me that there are lands that should never be irrigated.

Thank you for considering my comments.

David Carle
carle@qnet.com
760 647-6431
PO Box 39
Lee Vining, CA 93541
Author: /Water and the California Dream /(Sierra Club Books, 2003) and /Introduction to Water in California /(UC Press, 2004)

RESPONSE TO COMMENT I-31

I-31-1

Comment noted. No response necessary.

COMMENT I-32. ROGER K. MASUDA

From: Gerald Robbins
To: cjacquemin@mp.usbr.gov
Date: 7/30/2005 1:11:53 PM
Subject: COMMENT Fwd: San Luis Drainage Feature Re-evaluation Draft EIS -- Unofficial Comments

I-32-1 1. Idea #1: Since you already have a piping alternative to Estero Bay in San Luis Obispo County, have you considered running the pipeline instead to PG&E's Diablo Canyon Nuclear Power Plant in San Luis Obispo County?

The two possible uses at Diablo Canyon could be:

(1) cooling water for the power plant – the discharge water may be a problem because the chemicals would be more concentrated but may be not.

(2) using the waste heat from the cooling water to distill the drainage water in a separate water purification system. The distilled water could be used to help recharge groundwater within San Luis Obispo County or, if politically possible, mixed with drinking water supplies for water short areas within San Luis Obispo County. You would of course need to properly dispose of the residue.

I understand that water distillation pilot projects have been conducted at Diablo Canyon in the past but the problem was the cost of pumping the water over Coast Range to the San Joaquin Valley. Since you would be building a pipeline, you could build a parallel pipeline to transport the distilled water back to the San Joaquin Valley.

I-32-2 2. Idea #2: For your in-Valley disposal alternative, what about having someone construct a gas-fired electrical power plant near Electric Transmission Path 15. The drainage water could be used as power plant cooling water, you could try distilling a portion of the drainage water, and surplus power from the power plant could be used to run the RO units. Most of the power plant's output could possibly be sold into the electric transmission grid via Path 15 or used to serve the greater Fresno metropolitan area.

Good luck.

Roger K. Masuda
Griffith & Masuda
A Professional Law Corporation
517 E. Olive Street
Turlock, CA 95380
www.calwaterlaw.com
(209) 667-5501
FAX (209) 667-8176

RESPONSES TO COMMENT I-32

I-32-1

A complete range of alternatives was considered. Selection of the alternatives considered in the Draft EIS is described in the PFR.

I-32-2

The recommendation to construct a gas-fired electrical power plant near Electric Transmission Path 15 is outside of the purpose and need for the project.

COMMENT I-33. BRUCE GIBSON AND ROGER LYON

BRUCE GIBSON
1410 Cottontail Creek Road
Cayucos, California 93430

ROGER LYON
151 Cayucos Drive
Cayucos, California 93430

August 1, 2005

VIA FACSIMILE

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

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

Dear Ms Jacquemin:

These comments supplement those we provided in testimony at the Cayucos public hearing. Comments are being provided by us as individuals as well as on behalf of a number of residents of Cayucos and property owners along the anticipated route of the Ocean Disposal alternative.

The Bureau is urged to drop the Ocean Disposal alternative and proceed with one of the "In Valley" alternatives, which the Bureau has identified as the "anticipated preferred alternative." The drainwater problem was created by the irrigation of land in the San Joaquin Valley and should be solved there as well.

I-33-1 From a legal perspective, the draft EIS does not adequately identify the project, but rather identifies a series of alternative methods of addressing the drainage issue. Lacking a preferred alternative, identified as the "project," all of the alternatives should have been described in complete detail. Furthermore, a complete assessment of environmental impact should have been provided for each alternative. Only then could the public reasonably comment on the adequacy of the Bureau's environmental review before the EIS is finalized.

I-33-2 The description of the Ocean Disposal alternative is woefully inadequate. In turn, the analysis of its environmental impacts is likewise flawed. Under the current process, the Bureau would be allowed to select the Ocean Disposal alternative as the project *after* the public comment process has been closed, with no update of the EIS, no re-circulation of the draft EIS, and no further public involvement. This would violate NEPA.

The description of the Ocean Disposal alternative is found at pages 2-48 through 2-55. The alternative consists of over 200 miles of up to 42" pipeline, a 2.1 mile seven foot

diameter excavated tunnel and a 1.1 mile siphon. The routing of the pipeline is impossible to determine with any precision, as the map (figure 2.8-1) is of a scale of approximately 1" equals 20 *miles*. The draft EIS acknowledges that the environmental analysis impacts of installing this major 200-mile pipeline will be deferred until after the public comment period is closed:

> "The potential facility locations and conveyance alignments were based on existing information that indicates that they ***may*** be suitable for their intended purposes. Final selection of conveyance and facility locations will require additional field investigations and data analysis to evaluate engineering and ***environmental*** parameters (e.g., soils, groundwater, land use, and endangered and protected species) and issues raised in this EIS. The facilities would be designed to comply with current Federal and State regulations." (emphasis added)

I-33-3 In particular, there is no specific analysis of the impacts of routing through sensitive habitat. Table 2.8-1 indicates that 55 acres of sensitive habitat will be affected. The type and location of the habitat and proposed mitigation are not identified. Section 7.2.8 dismisses the biological impacts of this alternative by simply indicating that "[d]etailed specifications of [the Ocean Disposal] alternative's major facilities, permanent structures (buildings, tunnel portals, maintenance yards, roads, berms, fences, pump facilities, powerlines), construction schedules, and facility operating plans are not yet available."

I-33-4 Likewise, there is a dearth of analysis of the impacts on cultural resources of the yet undefined pipeline route. The EIS acknowledges that no field-level cultural resource reconnaissance studies have been completed specifically for this alternative, although the area, particularly near the coast, is rich in cultural sites (Section 15.2.8.). Impacts are identified as significant, but adverse impacts are left to be addressed by as yet identified mitigation measures.

I-33-5 The draft EIS recognizes that the pipeline route for the Ocean Disposal alternative passes through several major fault zones, as well as through the Franciscan Formation from near the summit of the Santa Lucia Range to the Pacific Ocean. This geologic assemblage is susceptible to seismic and landslide hazards, necessitating significant future geotechnical studies (Section 9.2.8). As written, this draft EIS cannot be finalized before those studies are complete and the updated draft is recirculated.

I-33-6 While difficult to determine from the large scale of the route map, Table 2.8-2 identifies an 11.35 mile "Cottontail pipeline," that apparently traverses the Cottontail Creek watershed near Cayucos. The draft EIS fails to address the potentially significant impact of a pipeline rupture in this area. Cottontail Creek is one of two creeks which feed Whale Rock Reservoir, a public water supply for the City of San Luis Obispo, Cal Poly and the California Men's Colony. The EIS must demonstrate that there is no risk for catastrophic pipeline rupture within the watershed of this drinking water reservoir.

I-33-7 The surface water resources analysis as it relates to the Ocean Disposal alternative is inadequate and confusing. We note that the Delta Discharge alternative includes a costly treatment of drainwater to reduce selenium to a level of 10 ug/L before disposal. The Ocean Disposal alternative does not include this treatment before disposal, and drainwater at the outfall in Estero Bay will have a selenium concentration of 220 ug/L. If ocean disposal is to

I-33-8 be considered, the project should include selenium removal treatment and the cost comparison should be revised to reflect this increased cost.

I-33-9 The Ocean Disposal alternative arbitrarily accepts this greatly increased selenium concentration without any specific analysis of impacts on the marine environment. Analysis of the near-field changes in receiving waters (section 5.2.8.3) includes only simplistic diffusion calculations of selenium concentrations. Specifically, the draft EIS does not account for other potential pollutants in the wastewater (e.g., pesticides), nor does it substantiate the dismissal of impacts from the diffused plume. Similarly in the far-field analysis, the study does not address long-term accumulation of wastewater components in Estero Bay (or their impacts) because it does not include any oceanographic study of circulation in that water body.

I-33-10 In assessing the relative impacts of various alternatives, the draft fails to address the considerably greater energy use required of the Ocean Disposal alternative. Table 2.13-1 shows that the total annual energy use of this alternative is more than five times greater than any other. The air resources impact analysis (section 11) does not address the cumulative impact of emissions resulting from the generation of the 81.4 gigawatt-hr/year required to operate the Ocean Disposal alternative. This greater energy must be considered in any comparison of the alternatives.

I-33-11 In the recreation resources section (14.2.8), it is stated that features of the Ocean Disposal alternative do not cross any recreation areas. Since no specific pipeline route is shown, it is impossible to tell where the pipeline route crosses Highway 1 and enters the ocean. Point Estero is very close to Estero Bluffs, a part of the California State Park system, which is subject to a conservation easement held by the Cayucos Land Conservancy. The EIS should confirm that the proposed pipeline will not cross this recreation area.

I-33-12 Tourism is one of the primary economic engines of San Luis Obispo County and is based largely on the relatively pristine condition of its coastline. The Regional Economics section of the draft EIS fails to address potential economic impacts of the stigma of having untreated selenium-tainted wastewater dumped into Estero Bay. The devastating environmental damage at Kesterson has generated national, if not international, negative press. Implementation of the Ocean Disposal alternative will certainly produce similar negative public reaction, with a commensurate negative impact on Central Coast tourism. The EIS needs to identify and address this issue.

In conclusion, the draft EIS is inadequate in its description and analysis of the Ocean Disposal alternative. If this alternative is to be selected, it will be necessary to re-open the

NEPA process to adequately describe the specifics and environmental impacts of the project. In turn, once that updated phased EIS is complete, the new draft would need to be recirculated for public review and comment.

The Bureau is urged to proceed with its anticipated preferred in-valley alternative.

Sincerely,

ROGER LYON

BRUCE GIBSON

cc: Congressman Bill Thomas
Congresswoman Lois Capps
Senator Abel Maldonado
Assemblyman Sam Blakeslee
San Luis Obispo County Board of Supervisors
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
Morro Bay National Estuary Program
Surfrider Foundation, San Luis Bay Chapter
ECOSLO
Farm Bureau-San Luis Obispo County
California Cattlemens Assn.-San Luis Obispo County
Cayucos Land Conservancy

RESPONSES TO COMMENT I-33

I-33-1

The project description is adequate for the analysis of environmental impacts.

I-33-2

As discussed in Master Response GEN-1, the Draft EIS was prepared at an appraisal level of design, and as such, the project description for the Ocean Disposal Alternative is considered adequate for the assessment of environmental effects.

I-33-3

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 sensitive areas in the pipeline vicinity.

I-33-4

The Draft EIS describes elements of the Ocean Disposal Alternative that may have an effect on cultural resources. Specific impacts to individual cultural resources await inventory and evaluation efforts in compliance with 36 CFR Part 800.4 once a preferred alternative is authorized and funded by Congress. The Draft EIS states that mitigation measures will be implemented for construction activities that will have an adverse effect on historic properties.

I-33-5

See Master Responses GEN-3 and SW-15 in regard to the analysis of pipeline failures.

I-33-6

One reach of the Ocean Disposal Alternative pipeline would follow Cottontail Creek. See Master Responses GEN-3 and SW-15 for discussions of pipeline breach analysis and pipeline design, respectively.

I-33-7

Comment noted. No response necessary.

I-33-8

The comment states that drainwater at the Estero Bay outfall would have an Se concentration of 220 mg/L and Se treatment should be added to the Ocean Disposal Alternative. As discussed in Section 5.2.2.1, the Ocean Disposal Alternative diffuser was designed and modeled to meet the Se criterion of 15 mg/L (the 6-month median concentration California Ocean Plan water quality objective) within a reasonable zone of initial dilution. For additional discussion, see Master Responses SW-6 and SW-13.

I-33-9

See Master Responses SW-13, SW-4, SW-5, SW-9, and SE-1 in regard to the water quality impacts and analysis of those impacts for the Ocean Disposal Alternative.

I-33-10

The cost of energy used to convey water for the Ocean Disposal Alternative is included in the Annual Project Expenditures shown in Table 17-5. As noted, this alternative has a conveyance system cost that is more than 10 times greater than the In-Valley Disposal Alternative.

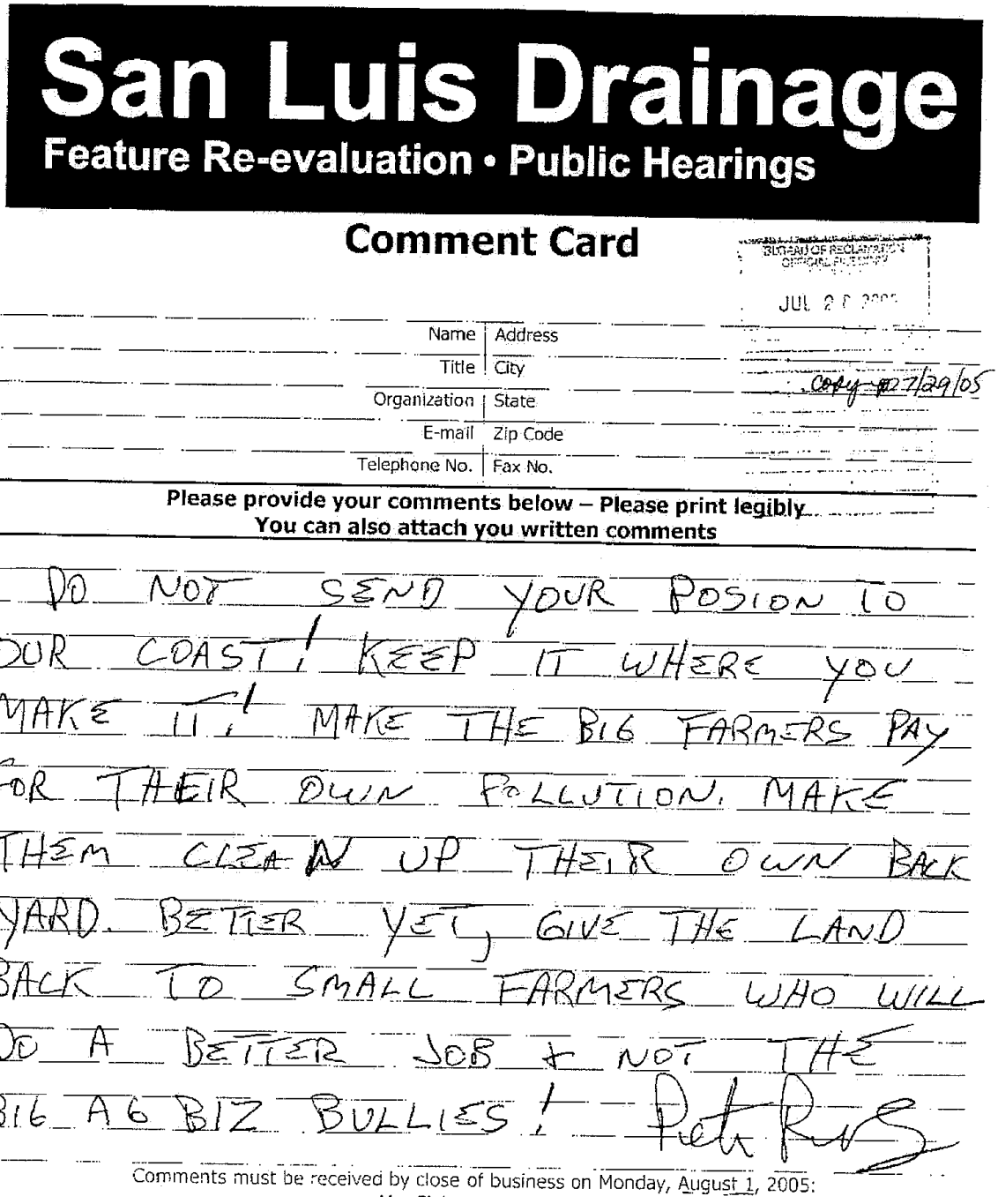
I-33-11

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 sensitive areas in the pipeline vicinity.

I-33-12

Reclamation's analysis of the Ocean Plan discharge policy and current ocean discharge permits indicates that the Ocean Disposal Alternative would not cause significant environmental impacts to Estero Bay. Based on the absence of measurable environmental impacts, no economic impacts were anticipated other than those associated with construction of the conveyance pipeline and outfall. In addition, Reclamation is unaware of any currently existing methods to reliably estimate the economic impacts of a potential perception that implementation of the Ocean Disposal Alternative will cause environmental damage to Estero Bay. However, Reclamation is willing to consider any additional information that the commenter might provide regarding the measurement of economic impacts of such a perception on the area's economy.

COMMENT I-34. ILLEGIBLE SIGNATURE: PETER R...S



San Luis Drainage
Feature Re-evaluation • Public Hearings

Comment Card

BUREAU OF RECLAMATION OFFICIAL FILE COPY
JUL 2 [illegible]

Name | Address
Title | City
Organization | State
E-mail | Zip Code
Telephone No. | Fax No.

Copy @ 7/29/05

I-34-1

Please provide your comments below – Please print legibly
You can also attach you written comments

DO NOT SEND YOUR POSION TO OUR COAST! KEEP IT WHERE YOU MAKE IT! MAKE THE BIG FARMERS PAY FOR THEIR OWN POLLUTION. MAKE THEM CLEAN UP THEIR OWN BACK YARD. BETTER YET, GIVE THE LAND BACK TO SMALL FARMERS WHO WILL DO A BETTER JOB & NOT THE BIG AG BIZ BULLIES! – Peter R...S

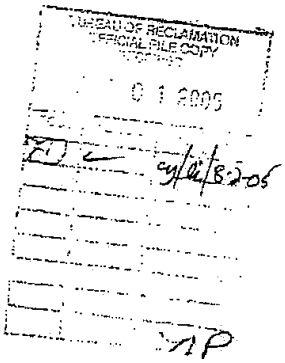
Comments must be received by close of business on Monday, August 1, 2005.

RESPONSE TO COMMENT I-34

I-34-1

Comment noted. No response necessary.

COMMENT I-35. JOHN A. ALEXANDER (2 OF 2)



John Alexander Research
Specializing in environmental solutions

Ms Claire Jacquemin
Bureau of Reclamation
Mid Pacific Region
2800 Cottage Way MP - 700
Sacramento, Ca 95825

Dear Ms Jacquemin:

I-35-1 Having attended several meetings regarding the San Luis drainage public meetings, and having read much of the literature, I get the feeling of floundering. None of the solutions presented to the public are acceptable. That truly is a shame!

John Alexander Research had made a study and found a viable solution, even before the Kesterson fiasco. When I flew to Washington DC to meet with the Dept of Interior, I was told::"The water belongs to us----we will do with it as we wish!" So, we sat still while the Red Rock ranch charade fell on its face.

The selenium - salt "problem" in leach water is being made into a mountain. It should not even be a mole hill. The trilllions of gallons of leach - runoff water could go a long way toward solving California's water shortage, instead of being an adversity.

We have developed and demonstrated the technology of treatment that inexpensively makes the water useable for growing crops. This reduces the salt water to below the root zone, to make hugh acreage once again productive. No more need to be dumping the valley's sewage.

A caveat------as an environmental scientist, I cannot discuss our technology if the treated water will be wasted by dumping or evaporation. If wisely used, I will cooperate to the hilt!

Our motto "Adversity to Advantage"

Sincerely,

John A. Alexander

John A Alexander Phd

cc:George Bush, President
Arnold Swartzenneger
Gov of California

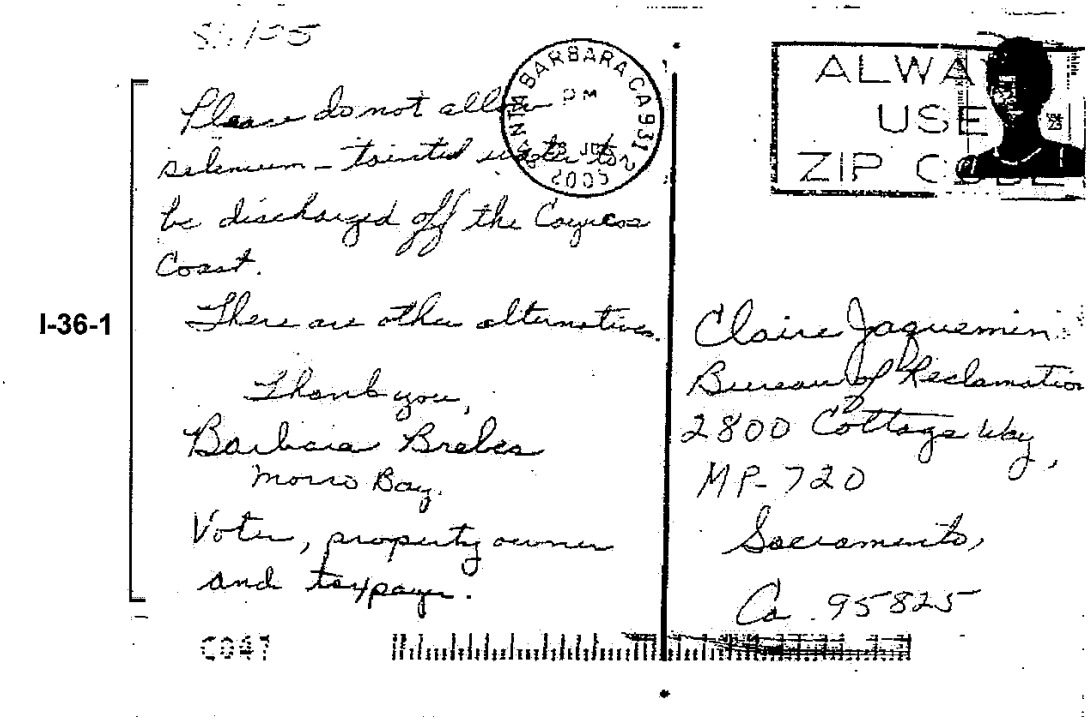
Pres John A Alexander Research Co
PO Box 288 Cayucos, Ca 93430
805 995 1109

RESPONSE TO COMMENT I-35

I-35-1

Comment noted. No response necessary.

COMMENT I-36. BARBARA BREBES



I-36-1

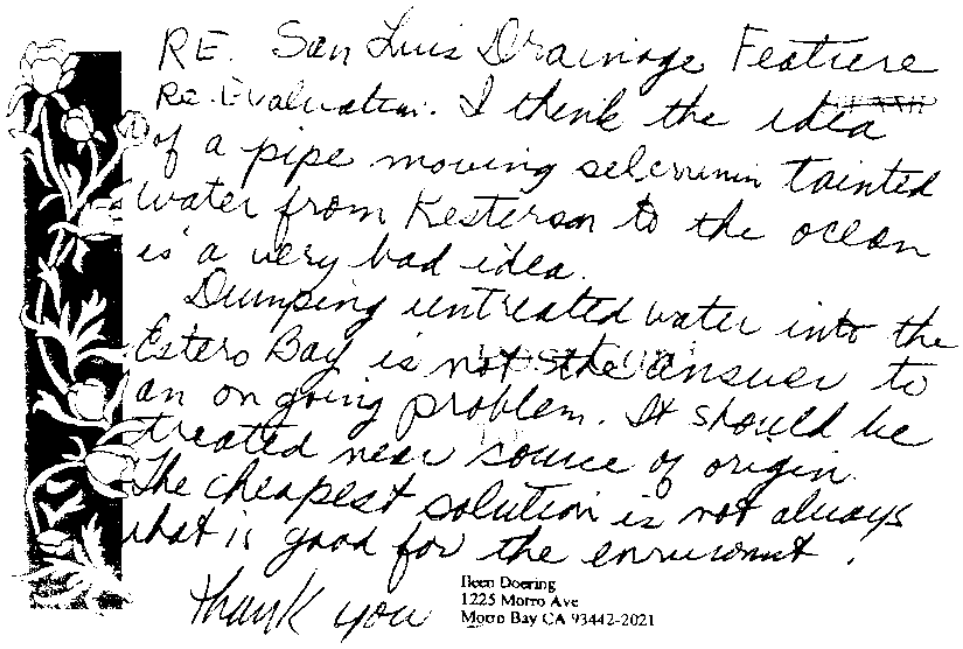
RESPONSE TO COMMENT I-36

I-36-1

Comment noted. No response necessary.

COMMENT I-37. ILEEN DOERING

I-37-1



RE: San Luis Drainage Feature Re-Evaluation. I think the idea of a pipe moving selenium tainted water from Kesterson to the ocean is a very bad idea.
Dumping untreated water into the Estero Bay is not the answer to an ongoing problem. It should be treated near source of origin. The cheapest solution is not always what is good for the environment.
Thank you

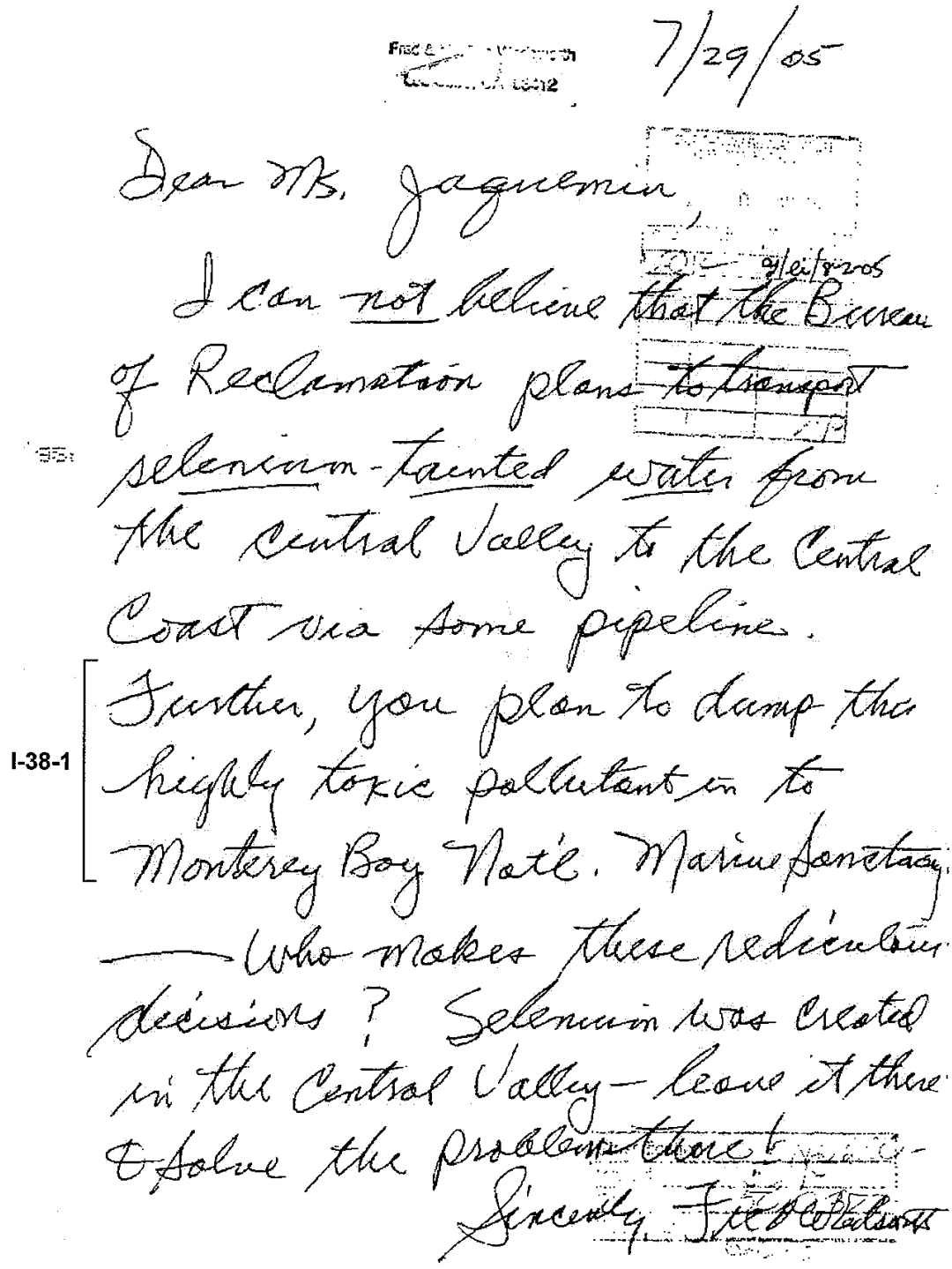
Ileen Doering
1225 Morro Ave
Morro Bay CA 93442-2021

RESPONSE TO COMMENT I-37

I-37-1

Comment noted. No response necessary.

COMMENT I-38. FRED WEDSWORTH



7/29/05

Dear Ms. Jaquemin,

I can not believe that the Bureau of Reclamation plans to transport selenium-tainted water from the Central Valley to the Central Coast via some pipeline.

I-38-1 Further, you plan to dump the highly toxic pollutant in to Monterey Bay Natl. Marine Sanctuary. — Who makes these rediculous decisions? Selenium was created in the Central Valley — leave it there & solve the problem there!

Sincerely, Fred Wedsworth

RESPONSE TO COMMENT I-38

I-38-1

The outfall for the Ocean Disposal Alternative would be approximately 11 miles south of the southern boundary of the Monterey Bay National Marine Sanctuary. At such a distance, the contribution of constituents from the discharged water would not be discernable from background levels. Reclamation will select a preferred alternative in the ROD based on federal planning guidelines.

COMMENT I-39. JERRY JAMES

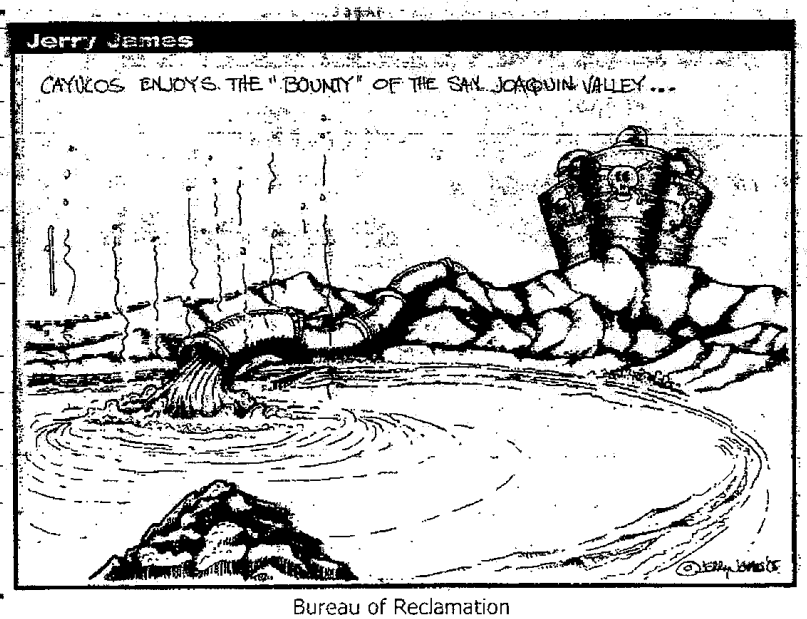
San Luis Drainage
Feature Re-evaluation • Public Hearings

Comment Card

Name	Address
Title	City
Organization	State
E-mail	Zip Code
Telephone No.	Fax No.

Please provide your comments below -- Please print legibly
You can also attach you written comments

I-39-1



Bureau of Reclamation
2800 Cottage Way, MP-720
Sacramento, CA 95825

RESPONSE TO COMMENT I-39

I-39-1

Comment noted. No response necessary.

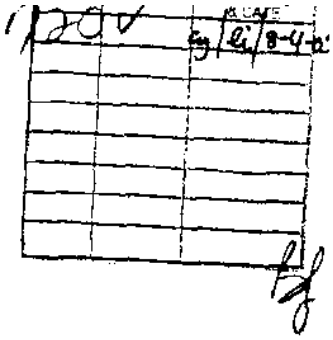
COMMENT I-40. EDWIN W. LEE

Date: Sat, 30 Jul 2005 22:36:36 -0700 (PDT)

From: "edwin lee" <lliedlee@yahoo.com> Add to Address Book

Subject: Central Valley Agricultural Drainage Alternatives

To: Jrobbins@mp.usbr.gov



Jerry Robbins
Planning Division
US Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

Dear Mr Robbins,

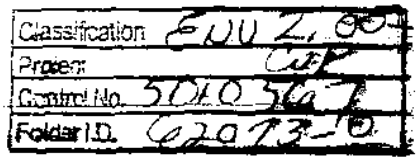
Request has been made for public comments on the USBR proposal to prepare an EIS on possible solutions to the agricultural drainage problems in the Central Valley.

Three alternatives have been proposed. Discharge to the Delta or Carquinez and in-land disposal will meet serious objections and may not be realistically tenable. This leaves the Estero Bay discharge the only realistic acceptable solution but even this solution must meet economical affordability acceptance. Therefore other alteratives should be considered to exhaust all possible low cost solutions.

The drainage problems are complex and there are no easy solutions but all reasonable alternatives should be evaluated. The attached notes are suggestions on other possible alternatives for evaluation in an EIS. If you have any question on these suggestions please contact me.

Edwin W. Lee, P.E.
Lee and Associates
32 Thurles Place
Alameda, CA 94502
Telephone: 510-769-9927
E-mail: liledlee@yahoo.com

Attach: Notes on Drainage Alternatives



Central Valley Agricultural Drainage Disposal Alternatives

Three alternatives have been proposed for possible solutions to the Central Valley agricultural drainage problem. Discharge into the Delta and In-Valley solutions will meet strong objections and may not be realistic viable alternatives. This leaves the proposed discharge to Estero Bay the only real solution with the best chance for acceptance, provided that the cost is affordable. Therefore other out -of -basin discharges should be evaluated also as alternatives to exhaust all possible outcomes in seeking low cost solutions that would be economical ,environmentally acceptable.and long term sustainable. These possible alternatives are discussed in the following paragraphs for inclusion into the draft EIS.

I-40-1 Under the San Joaquin Valley Drainage Project (1980-1990), an ocean discharge to Santa Cruz was evaluated under a contract with the consultant Brown and Caldwell. A draft engineering report was prepared along with a tentative route selection but the report was never finalized because only in-valley solutions were evaluated. This draft report should be available in the SJVDP files for review. This alternative could be less costly than the proposed Estero Bay discharge for the following reasons.

1. The route to Santa Cruz is shorter. Agricultural drainage would be collected in the existing San Luis Drain and pumped over Pacheco Pass and follow the Pajaro River to Watsonville to the ocean. Drainage could be discharged near Watsonville or north towards Santa Cruz to an ocean outfall. Municipal wastewater from Santa Cruz currently is discharged into an outfall located within the National Marine Sanctuary. Extensive physical and biological oceanographic studies were conducted in the design of this outfall and continuous operational monitoring has been conducted for decades. Discharge operations has been acceptable under permit . There are other marine outfalls discharging municipal wastewater in the Monterey Bay area, under permit conditions.
2. Tunnel cost over Pacheco Pass could be reduced if the force main could be installed in the utility duct of the proposed San Francisco-Los Angeles Super Rail.

I-40-2 3. The existing San Luis Drain should be upgraded . Suggestions are to cover the drain with plastic or lightweight concrete to control biological growths and odors.

I-40-3 4. Tulare Basin agricultural drainage could be concentrated in evaporation ponds for northward conveyance in the San Luis Drain for ocean disposal . Alternatives should evaluate discharge into the Mohave Basin or Carrizo Plains for disposal into dry salt beds.

RESPONSES TO COMMENT I-40

I-40-1

A copy of the Ocean Discharge Report for the San Joaquin Valley Drainage Project (by Brown & Caldwell) is available in the Reclamation Office of Public Affairs Library in Sacramento.

I-40-2

The comment is noted. Some alternatives may include upgrading San Luis Drain if needed.

I-40-3

This technology/option was evaluated during the development of alternatives as described in the PFR Addendum. Discharge to out-of-basin evaporation and disposal facilities was not pursued due to concerns with environmental justice and conformance with water policy encouraging in-basin solutions.

COMMENT I-41. REO CORDES

From: Gerald Robbins
To: cjacquemin@mp.usbr.gov
Date: 8/7/2005 12:08 AM
Subject: Comment>>Fwd: no run off in our ocean

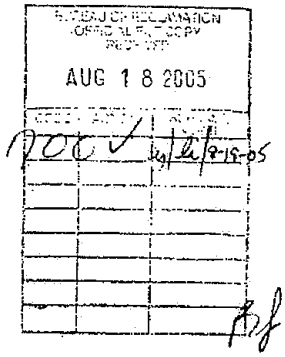
I-41-1 I am apposed to agricultural runoff being pumped into the waters off San Luis Obispo County. Please deal with this in another way.
Thank you
Reo Cordes
2171 ocean st.
Oceano, Ca. 93445

RESPONSE TO COMMENT I-41

I-41-1

Comment noted. No response necessary.

COMMENT I-42. MR. & MRS. BERTAND BORCHARD



August 12, 2005

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

Attention: Claire Jacquemin

Ms. Jacqueman,

We are residents of Cayucos and are very concerned about the possible dumping of selenium laden water onto our coast.

I-42-1 It is truly difficult for us to believe that the government could seriously consider such a thing. From what we've read in the newspaper, the government doesn't have any clear proof of what the consequences would be to the sea life, let alone what chemicals might be left in our surf where hundreds of people surf and swim.

Our grandchildren use the Cayucos beach when they come to visit us, and the idea that selenium saturated water might be dumped here, is really disturbing to us.

I-42-2 When we first heard this scheme mentioned a few months ago, we said...they can't be serious. What is the justification of bringing this from the central valley and dumping it on a coastal community? It would seem to us that the mess should be handled where it was created. Surely, there are

I-42-3 places in the central valley where this selenium can be cleaned from the water. If not, then we suggest the government find a way to dispose of this stuff over there.

I-42-4 We would appreciate any kind of information that was discussed at the meeting in Cayucos. Both of us are very ill and unable to attend that meeting. Perhaps, you have some kind of hand out or report that you could send.

Thanks for your help.

Sincerely,

Mr. & Mrs. Bertram Borchard

Mr. & Mrs. Bertram Borchard
249 Cayucos Dr.
Cayucos, CA 93430

RESPONSES TO COMMENT I-42

I-42-1

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

I-42-2

The Ocean Disposal Alternative is one of seven alternatives that were evaluated in the Draft EIS and has not been identified as the preferred alternative. For background on the development of this alternative, see the December 2001 Preliminary Alternatives Report (PAR), San Luis Drainage Feature Re-evaluation, the December 2002 PFR, and the July 2004 PFR Addendum.

I-42-3

The In-Valley Alternatives include treatment and disposal of drainwater in the San Luis Unit.

I-42-4

All of the comments received at the public hearing held in Cayucos on July 14, 2005, as well as all of the other public hearings are summarized and responded to in Appendix O8 of the Final EIS.

COMMENT I-43. JERRY WAIDNER

From: Jerry Waidner <jwaidner@thebaynews.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/12/2005 1:42 PM
Subject: comment on the dumping of selenium-tainted agricultural runoff intothe pacific ocean in Cayucos

RE: dumping selenium-tainted Central Valley agricultural runoff into the pacific ocean

I was appalled to hear of this proposal.

It's way past the time when powerful interests should think that they can get away with just shrugging their problems off on unsuspecting adjacent communities.

I-43-1 I am politically adept and helping to organize opposition to this proposal.

I vow to vigorously fight this shameful attempt to pollute our ocean and will work tirelessly to unseat any politician so ignorant of environmental issues that they support this measure.

I hope I have made myself clear.

Jerry Waidner
1748 Eighth Street
Los Osos, CA 93402
805.528.8776

RESPONSE TO COMMENT I-43

I-43-1

Comment noted. No response necessary.

COMMENT I-44. PATRICA ANDREEN

From: Patty Andreen <andreen4supervisor@yahoo.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/19/2005 12:50 PM
Subject: Dumping Agricultural Waste into Estero Bay in San Luis Obispo County, CA
CC: <sbianchi@co.slo.ca.us>

Dear Ms. Jacquemin:

I-44-1 I am strongly opposed to the proposal to dump agriculatural waste from the San Joaquin Valley into the Estero Bay off Cayucos, California.

I-44-2 The effects of this discharge could be extremely damaging to our marine ecosystem. At a time when marine life is already challenged by warming temperatures and pollution, this proposal to dump selenium and pesticiede bearing waste into the water is ill advised.

Thank you for your consideration of this viewpoint and for working to find a better solution.

Patrica Andreen
354 Mitchell Drive, Los Osos, CA 93402

RESPONSES TO COMMENT I-44

I-44-1

Comment noted. No response necessary.

I-44-2

See Master Responses SW-8, SW-13, SW-9, and SE-1 in regard to the effects of the Ocean Disposal Alternative on the marine ecosystem.

COMMENT I-45. ANN BROOKS

From: "Jane Maxwell and Ann Brooks" <JMandAB@charter.net>
To: <cjacquemin@mp.usbr.gov>
Date: 8/19/2005 1:38 PM
Subject: Untreated Waste in the Ocean

Dear Ms. Jacquemin:

I-45-1 I am disturbed to read in the local paper that your Bureau is planning to dump 40 years worth of untreated agricultural waste into the ocean at Estero Bay. Surely there is a better alternative that would not have such a horrible environmental impact.

Ann Brooks
2715 Thoroughbred Pl.
Arroyo Grande CA 93420

RESPONSE TO COMMENT I-45

I-45-1

Comment noted. No response necessary.

COMMENT I-46. ROBERT CRUTTENDEN

From: "Robert Cruttenden" <CRUTT@CHARTER.NET>
To: <cjacquemin@mp.usbr.gov>
Date: 8/19/2005 9:48 AM
Subject: pipeline

I-46-1 I am a resident of the California Central Coast and do not want the central valley waste water dumped in the ocean. You will be trading in one problem for another, do not do it! I and my fellow central coast citizens will fight you on this.

Sincerely,

Robert Cruttenden
San Luis Obispo, CA

RESPONSE TO COMMENT I-46

I-46-1

Comment noted. No response necessary.

COMMENT I-47. RICHARD (NO LAST NAME PROVIDED)

From: <Richard@HisCabin.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/19/2005 8:17 AM
Subject: agricultural waste from the San Joaquin Valley into Estero Bay at Point Estero near Cayucos.

I-47-1 **PLEASE KEEP THEIR WASTE IN THEIR OWN BACKYARD!**

agricultural waste from the San Joaquin Valley TO BE PIPED into Estero Bay at Point Estero near Cayucos.

RESPONSE TO COMMENT I-47

I-47-1

Comment noted. No response necessary.

COMMENT I-48. JULIE SMITH

From: Julie Smith <jsmith@ernieball.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/19/2005 11:19:20 AM
Subject: Pipeline

I-48-1 Are you nuts, we surely don't want or need San Joaquin's nasty waste in our Estuary. Let them cleanup their waste without shipping it to us.
Julie K. Smith
Arroyo Grande, CA. 93420

Julie Smith
jsmith@ernieball.com

RESPONSE TO COMMENT I-48

I-48-1

Comment noted. No response necessary.

COMMENT I-49. HUNTLEY LEWIS

From: "Don & Huntley" <donhunt@charter.net>
To: <cjacquemin@mp.usbr.gov>
Date: 8/20/2005 3:59 PM
Subject: agricultural waste dumping off off Point Estero

Dear Ms. Claire Jacquemin,

I-49-1 Please find another means of disposal for untreated agricultural waste from the San Joaquin Valley than piping it into Estero Bay near Cayucos. As a resident of the Central Coast, I have familiarized myself with the local estuary and marine ecosystem. This plan would be devastating to the migrating marine mammals, birds and fish we have

I-49-2 off this coast. The southern sea otter is a threatened species that lives in these waters. Do not try to clean up one polluted area by polluting another and destroying the fragile balance of the sea.

Sincerely, Huntley Lewis,
Cambria

RESPONSES TO COMMENT I-49

I-49-1

Comment noted. No response necessary.

I-49-2

See Master Responses SW-8, SE-1, and SW-12.

COMMENT I-50. MICHAEL MANION

From: Michael Manion <micronesia89@sbcglobal.net>
To: <cjacquemin@mp.usbr.gov>
Date: 8/20/2005 6:36 PM
Subject: Ocean dumping of toxic valley water...

Dear Ms. Claire Jacquemin;

I-50-1 The simple sollution, to build a pipeline to the coast, is an expensive way to transport toxic wastewater. But it doesn't produce any clean water, or create a new clean-up technology.

I-50-2 If you approach the toxic wastewater in the Valley with the plan to purify the water for further agricultural use, you will be able to find more money in federal grants (than the money required by the pipeline contractors) to develop a new technology in high volume water purification that would have further California application in cleaning up the Salton Sea (a major So. Cal. problem).

You would be creating long term work, in a developing industry, for your state that could have global impact for cleaning up toxics.

Just imagine cleaning up the Salton Sea!

Respectfully,

Michael Manion
Arroyo Grande CA

RESPONSES TO COMMENT I-50

I-50-1

The In-Valley Alternatives develop reclaimed water through the use of RO treatment. As noted in Section 1.1, the overall project purpose is to provide agricultural drainage, not to create new cleanup technology.

I-50-2

The comment states that if Reclamation plans to purify water for agricultural reuse, federal grants might be available to develop new technology for high-volume water purification that would have further application in cleaning up the Salton Sea. RO treatment is a component of the In-Valley Alternatives. Creating new technology for other projects is outside of the scope of this EIS; however, see Master Response GEN-5.

COMMENT I-51. JOHN AND SUE BOUDREAU

From: "johnboudreau" <jedselboud@charter.net>
To: <cjacquemin@mp.usbr.gov>
Date: 8/23/2005 10:32 AM
Subject: San Luis Drainage Feature Re-evaluation: Draft EIS May 2005. Public Comment.

Dear Ms. Jacquemin,

I-51-1 The concept of discharging waste water to the ocean near Cayucos is not acceptable because of the threat to marine mammals, birds and fish, both local and migrating. The USBR has several alternatives that do not include dumping on a neighbor, please concentrate on them. We appreciate this opportunity to comment, and hope you would very soon eliminate ocean disposal as an alternative.

Sincerely,

John Boudreau

Sue Boudreau

RESPONSE TO COMMENT I-51

I-51-1

Comment noted. No response necessary.

COMMENT I-52. RANDI PERKINS

From: Randi Perkins <randiperkins@mac.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/23/2005 11:39:56 AM
Subject: proposed Bureau of Reclamation plan for Estero Bay, Cayucos, CA.

Dear Ms.Jacquemin,

I-52-1 As a concerned Central Coast resident, I wish to comment on the proposed Bureau of Reclamation's plan to pipe 40 years of untreated selenium and pesticide-bearing agricultural waste from the San Joaquin Valley, to be dumped a mile and a half off shore from Estero Bay near Cayucos. This is an outrageous and ill-conceived plan, that will do great and lasting damage to the native and migrating marine mammals, birds and fish that depend upon that pristine area. If the toxic agricultural waste is dumped into the ocean waters off of Point Estero (or any other region of the Pacific) literal dead zones would be needlessly established off of our coasts. That would be a horrific tragedy. That so much toxic waste has accumulated in the San Joaquin Valley due to the over use of pesticides is a disaster in & of itself, but to transport and dump it into the ocean, would be the continuation of distruction and no viable solution.

I-52-2 Please do everything within your power to avoid this deadly scenerio. The San Joaquin Valley cannot dump their toxic waste off of our pristine coast. Other solutions must be available to the Bureau of Reclamation. Please do the right thing.

I am anxious to hear your comments and will be closely watching the outcome.

Sincerely,

Ms. Randi Perkins
10009 Old Morro Road East
Atascadero. Ca. 93422

RESPONSES TO COMMENT I-52

I-52-1

See Master Response SW-11 in regard to the potential creation of hypoxic “dead zones.”

I-52-2

Comment noted. No response necessary.

COMMENT I-53. SUSAN A. SAWADE

Susan A. Sawade
1394 Paseo Ladera Lane
Arroyo Grande, CA 93420
August 23, 2005

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

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

Dear Ms. Jacquemin:

I have been following with interest and concern for some time now the cleanup plan the Bureau of Reclamation is considering for the disposal of toxic agricultural wastewater from the San Joaquin Valley area.

One of the options is to pipe this untreated selenium and pesticide laden wastewater directly into the ocean and discharge it one-and-one-half miles offshore into Estero Bay at Point Estero near Cayucos in San Luis Obispo County.

This is an area of the ocean rich with plant life, fish and migrating marine mammals. These include many cetaceans – grey whales, blue whales, killer whales, harbor porpoise and common dolphin – sea lions, harbor seals, elephant seals, Northern fur seals and it is also the habitat for the Southern sea otter, a threatened species. There was a severe die-off of sea otters in 2004 in this very area of the ocean off Cayucos from suspected parasitic infection from cat and opossum feces that washed from the creek into the ocean.

I-53-1 As the deadline for public comment nears I am compelled to write with my strong opposition to this plan.

In January of 2003 I became a rescue volunteer with The Marine Mammal Center. Now in my third season we find ourselves in the midst of a domoic acid event that is causing California sea lions, Northern fur seals, sea otters and cetaceans to either strand with seizures or to wash onshore near death or dead.

These algal blooms produce a neurotoxin that accumulates in anchovies, sardines and other small fish and then are consumed in large numbers by California sea lions, Northern fur seals, sea otters and cetaceans.

While some algal blooms are considered natural events and not all are poisonous, there is evidence that they appear to be happening more frequently and with greater toxicity. Scientists suspect pollution to be one of the causes of this domoic acid poisoning.

Where the coastline is remote, ailing and dead animals lie unnoticed. On more populated beaches the animals strand and volunteers have responded to rescue over 120 animals in the past five weeks. Many died before transport; many more have had to be euthanized due to seizures and brain damage from acute domoic acid toxicity. Many of the animals that are treated and released by The Marine Mammal Center in Sausalito restrand with epilepsy and and are poor candidates for any rehabilitation.

It is very hard to watch a beautiful wild animal seize, either semi-comatose or with head weaving, eyes bulging and foam coating its face, it's body so hot from the seizure you can feel the intensity of it. Worse yet is to watch this animal die. And all this from suspected pollution of the ocean.

I-53-2 These few examples of human or land-based negative influences on the ocean are just observations known in our area by one lay person. We do not need to intentionally dump selenium and pesticide toxins into Estero Bay with the full knowledge these toxins will cause irreparable harm to the ocean, the plant life, plankton, fish, cetaceans and marine mammals.

Something is very wrong with the plan to pipe this wastewater to the Central Coast and dump more toxins into the ocean.

The Bureau of Reclamation has options to treat and dispose of this agricultural wastewater from the San Joquain Valley with in-valley disposal.

The Bureau of Reclamation has the ability to take actions that are environmentally responsible and right and to set a standard for protecting the ocean from further contamination from land-based negative activities.

Thank you.

Sincerely,

Susan A. Sawade

Susan A. Sawade

RESPONSES TO COMMENT I-53

I-53-1

Comment noted. No response necessary.

I-53-2

See Master Responses SW-8, SW-13, SW-9, SE-1, and SW-12 in regard to the effects of the Ocean Disposal Alternative on the ocean, plant life, plankton, fish, cetaceans, and marine mammals.

COMMENT I-54. SYLVIA M. GREGORY

From: Sylvia Gregory <sdmg@ifn.net>
To: <cjacquemin@mp.usbr.gov>
Date: 8/25/2005 12:31:25 PM
Subject: Draft EIR on Selinium Disposal in the Central Valley

Sirs:

It is with great concern that I read that there seems to be no plan to buy out the farmers that are putting into use the lands of the Westside that are causing all of the runoff of Selenium.

If it is indeed just 600 growers that are using that land I feel that the costs to buy out these lands could be the most simple way to take care of the problem of Selenium disposal. If the land was not disturbed by putting it into production then the Selenium would remain where it is naturally.

I-54-1 Retiring the lands of the west side of the San Joaquin Valley would be the wisest and probably in the long run the cheapest way to handle the Selenium disposal question. I feel that this should be the first answer sought.

I-54-2 I do not feel that the San Louis drain emptying into the Estuary at any point is a good idea. The San Francisco Bay is needing clean up from all of the agriculture waste that is loaded into it now without putting more Selenium into it. It is necessary to clean up the Bay so there will be a healthy milieu for fish and people who want to use it. It should not be used for a dumping place for Selenium.

Sincerely,

Sylvia M. Gregory
141 Madison Ave.
San Bruno, Calif. 94066
650-589-3176

RESPONSES TO COMMENT I-54

I-54-1, 2

Comment noted. No response necessary.

COMMENT I-55. EVELYN AND DAVID DABRITZ

From: <DDabritz@aol.com>
To: <grobbins@mp.usbr.gov>, <cjacquemin@mp.usbr.gov>
Date: 8/27/2005 10:35 AM
Subject: San Luis Drainage

August 27, 2005

G. Robbins,

I-55-1 We oppose the plan to use a pipeline to remove the selenium pollution from the San Luis Drainage project as Ocean Outfall to be discharged in the Pacific Ocean above Cayucos, California. The Marine Sanctuary boundary is only a few miles away in Cambria.

I-55-2 We believe that the pollution caused by agriculture would better be handled by local detoxification methods, especially by chemical treatment or algae. Ocean pollution could be catastrophic to ocean denizens because of

I-55-3 unknown bio concentration of selenium. Selenium is know to be a biological trigger for birth defects in birds, i.e. beak malformation.

Further damage to the environment would, of course, be best stopped by not adding precious water to toxic land .

Sincerely,

Evelyn and David Dabritz
3650 Studio Dr.
Cayucos, CA 93430
805-995-3874
ddabritz@aol.com

RESPONSES TO COMMENT I-55

I-55-1, 2

Comment noted. No response necessary.

I-55-3

See Master Responses SW-8 and SE-1.

COMMENT I-56. LINDA BAGGETT

From: "Linda Baggett" <lbaggett@cuesta.edu>
To: <cjacquemin@mp.usbr.gov>
Date: 8/29/2005 10:34 AM
Subject: stop the pipe!!!!!

I-56-1

Dear Ms. Jacqueline,
Please, oh please, add my name to those opposed to this horrible proposal.
Linda Baggett
1219 San Mateo Drive
SLO 93401

RESPONSE TO COMMENT I-56

I-56-1

Comment noted. No response necessary.

COMMENT I-57. BILL DENNEEN

From: Bill Denneen <bdenneen@slonet.org>
To: <cjacquemin@mp.usbr.gov>
Date: 8/29/2005 8:47:54 PM
Subject: Selenium Dumping off Estero Bay

TO: Claire Jacquemin, <cjacquemin@mp.usbr.gov>, Bureau of Reclamation, 2800 Cottage Way, MP-700, Sacramento 95825

The Bureau of Reclamation is proposing to pipe 40 years of untreated agricultural waste containing untreated selenium and pesticide-bearing waste from the San Joaquin Valley into Estero Bay at Point Estero near Cayucos approximately a mile and a half offshore.

I-57-1 As a Biologist, I am very familiar with the ecology and hydrology of the bay. Introducing untreated agricultural waste into the bay will negatively impact species around and to the south of the point of release through bioaccumulation, contributing to neurological damage and decreased fecundity of fish, birds and marine mammals, including many listed on the endangered species list. Migratory species (e.g. birds) going through the bay will be affected. This plan calls for untreated selenium and pesticide-bearing waste to be dumped a mile and a half from shore in an area rich with migrating marine mammals, birds and fish, and an area that

I-57-2 is the habitat for a threatened species, the southern sea otter. The effects of this discharge would be devastating to our local estuary and marine ecosystem. The release would adversely affect the already fragile

I-57-3 coastal commercial and sport fishing industries in Cayucos, Morro Bay and Port San Luis.

I-57-4 Do not further contaminate our ocean and the organisms therein. !!!!!!!!!!!!!!!!!!

William Denneen, Emeritus Biology Professor, 1040 Cielo Lane, Nipomo, 93444

RESPONSES TO COMMENT I-57

I-57-1

See Master Responses SW-8, SE-1, and SW-12.

I-57-2

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

I-57-3

See Master Responses SW-8, SE-1, and SW-10 regarding environment effects of the Ocean Disposal Alternative.

I-57-4

Comment noted. No response necessary.

COMMENT I-58. DON DOLLAR

From: "D. & E. Dollar" <ddollar@pacbell.net>
To: <cjacquemin@mp.usbr.gov>
Date: 8/29/2005 1:24 PM
Subject: San Luis Drainage

Bureau of Reclamation

Re: San Luis Drainage

I-58-1 The proposal to drain toxic laden water to the Pacific Ocean is flawed. We are now in the 21st Century and know that there are way too many shortcomings with that approach. Our knowledge of ocean dynamics is rudimentary. The EIS fails to address completely the following issues:

I-58-2 • Ocean currents and the seasonal patterns to disperse proposed discharge
I-58-3 • Migrating sea mammals, such as sea lions, elephant seals, otters, whales, etc.
I-58-4 • Pipeline issues, such as leaks, breaks, earthquakes, wildland fires, visual and environmental impacts
I-58-5 • Monitoring of ocean discharge

I-58-6 **I suggest that the best plan for this project is a mixture of land retirement and water treatment and reclamation within the impaired drainage areas.**

Sincerely,

Don Dollar
2357 Banderola Court
San Luis Obispo CA

RESPONSES TO COMMENT I-58

I-58-1

Comment noted. No response necessary.

I-58-2

A significant quantity of current velocity, temperature, and salinity data were analyzed in modeling the fate of the discharge within the ocean. Specifically, temperature data for 1972-1986, salinity data for 1972-1985, and current data for 1984-2002 were obtained, totaling over 200,000 data points. These data were gathered from four sources to form the basis of the discharge diffusion analysis (see Draft EIS 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 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 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). This estimate is based on analysis of ADCP data at the NOAA Point San Luis station for the 1997-2002. If the Ocean Disposal Alternative were

selected as the preferred alternative in the ROD, a more detailed analysis of local ocean currents would be required and conducted. See Master Response GEN-1.

I-58-3

See Master Responses SW-8, SE-1, and SW-12.

I-58-4

See Master Responses GEN-1, SW-15, and ALT-P2. Wildland fires are not anticipated to damage the pipeline.

I-58-5

Reclamation would conduct monitoring and adaptive management for any alternative. See Master Responses REG-1 and MIT-1.

I-58-6

Comment noted. No response necessary.

COMMENT I-59. LEE GREENAWALT

From: "lee greenawalt" <lgreenawalt@MSN.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/29/2005 10:00 AM
Subject: Selenium dumping off shore

FROM THE SHACK By the Sea
Lee and Carmen Greenawalt 499 Nevis St. Morro Bay, CA 93442
(805) 772 9549 lgreenawalt@MSN.com, CarmLeeG@yahoo.com

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

Dear Ms. Jacquemin,

I taught elementary school science in Merced for 25 years, taking students to Kesterson reservoir. I observed results of selenium build-up as the irrigation of formerly dry-land farming became prevalent.

I-59-1 Now, five years a resident here, I decry the attempt to cheaply dump decades of dangerous chemicals into an area already vulnerable to added waste from proposed expanded electrical generation. I realize the selenium needs to go somewhere. The currents of the ocean around the 5 mile limit might be able to handle the waste. Certainly not less than 2 miles due to

I-59-2 circulation cycles of peninsulas and bays of Monterrey, San Luis Obispo and Santa Barbara. Please look carefully at scientific studies of the whole ocean environment before approving a stop-gap measure to help central valley farmers that endangers world-wide sea life.

RESPONSES TO COMMENT I-59

I-59-1

Comment noted. No response necessary.

I-59-2

The evidentiary basis of this comment is unclear. Although an extensive three-dimensional analysis of ocean current dynamics was not conducted as part of the EIS, it was the professional judgment of the EIS preparers that this detailed level of analysis was not warranted at the feasibility level of design (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, including data for different seasons. Temperature, salinity, and current velocity data were gathered from four sources to form the basis of the discharge diffusion analysis (see Draft EIS 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 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 vicinity of the diffuser only 1 percent of the time, and for durations of around 1 hour (though in some cases up to 3 hours). This estimate is based on analysis of ADCP data at the NOAA Point San Luis station for the 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 ROD, a more detailed analysis of local ocean currents would be required and conducted

COMMENT I-60. JAN HOWELL MARX

From: Jan Marx <janmarx@fix.net>
To: <cjacquemin@mp.usbr.gov>
Date: 8/29/2005 7:49:43 AM
Subject: NO Selenium Dumpting off Estero Bay

Dear Ms Jacquemin:

I-60-1 I am writing to voice my strong opposition to the Bureau of Reclamation dumping Central Valley selenium laden water off the coast of Cayucos in San Luis Obispo County. It should be disposed of on site, or at least

I-60-2 in Kern County. It is a hazardous waste and would be harmful. to bird, animal and marine life. Please do not pursue this alternative. The Sierra Club and the Environmental Center of San Luis Obispo County, among other groups with whom I am actively involved, are working to extend the Marine Sanctuary south from Monterery County to Point Sal. The entire coastal area deserves to be preserved, not polluted.
Thank you.
Jan Howell Marx, Esq.
265 Albert Drive
San Luis Obispo
CA 93405

RESPONSES TO COMMENT I-60

I-60-1

Comment noted. No response necessary.

I-60-2

See Master Responses SW-8 and SE-1.

COMMENT I-61. GREG MCCLURE

From: Newsstand Greg <centralcoastnewsmission@gmail.com>
To: Ms Jacquemin <cjacquemin@mp.usbr.gov>
Date: 8/29/2005 8:05 PM
Subject: Please log my protest

Ms Jacquemin,

I-61-1 Please listen to my protest: no dumping 40 years' worth of toxic agricultural waste into California's fragile shoreline ecosystem!

There must be a better plan to dispose of this hazardous material. Destroying another habitat is not a good enough "plan."
Thank you for your time and attention.

-- your blogster, "Newsstand Greg" McClure

Central Coast News Mission
http://newsmission.blogspot.com
California's Central Coast blog of current comment.

RESPONSE TO COMMENT I-61

I-61-1

Comment noted. No response necessary.

COMMENT I-62. BARRY PUTMAN

From: <BFPutman@aol.com>
To: <cjacquemin@mp.usbr.gov>, <caucus@omnipost.com>
Date: 8/29/2005 11:47 AM
Subject: Estero Bay Dumping Letter
CC: <BFPutman@aol.com>

Dear Ms. Claire Jacquemin:

I understand the Bureau of Reclamation is proposing to pipe 40 years of untreated agricultural waste containing untreated selenium and pesticide-bearing waste from the San Joaquin Valley into Estero Bay at Point Estero near Cayucos approximately a mile and a half offshore.

As a marine biologist, I have done extensive research work on the marine life in Estero Bay, was one of the coauthors of the State of California's resource inventory of Estero Bay–hence am quite familiar with the threatened, endangered and commercial species that depend on the bay, and am very familiar with the ecology and hydrology of the bay. Introducing untreated agricultural waste into the bay will negatively impact species around and to the south of the point of release through bioaccumulation, contributing to neurological damage and decreased fecundity of fish, birds and marine mammals, including many listed on the endangered species list. Migratory species going through the bay will be affected in the sam way. The release would also damage tourism and adversely affect the already fragile coastal commercial and sport fishing industries in Cayucos, Morro Bay and Port San Luis.

I-62-1

I-62-2

I would recommend exploring the possibility of running the waste through decontamination ponds planted with select marsh vegetation as in the waste treatment facilities in Santa Cruz and other localities (see the literature). These could probably be constructed close to where the waste is stored, saving money, and have been shown to be quite effective at degrading pesticides and removing heavy metal decontamination from wastes.

I-62-3

I urge you strongly to reconsider this plan.

Thank you,

Barry Putman

RESPONSES TO COMMENT I-62

I-62-1

See Master Responses SW-8, SE-1, and SW-12 for discussion of the effects of Ocean Disposal Alternative discharge on near-field water quality, bioaccumulation, and special-status species.

I-62-2

See Master Responses SW-8, SE-1, and SW-10 in regard to effects of the Ocean Disposal Alternative.

I-62-3

The comment recommends running drainwater through decontamination ponds planted with select marsh vegetation. Marsh vegetation is attractive to wildlife and could result in additional ecotoxicity. In addition, discharge of drainwater with high Se concentrations into a productive marsh system will likely result in bioaccumulation and potential impacts to avian species. See Master Response ALT-T1.

COMMENT I-63. PETER RISLEY

From: "peter risley" <prisley@cwo.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/29/2005 1:51 PM
Subject: estero bay

I-63-1

We of morro bay and estero bay say no to your garbage. We will not accept it. You deal with it because its your garbage. Treat it on your land. You created it. Your big time farmers profited from the creation of this toxic waste. Now they want the public to pay for the dumping of it. The farmers who created it should pay, not us.

No to the toxic waste in Estero Bay.

Treat it and dispose of it on your land, not ours.
Peter

RESPONSE TO COMMENT I-63

I-63-1

Comment noted. No response necessary.

COMMENT I-64. W. DUANE WADDELL

From: Gerald Robbins
To: Jacquemin, Claire
Date: 8/29/2005 4:18 PM
Subject: COMMENT Fwd: Ocean Alternative

Gerald D. Robbins, Jr.
Project Manager
Bureau Of Reclamation
2800 cottage Way, MP-700
Sacramento, CA 95825

Re: The Ocean Disposal Alternative being considered to solve the drainwater problem created by irrigation of land in the San Joaquin Valley

Dear Mr Robbin;

I-64-1 ENVIRONMENTAL IMPACT .. .. This issue alone is reason enough to immediately eliminate this alternative. Two hundred miles of pipeline must be bulldozed through many sensitive areas. Does your report identify these
I-64-2 areas and state how they will be protected? Are you aware that this proposed alternative is routed through crucial red-legged frog territory and that it bisects the most successful Western Snowy Plover breeding beach on the central coast? These and many other sensitive areas are protected from local and state development. Is the
I-64-3 Federal Govt,,,,,,,,,,Bureau of Reclamation held to a different standard?

I-64-4 I am extremely disturbed by the fact that there is a fifty year plan included in this alternative and that there are no provisions for dealing with or ending the farming methods that will continue to create this drainwater problem.
I-64-5 Why? I hope that Congress will be provided with an in depth, detailed plan providing good information about the above and other critical issues .....if the Ocean Alternative plan continues to be considered.. COST
I-64-6 ALONE SHOULD NOT BE THE DECIDING FACTOR.

It's not necessary for me the mention the potential damage to the ocean eco-system.....is it ?

Please enter my comments in the September 1st deadline report regarding these issues.

Thank you,

W. Duane Waddell, Rancher
6030 Hwy One
Cayucos, CA 93430

Ph 805 995 1355

RESPONSES TO COMMENT I-64

I-64-1

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 sensitive areas in the pipeline vicinity.

I-64-2

Formal consultation with the Service under Section 7 of the ESA has been completed for the In-Valley Alternatives. Additional informal consultation with the Service is ongoing to develop monitoring and mitigation necessary to protect special-status species. Information developed

during consultation has been incorporated into the Final EIS, and the Biological Opinion is included as Appendix M2. Reclamation will address its regulatory responsibilities as defined through the ESA consultation process. Consultation for the Out-of-Valley Disposal Alternatives has not been initiated. If these alternatives were selected during the Final EIS and ROD process, consultations would be initiated during the final design and permitting phases.

I-64-3

Comment noted. See Response to Comment I-64-1. Reclamation will address its regulatory responsibilities as defined through the ESA consultation process and other statutes as they apply.

I-64-4

As described in Section 1.1, the purpose of this project is to provide drainage service to drainage-impaired lands. Evaluating the farming methods that create the drainage is not within the scope of this EIS. However, source control was included in the estimates of drainage service rates. See Master Response ALT-S1 for more information about source control of drainwater.

I-64-5

Comment noted. No response necessary.

I-64-6

Cost is only one factor in the selection of a preferred alternative. Table 2.13-2 provides a full comparison of the adverse and beneficial effects of each project alternative. The preferred alternative and the rationale for its selection are discussed in Section 2.15 of the Final EIS.

COMMENT I-65. MATTHEW RICE

Matthew W. Rice
705 East Grand Avenue
Arroyo Grande CA 93420
Tel: (805) 481-0853
Fax: (805) 481-8969
Email: mattrice@allstate.com
Ca. Lic. # 0738218

August 25, 2005

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

RE: Proposed Ocean Dispersal of Selenium Contaminated Water

Dear Claire,

I was quite surprised and angered by the possibility of a 211-mile pipeline traversing San Luis Obispo County in order to dump contaminated water off the coast of Cayucos. Selenium has been shown to cause multiple ill effects in animals as well as humans. Myself, my wife as well as my sons are all avid surfers and fisherpersons. The continued release of selenium will accumulate in the plant life and animal life along our coast. In the short term it may be difficult to recognize any immediate adverse effects, however, in the long term central nervous and circulatory systems of those exposed will be affected. I-65-1

This proposal is also in conflict with the Bureau of Reclamation's mission statement: I-65-2

> *"The mission of the Bureau of Reclamation is to manage, develop, and* ***protect water*** *and related resources in an* ***environmentally*** *and economically sound manner in the interest of the American public."*

While this option may be cost effective in the short-term, the long-term cost in ill health effects will be immeasurable. The proper solution would to treat the water at the point of contamination rendering it safe for irrigation purposes and thereby freeing additional water for other uses. I-65-3

Please protect our natural resources. Correct the contamination; don't dump a known hazardous waste into our coastal waters. I-65-4

Sincerely,

Matthew Rice

RESPONSES TO COMMENT I-65

I-65-1

See Master Responses SW-8 and SE-1.

I-65-2

Comment noted. No response necessary.

I-65-3

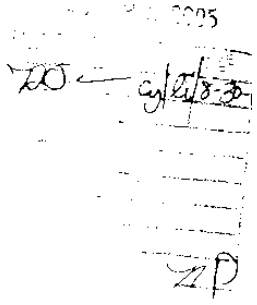
The In-Valley Alternatives incorporate RO treatment with reclamation of product water.

I-65-4

Comment noted. No response necessary.

COMMENT I-66. RANDAL AND ELIZABETH BALL

Dr. and Mrs. Randal Ball
1579 Frambuesa Drive
San Luis Obispo, CA 93405
(805) 543-0431



August 26, 2005

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

PROPOSED PIPELINE TO ESTERO BAY

Dear Ms. Jacquemin:

As residents of San Luis Obispo County for over 30 years, we would like to express to you our concerns regarding the pipeline that is proposed from the Central Valley to the Estero Bay area near Cayucos and Morro Bay to carry selenium off shore.

I-66-1 We feel the pipeline carrying selenium is not appropriate to be disposed of off the central coast. The area proposed is home to numerous sea birds, coastal birds as well as many,
I-66-2 many species of sea life to could be affected by the selenium in time. In addition, the
I-66-3 route the pipeline would take to the coast would also be very disruptive to the flora and fauna of the area where it would be installed. We also are aware of earthquake faults in
I-66-4 the area proposed and this should certainly be a concern of your department.

I-66-5 We feel the alternative proposals submitted to you by Mr. John Alexander of Cayucos are well worth a serious study by your department and we would hope other solutions could be considered.

Thank you for the opportunity to submit our concerns and to let you know that we are completely against this project.

Sincerely,

Randal and Elizabeth Ball

CC: Senator Barbara Boxer
Senator Dianne Feinstein
Representative Lois Capps
Representative Bill Thomas
Governor Arnold Schwarzenegger

RESPONSES TO COMMENT I-66

I-66-1

Comment noted. No response necessary.

I-66-2

See Master Responses SE-1 and SW-12 in regard to the effects of Se on marine life.

I-66-3

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 pipeline vicinity.

I-66-4

See Master Response GEN-1 in regard to the location of the pipeline route.

I-66-5

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

COMMENT I-67. SMITH HELD

August 26, 2005

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

Dear Ms. Jacquemin;

I am a landowner along the proposed route for the pipeline for the Selenium Disposal project for the San Luis Drainage. I urge you to find a realistic solution to the Central Valley's selenium problem that does not so severely impact my land and my community.

I-67-1 While I am concerned with the lack of study of the effects of the discharge into the ocean, chief among my concerns are the effects of the pipeline across the land.

I-67-2 The EIS doesn't seem to address the seismic activity in the area. There is a significant crack in the hill caused by the Dec. 21, 2004 earthquake that does not seem addressed in the EIS. My understanding is that earthquake was not even a particularly large one. The lack of planning for earthquakes will likely result in my creeks, and eventually Whale Rock Reservoir, filling up with selenium-rich water. That is unacceptable.

I-67-3 The pipeline map appears to have been drawn by someone who has not been to the area before. It would be a bad idea even in the right place, but where drawn, it seems to take in some of the steepest and least accessible terrain we have to offer. The environmental damage during the installation is incalculable, much less when the pipeline bursts.

The map misses major geographic features, like our highway, that was completed in 1975. If the rest of the data used for the EIS is similarly outdated and incorrect, I believe a strong case could be made for throwing the whole thing out and starting again using sound science and current information.

I-67-4 I have not studied any of the other alternatives for the selenium, but surely one of them has less impact on "innocent" third parties like the people of San Luis Obispo County. I say "innocent" because we were not part of the creation of the problem, but with this Alternative we are force to pay for the resolution. My vote is that you treat it in the valley, which needs the water anyway.

Thank you for considering my input as an affected party in this misguided alternative.

Sincerely,

Smith Held
PO Box 225
Cayucos, CA 93430

Cc: Gerald Robbins, Bureau of Reclamation
Sammie Cervantes, Bureau of Reclamation
Congressman Bill Thomas
Congressman Lois Capps
Assemblyman Sam Blakeslee

RESPONSES TO COMMENT I-67

I-67-1

The comment is noted. Master Responses SW-8 through SW-15, which specifically address various types of effects of the Ocean Disposal Alternative discharge. Impacts associated with the terrestrial portions of the Ocean Disposal Alternative are addressed in the Section 7.2.8 of the EIS. If the Ocean Disposal Alternative were selected as the preferred alternative, additional feasibility and final design studies would provide more detailed information about sensitive areas in the pipeline vicinity.

I-67-2

Seismic activity is discussed in Section 9 and in detail in Appendix H. Section 9 and Appendix H have been updated to include discussion of the December 2003 San Simeon earthquake and its effects. See Master Responses GEO-1 and GEO-2 for additional discussion of seismic activity and surface disruption.

I-67-3

The map is adequate for its intended purpose and the scale.

I-67-4

Comment noted. No response necessary.

COMMENT I-68. KAREN PEARSON

Ms Jacquemin –

I-68-1 I cannot believe that our government will consider no other options to get rid of Selenium other than the expensive pipeline to dump it in our coastal waters.

You should listen to John [illegible] of Paguco, CA → he was on the Dave Congleton show on radio AM 920.

Quit spending our tax money needlessly. We are all ready to leave CA for good due to high taxes. Pay all the needless taxes yourselves.

8-29-05

BUREAU OF RECLAMATION
OFFICIAL FILE COPY
RECEIVED
AUG 3 1 2005

I thought of you today

Sincerely,

Karen C. Pearson

Karen Pearson
1600 Burton DR
Cambria, CA 93428

Classification [illegible]

RESPONSE TO COMMENT I-68

I-68-1

Comment noted. No response necessary.

COMMENT I-69. CONSTANCE HELPS

Constance Helps
PO Box 1012
Cambria,Ca.
93428

CLAIRE JACQUEMIN
BUREAU OF RECLAMATION
2800 COTTAGE WAY, MP700
SACRAMENTO, CALIFORNIA 95825

Dear Ms Jacquemin,

I-69-1 I live in San Luis Obispo County and have heard of your plan to pipe selenium laced water into our Coastal Waters. This seems extremely wrong. I urge you

I-69-2 to contact Dr. John Alexander who can inexpensively treat that water and turn it into a useful byproduct on which to grow plants. They have done this in other countries. and it seems a creative and productive answer to the many problems you face in alleviating a dangerous and frustrating problem. Dr. Alexander can be reached by phone. 1-805-995-1109. What do you have to lose?

Sincerely,

Constance Helps

Constance Helps

RESPONSES TO COMMENT I-69

I-69-1

Comment noted. No response necessary.

I-69-2

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

COMMENT I-70. JOHN HELPS

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

Dear Sir:

I-70-1 The Bureau of Reclamation is considering building a pipeline from the San Joaquin Valley to the coast of San Luis Obispo County. This is a very stupid way of getting rid of a pollutent by polluting an area that already is spending time and money to keep our agrcultural pollutents from going into our streams and then into the ocean.

I-70-2 Take care of the selenium in the San Joaquin by removing it in the San Joaquin Valley. It was taught to me as a child during the "dust bowl" days that the Bureau of Reclamation came into being to reclaim land that was poorly used by saving the land not by exporting farmers mistakes to other areas. Take care of the selenium problem by solving it at the source. You will also be making more usable water.

Sincerly,
John Helps
PO Box 1012
Cambria, California 93428

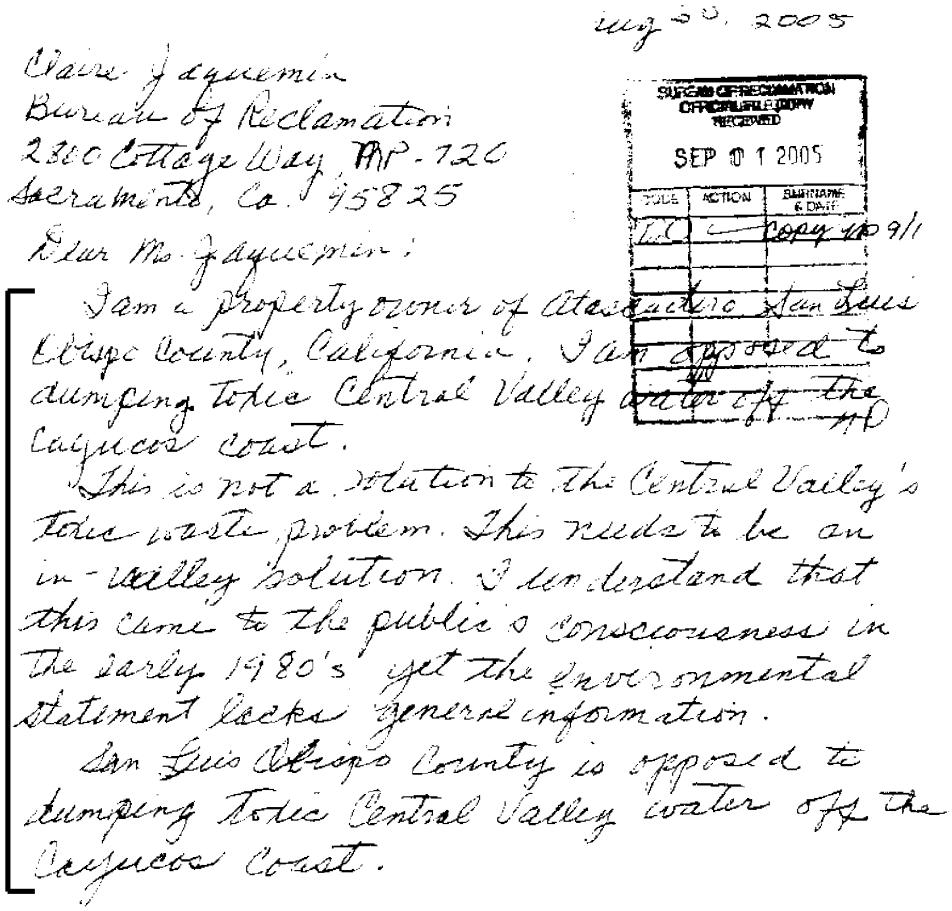
SUBJECT; OCEAN ALTERNATIVE PROPOSAL

RESPONSES TO COMMENT I-70

I-70-1, 2

Comment noted. No response necessary.

COMMENT I-71. DOLORES SIMONS



aug 30, 2005

Claire Jaquemin
Bureau of Reclamation
2800 Cottage Way, MP-720
Sacramento, Ca. 95825

Dear Ms. Jaquemin:

I am a property owner of Atascadero San Luis Obispo County, California. I am opposed to dumping toxic Central Valley water off the Carpinteria coast.

This is not a solution to the Central Valley's toxic waste problem. This needs to be an in-valley solution. I understand that this came to the public's consciousness in the early 1980's yet the Environmental Statement lacks general information.

San Luis Obispo County is opposed to dumping toxic Central Valley water off the Carpinteria Coast.

I-71-1

Sincerely,
Dolores F. Simons

DOLORES F. SIMONS
9505 CARMEL RD.
ATASCADERO, CA. 93422

RESPONSE TO COMMENT I-71

I-71-1

Comment noted. No response necessary.

COMMENT I-72. CYNTHIA HAWLEY

From: "Cynthia Hawley" <Hawley@ParkerandHawley.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/31/2005 1:40 PM

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

August 31, 2005

RE: Drainage service to the San Luis Unit of the Central Valley Project

Dear Ms Jacquemin:

I-72-1 I oppose the proposal to dump toxic agricultural wastes into the ocean waters of San Luis Obispo County. The project would not only be disastrous to ecosystems and a threat to human health and safety it would be illegal on a number of fronts.

I-72-2 Please refer to Title 8 of the San Luis Obispo Health and Safety Code which, among other relevant things, prohibits any pipeline in the ocean waters of San Luis Obispo County for the purpose of discharging any waste and prohibits any discharge of waste into the ocean waters.

I-72-3 The Draft IES fails to address the fact that the project is in violation of this local ordinance and fails to adequately address compliance with other elements of the San Luis Obispo general plan. The San Luis Obispo general plan is organized around resource protection and any environmental review would necessarily overlap with its requirements. I am also concerned that the project would violate the public trust doctrine and that public trust issues are not adequately addressed in the Draft EIS.

Best regards,

Cynthia Hawley
1801 Dorking Avenue
Cambria, California 93428
805-927-4964

RESPONSES TO COMMENT I-72

I-72-1

Comment noted. No response necessary.

I-72-2

The comment states that Title 8 of the San Luis Obispo Health and Safety Code prohibits any waste-bearing pipeline or waste discharge in ocean waters of San Luis Obispo County. As discussed in Section 4, the Ocean Disposal Alternative would have to be consistent with State, areawide, and local plans and programs to the extent possible. Reclamation will review the San Luis Obispo General Plan. See Master Response REG-1.

I-72-3

Generally, tidewaters to their farthest reach, tidelands, navigable waters, and permanently submerged lands, including those extending lakeward or seaward to the limit of state ownership, are subject to the Public Trust Doctrine. The Public Trust Doctrine originated as an instrument of federal common law used to ensure protection of the public's interest in navigation, fishing, and recreation. The Draft EIS addresses potential impacts of project alternatives involving discharge to the ocean on fishing and recreational uses of the ocean. The Ocean Disposal Alternative pipeline, which would extend 1.4 miles offshore, would be located on the bottom of the seabed; therefore, it would have no impact on navigation.

COMMENT I-73. ERIC LAURIE

From: Gerald Robbins
To: cjacquemin@mp.usbr.gov
Date: 8/31/2005 9:22 PM
Subject: Fwd: Comments to Reclamation

FYI...one more....

>>> Eric Laurie <ericpia@hotmail.com> 08/31 2:56 PM >>>

From Eric Laurie (ericpia@hotmail.com) on Wednesday, August 31, 2005 at 21:55:58

message: Jerry Robbins
Project Manager

I-73-1 Regarding the proposal to transport selenium from the Central Valley to the ocean off the coast of Cayucos. I urge you to consider other options. Selenium has been known to cause birth defects in both animals and humans and this would be a very bad place to dump it. There is a thriving ocean-entered community just south of your proposed dumping site composed of fisherman, swimmers, surfers and divers.

Please reconsider this plan.

Thank you.

RESPONSE TO COMMENT I-73

I-73-1

Comment noted. No response necessary.

COMMENT I-74. LIBBY LUCAS

From: <JLucas1099@aol.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/31/2005 1:14 PM
Subject: Draft EIS San Luis Drainage Feature Re-Evaluation

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

August 31, 2005

Dear Ms. Jacquemin,

The Bureau of Reclamation Draft EIS San Luis Drainage Feature Re-Evaluation does contain a wealth of information about chemical constituents of agricultural drainage in Westlands San Luis Unit but there are important factors I do not find in the report.

I-74-1 What is temperature range of this drainage water? Is it contributing factor to toxicity and cumulative chemical impact of Westlands agriculture on entire estuary ecology? It is my understanding that raised temperatures make most chemicals more lethal. Is any consideration given to cool drainage runoff by tree shade or underground pipes?

A second general area of concern not addressed is air quality. As Central Valley has such a serious human health problem with allergies, especially in children, it would be important to identify any contributing factors in Westlands agricultural practices.

I-74-2 Two aspects of this reclamation plan that could affect compromised valley air quality would be revegetation of retired farmland and extensive filtering of drainage water for evaporation ponds to make them entirely benign for waterfowl of the Pacific Flyway. (There is no greater human health hazard than sick wildlife in air, ground or water.)

Revegetation of fallow or retired farmland will be an enormous challenge due to soil and groundwater degradation, that some claim is permanent. Ideally, it would be best to attempt to restore perennial bunch grasses and prairie vegetation that comprised range for historic herds of pronged horn antelope and tule elk. (Consider Italy's use of marginal Apennine mountain lands as free range wildlife corridor up center of country)

I-74-3 The California Native Grass Association has member who has achieved considerable success in Winters in establishing bunch grasses along three miles of highway. This would be an invaluable resource management tool to limit soil loss from wind erosion and to begin to restore watershed habitat.

The agricultural practices that have removed all traces of original plant communities and the organic matter that would ensure their sustainability were they reintroduced, need to be addressed in this report and a remediation plan recommended. At present there would be one hundred percent exotics and only weed seed sources. So simple retirement of land is a complex challenge and acreage envolved quite daunting, but restoration has to be a component of this San Luis Drainage Feature Re-Evaluation.

I-74-4 It is my understanding that there has been a joint federal and state feasability study of retiring these drainage impaired lands by U.S. Bureau of Reclamation and State Department of Water Resources, so are such restoration plans well in hand?

I-74-5 The majority of these drainage impaired acreages seem best to retire and dry farming of grain may not be sustainable, even leaving the land fallow every other year. The concept of conjunctive use, as in reusing drainage water for salt tolerant crops, is a poor interim option as it only compounds degradation of land, water and groundwater. (When Romans salted Carthage lands it was intended to finish them off as a nation).

I-74-6 The best solution for remediating this extensive buildup of salts, with attendant toxic levels of Selenium, Arsenic

I-74-6 cont. and Mercury is dilution. The alternatives of disposal at Delta-Chipps Island and Delta Carquinez Strait pose unmitigatable threats to habitat and water quality for waterfowl and fish of the San Francisco Bay Estuary. Also, the migration of toxic laden sediments to South San Francisco Bay must be noted!

I-74-7 The Ocean Disposal alternative will be argued to be more benign in that Selenium, Arsenic and Mercury, as of marine origin, can be processed biologically by marine systems, but the outfall should extend further out, two miles, and deeper, 600 feet, and dilution in waste stream should be at level to assure no spikes in selenium etc.

I-74-8 Studies need to be made that will guarantee species such as Brown Pelican will not be negatively impacted. Also, they should evaluate if agricultural drainwater can be treated to a level to make it usable for Morro Bay's power plant, instead of seawater.

I-74-9 All three out-of-Valley disposal options are unattractive in that they pass agricultural in-valley toxic problems, that have been known to exist for over twenty years, on to other areas that have their own sustainability problems. In South Bay, treated water outfalls and stormwater urban runoff are overwhelming natural marsh ecosystems.

I-74-10 National Wildlife Refuges of the San Francisco Bay Estuary are not only a national resource but an element of the international migratory bird treaty that United States is committed to uphold. The in-valley proposals that include evaporation ponds run counter to responsible management of this resource. There is no way that waterfowl can be expected not to use bodies of water adjacent to marshes and wetlands that they have historically used (since the dawn of time) for food and refugia on migration flights north and south as seasons prescribed.

I-74-11 The bio-accummulation of selenium and mercury in organisms of the estuary have been scientifically documented in past two decades. Studies recently have shown that remediation by biological processes will result in production of selenoproteins that make treated effluent water more toxicologically harmful than untreated influent. It appears that there is no remedial treatment process guaranteed to make drainage water sufficiently benign not to be a hazard to the fish and waterfowl of the estuary.

I-74-12 Please retire every possible acre of this marginal farmland. Do not dispose of toxic drainage into underground aquifers by any method other than what is 'naturally' occurring. Enforce dilution and filtering of contaminants at every control canal point. Adjust regimen of fertilizers and pesticides to a benign, organically sustainable level.

Conjunctive use will only compound cumulative impact of contaminants. Evaporation ponds are lethal for waterfowl and ultimately human health will suffer. Do strive for dilution of pollution in whatever least damaging alternative compromise can possibly be fashioned for agricultural drainage to this unique west coast estuary.

Thank you for the opportunity to read and comment on this exhaustive report. I will keep it as an invaluable reference resource. Best wishes for successful deliberations on this pivotal land and water use policy.

Sincerely,

Libby Lucas, Conservation South
174 Yerba Santa Ave,
Los Altos, CA 94022

RESPONSES TO COMMENT I-74

I-74-1

The Draft EIS diffuser analyses assumed that drainage water temperatures entering the conveyance system would range from 10ºC in winter to 26ºC in summer. No formal analysis of heat transfer during conveyance to discharge locations has been conducted, but soil is a very good insulator, and we would expect relatively little heat transfer from portions of the conveyance system that are underground. Some heat loss might be expected for the Ocean Disposal Alternative (211 miles of buried pipeline), where the last mile of conveyance would be an underwater pipeline. Therefore, use of the two discharge temperatures cited above (10ºC in

winter to 26ºC in summer) was a reasonable modeling assumption. For comparison, receiving water temperatures in the Delta near the discharge point are approximately 7ºC in winter and 15ºC in summer. Thus, the differences between effluent and receiving water temperatures at the Delta discharge locations would be approximately 3ºC in winter and 11ºC in summer. However, given the 2-to-1 dilution accomplished within the zone of initial dilution (ZID), at the edge of the ZID we would expect the temperature difference to be negligible in winter and only +3.7ºC in summer. Furthermore, the summer temperature difference would rapidly diminish with continued mixing outside of the ZID.

Based on this analysis, replacing canals with a buried pipeline is not necessary to control thermal effects. However, if one of the Delta Disposal Alternatives were selected for implementation and temperature effects were determined to be problematic, switching from canals to a buried pipeline could be investigated at that time.

At the Point Estero discharge location, winter receiving water temperatures are approximately 10ºC and summer temperatures range from 11ºC (at 60 meters, the discharge depth) to 17ºC (at the water surface). Thus, during winter, there would be no difference between the discharge and receiving water temperatures (zero temperature impact), and during the summer. the difference would be 15ºC (assuming an ocean temperature of 11ºC at 60 meter depth). However, given the 15-to-1 dilution accomplished within the, at the edge of the ZID we would expect the summer temperature difference to be less than 1ºC, a negligible difference (the winter difference is of course zero at the edge of the ZID). Furthermore, if we assume moderate heat transfer in the pipeline, summer temperature differences would diminish even further, and there would not be a significant impact on mixing in the ZID since mixing is governed by momentum and not buoyancy forces (which change with temperature). A preliminary sensitivity analysis shows that if discharge temperatures are assumed to be equivalent to seasonally averaged ambient air temperatures for Martinez (11ºC in winter and 20ºC in summer) and Morro Bay (12ºC in winter and 15ºC in summer), mixing conditions in the ZID would be virtually unaffected and temperature differences at the edge of the ZID would be negligible for both locations and seasons.

I-74-2

Westlands agricultural practices are incorporated as part of the existing conditions and No Action alternative and are addressed in Section 11.2.2 of the Draft EIS. Revegetation and retirement of farmland are part of the proposed action alternatives and are addressed in Sections 11.2.3 through 11.2.8.

As stated in Master Response AIR-1, Reclamation will develop emissions estimates and complete any applicable Federal consistency analysis and permitting during the detailed design phase of the project.

I-74-3

See Master Response ALT-L1 in regard to habitat restoration on retired lands.

I-74-4

See Master Response ALT-L3 in regard to future uses of retired lands.

I-74-5

Comment noted. No response necessary.

I-74-6

See Sections 5, 7, and 8 for impacts to San Francisco Bay from the Delta Disposal Alternatives.

I-74-7

The evidentiary basis of this comment is unclear. Analysis conducted for the EIS suggests that the currently proposed location of the diffuser would result in adequate dilution. Once discharged to the ocean, the agricultural drainwater will mix with and diffuse, or spread, into the surrounding ocean environment. The diffuser design analysis demonstrated that the concentration of effluent, and concentrations of particular constituents of concern in the effluent, will be diluted to levels below appropriate water quality standards very quickly after discharge and, thus, surrounding ocean areas will experience relatively low levels of effluent. For example, even under the infrequently (< 1 percent of the time) occurring condition when zero ocean currents are above the diffuser, Se concentrations would reach the applicable water quality criterion of 15 µg/L between 6 and 12 meters above the diffuser. With maximum expected currents, diffusion to the water quality criterion would be achieved only 2 meters above the diffuser (see Draft EIS Section 5.2.8.3, page 5-65). Thus, the water quality criterion would be met very quickly after discharge. At locations farther from the diffuser, dilution would reduce constituent concentrations to levels well below the water quality standard. Also see Master Response for SW-13.

I-74-8

See Master Responses SW-8, SE-1, and SW-12 in regard to impacts to aquatic life in the vicinity of the Ocean Disposal Alternative diffuser.

Use of drainwater as a cooling water source for the Morrow Bay Power Plant was considered but not pursued due to concerns with institutional arrangements and water quality compatibility with existing plant metallurgy.

I-74-9

Comment noted. No response necessary.

I-74-10

See Master Response GW-1 in regard to the effects of evaporation basins on migratory waterfowl. As none of the In-Valley Alternatives would directly discharge to National Wildlife Areas in the San Francisco Bay Estuary, disclosure of effects to wildlife using the evaporation basins as described in the EIS would include effects to the NWR of the San Francisco Bay Estuary.

I-74-11

Reclamation conducted a pilot study to address the question of Se bioavailability of biotreated drainage water. Results of the study indicated that Se in evaporation basins receiving biotreated drainage water did not have increased bioavailability compared to existing systems in Tulare Lake Drainage District. Reclamation has incorporated additional treatment processes to convert residual Se from biotreatment systems into less bioavailable forms.

I-74-12

Comment noted. No response necessary.

COMMENT I-75. LIBBY LUCAS

From: <JLucas1099@aol.com>
To: <cjacquemin@mp.usbr.gov>
Date: 8/31/2005 8:16 PM
Subject: USBR San Luis Drainage Feature Re-Evaluation Draft EIS - postscript

Ms. Claire Jacquemin,

I-75-1

As postscript to my submittal on the USBR San Luis Drainage Feature Draft EIS

For details on the bunch grass restoration effort in Winters, the address is:

California Native Grass Association
P.O. Box 72405
Davis, CA 95617 phone 1-866-456-CNGA

PPS: Please note that the BCDC Commission is being briefed this week by staff on mounting concern in regards Methylmercury impacts on San Francisco Bay.

Thank you again for USBR staff consideration in being able to review this Draft EIS.

Sincerely,

Libby Lucas
174 Yerba Santa Ave.,
Los Altos, CA 94022

RESPONSE TO COMMENT I-75

I-75-1

Thank you for the information.

COMMENT I-76. KATHY SMITH

From: "Kathy Smith" <kdsmith@jps.net>
To: <cjacquemin@mp.usbr.gov>
Date: 8/31/2005 2:33 PM
Subject: Bureau of Reclamation Plan to Dump Ag Waste in Estero Bay

Dear Ms. Jacquemin,

I-76-1

*Please **DO NOT** dump toxic, untreated waste into the ocean. I live in Cambria, California located in San Luis Obispo County, and while government agencies and private citizens have made great strides in protecting the Central Coast of California, keeping it safe for all wildlife including **endangered sea otters**, the very idea that it would be considered to dump selenium waste into the ocean in Estero Bay at Point Estero near Cayucos is unbelievable!*

You must find another solution, such as decontaminating the waste on the site where it is presently located in the San Joaquin Valley. It can be done, just as oil companies have been doing for years with sludge produced from drilling for oil. They were forced to be responsible for the waste they created without further pollution!

*Please do not go forward with the plan to dump toxic waste into the ocean off the shore anywhere! You must be responsible and **do the right thing by cleaning up the waste on the current site in the San Joaquin Valley**!*

Sincerely,

Kathy Smith
1975 Richard Avenue
Cambria, CA 93428

RESPONSE TO COMMENT I-76

I-76-1

Comment noted. No response necessary.

COMMENT I-77. R. CRAIG SMITH

From: "R Craig Smith" <rcsmith@jps.net>
To: <cjacquemin@mp.usbr.gov>
Date: 8/31/2005 1:16 PM
Subject: Bureau of Reclamation Plan to Dump Ag Waste in Estero Bay

Dear Ms. Claire Jacquemin,

I-77-1 I do not agree with any plan to dump toxic, untreated waste into the ocean. I am a resident of San Luis Obispo county, living in Cambria, California, and do not believe anyone in this day and age would consider just moving a toxic substance problem from one area to another just to cure their immediate problem. That's what would be done if the San Joaquin Valley selenium waste is transported to, and dumped in, the Estero Bay at Point Estero near Cayucos. We have all heard the stories of some one disposing of waste form one area to another to later find out they've created the same, or worse, problem in the new dump area.

To reclaim the land, the waste should be treated in place and the land restored to an acceptable level just like the government has required numerous private companies to do when toxic waste is discovered on their properties.

The plan to dump toxic waste into the ocean off the shore anywhere is unacceptable. Please do the responsible thing, and the thing that is done to private companies, and clean up the mess in place.

Thank you.
R. Craig Smith

RESPONSE TO COMMENT I-77

I-77-1

Comment noted. No response necessary.

COMMENT I-78. MARGARET (P.J.) WEBB

From: "Margaret (P.J.) Webb" <pjwebb@inreach.com>
To: "Ms. Claire Jacquemin" <cjacquemin@mp.usbr.gov>
Date: 8/31/2005 11:54:49 AM
Subject: San Luis Unit of the Central Valley Project

RE: Public Comment on the Draft EIS, Drainage Service for the San Luis Unit of the Central Valley Project

Dear Ms. Jacquemin,

I-78-1 I wish to add my voice to others that oppose any ocean disposal alternative for this project. The hazards from this type of disposal carry considerable potential impact to our environment. Some of the concerns I have about these potential impacts include:

I-78-2 -The creation of a hypoxic "dead zone" off the Central Coast caused by the proposed discharge of untreated nutrient-laden agricultural irrigation return;

I-78-3 -The growth of toxic algal blooms that harm marine mammals, humans and birds;

I-78-4 -The introduction of pathogens such as bacteria, viruses and parasitic protozoal cysts into the marine environment

I-78-5 -The pollution of ocean waters by effluent containing high concentrations of mercury, boron, molybdenum, chromium, copper, nickel, nitrates, ammonia, phosphates, petroleum, herbicides and pesticides;

I-78-6 -A violation of regional responsibility obligation imposed on agriculture by the California State Water Quality Control Board caused by exporting this waste water from San Luis to Estero Bay; and

I-78-7 - The further danger posed for the Southern Sea Otter, a threatened species, by adding contaminant load to the center of the vulnerable animals' habitat and range.

The draft EIS does not address these types of environmental impacts properly or completely. I urge the Bureau of Reclamation to seriously consider all the consequences of ocean discharge, not only at the point of outfall, but also the far-reaching consequences to humans, marine mammals, and birds through bio-accumulation of this toxic discharge. Please fully evaluate these dangers, fully examine alternatives to ocean disposal and eliminate it as a potential alternative for this project.

Sincerely,
Margaret (P.J.) Webb
P.O. Box 702
Cambria, CA 93428
Phone: (805) 927-2987
Fax: (805) 927-5312
email: pjwebb@inreach.com

RESPONSES TO COMMENT I-78

I-78-1

Comment noted. No response necessary.

I-78-2

See Master Response SW-11 in regard to the potential creation of hypoxic "dead zones."

I-78-3

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

I-78-4

The introduction of pathogens (i.e., E. coli bacteria) into the ocean environment from the San Luis Drain effluent water would most likely occur. Due to the nature of current laboratory procedures, many measured bacteria counts are only estimates (e.g., >1.6 million MPN [most probable number]). It is impossible to determine what the concentration of indicator bacteria concentrations would be at the discharge site. However, bacteria concentrations would have to meet the objectives of the California Ocean Plan and the waste discharge permit requirements that would be obtained if the Ocean Disposal Alternative were chosen.

I-78-5

See Master Response SW-13.

I-78-6

No water quality changes are expected to result from the Ocean Disposal Alternative that would affect agricultural discharge requirements for Central Coast farmers. See Master Response AG-1 for additional discussion.

I-78-7

See Master Responses SW-8, SE-1, and SW-12.

COMMENT I-79. CATRIONA BANKS-OROSCO (1 OF 2)

From: "berros@earthlink.net" <berros@earthlink.net>
To: <grobbins@mp.usbr.gov>
Date: 9/1/2005 11:03:03 AM
Subject: No Selenium Pipeline in CA

To whom it may concern,

I-79-1 I am a resident and taxpayer of San Luis Obispo county in California. I am strongly opposed to the building of a pipeline through our county to allow selenium from the Central Valley of California to be dumped in the Pacific Ocean. This would be a waste of money and resources and a drain on the health of our oceans and citizens. There are safer, more affordable alternatives that need to be studied. Please do not allow this proposal to go through. Our oceans and our environment do not have a voice. It is up to the people to be sure we are safeguarding all life and making the best and most efficient use of all of our resources.

Thank you,

Catriona Banks-Orosco
Nipomo, CA

RESPONSE TO COMMENT I-79

I-79-1

Comment noted. No response necessary.

COMMENT I-80. CATRIONA OROSCO (2 OF 2)

From: "catriona@pop3.direcpc.com" <catriona@pop3.direcpc.com>
To: <grobbins@mp.usbr.gov>
Date: 9/1/2005 10:56:47 AM
Subject: Selenium Pipeline in San Luis Obispo county

To whom it may concern,

I-80-1 As a resident and tax payer in San Luis Obispo county, California, I am strongly opposed to the proposition of building a pipeline through San Luis Obispo county to allow selenium runoff to be dumped in the pacific ocean. This would be a gross misuse of land and resources!!! There are alternatives that would better protect the safety of our land, our children and our resources. Please do not allow this pipeline to be built.

Kind Regards,

Catriona Orosco
Nipomo, CA 93444

RESPONSE TO COMMENT I-80

I-80-1

Comment noted. No response necessary.

COMMENT I-81. W.W., TIMOTHY, AND JAMES HARTZELL

August 25, 2005

Bureau of Reclamation:
Ms. Clare Jacquemin
Gerald D. Robbins Jr.
Sammie Cervantes

I-81-1 As landowners of Rancho Santa Rita in Templeton, California, we are writing to express our concerns regarding the proposed Ocean-Disposal Alternative pipeline. After recently attending a local meeting, we take exception to the project and the proposed plans. The meeting was not well-advertised, we feel many others would have attended and voiced similar concerns. Among the landowners present, quite a few logical questions were asked. Mr.Robbins deferred most questions to the engineer and team leader in Denver.

I-81-2 Many of these questions went unanswered. This did not instill confidence that the project was well thought out or designed with our unique environment in mind. Landowners exited the meeting with not knowing much more information than they had previously acquired.

Of specific concern are the following:

I-81-3 • The physical size of the pipeline, the engineers waivered in reporting proposed pipe sizes and lengths.

I-81-4 • The Reclamation team stated no other services would be using this right-of-way. However, written material states: "conveyance has the potential for other drainage producers to utilize the conveyance and disposal facilities".

I-81-5 • Depth of the pipeline, due to solid rock in much of this area, the disruption of our natural underground water flow would be affected.

I-81-6 • No mention was made of payment to the landowner for land taken by easement.

I-81-7 • It appeared obvious that the engineers have never visited the site of the proposed pipeline. They were unaware of the steep mountains and deep canyons. More importantly, they acknowledged their ignorance of severity of two major earthquake faults: The San Simeon and the San Andreas. One of us lost our home in December of 2003, due to the 6.5 magnitude quake. PVC pipe will not withstand the constant shifting of the land.

I-81-8 • As owners of Hartzell Ranch and Hartzell Horizontal Well Drilling Inc., we are well-aware of the constant shifting of the local land. Local soil types range from sandstone, limestone, shale and red rock to serpentine (asbestos). Placing a pipeline through many different types of soil will cause instability. Lining tunnels with cement will prove to be a temporary conduit. As mentioned above, the land will move, the cement will crack.

I-81-9 • No mention was made of maintaining the pipeline. Due to the constant land movement, pipes will crack causing selenium waste to discharge into the local water flow.

I-81-10
- Maps provided were either very old or not keyed with understandable legends. When asked questions about the tunnels, engineers in Denver noted they were viewing different maps. Which map showed the accurate route and number of tunnels?

I-81-11
- We disagree with the engineers and firmly believe the impact of this proposed pipeline would have severe erosion effects on the land.

I-81-12
- The proposed route runs very close to our lake used for irrigation. How does the team plan on monitoring the impact of loose mud/soil entering our lake or local creeks. What impact will the construction have on the fish and wildlife? If the construction should cause the lake's spillway to crack, will we be justly compensated in order to afford repairs?

I-81-13
- On a personal note, according to the map, the proposed pipeline course lies directly beneath one of our homes. Should the government decide to follow through with this proposal, we request the team of engineers visit our ranch and consider alternate routes.

I-81-14
- On the map, numbers appeared to designate certain aspects of the pipeline. Could you please explain the import of the following numbers: 11, 12, 13, 14, 15, 16, 25, 32, 51, 52, and 53?

As landowners who would be harshly affected by the imposing of this pipeline, we would appreciate the courtesy of your response.

Sincerely,

W.W. Hartzell Jr. _____

Timothy J. Hartzell _____

James W. Hartzell _____

Rancho Santa Rita
3520 Old Creek Rd
Templeton, Ca. 93465
805-237-6031

RESPONSES TO COMMENT I-81

I-81-1, 2

Comment noted. No response necessary.

I-81-3

See Master Responses GEN-1 and ALT-P3.

I-81-4

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

I-81-5

The pipeline would be aligned to minimize disruption of groundwater flow paths in the area to the extent possible. See Master Response GEN-1 regarding the design process.

I-81-6

Right-of-way and acquisition costs were estimated for each alternative and included in the Draft EIS economic analysis. Estimated values included land and improvements, acquisition costs, relocation assistance costs, and contingencies. No estimates were included for relocation of roads, highways, and utilities, or for acquisition of mineral rights. See Master Responses ALT-P1 and GEN-1.

I-81-7

Section 9.1 and Appendix H discuss the project area and its potential geologic hazards. Section 9.2.8 discusses the major faults, seismicity, and slope instability in the vicinity of the Ocean Disposal Alternative route. Appendix H includes detailed discussions of specific faults, including the San Andreas and San Simeon faults. Appendix H of the Final EIS has been updated to include a discussion of the 2003 San Simeon earthquake and its effects. Also see Master Response GEO-1 regarding seismic activity in the project area.

I-81-8

Rock types and topographic conditions that have the potential to generate slope instability are present along the Ocean Disposal Alternative pipeline route and must be mitigated for in the construction design. Mass wasting hazard is discussed in Section 9.1.5.4 and, specifically, for the Ocean Disposal Alternative in Section 9.2.8, along with newly included general mitigation options.

I-81-9

See Master Responses SW-15 and GEN-1 for discussion of pipeline breaches and the level of alternative design and analysis in the Draft EIS, respectively.

I-81-10

See Master Response GEN-1.

I-81-11

Increased erosion potential due to construction of the Ocean Disposal Alternative pipeline can be avoided by implementing temporary BMPs for erosion and sediment control, and temporary drainage measures to prevent excessive slope runoff. Section 9.2.8 of the Final EIS has been

revised to include additional information on geologic effects of pipeline construction and potential mitigation measures. Presence of the buried pipeline, once construction-related effects have ceased, should not affect long-term erosion potential. Also see Master Responses GEN-3 and SW-15.

I-81-12

Standard construction management BMPs would be used to prevent sediment transport and erosion in disturbed areas. Section 5 of the Final EIS provides additional information on typical BMPs that would be employed in the project.

I-81-13

See Master Response GEN-1.

I-81-14

Reclamation project designers used the numbers 11-16, 25, 32, and 51-53 on pipeline maps distributed at public meetings to track design items. The numbers are not used in the EIS.

COMMENT I-82. BARBARA J. LUCICH

August 25, 2005
10095 Hwy 46 West/
Green Valley Rd
Templeton, California

To Ms. Clare Jacquemin
Bureau of Reclamation

Dear Ms. Jacquemin.

It is with grave concern that I write this letter regarding the proposed pipe line. This selenium-carrying pipe may have been the idea of well-intended people, however, if you study the facts and feasibility, it does not make sense to go forward with this project. I appreciate the opportunity to correspond with you about this issue.

I-82-1

As land owners in the immediate area next to Rancho Santa Rita (also known as Hartzell Ranch), safety is an important concern. As I mentioned at the recent meeting (Farm Bureau office, Templeton, Ca.), the San Andreas Fault travels through our ranch. Our home received quite a bit of damage from the 6.5 San Simeon Earthquake in 2003. Almost on a weekly basis, sometimes daily basis, we have quakes in the 3.0-3.4 range. Parkfield, Ca. is approximately 45 minutes away, for many years they have been predicting a major earthquake there. At the meeting I inquired of Scott Irvine and Bill Thompson (via conference call) if they or Mr. Robbins had visited this mountainous area. None of the three had traversed the proposed pipe line path. If you contact the USGS office, you will be able to speak to the geologists who set up a seismograph on our property to monitor the quakes and aftershocks. Giant boulders deseended into canyons, numerous cracks still exist today in road and along hillsides. My point being, the ground is unstable here. Mr. Irvine stated they would use PVC pipe. If the wild pigs don't dig it up, the shifting ground will in fact, crack it. Mr. Robbins stated that there is no provision in the plan to maintain, let alone monitor this pipe line. Who would be responsible for reporting cracked pipes/leaks? How do you plan to get bulldozers, backhoes, and other equipment situated on almost vertical hillsides? The reality of hoisting a loaded cement truck into some of the proposed areas is unbelievable.

I-82-2

After the meeting, I left even more concerned then when I arrived. Numerous questions were asked of Mr. Robbins, Sam Cervantes, or the two gentlemen in Denver; they had no answers to quite a few. I felt as if the Reclamation team was ill-prepared and just going through the motions so they could establish that they had held a meeting. One perfect example of this was the maps available. Not even the number of tunnels was the same on our map, compared to the map being viewed in Denver. Although very polite, the Reclamation team offered very few facts, unless we directly asked, and as mentioned before, answers were most often vague, or non-existent.

I-82-3 I feel I must mention the casual disrespect accorded to Dr. Alexander, a local renown aquatic biologist. This gentleman offered the technology to remove selenium from the water so that it could be reused for crops, animals, and even become potable for humans. Mr. Robbins smiled and told him he knew who he was and chuckling, told Dr. Alexander he had heard he'd written to the Governor and to the President. The offer of the technology was made from the heart, free of charge, to help mankind reuse a limited resource. How can the Reclamation team justify laughing this off?

In closing, I'm sincerely hoping this is not one of those stories that will be told years later. As affected land owners, we do not feel our concerns were seriously considered. I could go on for pages writing about the overwhelming economic costs, the devaluing of land prices, and the personal hardships this pipe line would cause. Are you aware the map proposes the pipe line travel along side a lake's spillway, then directly under one rancher's home???

I will be interested in hearing from you. If I do not, I will sadly tell others of this bureaucratic plan with no core of common sense.

Thank you for taking the time to read this letter.
Sincerely,

Barbara J. Lucich
P.O. Box 1464
Templeton, Ca 93465

RESPONSES TO COMMENT I-82

I-82-1

See Master Responses GEN-1 and SW-15, which discuss the pipeline route and monitoring, respectively.

I-82-2, 3

Comment noted. No response necessary.

COMMENT I-83. R. REYES

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

23 USA

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Ms Claire Jacquemin: 8-30-05

I-83-1
No toxic pipe Line, Please
You need to stop creating pesticide
Bearing waste, use organic Farming
practices (use mushroom, Reeds to eat
most of the waste) I heard they tried
this out w/ Dr. Gary's end by product.
w/ success! Don't Dump in our beautiful
Bay, we have another problem w/ Radio Active
cooling h2o and waste we need to stop making it
@ diablo cyn, I spoke to a friend in orange
co. CA, they found terrible w/ Asthma from
dust and poisons in the air. Try to get the
Farmers + orchards to use grow & cover then
press down grow green to create steam [illegible]. Thanks
R Reyes

RESPONSE TO COMMENT I-83

I-83-1

Comment noted. No response necessary.

COMMENT I-84. ERIC GREENING

Claire Jacquemin,
U.S. Bureau of Reclamation, Mid-Pacific Region
2800 Cottage Way, MP-720
Room W-2830
Sacramento,
California.
95825

August 25th, 2005

Dear Ms Jacquemin,

I-84-1 The Draft EIS on the San Luis Drainage Feature Re-evaluation is completely inadequate in describing the Ocean Disposal Alternative and its impacts, meaning that one of the following two choices must be made:

1, The Ocean Disposal Alternative must be definitively dropped from further consideration, or

2. A revised draft EIS must be circulated giving enough information for substantive comments to be addressed in the Final EIS.

Given the uncertainty about what substances will be allowed to flow through the pipeline, and given the lack of any EIS information on the marine food chain in Estero Bay, and potential for bioconcentration of

I-84-2 contaminants, it is impossible to assess the biological impacts of this alternative on the ocean environment. Common sense would indicate that

I-84-3 impacts would likely be very significant: dilution is not the solution to pollution, especially where organisms form pathways for its concentration.

Assessment of the impacts of the terrestrial pipeline are also completely inadequate. The diameter and length are roughly comparable to those of the Coastal Branch of the State Water Project, and having paid attention to issues with that project, I find it clear how little thought has gone into this one.

I-84-4 Indeed, this project has problems and uncertainties that go beyond those of the Coastal Branch. The Coastal Branch delivers a product that some in the Central Coast are willing to pay for, creating a revenue stream for ongoing maintenance and mitigation monitoring. What would be the revenue stream for the Ocean Disposal Pipeline?

I-84-5 When comments were received by the DWR expressing concern with the concept of regional water treatment (which subsidizes sprawl and threatens aquatic environments with massive chlorine spills in the event of leaks) one justification given was the need to prevent invasive organisms from transferring from the Delta and Valley ecosystems into our coastal streams. The Ocean Disposal Pipeline has no treatment plant. What invasive organisms might survive the trip through the Ocean Disposal

I-84-5 cont. pipeline, and how would they be prevented from infesting our coastal waterways?

This pipeline would cross 102 blue-line streams. Given that the system would largely operate by gravity flow, pressures inside the pipe
I-84-6 would be considerable, particularly in lower elevations toward the coast. (Exactly what would they be? No hydraulic grade line is provided in your document.) What construction specifications (such as double lap vs single
I-84-7 lap welds) would prevent leakage of this contaminated fluid into our streams. How would leaks be detected? How would they be responded to?
I-84-8 The Coastal Branch has equipment (such as mobile dechloramination units) posted along their pipeline that can respond quickly to emergencies. They have a revenue stream to pay for this and for the people who would respond with the equipment. What comparable arrangements would be made for this
I-84-9 pipeline, and how would it be funded? How can we be assured that the funding would continue through future budget cycles? Would any particular
I-84-10 reinforcement (or flexibility) be provided in the vicinity of earthquake faults crossed by this project?

I-84-11 Where public rights-of-way would be used, what arrangements with these public agencies have been made? Where the project needs to cross private land, strong resistance to your project will surely be encountered. It is predictable that affected landowners will unite and fight with all resources
I-84-12 at their disposal. What board or commission is responsible for invoking Resolutions of Necessity on this project? How can the finding that this
I-84-13 project is being designed consistent with greatest public good and least private injury possibly be made for this alternative? If and when resolutions
I-84-14 of necessity might be made, is the Bureau of Reclamation prepared to pay full value, including severance, to informed and determined landowners? Is
I-84-15 the Bureau prepared for a long contentious period of right-of-way
I-84-16 acquisition? What continuing access will be required along the pipeline route? What visible structures might protrude above the ground along this
I-84-17 pipeline? The original EIR for the Coastal Branch failed to note the conspicuous structures along that route. Will there be similar surprises with this project?

I-84-18 Have the Salinan Tribe and other indigenous groups along the pipeline route been consulted as required under SB 18? What has been the response
I-84-19 of those groups to the huge swath of disturbance that would plow through many culturally sensitive sites?

I-84-20 Where the pipeline passes through wooded areas, what kind of tree mitigation is proposed? What would be the funding source for ongoing
I-84-21/22 maintenance and monitoring of mitigation plantings? Would planting be

I-84-22 cont. possible over the pipeline itself, or would a visible strip of land have to remain unwooded?

I-84-23 Would the crossings of the Salinas River and other major streams be

I-84-24 buried or suspended above ground? If buried, how would leaks be detected?

I-84-25 If suspended above ground, what would be the visual impacts? Of course, we are still very hazy even as to the locations of these crossings!

I-84-26 Given the likelihood of drastic increases in energy costs, how can an alternative that depends on pumping a river of contaminated fluid 2000 feet uphill possibly be justified? Major spikes in energy costs would probably

I-84-27 create a wider economic recession, affecting revenue of all government agencies. How would increased energy costs be accommodated in the shrinking agency budget without causing corner-cutting elsewhere?

I-84-28 What habitat types are impacted by the pipeline and its construction corridor, and how is damage to each one mitigated? Normally, an environmental document on a pipeline project quantifies that there will be

I-84-29 disturbance of so many acres of valley grassland, so many acres of blue oak savanna, so many acres of riparian, etc. with detailed plans for onsite and offsite mitigation for each habitat type. There is nothing resembling that here—the route itself is too uncertain. That is why, to return to my opening comments, this EIS insufficiently characterizes the Ocean Disposal

I-84-30 alternative, such that before a Final EIS incorporates it, a Revised Draft needs to be prepared, allowing public comments on an actual, fleshed out project. The other option, and this would undoubtedly be the preference of everyone in San Luis Obispo County, would be to permanently remove the Ocean Disposal option from the list of alternatives. The very name reeks of a less enlightened era, of irresponsibility. The ocean is not a place of disposal. Period.

Thank you for the opportunity to comment.

Sincerely,

Eric Greening

Eric Greening,
7365 Valle Ave.
Atascadero,
California.
93422

RESPONSES TO COMMENT I-84

I-84-1

See Master Responses SW-Ocean Impacts-Discharge Environment, SE-1, and SW-9.

I-84-2

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

I-84-3

See Master Responses SW-8, SW-13, SW-9, SE-1, and SW-10 in regard to the Ocean Disposal Alternative's impacts and analysis.

I-84-4

The "revenue stream" to pay for ongoing maintenance and mitigation monitoring for all action alternatives would be based on funds collected from project beneficiaries (San Luis Unit irrigators). These collected funds would constitute the contractual repayment obligation that project beneficiaries are required to accept before drainage features are constructed. Project costs would be allocated and repaid according to project authorizing legislation and Reclamation policy. See Master Response EC-3 in regard to repayment of project costs.

I-84-5

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

I-84-6

See Master Response GEN-1.

I-84-7 - 9

See Master Response SW-15.

I-84-10

See Master Response GEN-1. The design of a pipeline in the vicinity of an active fault is usually very different than that of the rest of the pipeline. Specific features would be identified in a later design phase if this alternative were advanced for further consideration.

I-84-11

See Master Response ALT-P1 for a discussion of the use of public rights-of-way.

I-84-12

As described in Section 1.2 of the Draft EIS, Reclamation is required to develop drainage service for the San Luis Unit in accordance with a court order. Selection of the specific alternative for implementation and necessary right-of-way will take place in accordance with Reclamation policy.

I-84-13

The preferred alternative and the rationale for its selection are discussed in Section 2.15 of the Final EIS. Table 2.13-2 of the EIS provides a full comparison of the adverse and beneficial

effects of project alternatives. As indicated in that table, most adverse impacts can be mitigated to a less-than-significant level.

I-84-14

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.

I-84-15, 16

See Master Response ALT-P1 for a discussion of right-of-way acquisition and access for the Ocean Disposal Alternative.

I-84-17

See Master Response ALT-P2 in regard to visible structures along the Ocean Disposal Alternative pipeline route.

I-84-18

At this level of inquiry, no Native American tribes along any of the alternative alignments have been contacted. Once an alternative is selected for further analysis, Native American tribes and interested members of the public will be contacted pursuant to the regulations set forth in 36 CFR Part 800. Senate Bill 18 requires Native American consultations during amendments to General Plans. If an amendment is required, then consultation will proceed under this authority. Regardless, the regulations noted above require federal agencies to contact Native American tribes to determine if there are sites of religious or cultural significance within the area of potential effect.

I-84-19

See the Response to Comment I-84-18. Once a preferred alternative is selected, the alignment will be inventoried, and identified cultural resources will be evaluated for inclusion in the National Register of Historic Places. If these historic properties are adversely affected, then a memorandum of agreement will be negotiated among Reclamation, the State Historic Preservation Officer (SHPO), and consulting parties to resolve adverse effects.

I-84-20

Pipeline rights-of-way would be treated as utility rights-of-way and receive routine maintenance. If the Ocean Disposal Alternative is advanced for further consideration, mitigation issues will be addressed on a case-by-case basis.

I-84-21

Funding for all action alternatives would require authorization from Congress and appropriations every 5 years for planned expenditures.

I-84-22

Where possible, existing right-of-way easements would be used. See Master Response ALT-P1 in regard to vegetation along the Ocean Disposal Alternative alignment.

I-84-23

See Master Response ALT-P2, which discusses pipeline burial.

I-84-24

See Master Response SW-15.

I-84-25

See Master Response ALT-P2 in regard to stream crossings of the Ocean Disposal Alternative pipeline.

I-84-26

The cost of energy used to convey water for the Ocean Disposal Alternative is included in the Annual Project Expenditures shown in Table 17-5. As noted, this alternative has a conveyance system cost that is more than 10 times greater than the In-Valley Disposal Alternative.

I-84-27

The reader is concerned with increasing energy costs and the ability of Reclamation to accommodate rising costs. Costs and escalation factors for energy were developed based on accepted practices for Reclamation projects and appraisal-level cost analyses.

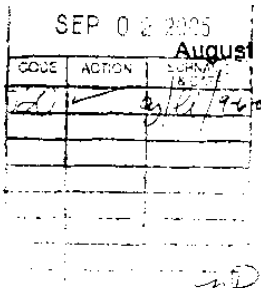
I-84-28, 29

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 be conducted to identify the habitat types potentially affected and appropriate mitigation.

I-84-30

Comment noted. No response necessary.

COMMENT I-85. LEE HOWARD



August 31, 2005

Mr. Gerald Robbins, Project Manager
United States Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

Mr. Robbins:

I was given a copy of the San Luis Drainage Feature Re-Evaluation Draft Environmental Impact Statement. I have lived in the San Joaquin Valley all of my adult life and have a great affection for the people and natural resources here. I appreciate the opportunity to comment on your report. Considering that I have approached the 11th hour in getting these comments to you, I will fax them as well as send an original copy.

Section One:

I-85-1 I am concerned that while this section mentions that Reclamation hasn't yet chosen a preferred alternative, and, indeed, won't select one until the final document, part of section two says, "Reclamation anticipates that its preferred alternative will be one of the three In-Valley/Land Retirement Alternatives." It is obvious that your agency has already decided which type of alternative it will pursue and it is misleading to act as if all of the possible alternatives will be considered equally.

Section Two:

I-85-2 What other lands, other than Broadview, have been purchased or otherwise retired recently for use as reuse facilities property? How many acres is this and where is the acreage located?

I-85-3 How will Reclamation find lessees and operators to manage all that retired land for
I-85-4 dryland farming and grazing? What will happen if Reclamation can't find people to
I-85-5 manage land in that way? How will weed management be accomplished if your agency
I-85-6 is unable to attract enough lessees? Isn't there current land retirement information to put in table 2.3-1 rather than only using estimates?

I-85-7 It doesn't seem like much of a public review process if field investigations, etc. are put off until after people have had a chance to comment on this report. Will there be a chance to look at this information once it's compiled? Also, if you don't say where the
I-85-8 evaporation ponds will be located and you haven't done the field investigations, how do we know if you really will avoid sensitive and protected species? If you admit that these
I-85-9 field investigations will be put off until some other time, how can you say "this EIS evaluates the potential environmental effects of the full system when it is completely constructed?" This statement, at this time, simply isn't true. Likewise, without telling us
I-85-10 where things will be located, and without giving us complete field data and mitigation and operating plans, determining the biological resources effects isn't valid at this point.

Section Five:

I-85-11 Are you really going to be removing contaminated water from the San Joaquin River?

Section Seven:

As mentioned in section two, since "Intensive biological field surveys have not yet been completed. Detailed facility designs, site selections, operating plans, and construction

I-85-12 schedules are still being developed or refined" release of this document for public review doesn't seem like real public disclosure. The project is going to take place over 50-

I-85-13 years, and I'd guess that a lot could happen along the way. Are you going to let the public have chances to review the process and make comments as things develop?

I-85-14 Without all of the necessary information, especially in this biological resources section, how can anyone, including Reclamation, determine the impacts at this time?

I-85-15 Sheep are not easy on land and I can't agree with the statement that "the loss of terrestrial habitat that would result from permanent conversion of the sites from prior agricultural use to evaporation basin use would be compensated by the more diverse habitat provided by the adjoining or surrounding, reuse areas or retired (dryland farmed or grazed) parcels." Also, cultivated land has some water on it while retired land will not.

I-85-16 Lack of water could be a big problem for various species.

I-85-17 I noticed these sentences: "Marine mammals could be injured or disturbed by construction activities and noise, but the degree and probability of effects would depend on the timing of the activity and the activity's distance from areas transiently used by the species. No significant effect to aquatic and wetland resources are anticipated to occur as a result of construction of the outfall." Are you saying that when you don't know how much damage will be done, it doesn't count?

Section Seventeen:

I-85-18 Out of the whole report, I am most concerned with sections seventeen and eighteen. Because you chose to combine all of the nine counties in the project area rather than also looking at the affected counties and communities individually, your economic evaluation is biased I support my statement with language in your report; "The San Luis Unit is located within Fresno, Kings, and Merced counties in [the] western San Joaquin Valley (page 17-1)" and "However, in terms of measuring the significance of the effect of a particular action, the potential of that action to be considered significant within the area decreases as the size of the effect area increases. In essence, the effect of an action may be suppressed or hidden in areas with a large amount of economic activity. This may be a problem if the effects of an action are actually concentrated in a small subarea rather than dispersed throughout the entire effect area. An action that might be considered insignificant when analyzed over the entire area could be quite significant if it occurs within a smaller subarea (page 17-5)." You have already stated your preference for an In-Valley solution, consequently, economic effects have to directly address the

I-85-19 communities that will be most affected by the project. The analysis should be redone to capture the effects to the San Luis Unit counties and to the communities that would be most affected by the In-Valley alternatives, communities like Firebaugh, Five Points, Helm, Huron, Kerman, Mendota, San Joaquin, and Tranquillity. Other communities in this portion of the project area should also be included. Failing to separately, and directly, assess the economic effects to the San Luis Unit counties, and the communities, misleads the public into believing that the overall economic effects aren't important Another problem with this section is that it talks about creating new jobs but

I-85-20 doesn't say what these jobs are or where they'll be located. These new jobs could very well be in places different than the places where jobs were lost.

I-85-21 Now, section seventeen says that existing retraining and "similar" programs will help prevent project-related significant cumulative unemployment effects. Exactly what are these programs, how are they funded, how secure is the funding, who do the programs target, etc.? Relying on existing, and probably inadequately funded, programs to take

I-85-22 care of the economic effects caused by your project seems like a way for Reclamation to place responsibility for its damages onto other public agencies. This is not an acceptable approach.

Section Eighteen:

I-85-23 As with section seventeen, the information in this section should focus directly on the San Luis Unit counties and communities. How many jobs have already been lost due to
I-85-24 land retirement? How successful are the re-training programs that Reclamation is
I-85-25 relying on and how many people can be retrained with the funds available? You
I-85-26 acknowledge that housing as well as jobs will be lost because of the project but don't say what Reclamation will do to take care of the situation. Even though short-term
I-85-27 construction jobs may become available, realistically, how many displaced workers will be qualified and able to compete for those jobs especially since there will already be skilled construction workers available?

I-85-28 This project could cause the loss of loss of jobs, housing, schools, health clinics, etc., not only because of financial hardship to the communities, but also because some of the communities are built on farmland targeted for retirement and loss of water availability.
I-85-29 This section doesn't property disclose the impacts to the communities that will be most affected by the project; and for the effects that are discussed, Reclamation plans to rely on existing public assistance programs to alleviate the economic and environmental
I-85-30 justice effects. This approach is anything but appropriate or just and I think that section seventeen and eighteen should be reworked to reflect actual impacts to the counties and communities and that Reclamation should discuss how it plans to take care of these impacts.

Thank-you for your time and consideration of these comments.

Sincerely,

L. Howard

Lee Howard
1426 E. Cortland Avenue
Fresno, CA 93704

RESPONSES TO COMMENT I-85

I-85-1

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

I-85-2

The only land that has been purchased for the expressed purpose of drainwater reuse is the approximately 4,000 acres currently being developed for reuse by Panoche Drainage District. Other lands within Westlands Water District have been purchased by Westlands as a result of litigation settlements. Where these existing District-owned lands are located such that it is feasible to use them for future drainwater reuse sites, they are being considered for that purpose to maintain as much commercially productive agriculture as possible.

I-85-3

Land retirement can be accomplished through placement of non-irrigation covenants on the lands and does not necessarily imply a change in fee title ownership of the lands nor require identification of ownership. Compatible (non-irrigated) and foreseeable land management uses were estimated to account for ongoing management costs associated with the land retirement as well as to evaluate foreseeable environmental impacts. Post-retirement land management would be the responsibility of the landowner. Post-retirement land uses beyond the scope of those evaluated (dryland farming, grazing, or fallowing) would be a separate project subject to all applicable environmental review, permitting, and financing requirements.

I-85-4

If an alternative involving land retirement is selected and funded, Reclamation would offer land retirement in place of drainage service to owners of all eligible lands. Participation in the land retirement program would be at the discretion of the landowners. However, no drainage service would be provided for lands identified for retirement. If participation in the land retirement program is lower than anticipated, an adaptive management approach will be developed to ensure that the selected alternative is effectively implemented.

I-85-5

See Response to Comment I-85-4. Weed management for retired lands is discussed in Master Response ALT-L1.

I-85-6

See Master Response ALT-L3 regarding future uses of retired lands.

I-85-7

A 30-day no action period will be provided following publication of the Final EIS. After the no action period, Reclamation will adopt the Final EIS as adequate in compliance with NEPA and make a decision on the proposed action, which will be published in a ROD. In addition, if permits are required for the selected alternative, the public may have an opportunity to comment during the permitting process.

I-85-8

See Master Response BIO-2 in regard to protection of special-status species.

I-85-9

The EIS assumes that impacts will occur in the absence of other site-specific information and discloses potential mitigation measures that could be required. Therefore, the EIS is compliant with the purpose of NEPA to disclose impacts to allow selection of the preferred alternative.

I-85-10

The comment is noted. Estimated effects to biological resources in the Draft EIS are based on the best available information. That information and current scientific principles were used to develop the assessment information provided in the Draft EIS.

I-85-11

Reclamation believes the comment refers to the phrase "removal of the water and chemicals from the river," which appeared in several places in Section 5 of the Draft EIS. The text should read "removal of the water and chemicals from the Grassland Bypass Project discharge to the river." This change has been made in Final EIS Sections 5.2.4.2, 5.2.5.2, 5.2.6.2, 5.2.7.2, 5.2.8.2, 5.2.9.2, and 5.2.10.2.

I-85-12

See Response to Comment I-85-9.

I-85-13

See Response to Comment I-85-7. Reclamation will provide periodic updates on the implementation of the selected alternative.

I-85-14

See Response to Comment I-85-10.

I-85-15

The validity of the statement cited in the comment would depend on the final sites selected for construction. In general, however, lands retired from intensive agricultural management (e.g., multiple annual soil tillage, pesticides, fertilizers, etc.) would provide more habitat potential than lands remaining under intensive agricultural management.

I-85-16

Historically, the lands requiring drainage were arid, and the native species that occurred there were adapted to dry conditions. The addition of irrigation has changed the composition of plant and animal communities found in the area, and removal of irrigation water will change the composition once again. In Section 7 of the Draft EIS, Reclamation addressed such changes using the best available information.

I-85-17

The analysis uses existing information where available. That information indicates that timing and distance to areas used by marine species as it relates to potential construction activities would affect the level of impact. The section is disclosing the potential for effects on resources as required by NEPA.

I-85-18

See Master Response EC-2 in regard to the economic impact region considered for the proposed project.

I-85-19

See Master Response EC-2 in regard to the economic impact region considered for the proposed project.

I-85-20

While it is difficult to determine the exact locations of jobs created or lost as part of the proposed project, in general, the majority of the jobs that would be lost under the action alternatives would occur near the retired drainage-impaired lands. New jobs may be associated with either construction or operation of the drainage facilities, which for the In-Valley Alternatives would occur in the same general county or region as the retired lands.

I-85-21

See Master Response SI-1 in regard to job retraining programs.

I-85-22

Comment noted. No response necessary.

I-85-23

See Master Response EC-2 for a discussion of the region considered for social and environmental justice issues.

I-85-24

Jobs lost due to past and current land retirement activities were not analyzed in the Draft EIS.

I-85-25

See Master Response SI-1 in regard to job retraining programs.

I-85-26

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

I-85-27

The number and qualifications of workers available to fill construction jobs are highly variable. It is inappropriate to speculate about the number or qualifications of workers available at the time of project implementation.

I-85-28

Comment noted. No response necessary.

I-85-29

See Master Response EC-2 for a discussion of the region considered for social and environmental justice issues.

I-85-30

See Master Responses EC-2 and ALT-L1 for a discussion of the region evaluated for social and environmental justice impacts and project-related socioeconomic impacts, respectively.

COMMENT I-86. WILLIAM C. BIANCHI

William C. Bianchi Ph. D
4375 San Simeon Creek Road
Cambria CA 93428
805-927-8006

8/18/2005

Gerald D. Robbins, Jr.
U. S. Bureau of Reclamation, Mid-Pacific Region
2800 Cottage Way, MP-720
Room, W-2930
Sacramento, CA 95825

Dear Mr. Robbins,

Please find enclosed my comments on the EIS for the San Luis Drainage Feature Re-Evaluation. Included are four pages of comments and conclusions, plus my resume, and publications, of which some relate to your project.

I-86-1 Relative to the in-Valley alternatives, when I was working under J. N. Luthin as a Research Assistant at the University of California, Davis, one of the applied research activities was associated with the salinity build-up in the Imperial Valley. The Extension Service and University had test plots where high furrows on saturated fields were accumulating surface salts which were of sufficient thickness to be harvested. This could be a technique to isolate and remove salts, particularly now when perforated plastic conduits are readily available. As you well know, air quality issues are involved in areas like the West side where wind velocities are significant and can lift anything off of open soil surfaces (Owens Lake is an excellent example of this). The high-bed furrows could well modify the particle lift significantly.

I wish you well in your endeavors. It was 45 years ago that we were thinking of this eventual conclusion to irrigation on the west side.

You will note from the publications list that Bill Johnston, late of Westlands Irrigation District, was out there with us on the West side, and he should confirm some of the conclusions that I have reached in my analysis of the EIS.

Sincerely,

William C. Bianchi

William C. Bianchi, Ph. D

Cc: Shirley Bianchi, Chair
Chair, San Luis Obispo County Board of Supervisors

Comments on the Draft Environmental Impact Statement for San Luis drainage - May 2005
Directed at the Ocean Disposal Alternative
William C. Bianchi Ph.D. (Resume attached)

OCCEAN ALTURNATIVE - COSTS

I-86-2 Section ES 3.2 - states that Reclamation's preferred alternative "is expected to be one of the In Valley alternatives". Having no access to the Plan Formation Report Addendum within this EIS as received brings into question justification for this conclusion and its origin. Thus one must assume that the Ocean Disposal Alternative could be of equal priority.

I-86-3 Section ES 3.2.6 Table ES 6 - one must assume that the minimum economic path for the ocean outfall would be to discharge the entire 97,000 acre-feet of collected water to the ocean. This will eliminate the regional reuse facilities which are not justified in light of the minor agricultural productivity, the increase cost and the added O&M costs. Federal subsidization is doubtful. This lowers Reclamation's projected costs of Ocean Disposal Alternative down to $484 mil. Well below any of the other alternatives.

ALSO;

Section 2.11.4.3 - this section acknowledges that the Ocean Disposal Alternative is the least expensive of the Out of Valley alternatives as evaluated. Yet it is indicated " in a second analysis" that In Valley disposal was still very close to the least cost Out of Valley alternative regardless of the amount of land retirement". In Section 2.15 - Preferential Alternatives, it states

I-86-4 that the environmentally preferred alternative is defined as the one that promotes the "national environmental policy", whose "policy" and what national interests? Where in the suite of

I-86-5 evaluations do the negative aspects of the Ocean disposal offset its low cost?

ALSO;

I-86-6 Section 2.12 - mitigation, easement acquisition costs for the Ocean Discharge Alternative pipe line are significant, yet costs ignored.

ALSO;

I-86-7 Table 2.13.1- estimates the energy consumption of the Ocean Disposal Alternative as 81.4 giga watt-hrs/yr. Where does this fit into the current power grid and California's production problems and were are the energy cost projections over the 50yr life of the project? This can not be defined as having "no significant effect" (Table 2.13.2).

OCEAN ALTURNATIVE - PIPELINE ALIGNMENT

I-86-8 Figure 5.1-8- indicates that the pipeline enters the watershed that feeds into Whale Rock Dam, part of the fresh water supply for the area. The drain water quality fits the definition of a hazardous waste and thus requires State regulation as such (so enter this into Table 4.1,pg 4-2, line 14&15) because of the potential for entry into the region's domestic surface and groundwater supply from possible pipeline failure. This also pertains where the pipe crosses the Salinas River and its tributaries that feed the groundwater use for domestic water supply.

ALSO;

I-86-9 Section 9.2.8 and Appendix H- Geology and Seismicity will have to be updated to relate new seismic data to the engineering of the pipeline from the Salinas River to Point Estero. The San Simeon seismic event of 12/23/03 resulted in major vertical displacement and slope failure along the proposed alignment. This is not covered in the current review. This will result in new construction standards and so costs must be revised accordingly.

ALSO:

The alignment chosen traverses some of the least stable slopes in the Santa Lucia Mountains. Here the experience on the stability of engineering structures is well documented and physically exhibited by Cal-Trans on HY46 west. The creation of "appropriate slope design" has yet to be achieved here even after many years. The HY46 project costs of "mitigation" will be continuing, very large and economically significant.

ALSO;

I-86-10 Should there be a pipeline rupture on the slopes of the Santa Lucia the results would be disastrous not only to the water supply, but also land forms and the view shed, very important to the tourist based economy of the area.

OCEAN DISCHARGE IMPACTS

I-86-11 Section 5.2.2-Modeling Method and Assumptions for Ocean Discharge make the definition of the performance of the ocean discharge plume uncertain at best. The assumed concentration of the effluent is qualified in Table D2-1 with the footnote "For purposes of this analysis the design TDS concentration of 19,000 ppm was assumed to be equivalent to the effluent salinity. Although this correlation is not perfect the assumption is reasonable given the preliminary nature of this analysis". This conditional statement also relates to the other constituents and designated

I-86-12 pollutants that would be discharged in the effluent at point of release. This uncertainty reflects the fact that little historic data has been collected for a prediction. This brings into question the existing and projected future concentrations in the collected drain water. To correct this at the point in time requires ranges in concentration to be estimated, tabulated and used in this draft so that the reader is kept aware of how the degree of uncertainty relates to the conclusions drawn.

ALSO;

The same uncertainty is apparent in the description of how the pollutant plume would perform at the outflow structure. The wide spread existing oceanographic data collected for interpretation is recognized as site-specific and "they may not perfectly represent conditions at the proposed outfall location". "However, although neither a detailed long-term site-specific monitoring program nor a hydrodynamic modeling study of the project area has been conducted to date, it is our qualitative assessment that current data use for this analysis are reasonably representative of

I-86-13 the diffuser site conditions"(Emphasis added). Important here also is that overlapping plumes in the near vicinity of the discharge point have not been treated, in particular that of the Moro Bay City – Duke Energy outfall and also that of the nearby abalone farm (see Section-5.2.12.8).

ALSO;

Section 5.2.13.6 – "Water quality in Point Estero would be degraded in the mixing zone around the diffuser. Outside of the mixing zone, water quality is not predicted to be exceed WQOs Water Quality Objectives resulting in no significant effect compared to the No Action a

I-86-14 Alternative". Table 5.1-11 Selected Water Quality Objectives (emphasis added) fails to contain information on the limits for nitrate nitrogen, phosphates, and suspended solids. These three nutrient constituents (suspended soil particles can be a significant phosphate and pesticide source) could be extremely important to the biology of the Estero Bay.

ALSO;

I-86-15 Completely lacking in this EIS is a treatment in the detail as was provided for the Bay Delta of the probable biological impacts to the Ocean equal ecology of the drain discharge. For instance, the chromium ion on giant kelp, nutrients on micro flora, and sediment on benthic organisms.

ALSO:

Table C2-7 – Drain water Quality .. must have been generated from groundwater modeling and the statistical treatment (Section C2.5.2) of the available chemical analysis for the project area.

I-86-16 This developed transport model is deficient in groundwater elevation historical data as no evidence of the recognition that sample well penetration depth and aquifer profile thickness, permeability, confinement, is treated as impacting sample well reliability, nor in the representation of drain water quality. The absence of any attempt at quantity and quality trend generation indicates that the data base was too limited for validation of the groundwater model and so the transport model. This is particularly important not only from the standpoint of the impact on quantity and quality of the staged construction the drainage farm systems and collection network itself but also from the standpoint of the probable relocation of irrigation water to lands up gradient from their current location (see US Fish and Wildlife Service letter of Nov 17 2004, "WATER NEEDS"). Currently new lands are being prepared for irrigation in the I-5 corridor above the aqueduct. Further supporting this concern is the statement in section 13.1 -- AFFECTED ENVIRONMENT "A large number of arable acres in Westlands are idle in dry years because of inadequate water supply". "The northerly area also has lands suitable for growing all crops and some lands suitable for growing salt tolerant crops".

I-86-17 ALSO; Figure 6-5 Geohydrology Section of the Western San Joaquin Valley, misrepresents the stratification present in the valley sediments and puts into question the groundwater flow assumptions used. Extensive field observations done by DWR, USBR, USGS, and the USDA-ARS(see publications #'s 7,8,12,13,14,16,20,21,and 25 – citations attached) in the late 1950's to 1960's showed extensive clay layering above the Corcoran Clay with hydraulic conductivity less than concrete causing shallow perched water tables even with the limited pre-Westland's irrigation. This has been ignored in the project geohydrologic analysis and leads to major questions as to the evaluation of water quality and quantity estimates used to design the Ocean Discharge Alternative.

ALSO;

I-86-18 No data is cited on the inventory of soluble constituents in the vadose zone that will be mobilized by existing and expand upland irrigation, particularly nitrates which are native to these profiles along with the gypsum recognized in this EIS.

ALSO;

I-86-19 Section 15 – Agricultural Production and Economics. No where in the treatment of salt balance is the importation of salt in the irrigation source water and fertilizer amendments treated. The Delta diversion is becoming more saline as it is pushed to its limits almost regularly and soluble amendments are applied regularly.

OCEAN IMPACTS

I-86-20 Section 7.2.8.2 - Aquatic and Wetland Resources - Ocean Effects states "Detailed operating plans and development schedules for the Ocean Disposal Alternative's major facilities have not yet been completed. Subsequently, the following evaluation of potential operational effects to aquatic and wetland resources is based on conceptual operating plans". Considering the greatest potential for impact of this toxic waste discharge will be at the point of release in the ocean **during operations** the above statement would indicate that until the operational impacts are evaluated Ocean Discharge should be abandoned as an alternative.

OCEAN ALTURNATIVE
CONCLUSIONS

I-86-21 The cost evaluations should be further defined to include those that have been avoided by statements of mitigation and refined before any preferred alternative is selected on costs.

I-86-22 The design capacity of the operational system and future demands on it is yet to be determined. If constructed on current information only the IN VALLEY ALTURNATIVES alone provide the flexability to accommodate for increased capacity that has not been acknowledged by the current design.

I-86-23 The treatment of the geologic hazards "to be mitigated defined" along the alignment is out of date and absent of local historical experience on engineering structures in the Santa Lucia's.

I-86-24 The pollutant and salinity makeup of the effluent discharge is not fully described nor scaled in concentration in sufficient accuracy to predict what the impacts might be to public health and the ecological environment by this alternative.

I-86-25 Treatment of the ocean physical and ecological impacts is completely lacking.

I-86-26 The OCEAN ALTURNATIVE should be deleted as an alternative in favor of the IN VALLEY ALRURNATIVES selected because of their flexibility to accommodate all the above future uncertainties.

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 I-86

I-86-1

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

I-86-2

The PFR Addendum and other project-related reports are available on the Web at: http://www.usbr.gov/mp/sccao/sld/docs/index.html. Also see Master Response ALT-A1 regarding the selection of a preferred alternative.

I-86-3

An analysis of the costs of source control measures (including reuse) versus the costs of conveyance, treatment, and disposal was conducted as a part of the PFR. Results of the analysis indicated that reuse was the most cost-effective source control component, reducing the volume of disposal by 73 percent and thereby reducing the pipeline construction and operation costs.

I-86-4

The policy identified in the comment is Section 101 of the National Environmental Policy Act (42 USC 4331).

I-86-5

According to Reclamation's economic evaluations, the Ocean Disposal Alternative would have neither the lowest capital expenditure nor the lowest cost to the economy from a national perspective. The environmental impacts for the Ocean Disposal Alternative are discussed in various sections titled “Ocean Disposal Alternative” throughout the EIS.

I-86-6

Costs of land acquisition for easements are included in the cost estimates. Mitigation costs are presented in Appendix O of the Final EIS.

I-86-7

The forecast electrical demand for the Ocean Disposal Alternative is approximately 81.4 GW hours per year. The loads associated with this 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. Assuming that 80 percent of the Ocean Disposal Alternative peak energy demand is typically required (the utilization factor), project demand represents an additional system load of approximately 12 MW. 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 that is 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 cost of energy used to convey water for the Ocean Disposal Alternative is included in the Annual Project Expenditures shown in Table 17-5.

I-86-8

The evidentiary basis for the statement that the drainwater fits the definition of a hazardous waste is unclear. See Master Responses GEN-3 and SW-15 in regard to the potential for pipeline failure.

I-86-9

Section 9.2.8 and Appendix H have been revised to include discussion of the San Simeon earthquake and its effects. See Master Responses GEO-1 and GEO-2 for additional discussion of seismic activity and surface disruption, respectively. It is unlikely that this event will generate new construction standards since the current standards account for the effects of events such as the San Simeon earthquake. The construction of the Ocean Disposal Alternative pipeline would demand mitigation measures for ground-shaking hazard based on existing standards.

I-86-10

The comment is noted. See Master Responses SW-15 and GEO-3 for discussion of the likelihood of pipeline breaks and potential mitigation, respectively.

I-86-11

Drainwater quality included uncertainty analysis and used upper confidence limits to predict worst-case conditions.

I-86-12

The EIS uses both existing historical data and new data to predict drainage water quality. As with any predictive scientific effort, uncertainty exists in predicted concentrations. The EIS used the estimates of uncertainty to predict the highest concentrations likely to be present. By using high estimates, the EIS is conservative in that it discloses impacts that may be overstated.

I-86-13

Since the diffuser would not be located immediately adjacent to the outfalls mentioned in the comment, the effect of interactions between the proposed ocean disposal outfall and the other two outfalls would be a far-field effect. For example, the Morro Bay/Cayucos Wastewater Treatment Plant outfall is located approximately 9 miles southeast, the Duke Energy Morro Bay Power Plant outfall is approximately 10 miles southeast, and the abalone farm discharge is approximately 2.5 miles southeast of the proposed ocean diffuser location (Draft EIS Figure 5.1-8). The zone of initial dilution (ZID) for the Ocean Disposal Alternative is far smaller than these distances, so that Se concentrations will fall below water quality objectives well before discharges from these sources would "interact." If the Ocean Disposal Alternative were chosen as the preferred alternative in the ROD, a more detailed analysis of far-field impacts would be conducted.

I-86-14

The introduction of nutrients and suspended solids to ocean waters from the Ocean Disposal Alternative is discussed in detail in Master Responses SW-11, SW-4, and SW-13.

I-86-15

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

I-86-16

Section C2.5.2 describes the process used to estimate the groundwater quality served by different reuse facilities in the San Luis Unit using an existing well monitoring database developed over the past two decades by Reclamation. The reader questions the use of the groundwater quality data (Swain 1990) for this analysis based on the lack of recognition of the importance of well and aquifer characteristics and incorrectly assumes that a groundwater transport model was used

to generate the estimates. In addition, the reader questions the database and deems it inadequate due to a lack of analysis of temporal trends in groundwater quantity and quality.

As described in Section C2.1, a transport model was not used to develop the estimates of groundwater quality. Existing data on shallow groundwater quality were modeled using geostatistical methods. Section 6 of the Draft EIS presents the results of the groundwater transport model that was used to estimate changes in groundwater elevation using the MODFLOW modeling code developed for the project area by USGS and subsequently modified by HydroFocus for use in this project. It should be noted that the MODFLOW modeling is independent of the groundwater quality estimates. Appendix E2 of the Draft EIS presents the results of additional sampling and analysis of groundwater quality conducted by Reclamation in 2002 to assess changes in groundwater quality since 1989. This analysis indicated that no systematic changes were found in the Study Area.

I-86-17

The geologic stratification of the San Joaquin Valley has been incorporated into the USGS model that was used for analysis in the Draft EIS. Specifically, hundreds of well logs were used to characterize the textural spatial variability. More than 35 USGS person-years were spent developing the groundwater flow model.

The papers cited by the commenter have been reviewed. Upon review of these papers, it is unclear what the relevance of soil solution sampling and water-stage recording devices have to the drainage study area hydrogeology. Four of the papers cited propose the existence of a perched water table in the western San Joaquin Valley based on limited measurements and observations in the Cantua Creek Fan in the 1960s. Comprehensive examination of groundwater-level data throughout the western San Joaquin Valley by the USGS, including the Cantua Creek Fan area, did not find evidence of perched conditions except in limited areas near the axis of the valley (see Belitz and Heimes 1990, Character and Evolution of the Ground-water Flow System in the Central Part of the Western San Joaquin Valley, California, USGS Water Supply Paper 2348).

The generalized geohydrologic section of the western San Joaquin Valley (Figure 6-5) is taken from USGS publications reporting results from the San Joaquin Valley Drainage Program. The section was developed from previous USGS and DWR reports and new data collected as part of the San Joaquin Valley Drainage Program. Further detailed textural distribution analyses were incorporated into the USGS model. Modifications to the model were minor, and the stratification presented is identical to that presented by the USGS.

The groundwater flow assumptions are quantified in a numerical groundwater flow model originally developed by the USGS. The USGS used an extensive database of geologic, groundwater-level, and water-use data to develop and calibrate its 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.

I-86-18

An increase in upslope irrigation is not planned. The soil salinity analysis was not site-specific but was designed to (1) evaluate soil salinity effects of varying irrigation strategies and (2) verify

the validity of the simple mass balance model for estimating soil salinity. In Appendix E3, which describes the soil salinity modeling, sources of chemical data are referenced that include data for the unsaturated zone, including data for upslope areas. Because the primary focus was the estimation of possible soil salinity changes relative to agricultural production, nitrates were not considered in the analysis. Reclamation agrees that there are naturally occurring nitrates. However, concentrations of these nitrates are generally lower than soluble nitrogen generated from fertilizer application. Salinity, Se, boron, and molybdenum are the primary constituents of concern for drainwater quality. Implementing strategies for minimizing concentrations of these constituents will also minimize nitrate concentrations by minimizing deep percolation into groundwater.

I-86-19

The comment appears to refer to Section 12 rather than 15. Salt balances discussed in Section 12 considered salts in imported irrigation water but not in fertilizers. Including estimates of salts from fertilizers would make little difference in the overall salt balances because salt loads from fertilizer application are small compared to salt loads from irrigation supply, soil, and groundwater. For these reasons, inclusion of fertilizer in the mass balance would not change the relative comparison among alternatives.

I-86-20

Comment noted. No response necessary.

I-86-21

See Master Response MIT-2 in regard to mitigation planning.

I-86-22

Increased capacity of the drainage system beyond the current design is not a stated component of the In-Valley Alternatives. However, the PFR Addendum provides an overview of the preliminary preferred alternative selection criteria, and flexibility in accommodating future conditions was an advantage identified for the In-Valley Alternatives.

I-86-23

Section 9.2.8 and Appendix H have been revised to include discussion of the San Simeon earthquake and its effects. See Master Responses GEO-1, GEO-2, and GEO-3 for additional discussion of seismic activity, surface disruption, and mitigation, respectively. The construction of the Ocean Disposal Alternative pipeline would require mitigation measures for ground-shaking hazard based on existing standards. Mitigation procedures to account for secondary effects such as those triggered during the San Simeon earthquake must also be undertaken. Possible mitigation options are discussed in Section 9.2.8.

I-86-24

See Master Responses SW-10, SW-9, and SW-13 in regard to public health and ecological effects of the Ocean Disposal Alternative.

I-86-25

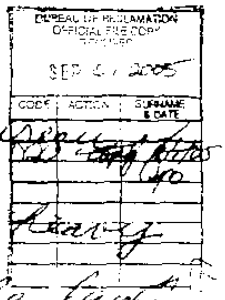
See Master Responses SW-8, SE-1, and SW-9.

I-86-26

Comment noted. No response necessary.

COMMENT I-87. JOHN P. MILLS

To. Ms. Claire Jacquemin



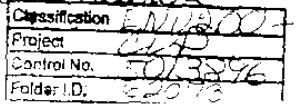
This letter is regarding the Bureau of Reclamations proposal to pump levels of selenium and pesticide laden agricultural water through a proposed pipeline from the San Joaquin Valley to the Estero Bay "Cayucos", to be discharged 1½ mile of shore into the Pacific Ocean.

I'm not suprised by the proposal, this is typical approach where money continues to outweigh the enviroment.

I-87-1 The environmental impact would be devasting to Marine Life, which is and has been in a state of major decline. And the impact of the pipeline construction would also be detrimental to the land enviroment, there are better choices

We as citizens and stewards of our planet cannot continue to put taking care of our planet as a secondary action. Jobs should not be the primary impudance in the final mitigation of this project

I am a maint worker at a Central Coast City. I did a small amount of research as to compile information which I'm sure you are well aware



I-87-2

The alternative methods could be water treatment removal of selinium and pesticides etc, which are very effective. Enclosed are copies of treatment data. There would be toxic sludge to haul to Kay-mat site etc.

The very large quantities of water could be reused after treatment to recharge aquifers use for direct irrigation etc.

Water is our most important resource Its seems that common sense would dictate action to take advantage of the water source and not spend millions of tax-payers money to pump this water to the pacific ocean

In my opinion we need to ask ourselves what is the approach to the "one" issue that will bring the effective results to our state for a healthier and safer inviroment that will only benefit us our children and there offsprings.

Lets us take advantage of the available technology and not be swayed by money and politics.

Sincerely
John P. Mills
PH 805-773-5006

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 I-87

I-87-1

See Master Responses SW-8, SE-1, SW-9, and SW-15.

I-87-2

The Draft EIS addresses a full range of alternatives including In-Valley Alternatives that incorporate the features described in the comment.

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INTRODUCTION

Four public hearings were held to provide forums for public comments and input on the EIS analysis. The hearings were held at the following dates, times, and locations:

- Monday, July 11, 2005, 1:30–3:30 p.m., Federal Building, Cafeteria Conference Room C-1001, 2800 Cottage Way, Sacramento, CA 95825
- Tuesday, July 12, 2005, 6–8 p.m., Heald College Conference Center, Rooms 1 and 2, 5130 Commercial Circle, Concord, CA 94520
- Wednesday, July 13, 2005, 6–8 p.m., Piccadilly Inn Shaw, Crown Room, 2305 West Shaw, Fresno, CA 93711
- Thursday, July 14, 2005, 6–8 p.m., Cayucos Veterans Hall, 10 Cayucos Drive, Cayucos, CA 93430

Comments identified from the official transcripts for each hearing are summarized in the following sections. Each comment has been assigned a prefix (CO for Concord, CY for Cayucos, F for Fresno, and S for Sacramento) and a number, and each commenter's name is included. Reclamation's response follows each comment. Master Responses are presented in Appendix P2.

Official transcripts are not included in the Final EIS but are available upon request.

SACRAMENTO PUBLIC HEARING, JULY 11, 2005

PH-S-1 (Joe Langenberg)

The commenter expressed support for the In-Valley Disposal Alternative with the absolute minimum land requirement option because the alternative allows treated water to be utilized; is the least complex and easiest to permit and, thus, easiest and quickest to implement; and is flexible, since it is not necessary to treat the whole area at once. Reclamation can easily treat the most adversely affected area immediately, add new units, or expand in-place units. In-valley disposal would also provide additional water.

Response

Comment noted. No response necessary.

PH-S-2a (Joe Langenberg)

If water can be treated, why reuse it first, when there are adverse impacts such as selenium and contaminants in the San Joaquin River? Drainwater should go directly into treatment. Drainwater recycling just takes water and degrades it by using the drainage.

Response

Reuse of drainwater reduces the volume of drainage (by about 70 percent) that requires subsequent treatment and disposal. Reuse is less expensive than treatment and disposal.

PH-S-2b (Joe Langenberg)

Selenium biotreatment is unnecessary and a waste of money. Better to go directly from treatment into storage.

Response

According to Reclamation's cost evaluation, biotreatment is less expensive than surface nets or covers for evaporation basins. See Master Response ALT-T1 in regard to the evaluation of water treatment options and technologies.

PH-S-3 (Matt Reeve, Department of Food and Agriculture)

Instead of retiring marginal land, it could be farmed using alternative practices such as integrated on-farm drainage management or dryland farming, with federal funding to make it more marketable to the farmers. Also, Reclamation should consider long-term management, cost, planting of native species, and other options. The commenter stresses that by keeping marginal land in production, farming could be maintained and the economy would not be disrupted as much as with land retirement.

Response

The Land Retirement Alternatives assume that retired lands would be one-third dryland farmed, one-third grazed, and one-third fallowed. The use of extensive on-farm integrated management systems was considered in the development of alternatives. However, on-farm management systems were not selected as a Unit-wide drainage solution primarily due to concerns over institutional and regulatory challenges that would be posed by the operation of many small systems throughout the Unit, rather than a few more centralized systems.

PH-S-4 (Joe Dillon, National Marine Fisheries Service)

NOAA Fisheries supports one of the in-valley solutions, potentially one with an option that matches up water uses. The Draft EIS properly identifies the impacts of the Delta Disposal Alternatives. The analysis of the Ocean Disposal Alternative needs additional detail regarding nutrient loading, algal blooms caused by warm ocean water, algal species that cause domoic acid poisoning, and other issues.

Response

The comment is noted. For additional details on the potential for nutrient loading and algal blooms under the Ocean Disposal Alternative, see Master Response SW-11.

CONCORD PUBLIC HEARING, JULY 12, 2005

PH-CO-1 (Barbara Johnson for Congressman George Miller)

The commenter requested permission for Congressman Miller to submit his written comments on the Draft EIS at a later date.

Response

Comment noted. No response necessary.

PH-CO-2 (Barbara Johnson for Congressman George Miller)

Citizens of the Delta region will oppose any Delta Disposal Alternative. Congressman Miller hopes Reclamation will encourage the wise use of taxpayer-funded water.

Response

Comment noted. No response necessary.

PH-CO-3 (Matt Moses, Contra Costa Water District)

The commenter expressed support for an in-valley solution to San Luis drainage and opposition to the Delta Disposal Alternatives.

Response

Comment noted. No response necessary.

PH-CO-4 (David Nesmith, Sierra Club)

The commenter expressed support for an In-Valley Alternative and opposition to the Delta Disposal Alternatives and Ocean Disposal Alternative.

Response

Comment noted. No response necessary.

PH-CO-5 (David Nesmith, Sierra Club)

The EIS should consider an alternative that would have zero evaporation ponds in the valley, maximum retention of water for Reclamation to use in areas that do not cause the water to become toxic, and provision of water for Reclamation reuse in more appropriate places; that would be cost effective and environmentally beneficial; and that would expand land retirement to at least the 379,000 acres of drainage-impaired lands subject to this study. Such an alternative would have lower initial capital outlay because it may not require the construction and O&M costs of a [desalination] plant.

Response

Reclamation has determined that a reasonable range of practicable alternatives have been evaluated for the project. See Master Response ALT-L2 in regard to retirement of all drainage-impaired lands.

PH-CO-6 (David Nesmith, Sierra Club)

Any land retirement program should include a program for re-employment, retraining, and rehousing displaced farm workers. The Draft EIS should include more detail on project-related effects to farm workers.

Response

See Master Responses ALT-L1 and SI-1 in regard to socioeconomic impacts of land retirement.

PH-CO-7 (Dr. Terry Young)

The Draft EIS seriously understates the environmental consequences of the Delta Disposal Alternatives.

Response

The Draft EIS includes adequate evaluation of impacts of the Delta Disposal Alternatives to enable consideration in selection of a preferred alternative. See Master Responses SW-1 and SW-2.

PH-CO-8 (Dr. Terry Young)

The commenter expressed support for an in-valley alternative that maximizes land retirement because it would minimize long-term drainage problems, cost the least, and perhaps reduce the environmental effects of running the reuse systems and evaporation pumps.

Response

Comment noted. No response necessary.

PH-CO-9 (Dr. Terry Young)

Evaporation ponds present risks to wildlife, possibly to a greater degree than was presented in the Draft EIS analysis.

The proposed alternatives should include an aggressive program for Reclamation to use the salts created in the evaporation ponds rather than letting them become a waste stream.

Response

The comments are noted. See Master Response BIO-3 in regard to the effect of evaporation basins on migratory waterfowl and other species and Master Response GEN-5 in regard to the reuse of salt.

PH-CO-10 (Dr. Terry Young)

Water that is no longer being used on retired lands should not revert to the district but should go back to Reclamation to be used to meet their currently unmet environmental obligations.

Response

The use of excess water is discussed in Master Response GEN-2.

PH-CO-11 (Dr. Terry Young)

It is unclear whether Reclamation anticipates creating incentives and requirements for landowners that keep land in production to limit the amount of drainwater that they put into the system. The amount of drainwater that Reclamation accepts should be limited, and financial incentives to reduce it below that level should be used.

Response

The maximum amount of drainwater that Reclamation accepts is based on the capacity of the system, and Reclamation made a determination based on cost effectiveness. The incentive is based on the design of the system, which dictates the maximum flow. The financial incentive would be the cost of treatment and disposal.

PH-CO-12 (Dr. Terry Young)

The proposed reuse system and evaporation ponds could have serious effects to wildlife. Systems have to be over-engineered and tightly maintained. Who would be liable if something goes wrong? Reclamation should protect the public by either putting together a performance bond or by investigating insurance that would pay for cleanup and damage mitigation.

Response

See Master Responses BIO-3 in regard to the effect of evaporation basins on migratory waterfowl and other species, MIT-2 in regard to mitigation planning, and MIT-1 in regard to adaptive management and monitoring.

PH-CO-13 (Hal Candee, Natural Resources Defense Council)

The commenter expressed support for land retirement options presented in the Draft EIS and opposition to the Delta Disposal Alternatives and Ocean Disposal Alternative.

Response

Comment noted. No response necessary.

PH-CO-14 (Hal Candee, Natural Resources Defense Council)

The Draft EIS fails to consider a full land retirement option. Some additional drainage land has been left out and some current programs anticipate the land coming back into production in the future. So what really is meant by land retirement?

Response

Land retirement in the Northerly Area was evaluated (see Section 2.11.4.1 of the Draft EIS), and the retirement of 10,000 acres in Broadview Water District is included in all three In-Valley Alternatives. See Master Response ALT-L2 for additional discussion.

PH-CO-15 (Hal Candee, Natural Resources Defense Council)

The new long-term contract with Westlands assumes the same amount of acreage and water deliveries for the next 25 years. How can Reclamation make a long-term commitment to Westlands without first resolving important questions about drainage and land retirement?

Response

Drainage rates are based on the number of acres farmed. Under each alternative except for the In-Valley/Drainage-Impaired Area Land Retirement Alternative, the water can be put to beneficial use. A provision in Westlands Water District's water services contract with Reclamation states that in the event the Secretary of the Department of the Interior implements a land retirement program to address drainage in the San Luis Unit, then a new Water Needs Assessment would be completed after each quarter of the overall retirement program has been implemented. The results of each new Water Needs Assessment would be evaluated to determine if a reduction in Westlands' total water contract quantity is warranted. Under the contract provision, lands retired through the CVPIA Land Retirement Program and the Britz Settlement would not be considered a part of the land retirement program for purposes of triggering a new Water Needs Assessment, but would be considered in any new Water Needs Assessments. Also see Master Response GEN-2 in regard to long-term contracts.

PH-CO-16 (Hal Candee, Natural Resources Defense Council)

Water freed up from land retirement belongs to Reclamation, not to Westlands or landowners. Reclamation should meet its other obligations such as water quality standards and environmental obligations under CVPIA rather than simply adding to the existing supply of farmers who may well aggravate the drainage problem.

Response

See Master Response GEN-2 in regard to use of excess water.

PH-CO-17 (Hal Candee, Natural Resources Defense Council)

The commenter is troubled by the tendency to make drainage decisions in a secret, piecemeal fashion, such as the Sumner-Peck settlement. Clarify if any secret discussions are taking place in regard to the proposed project.

Response

Environmental reviews conducted in accordance with NEPA require public disclosure and consultation at several points throughout the review process. Section 21.1 and Appendix P1, Section P1.2 describe the official notifications and public involvement activities for this project. Although it is ultimately Reclamation's responsibility to make a decision on the proposed action, the final decision would not be secret and will be documented in a Record of Decision.

PH-CO-18 (Hal Candee, Natural Resources Defense Council)

The Draft EIS doesn't adequately disclose how Westlands will meet its CEQA and other state law obligations.

Response

See Master Response REG-2 for a discussion of CEQA compliance.

PH-CO-19 (Hal Candee, Natural Resources Defense Council)

Regarding the issue of reasonable use under state law, Reclamation needs to more completely analyze whether water delivery service to this land is even legal under state and federal law.

Response

See Master Response P&N-1.

PH-CO-20 (Hal Candee, Natural Resources Defense Council)

Reclamation must more fully disclose how impacts from evaporation ponds and other project components will be mitigated.

Response

See Master Response MIT-2 in regard to mitigation planning.

PH-CO-21 (Gary Bobker, Bay Institute)

The Draft EIS shies away from its own conclusions. The In-Valley/Drainage-Impaired Area Land Retirement Alternative is acknowledged as superior to the others, both in terms of overall benefits and avoided impacts. This alternative begins to establish a long-term solution to the drainage disposal problem and also leads to the smallest amount of drainage volume, facilities, and ponds. Tools to reduce the volume of discharge and size of facilities should be evaluated,

and compensation habitat should be considered. Water savings created as a result of land retirement should be clarified. Water should revert back to Reclamation, which has many obligations.

Response

The In-Valley/Drainage-Impaired Area Land Retirement Alternative has been selected as the preferred alternative, as described in Section 2.15 of the Final EIS. Additional information on mitigation has been added to Section 20. See Response to Comment PH-CO-15 regarding water from retired lands.

PH-CO-22 (Gary Bobker, Bay Institute)

The Draft EIS underestimates impacts to the Delta and the coast. The Bay-Delta is already saturated with selenium. Additional loading could have a severe biological impact.

Response

See Master Responses SE-1 and SW-2 for a discussion of biological effects of the Ocean Disposal Alternative and Delta Disposal Alternatives.

PH-CO-23 (Gary Bobker, Bay Institute)

What are the project milestones between the public hearing and adoption of the Final EIS?

Response

Public comments on the Draft EIS were accepted through September 1, 2005, following a one-month extension of the public comment period. Comments made at the public hearings and submitted throughout the comment period were considered and addressed, and the Final EIS was published in or before May 2006. An additional 30-day no action period will be provided following publication of the Final EIS. Following the no action period, Reclamation will adopt the Final EIS as adequate in compliance with NEPA and make a decision on the proposed action, which will be published in a Record of Decision.

PH-CO-24 (John Kopchik, Contra Costa County Community Development Department, Conservation Division)

The San Luis Drain or some other export facility is a bad policy idea because the Delta is Contra Costa County's shoreline; the source of drinking water for half of the county's residents; a visual and recreational resource; and citizens have spent a lot of money to clean up, protect, and restore it.

Response

The comments are noted. Reclamation is required by court order to provide drainage service to the San Luis Unit, as explained in Section 1.1 of the Draft EIS. See Section 1.2 for a discussion of the court order and the background of the proposed project.

PH-CO-25 (John Kopchik, Contra Costa County Community Development Department, Conservation Division)

The Draft EIS understates drain impacts and costs. The commenter expressed support for an in-valley solution.

Response

Comment noted. No response necessary.

FRESNO PUBLIC HEARING, JULY 13, 2005

PH-F-1 (Joe Langenberg)

Why use reuse drainage recycling, a technique from a time when no other alternatives were available? Reclamation should do away with reuse, drainage recycling, and any further land retirement, all of which are unnecessary. Processing will remove the drainage, which will help to remove the salinity in the soil and restore the impacted soil to either Farmland of Statewide Importance or Prime Farmland.

Response

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

PH-F-2 (Jose Feria, Department of Water Resources)

DWR supports the Land Retirement Alternatives, but serious social and environmental justice issues occur with retiring large amounts of lands. Many communities would be at risk and lose a lot of economic base. Drainage reuse is an effective way to minimize the amount of drainage.

Response

The analysis of Land Retirement Alternatives indicated that economic and social/environmental justice effects would not be significant (see Sections 17.2 and 18.2).

Reuse of drainwater reduces the volume of drainage (by about 70 percent) that requires subsequent treatment and disposal. Drainage reuse is included in all of the action alternatives.

PH-F-3 (Jeff Bryant, Firebaugh Water District)

The EIS should discuss the Westside Regional Drainage Plan.

Response

Components of the Westside Plan are included in the In-Valley/Water Needs Land Retirement Alternative.

PH-F-4a (Andrew Gordus, CDFG)

The Draft EIS lacks information. Mitigation compensatory habitat is mentioned, but no conceptual locations, design or management plans, or land ownership or economic analysis are provided. An EIS should disclose all mitigation instead of deferring mitigation planning until later. The EIS provides start-up and annual cost alternatives, but without mitigation habitat cost estimates, current cost estimates could be significantly skewed.

Response

See Master Response MIT-2 in regard to mitigation planning.

PH-F-4b (Andrew Gordus, CDFG)

The EIS should include a discussion of avian winter impacts.

Response

See Master Response BIO-3 in regard to impacts to wintering birds.

PH-F-4c (Andrew Gordus, CDFG)

CDFG recommends restoring some retired lands to native habitat, rather continuing agricultural use.

Response

A future project could involve land/habitat restoration. However, costs are not included in this EIS. See Master Response ALT-L3.

PH-F-4d (Andrew Gordus, CDFG)

Fish and wildlife depend on current water flows. CDFG recommends that Reclamation provide some mitigation flows to the system for fish and wildlife.

Response

The analysis of project effects indicates that none of the action alternatives would have a significant impact on river flows.

PH-F-5 Carl Longley (California Water Institute, Central Valley Regional Water Quality Control Board)

The commenter, noting that he was speaking for himself, stated that an in-valley solution does not adequately consider long-term social, economic, and environmental justice issues resulting from impacts to groundwater and San Joaquin River water quality. An out-of-valley solution for salt disposal is necessary.

Response

The comment is noted. The analysis of In-Valley Alternatives indicated that social, economic, and environmental justice effects would not be significant (see Sections 17.2 and 18.2).

CAYUCOS PUBLIC HEARING, JULY 14, 2005

PH-CY-1 (Gregg Hauss for Congresswoman Lois Capps)

The public comment period should be extended by 30 days to enable additional review of potential project-related effects to Central Coast communities.

Response

See Master Response GEN-4.

PH-CY-2 (Shirley Bianchi, San Luis Obispo County Board of Supervisors)

The commenter described having less than two weeks to review the Draft EIS. A 30- or 60-day extension of the public comment period for the Draft EIS was requested. The commenter stated that the Central Coast area was not part of the problem addressed by the Draft EIS and should not be part of the solution.

Response

See Master Response GEN-4. The commenter's concerns are noted.

PH-CY-3 (Betty Winholtz, City of Morro Bay)

The Ocean Disposal Alternative would have tourism, fishing, and social justice effects in Central Coast communities.

Response

See Master Response SE-1 and SW-10 in regard to the effects of the Ocean Disposal Alternative on tourism and fisheries in Central Coast communities. No related effects to social justice are anticipated.

PH-CY-4 (Joey Racano, Ocean Outfall Group)

The commenter proposed his "ABC" regional watershed plan as an alternative to the project alternatives considered in the Draft EIS. Se-containing water and sewage from Morro Bay, Cayucos, and Los Osos would be sent via pipeline to Fresno.

Response

The ABC regional watershed plan proposed as an alternative does not meet the purpose and need of the project, described in Section 1.1 of the EIS. Reclamation is moving forward with the alternatives described in the Draft EIS and will not add any new alternatives at this time.

PH-CY-5 (Richard Sadowski)

The regional solution offered by the ABC plan (referenced in Comment PH-CY-4) should be considered and the Ocean Disposal Alternative eliminated from consideration.

Response

The comment is noted. See Response to Comment PH-CY-4.

PH-CY-6 (Joan Carter, ECOSLO)

The commenter expressed concerns about the environmental effects of the Ocean Disposal Alternative and support for the Land Retirement Alternatives. The commenter stated that improving water quality in the San Joaquin River is not worth the degradation of water quality in Estero Bay.

Response

Comment noted. No response necessary.

PH-CY-7 (Marla Bruton)

Discharging Se-containing drainwater into the ocean under the Ocean Disposal Alternative is not a viable solution.

Response

Comment noted. No response necessary.

PH-CY-8 (Marla Bruton)

The hearing should be deemed inappropriate due to lack of adequate notice about the project and the lack of availability of paper copies of the Draft EIS at the hearing location. The public comment period should be extended.

Response

The comments are noted. Appendix P1, Section P1.2 describes the public comment period and locations where paper copies of the Draft EIS were available for review. Also see Master Response GEN-4.

PH-CY-9 (Marla Bruton)

The commenter questioned the status of the National Pollutant Discharge Elimination System (NPDES) permit for the project.

Response

Permit application is not part of the NEPA process and would not take place until a preferred alternative is selected and advanced to a later design stage. NPDES permit requirements are discussed in Section 5.1.6.3.

PH-CY-10 (Bruce Ambo, City of Morro Bay)

The public comment period should be extended to allow for a more complete review of the Draft EIS.

Response

See Master Response GEN-4.

PH-CY-11 (Bruce Ambo, City of Morro Bay)

The impact analysis for the project, specifically for the Ocean Disposal Alternative, is incomplete because it defers detailed evaluation of mitigation measures and mitigation costs until permit requirements are identified. A cost comparison of alternatives cannot be conducted without a complete impact analysis.

Response

For more information on mitigation and costs of mitigation, see Section 20 and Appendix O of the Final EIS.

PH-CY-12 (Bruce Ambo, City of Morro Bay)

The pipeline for the Ocean Disposal Alternative, described in the Draft EIS as 42 inches in diameter, appears to be oversized, and the pipeline capacity discussed in the Draft EIS is half of the actual hydraulic capacity of a pipe of that size.

Response

The Ocean Disposal Alternative pipeline diameter would be 36 inches or less. The text of Section 2.8.1 has been revised to reflect this. See Master Response ALT-P3 for a discussion of pipeline hydraulic design.

PH-CY-13 (Bruce Ambo, City of Morro Bay)

The Draft EIS does not clearly identify other dischargers who might use the Ocean Disposal Alternative pipeline or contaminant levels in discharged water.

Response

See Master Response ALT-P3 in regard to other potential users of the Ocean Disposal Alternative pipeline.

PH-CY-14 (Jackie Crabb, San Luis Obispo County Farm Bureau)

The Ocean Disposal Alternative should be rejected because it would adversely affect species and water quality in the ocean along the Central Coast. A decrease in water quality would affect Central Coast farmers and ranchers, who are already subject to strict nonpoint-source water discharge requirements.

Response

See Master Response AG-1, which discusses why discharge under the Ocean Disposal Alternative would not be expected to result in tighter restrictions on agricultural discharges.

PH-CY-15 (Roger Lyon)

The commenter expressed support for the In-Valley Disposal Alternative and opposition to the Ocean Disposal Alternative.

Response

Comment noted. No response necessary.

PH-CY-16 (Roger Lyon)

The commenter stated that he understood this to be the only public hearing before the public comment period closed, and that the Ocean Disposal Alternative could be selected as the preferred alternative after the public comment period closed.

Response

Four public hearings were held during the public comment period for the Draft EIS, as described in Appendix P1, Section P1.2.

The In-Valley/Drainage-Impaired Area Land Retirement Alternative has been selected as the preferred alternative (see Section 2.15), and the selected alternative will be identified in the ROD following publication of the Final EIS.

PH-CY-17 (Roger Lyon)

The Draft EIS fails to adequately analyze the Ocean Disposal Alternative. For example, the exact pipeline route has not been identified, and therefore no analysis of environmental impacts along the route is presented. The Draft EIS should be revised to include this information and recirculated, and the public hearings and comment process should be repeated.

Response

If the Ocean Disposal Alternative were selected as the preferred alternative, additional feasibility and final design studies would be conducted. 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.

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.

PH-CY-18 (Roger Lyon)

The economics analysis is not consistent among the alternatives. For example, the Delta Disposal Alternative applies a 5 parts per billion (ppb) selenium standard to discharge water, while the Ocean Disposal Alternative allows a 15 ppb selenium standard. The cost of selenium removal is estimated for the Delta Disposal Alternatives but not for the Ocean Disposal Alternative.

Response

Appraisal-level cost estimates were prepared at an equivalent level for all alternatives. The water quality objectives for Se in surface waters of the Delta and ocean are governed by the policies and criteria of the Central Valley and San Francisco Basin Plans and Ocean Plan, respectively. See Master Response SW-6, which explains why Se treatment was not included in the Ocean Disposal Alternative.

PH-CY-19 (Colleen Johnson)

The Ocean Disposal Alternative would adversely affect the fishing industry and the health of people who eat fish from those waters.

Response

See Master Responses SE-1 and SW-10 in regard to the effects of the Ocean Disposal Alternative on local fisheries and the food chain.

PH-CY-20 (Brian Stark)

The commenter expressed the opinion that there must be other alternatives than those presented in the Draft EIS.

Response

An extensive alternative screening and selection process was conducted and is described in the PFR.

PH-CY-21 (Brian Stark)

What are the impacts related to pipeline establishment? Other pipelines built in the area during recent years had more environmental impacts than anticipated.

Response

Effects to biological resources from pipeline installation are discussed in Sections 7.2.8, 7.2.9, and 7.2.10. As discussed in Master Response GEN-1, the final route and exact location of the pipeline would not be determined unless the Ocean Disposal Alternative were advanced for further consideration, in which case additional feasibility and final design studies would be conducted.

PH-CY-22 (Brian Stark)

The public comment period should be extended to allow for a more complete review of the Draft EIS.

Response

See Master Response GEN-4.

PH-CY-23 (Brian Stark)

The Ocean Disposal Alternative should be eliminated from consideration because of its potential effect on fisheries and other resources and the proximity of the outfall to a federally protected marine sanctuary. The In-Valley Alternatives should be selected as the preferred alternative.

Response

The comment is noted. See Master Responses SW-8 through SW-13 in regard to the effects of the Ocean Disposal Alternative on local fisheries and other resources.

PH-CY-24 (Dan Berman, Morro Bay National Estuary Program)

The public comment period should be extended to allow for a more complete review of the Draft EIS.

Response

See Master Response GEN-4.

PH-CY-25 (Dan Berman, Morro Bay National Estuary Program)

The Morro Bay National Estuary Program is opposed to the Ocean Disposal Alternative and the Delta Disposal Alternatives. Those alternatives do not meet the stated purpose and need to provide a long-term sustainable salt and water balance for sustainable agriculture. The solution should be to reduce or eliminate production of contaminated water or to treat the contaminated

water. The Ocean Disposal Alternative does the least of all of the alternatives toward reducing and treating contamination.

Response

Comment noted. No response necessary.

PH-CY-26 (Dan Berman, Morro Bay National Estuary Program)

The Morro Bay National Estuary Program supports the In-Valley Alternatives as the preferred alternative.

Response

Comment noted. No response necessary.

PH-CY-27 (Dr. John Alexander, John Alexander Research)

Reuse of leach water in farming does not present a serious selenium hazard if treated and would prevent water waste.

Response

The comment is noted. All action alternatives include drainwater reuse, as described in Section 2.3.

PH-CY-28 (Dr. John Alexander, John Alexander Research)

The Ocean Disposal Alternative would endanger the commenter's abalone farm and the kelp industry in the coastal area.

Response

See Master Responses SE-1 and SW-10 for a discussion of the effects of the Ocean Disposal Alternative on local fisheries and marine life.

PH-CY-29 (Bruce Gibson)

The Draft EIS is deficient because it does not identify a preferred alternative. It is not clear why the In-Valley Disposal Alternative was not identified as being preferred over the Ocean Disposal Alternative.

Response

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

PH-CY-30 (Bruce Gibson)

The Draft EIS is deficient because it does not analyze the impacts of building the pipeline for the Ocean Disposal Alternative.

Response

See Master Response GEN-1 in regard to the level of analysis conducted for the Ocean Disposal Alternative and its 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.

PH-CY-31 (Bruce Gibson)

The Draft EIS is deficient because the economic analysis of the Ocean Disposal Alternative does not include selenium removal.

Response

See Master Response SW-6 in regard to the cost and need for Se removal.

PH-CY-32 (Bruce Gibson)

The Draft EIS is deficient because it lacks sufficient oceanographic data to identify the fate of contaminated water discharged under the Ocean Disposal Alternative.

Response

A significant quantity of current, temperature, and salinity data were analyzed in modeling the fate of the discharge within the ocean. Specifically, temperature data for 1972 to 1986, salinity data for 1972 to 1985, and current data for 1984 to 2002 were obtained, totaling over 200,000 data points. While far-field modeling was not explicitly conducted, conclusions about the effects of the discharge outside of the immediate mixing zone can be drawn from the results of the near-field mixing analysis, and far-field effluent concentrations are expected to be negligible. Furthermore, if the Ocean Disposal Alternative were advanced for further consideration, an explicit analysis of far-field impacts based on more extensive oceanographic data would be conducted.

PH-CY-33 (Bruce Gibson)

Section 5.2.8.3 of the Draft EIS fails to adequately address far-field effects to receiving waters for the Ocean Disposal Alternative.

Response

See Master Responses SW-4 and SW-5 and Response to Comment PH-CY-32.

PH-CY-34 (Noah Smuckler, San Luis Bay Surfrider Foundation)

The In-Valley Alternatives are preferable and would allow reuse of treated water. The Ocean Disposal Alternative would have negative impacts on tourism, fisheries, and recreational use of ocean waters and therefore is not a solution.

Response

The comment is noted. See Master Responses SE-1 and SW-10 in regard to effects of the Ocean Disposal Alternative on tourism, fisheries, and recreational use of ocean waters.

PH-CY-35 (John Chesnut)

The Draft EIS underestimates costs of the Ocean Disposal Alternative because it excludes environmental mitigation for the pipeline that would transport San Joaquin Valley drainwater to the coast.

Response

For information on the mitigation, costs of mitigation, and level of analysis for the Ocean Disposal Alternative, see Section 20, Appendix O, and Master Response GEN-1.

PH-CY-36 (John Chesnut)

The Draft EIS does not consider new technologies in selenium remediation that could be implemented on farms to reduce the volume of contaminated waters, which would in turn reduce the overall cost of the In-Valley Alternatives. The data analysis for the Broadview project shows that adding spoiled hay to water channels reduces selenium flows by 98 percent.

Response

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

PH-CY-37 (John Chesnut)

The Draft EIS analysis of agricultural contaminants, particularly organic pesticides, in drainwater was inadequate. Pesticide contamination may be of greater concern than selenium because its effects cannot be mitigated through dilution, which is a major assumption behind the Ocean Disposal Alternative.

Response

Additional information has been included in the FEIS to address contaminants that may be present in the drainwater discharged under the Ocean Disposal Alternative. See Master Response SW-13.

PH-CY-38 (John Chesnut)

The Draft EIS incorrectly assumes that all of the water districts within the San Luis Unit want the land within their districts to remain in agricultural production. For example, by fallowing land, Westlands Water District can acquire the water rights and sell water to Southern California.

Response

Land retirement is assumed in three of the In-Valley Alternatives. See Response to Comment PH-CO-15 regarding disposition of water from retired lands.

PH-CY-39 (John Chesnut)

The Draft EIS underestimates the costs of the Ocean Disposal Alternative because it does not incorporate an escalator to account for increases in energy costs.

Response

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

PH-CY-40 (Bill Bianchi)

The Draft EIS includes insufficient data on the quality of effluent water discharged under the Ocean Disposal Alternative. More recent data may have been available but were not included.

Response

Additional information has been included in the FEIS to address contaminants that may be present in the drainwater discharged under the Ocean Disposal Alternative. See Master Response SW-13.

PH-CY-41 (Bill Bianchi)

The Draft EIS does not adequately analyze the effects of chromium in water discharged under the Ocean Disposal Alternative on aquatic microorganisms and giant kelp. The EIS also fails to analyze the effects of phosphate and nitrates on ocean organisms.

Response

See Master Responses SW-8 through SW-13 for additional discussion of the effects of the Ocean Discharge Alternative on marine life.

PH-CY-42 (Bill Bianchi)

The reverse osmosis pilot at Red Rock Ranch described in the Draft EIS was of inadequate duration to evaluate a desalination plant.

Response

See Master Response ALT-T1 in regard to the adequacy of the RO pilot studies.

PH-CY-43 (Judy Neuhauser)

The public comment period should be extended to allow for a more complete review of the Draft EIS.

Response

See Master Response GEN-4.

PH-CY-44 (Judy Neuhauser)

The commenter questioned the methods used to calculate the projected costs of each alternative. The cost of mitigation for constructing a pipeline and of pumping water to Estero Bay under the Ocean Disposal Alternative does not appear to have been considered in the cost analysis.

Response

Master Response GEN-1 in regard to cost estimates for the Ocean Disposal Alternative. Mitigation costs are presented in Appendix O.

PH-CY-45 (John Carsel)

The Ocean Disposal Alternative would not only have a negative effect on tourism, recreation, and fisheries but would also require special disclosures in certain real estate transactions in the area. The alternative should be eliminated from consideration.

Response

The commenter suggests that the construction and operation of an outfall for the Ocean Disposal Alternative would require disclosure in real estate transactions and this disclosure could have an effect on property values. As described in the project description for the Ocean Disposal Alternative in Section 2.8 of the DEIS, the outfall would be located 1.4 miles offshore, well away from residential real estate. The land-based facilities would primarily consist of buried pipelines. Disclosure of right-of-way for the land-based facilities would be required for affected lands under private ownership. The Federal government would follow established policies for acquisition of this right-of-way, which could include offering the landowners compensation to acquire the right-of-way. As this alternative is not the preferred alternative identified in the FEIS, additional evaluation of economic impacts to real estate values from right-of-way acquisition is not considered to be necessary under the "reasonable research" standard in NEPA.

See also Master Responses SE-1 and SW-10 in regard to effects of the Ocean Disposal Alternative on tourism, recreation, and fisheries.

PH-CY-46 (John Carsel)

The public comment period should be extended to allow for a more complete review of the Draft EIS.

Response

See Master Response GEN-4.

PH-CY-47 (Andrew Christie, Sierra Club, San Lucia Chapter)

The Ocean Disposal Alternative would involve a longer construction period than other alternatives and would likely have permitting difficulties with San Luis Obispo County and the California Coastal Commission. The Draft EIS does not consider the likelihood of whether the permits needed to implement this alternative could actually be obtained. If the needed permits are denied, Reclamation would not be able to deliver on its obligation to the court to provide prompt drainage service to the San Luis Unit.

Response

Permit requirements and regulatory compliance for the Ocean Disposal Alternative are discussed in Master Response REG-1.

PH-CY-48 (Andrew Christie, Sierra Club, San Lucia Chapter)

An In-Valley Alternative with land retirement should be the preferred alternative.

Response

Comment noted. No response necessary.

PH-CY-49 (Julie Tacker, Los Osos Community Services District)

Reclamation should allow the Los Osos Community Services District and other land use committees in San Luis Obispo County to review and comment on the Draft EIS.

Response

The Los Osos Community Services District and all other interested parties were invited to provide comments on the Draft EIS. Written comments submitted by the Los Osos Community Services District are presented in Appendix P5, Comment L-14. Reclamation's responses follow Comment L-14.

PH-CY-50 (Pamela Heatherington, Surfrider Foundation, San Luis Chapter)

The San Luis Unit drainwater should stay where it was generated, and the sources of pollution in the drainwater should be addressed to prevent further contamination. To avoid socioeconomic

and social justice impacts, the affected lands should be retired and later reused for organic farming. The Out-of-Valley Disposal Alternatives should be eliminated from consideration.

Response

Comment noted. No response necessary.

PH-CY-51 (Jodee Bennett, ECOSLO)

In-valley treatment with land retirement should be the preferred alternative and should include measures to protect San Joaquin Valley wildlife from environmental effects.

Response

Comment noted. No response necessary.

PH-CY-52 (David Nelson)

The Ocean Disposal Alternative would adversely affect the fishing industry, which lacks the financial resources to demonstrate the impacts of ocean disposal on fisheries.

Response

See Master Responses SE-1 and SW-10 in regard to the effects of the Ocean Disposal Alternative on fisheries.

PH-CY-53 (David Nelson)

Selenium in the drainwater discharged under the Ocean Disposal Alternative would not be diluted sufficiently to avoid adverse effects to aquatic organisms.

Response

See Master Responses SE-1 and SW-8 through SW-13 in regard to the effects of the Ocean Disposal Alternative on aquatic organisms.

PH-CY-54 (David Nelson)

The mitigation costs of the Ocean Disposal Alternative have not been adequately considered.

Response

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

PH-CY-55 (David Nelson)

The Ocean Disposal Alternative should be eliminated from consideration.

Response

Comment noted. No response necessary.

PH-CY-56 (Ed Cosko)

The public comment period should be extended to allow for a more complete review of the Draft EIS.

Response

See Master Response GEN-4.

PH-CY-57 (Ed Cosko)

The Ocean Disposal Alternative should be eliminated from consideration because it would harm fisheries and ocean ecosystems.

Response

The comment is noted. See Master Responses SE-1 and SW-8 through SW-13 in regard to the effects of the Ocean Disposal Alternative on fisheries and ocean ecosystems.

PH-CY-58 (Gordan Hensley)

The public comment period should be extended to allow for a more complete review of the Draft EIS.

Response

See Master Response GEN-4.

PH-CY-59 (Gordan Hensley)

The In-Valley Alternatives should be adopted, and the Ocean Disposal Alternative should be eliminated from consideration.

Response

Comment noted. No response necessary.

PH-CY-60 (Gordan Hensley)

The Draft EIS does not adequately address effects of the project on federally listed special-status species, particularly marine mammals and migratory species such as steelhead and salmon.

Response

See Master Response BIO-2 in regard to the assessment of project effects on special-status species. Master Response SW-12 discusses effects of the Ocean Disposal Alternative on special-status species.

PH-CY-61 (Gordan Hensley)

The Draft EIS does not adequately address the Ocean Disposal Alternative's fisheries and tourism impacts, cumulative impacts, compliance with state regulations on disposal projects in the coastal zone, or mitigation. A complete analysis should be provided in the Final EIS.

Response

See Master Responses SW-8, SW-13, SE-1, and SW-10 in regard to effects of the Ocean Disposal Alternative.

PH-CY-62 (Lisa Schicker, Los Osos Community Services District)

The public comment period should be extended to allow for a more complete review of the Draft EIS.

Response

See Master Response GEN-4.

PH-CY-63 (Lisa Schicker, Los Osos Community Services District)

The Draft EIS does not identify a preferred alternative, which makes it difficult to provide comments.

Response

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

PH-CY-64 (Matt Clark)

The Out-of-Valley Disposal Alternatives should be eliminated from consideration.

Response

Comment noted. No response necessary.

PH-S-1 (Joe Langenberg)

Section 5.2.8.3 of the Draft EIS fails to adequately address far-field effects in receiving waters for the Ocean Disposal Alternative.

Response

Far-field impacts of the Ocean Disposal Alternative were not explicitly analyzed as part of the DEIS analysis. However, the diffuser design analysis demonstrates that the concentration of effluent, and concentrations of Se in the effluent, will be diluted to levels below appropriate water quality standards very quickly after discharge and, thus, surrounding ocean areas will experience relatively low effluent levels. For example, even under the infrequently (<1 percent of the time) occurring condition when zero ocean currents are above the diffuser, Se concentrations would reach the applicable water quality criterion of 15 mg/L between 6 and 12 meters above the diffuser. With maximum expected currents, diffusion to the water quality criterion would be achieved only 2 meters above the diffuser (see Section 5.2.8.3, page 5-65). Thus, the water quality criterion would be met very quickly after discharge. At locations farther from the diffuser dilution would reduce Se concentrations to levels well below the water quality standard. Therefore, despite not addressing the concern regarding far-field concentrations through explicit analysis, the issue was addressed implicitly through the diffuser design analysis. If the Ocean Disposal Alternative were chosen as the preferred alternative in the Record of Decision, a more detailed analysis of far-field impacts would be conducted. See also Master Responses SW-13 and SE-1.

PH-CY-66 (George Shytell)

The Ocean Disposal Alternative would adversely affect the environment and ocean-related recreation.

Response

See Master Responses SW-8, SW-13, SE-1, and SW-10 in regard to effects of the Ocean Disposal Alternative on the environment and recreation.

PH-CY-67 (Tyson Simonic)

The Ocean Disposal Alternative would adversely affect the environment and ocean-related recreation.

Response

See Response to PH-CY-66.

PH-CY-68 (Lynda Merrill)

The public comment period should be extended to allow for a more complete review of the Draft EIS.

Response

See Master Response GEN-4.

PH-CY-69 (Lynda Merrill)

The Ocean Disposal Alternative should be eliminated from consideration.

Response

Comment noted. No response necessary.

PH-CY-70 (Lynne Harkins)

The Draft EIS does not provide sufficient scientific support in its impact analyses. In particular, Section 8.2.12.6 fails to adequately demonstrate that the Ocean Disposal Alternative would not significantly increase selenium in surface water, sediments, or invertebrate tissue.

Response

See Master Responses SW-8 and SE-1 in regard to effects of the Ocean Disposal Alternative on Se levels in surface water, sediments, and invertebrate tissue.