

Letter J: Quechan Indian Tribe

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Via Facsimile and First-Class Mail

November 21, 2000

PLEASE REPLY TO THE
SEATTLE OFFICE

Mr. Don Young
Bureau of Reclamation
Yuma Area Office
P.O. Box D
7301 Calle Agua Salada
Yuma, Arizona 85366

Re: Quechan Indian Tribe's Comments on the Draft EIS/EIR for the Coachella Canal Lining Project

Dear Mr. Young:

We represent the Quechan Indian Tribe ("Tribe") and submit these comments on the Tribe's behalf. The Tribe has a number of concerns about the Bureau of Reclamation's Revised and Updated Draft Environmental Impact Statement/Environmental Impact Report, Coachella Canal Lining Project (Sept. 2000) ("Draft EIS/EIR"), in which it proposes to line 33.2 miles of the canal. We request that these concerns be addressed in a revised or amended DEIS/EIR or FEIS/EIR.

J-1

1. **Water Rights and the Colorado River.** The Tribe is concerned with the proposed project's effects on its water rights in the Colorado River, which is overappropriated. The EIS/EIR states that the proposed project will reduce the average flow of the lower Colorado River by approximately one-third of one percent, and will reduce the level of the river downstream from Blythe, California by about one-tenth of an inch. Draft EIS/EIR at S-8. The Bureau concludes that this change "would not be significant to the resources along the river." *Id.* This analysis appears inadequate given the overappropriation of the River.

J-2

The Tribe is also concerned about the Coachella lining project's cumulative effects on the Colorado River, on its senior rights in the river, on groundwater underlying the reservation, and on other trust assets. The Draft EIS/EIR's sections on affected environment, range of alternatives, and description of effects, as well as the final decision, must carefully consider not only the lining project, but also all connected and similar actions that could contribute to cumulative effects on the Colorado River's flow and level. In some cases, the BOR has ignored other critical actions. In other cases, it has given them short shrift or improperly deferred analysis

J-3

Letter J

Quechan Indian Tribe (represented by Morisset, Schlosser, Ayer & Jozwiak)

J-1 Responses to the Quechan Indian Tribe's comments are provided below, and revisions have been incorporated in the Final EIS/EIR as noted.

J-2 By conserving Colorado River water that is currently lost as seepage from the Coachella Canal, the proposed action would help reduce the over-allocation of the Colorado River, and it would help California stay within its allocated amount of Colorado River water use. The proposed project is identified in the California's Colorado River Water Use Plan as one of several cooperative projects that will help reach this goal. Additionally, the Coachella Canal Lining Project would not change Colorado River flows downstream from Imperial Dam, and the unlined section of the Coachella Canal is approximately 45 miles from the Quechan Indian Tribe's Fort Yuma Reservation. Therefore, the project would not affect Colorado River flows at the Quechan Indian Tribe's Fort Yuma Reservation.

J-3 Chapter 4.0 of the Final EIS/EIR, which contains a cumulative impacts analysis, evaluates the incremental contribution of the proposed Coachella Canal Lining Project in consideration of other past, present, and reasonably foreseeable future actions. This analysis in the Final EIS/EIR incorporates relevant information from other sources, such as the "Biological Opinion for Interim Surplus Criteria, Secretarial Implementation Agreements, and Conservation Measures on the Lower Colorado River, Lake Mead to the Southerly International Boundary, Arizona, California and Nevada" (FWS January 12, 2001); however, it does not defer analyses of cumulative impacts to future CEQA or NEPA compliance documents. See also response to comment J-5.

Mr. Don Young
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to a meager environmental assessment. BOR must do more than merely list other projects. Specifically, we point the BOR to Council on Environmental Quality's guidance entitled, *Considering Cumulative Effects Under the National Environmental Policy Act* (Jan. 1997), which describes some components of a meaningful cumulative effects review.

J-3
cont

These other actions include the following:

1. Imperial County's Felicity Project. The BOR has not considered the cumulative effect of the city of Felicity's taking of Colorado River water. In December 1998, Imperial County approved the creation of a new, mid-size city named "Felicity" located within 3-4 miles of the Colorado River and within 1/2 mile of the Tribe's Ft. Yuma Reservation. Felicity will house 22,000 residents, and commercial and industrial development. The County and applicant intend Felicity's water supply to be groundwater underlying the area, but have not examined the aquifer's hydraulic connection to the Colorado River or the amount that Felicity could reduce the Colorado River's levels and flows. The Tribe appealed the County's decision on these and other grounds to the California Court of Appeals. *Quechan Indian Tribe v. Imperial County et al.*, No. D035409 (4th Dist., Div. 1).

J-4

All of Felicity's acreage is within the Colorado River Aquifer, as shown in the recent report entitled, "Method to Identify Wells that Yield Water that will be Replaced by Water from the Colorado River Downstream from Laguna Dam in Arizona and California," BOR Water-Resources Investigations Report 00-4085 (2000)

2. BLM Land Exchanges. The BOR has not considered the cumulative effect of BLM's privatizing of 3,162.59 acres of land through several land exchanges. The to-be-privatized parcels lie only a few miles from the Colorado River. Most of the land is within the Felicity Planning Area. Once in private ownership, development pursuant to the Felicity Plan may occur. The BLM refuses to consider the privatization's effects on the Colorado River or the Tribe's interests. The Tribe has formally protested the BLM's inadequate environmental analysis.

J-5

All of the BLM privatized lands are within the Colorado River Aquifer, as shown in the recent BOR report mentioned above.

3. Lining the All American Canal. The BOR has inadequately considered the cumulative effect of lining the All American Canal, particularly on the Colorado River and the Tribe's senior water rights.

J-6

Quechan Indian Tribe (continued)

J-4 The potential development and expansion of Felicity was not included specifically in the cumulative impacts analysis because it would not incrementally contribute to impacts on the same resources as the proposed Coachella Canal Lining Project. The Coachella Canal Lining Project would not increase California's apportionment of Colorado River water. Rather, the project would allow water conserved in one area (i.e., water conserved by reducing canal seepage) to be used in another area of the State to meet existing demand. As part of this process, there may be an annual reduction in flows between Parker and Imperial Dams of approximately 26,000 acre-feet; however, the total volume of water diverted from the river would not change as a result of the proposed project. The Coachella Canal Lining Project would not change Colorado River flows downstream from Imperial Dam (i.e., Colorado River flows near Felicity or the Quechan Indian Tribe's Fort Yuma Reservation would not be affected).

Because the Coachella Canal Lining Project would not affect the net amount of water withdrawn from the Colorado River, it would not contribute to cumulative water use impacts (either surface water or groundwater) associated with the development of Felicity. Please also see response to comment J-5.

J-5 The Coachella Canal Lining Project would not incrementally contribute to cumulative environmental impacts associated with BLM land transfers in the Felicity Planning Area or near the Quechan-Fort Yuma Reservation. The earthen reaches of the Coachella Canal are separated from the Reservation by approximately 45 miles, avoiding the potential for cumulative effects on Reservation resources to result from the canal lining project. Also, as noted in response to comment J-3, there would be no change in Colorado River flows downstream of Imperial Dam, and this project would not affect groundwater under the Fort Yuma Reservation.

J-6 Neither the Coachella Canal Lining Project or the All-American Canal Lining Project would change any Tribal Colorado River water rights. The All-American Canal Lining Project was considered in the cumulative impacts analysis for the Coachella Canal Lining Project (see Chapter 4.0). The project-specific impacts of the All-American Canal Lining Project were addressed in a separate EIS/EIR and Record of Decision. Because the Coachella Canal Lining Project would have no effect on the Tribe's rights to Colorado River water, it would not contribute to any cumulative effects to those water rights.

Mr. Don Young
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4. Lower Colorado River Multi-Species Conservation Program (LCRMSCP). The BOR has inadequately considered the cumulative effect of this program, particularly on the Colorado River and the Tribe's senior water rights. J-7
5. BOR's Proposed Colorado River Interim Surplus Criteria. The BOR has inadequately considered the cumulative effect of these criteria, particularly on the Colorado River and the Tribe's senior water rights. J-8
6. IID-San Diego County Water Authority Water Conservation and Transfer Project. The BOR has inadequately considered the cumulative effect of the proposed transfer, particularly on the Colorado River and the Tribe's senior water rights. J-9

The Tribe's reservation at its current site was established in 1884, which gave the Tribe, under federal law, reserved rights to water in the Colorado River with a priority date of 1884; see *Arizona v. California I*, 376 U.S. 344 (1964); *Arizona v. California II*, 460 U.S. 605 (1983). Some of the Tribe's water rights were allocated by federal decree, see *id.*, and others are still under dispute.¹ The U.S. Supreme Court recently allowed the Tribe to pursue its claim to about 25.6 billion gallons (78519 afy) per year of Colorado River water. *Arizona v. California*, 530 U.S. ____, 120 S. Ct. 2304 (2000). J-10

2. **Cultural Resources.** The Draft EIS/EIR recognizes that the proposed project could significantly impact archaeological resources. Draft EIS/EIR at S-13. The Draft EIS/EIR does not even mention the Quechan Tribe. The Tribe strongly encourages the Bureau to more thoroughly consider impacts to the Quechan Tribe's archaeological and cultural resources before approving the project in its final form. J-11

3. **Groundwater.** The Draft EIS/EIR acknowledges that the project will have some effect on groundwater in the area of the Coachella Canal and downslope. As described above, the Tribe is challenging Imperial County's approval of a new city called "Felicity," which plans to take ground water that is likely in hydraulic connection with the Colorado River. *Quechan Indian Tribe v. Imperial County et al.*, No. 97872 (Court of Appeals, 4th Dist. Div. 1). The Tribe again encourages the Bureau to consider the cumulative effects of the proposed project in conjunction with the Felicity project and any other activities that may have a collective adverse effect on the Tribe's rights or the Colorado River. J-12

¹See *Metropolitan Water District v. United States*, 628 F. Supp. 1018 (S.D. Cal. 1986), 830 F.2d 139 (9th Cir. 1987); *California v. United States*, 490 U.S. 920 (1989). See also Report of the Special Master, *Arizona v. California*, No. 8, July 28, 1999, original.

Quechan Indian Tribe (continued)

J-7 Please see response to comment J-6 regarding why the Coachella Canal Lining Project would not contribute to cumulative impacts to the Quechan Indian Tribe's water rights. The Lower Colorado River Multi-Species Conservation Program was considered in the cumulative impacts analysis contained in Chapter 4.0 of the EIS/EIR.

J-8 Please see response to comment J-6 regarding why the Coachella Canal Lining Project would not contribute to cumulative impacts to the Quechan Indian Tribe's water rights. The Colorado Interim Surplus Criteria were considered in the cumulative impacts analysis contained in Chapter 4.0 of the EIS/EIR. As indicated in response to comment J-3, the analysis in the Final EIS/EIR incorporates relevant information from the "Biological Opinion for Interim Surplus Criteria, Secretarial Implementation Agreements, and Conservation Measures on the Lower Colorado River, Lake Mead to the Southerly International Boundary, Arizona, California and Nevada" (FWS January 12, 2001).

J-9 Please see response to comment J-6 regarding why the Coachella Canal Lining Project would not contribute to cumulative impacts to the Quechan Indian Tribe's water rights. The IID-San Diego County Water Authority Water Conservation and Transfer Project was considered in the cumulative impacts analysis contained in Chapter 4.0 of the EIS/EIR.

J-10 The Quechan Indian Tribe's comments on its claimed water rights are noted. As stated above, the proposed Coachella Canal Lining Project would have no effect on the Tribe's water rights and would, in fact, help reduce the over-allocation of Colorado River water by conserving river water currently lost as seepage from the Coachella Canal.

J-11 The Quechan Indian Tribe was not specifically mentioned in the assessment of cultural resource impacts because no cultural or archaeological resources specific to the Tribe have been identified along the canal. A letter to Mr. Mike Jackson, Sr., President of the Quechan Indian Tribe, was sent by Reclamation in July 2000 requesting, "assistance in identifying members of your tribe who have knowledge of sites of cultural significance that could be effected [sic] by the proposed Coachella Canal Lining Project." With the exception of this comment letter on the Revised and Updated Draft EIS/EIR from the Quechan Indian Tribe's legal representatives, no response has been received from representatives of the Tribe. The proposed canal lining project's Native American contact program is being continued pursuant to the National Historic Preservation Act and Executive Order 13084, "Consultation and Coordination with Indian Tribal Governments." Consultation with representatives from the Quechan Tribe will continue to be included as part of this effort. This process will also include a full Class III inventory of the proposed project's area of potential effect. Findings will be presented to the California State Historic Preservation Officer for concurrence.

J-12 The Coachella Canal Lining Project's effects on groundwater would not extend to the groundwater resources under the Felicity Planning Area due to the distance between the unlined sections of the Coachella Canal and this planning area. As a result, the Coachella Canal Lining Project would not contribute to cumulative groundwater resource impacts associated with development in the Felicity Planning Area. Please also see response to comment J-5.

Letter J: Quechan Indian Tribe (continued)

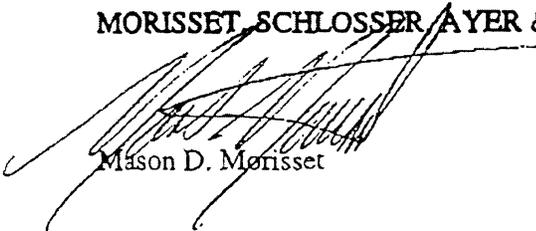
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J-13

The Draft EIS/EIR does not include in its list of references the recent U.S. Geological Survey report entitled, "Method to Identify Wells that Yield Water that will be Replaced by Water from the Colorado River Downstream from Laguna Dam in Arizona and California," BOR Water-Resources Investigations Report 00-4085 (2000). The Draft EIS/EIR should integrate the findings of this report, which describes the extensive area encompassed by the Colorado River Aquifer.

Sincerely yours,

~~MORISSET SCHLOSSER AYER & JOZWIAK~~



Mason D. Morisset

cc: Mike Jackson Sr., President
Quechan Indian Tribe

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Quechan Indian Tribe (continued)

J-13 The reach of the Coachella Canal that is proposed for lining is outside the study area of the USGS report referenced in this comment.

Letter K: U.S. Environmental Protection Agency (EPA)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

Don Young, Assistant Manager
Bureau of Reclamation
Yuma Area Office
PO Box D
7301 Calle Agua Salada
Yuma, AZ 85366

Dear Mr. Young:

The Environmental Protection Agency (EPA) has reviewed the **Revised and Updated Draft Environmental Impact Statement/Environmental Impact Report for the Coachella Canal Lining Project (RDEIS)** [CEQ# 000332] in accordance with our responsibilities under the National Environmental Policy Act (NEPA), the CEQ NEPA regulations at 40 CFR 1500-1508, and Section 309 of the Clean Air Act. Section 309, independent of NEPA, directs EPA to review and comment in writing on the potential environmental impacts associated with all major federal actions. In addition, EPA is directed to assess the adequacy of EISs in the context of meeting NEPA's procedural requirements. EPA's assessment is expressed in written comments and an alpha-numeric rating system which summarizes our views concerning potential environmental impacts and document adequacy.

K-1

The RDEIS evaluates three alternatives for lining a 33.2 mile long section of the Coachella Canal, and "no action." These alternatives are unchanged from the earlier DEIS. The Bureau of Reclamation has identified the Conventional Lining Alternative as the preferred alternative in the RDEIS. This alternative was identified as the preferred alternative in the DEIS as well.

EPA provided comments on the original Draft EIS in a letter dated March 15, 1994. A copy of our previous comment letter, without responses, is included in Attachment G of the RDEIS. For the purpose of comment response, our March 15, 1994 letter is hereby incorporated by reference.

EPA previously assigned a rating of EC-2 (Environmental Concerns--Insufficient Information) to the DEIS based on concerns involving potential impacts to wetlands and listed species, and insufficient documentation of the mitigation program and air quality conformity. EPA appreciates the additional detail concerning the mitigation plan, but notes that the RDEIS does not specifically address all of the comments in our previous letter. Accordingly, the EC-2 rating still applies pending our evaluation of Bureau responses to our previous comments.

K-2

The RDEIS concludes that the preferred alternative would not cause significant water quality impacts to the canal, Salton Sea, or Colorado River, and would not result in violations of applicable water quality standards. Unlike the Underwater Lining Alternative, no specific monitoring plan has been proposed to evaluate water quality during or following project implementation. EPA recommends that the Bureau develop a basic monitoring plan to confirm the assumption that water quality will not degrade over time. This plan should include mitigation measures which will be taken to halt any negative trends in water quality revealed through monitoring.

K-3

Letter K
U.S. Environmental Protection Agency (EPA)

K-1 Introductory text of letter; no response necessary.

K-2 Responses are provided separately to comments included in the EPA's March 15, 1994 letter (see responses to comments K-11 through K-17).

K-3 The reasons why no water quality monitoring is proposed for the Conventional Lining Alternative (preferred alternative) for the Coachella Canal, Salton Sea, or Colorado River are addressed for each respective water body.

Coachella Canal. In contrast to the Underwater Lining Alternative, which would expose canal water to wet concrete that could affect pH levels, water would not be returned to the Coachella Canal under the Conventional Lining Alternative until the concrete has dried. There is little potential for solid concrete to alter the pH of canal water. Accordingly, the potential for the concrete to have a significant effect on pH levels is negligible and water monitoring is not required. Similarly, no canal water quality monitoring requirement would be associated with the Parallel Canal Alternative because water would not be added to the newly constructed canal sections until the concrete has dried.

Salton Sea. As described in EIS/EIR Sections 3.2 and 3.3 and in response to comment F-5, none of the canal lining alternatives would have a measurable effect on the salinity or other water quality parameters of the Salton Sea. Accordingly, there would be no project-related benefit to monitoring water quality in the Salton Sea.

Colorado River. As described in response to comment F-5 and as addressed in EIS/EIR Section 3.4.3, the proposed action would result in an insignificant change to the salinity of the Colorado River. Lining the Coachella Canal may increase the salinity of Colorado River water between Lake Havasu and Imperial Dam by up to one-tenth of a milligram per liter. Baseline salinity levels for this section of the Colorado River range from 747 to 879 milligram per liter (see Table 3.5-1 in the Colorado River Interim Surplus Criteria Final Environmental Impact Statement, prepared by Reclamation, December 2000). Accordingly, the effect of the Coachella Canal Lining Project would represent less than 0.013 percent change from baseline conditions. Given the range of salinity levels that currently occur in the Colorado River, it would not be feasible to detect the negligible changes associated with the Coachella Canal Lining Project. Accordingly, no monitoring of the Colorado River is proposed in association with this project. Reclamation and the International Boundary and Water Commission, in accordance with international treaty, do monitor Colorado River water downstream from Parker Dam to the international border. If salinity increases in violation of the treaty are detected, immediate action is taken to comply with the treaty water quality standards.

Letter K: U.S. Environmental Protection Agency (EPA) (continued)

The model used to evaluate water resource impacts concentrates too narrowly on the project area. The Coachella Valley Water District (CVWD) has a model that includes much more of the watershed and hydrological features of the Valley. We recommend using the CVWD model to more comprehensively evaluate the project's impact on area-wide water resources.

K-4

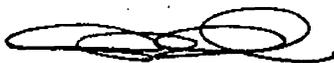
Our review has also revealed that the RDEIS does not address certain executive orders released after the publication of the original DEIS. EPA recommends that the FEIS include a discussion of all actions taken in furtherance of EO 13132 on federalism and EO 13084 on consultation and coordination with Indian tribal governments. Additional detail on the "Native American contact program" referenced on page 8-5 would be helpful. We also recommend that the FEIS include a map overlaying direct, indirect, and cumulative project impact zones with tribal landholdings and cultural influence areas, both current and historical.

K-5

K-6

We appreciate the opportunity to review this RDEIS. If you have any questions about this letter, please contact Leonidas Payne of my staff at (415) 744-1571.

Sincerely,



David J. Farrel, Chief
Federal Activities Office

U.S. Environmental Protection Agency (EPA) (continued)

K-4 Reclamation and CVWD concur that the modeling associated with the preparation of this EIS/EIR focuses on the project area. This focus is intentional because the project area is where the canal lining project would affect water resources, and it is where the project could also affect other resources (such as vegetation and wildlife habitat) that depend on canal seepage-induced surface and groundwater flows. Given the spatial relationship of the earthen canal reaches to the Coachella Valley, and the limits of the CVWD's model (which does not extend to the project area), that model would not provide a meaningful assessment of the water resource impacts associated with lining the earthen reaches of the canal. Accordingly, the CVWD's model of the Coachella Valley was not used as the basis for assessing project-related water resource impacts. Refer to Section 3.2.1 of the EIS/EIR, under the heading "Seepage and Geohydrology Studies," for additional discussion on the modeling efforts implemented during the preparation of the EIS/EIR.

K-5 Chapter 8.0 of the Final EIS/EIR has been revised to include assessments of the proposed action's compliance with Executive Order 12123 on federalism and Executive Order 13084 on consultation and coordination with Indian tribal government (Final EIS/EIR Sections 8.17 and 8.18, respectively). As described in the Chapter 8.0 revisions, the proposed action would comply with both executive orders. Consultation with Native American tribal organizations was initiated by letter of notification seeking input into the CEQA/NEPA review process for this proposed action. Please see response to K-6 for the names of tribal organizations contacted as part of this process. Reclamation is also consulting with Quechan Indian and Torres Martinez Tribes to discuss their respective concerns, as indicated in comment letters H and J.

K-6 The Native American contact program associated with this project is ongoing. This program was initiated during the preparation of the previous Draft EIS/EIR, and it was reinitiated in July 2000 with correspondence to representatives of the Augustine Reservation, Barona Reservation, Cabazon Band of Mission Indians, Cahuilla Band of Mission Indians, Campo Band of Mission Indians, Cuyapaipe General Council, Quechan Indian Tribe, Torres-Martinez Band of Mission Indians, Twentynine Palms Band of Mission Indians, and Viejas Reservation. Pursuant to Section 106 of the National Historic Preservation Act and in compliance with Executive Order 13084 on consultation and coordination with Indian tribal governments, this consultation process will continue as the project progresses. As indicated in response to comment H-6 from The Torres Martinez Desert Cahuilla Indians, Reclamation and CVWD have committed to including a Native American monitor during future archaeological surveys of the project area.

The proposed project would not directly or indirectly affect tribal landholdings. Based on this lack of effect, and given the nature of the canal lining project's anticipated impacts, Reclamation and CVWD do not concur that a map overlaying direct, indirect, and cumulative impact zones with tribal landholdings and cultural influence areas (both current and historical) is warranted.

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

K-7

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

U.S. Environmental Protection Agency (EPA) (continued)

K-7 This sheet explains the ratings system referenced in EPA's letter; no response is necessary.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105-3901

March 15, 1994

Robert Towles
Regional Director
Lower Colorado Region
Bureau of Reclamation
LC-150
P.O. Box 61470
Boulder City, NV 89006-1470

Dear Mr. Towles:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement/Environmental Impact Report (DEIS) for the proposed Coachella Canal Lining Project, Riverside and Imperial counties, California. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), NEPA implementation regulations issued by the Council on Environmental Quality, and EPA's authorities under Section 309 of the Clean Air Act.

The DEIS evaluates three alternatives for lining a 33.4 mile-long section of the Coachella Canal, a branch of the All American Canal which delivers an average of 300,000 acre feet/year of Colorado River water to the Coachella Valley Water District. The preferred alternative, conventional concrete lining of the existing canal, would conserve approximately 25,680 acre feet/year. Other alternatives are construction of a parallel, lined canal (25,680 af/year conserved) and underwater lining of the existing canal (24,670 af/year conserved). Under the terms of Congressional authorization for this project, non-federal financing is required. At the present time, it is anticipated that funding would be provided by the Metropolitan Water District (MWD) of Southern California, and that MWD would use the conserved water.

K-8

In many respects the purpose and design of the proposed project, including intent to mitigate impacts to wetlands habitat, are commendable. In our appraisal of the project, the most important environmental effects are offsite, resulting from reduced canal seepage which currently supports significant wetlands within the Salt Creek complex. We have rated the preferred alternative and DEIS EC-2 (environmental concerns-- insufficient information; see attached rating sheet) because the DEIS lacks sufficient documentation on aspects of the mitigation program which could influence the proposed action. For example, we have requested additional information on the supply and quality of mitigation water. We also note that the project could affect several listed species, including the desert pupfish and

U.S. Environmental Protection Agency (EPA) (continued)

K-8 These comments were made by EPA in 1994 relative to the previous Draft EIS/EIR. This introductory text provides EPA's general rating of the previous Draft EIS/EIR. The EPA's rating of EC-2 indicated that additional information should be incorporated into the Final EIS/EIR in order to provide an adequate NEPA analysis of the proposed action. The EPA's specific comments on the previous Draft EIS/EIR are contained on the following pages (comments K-11 through K-17). Because Reclamation and CVWD prepared a Revised and Updated Draft EIS/EIR rather than finalizing the previous Draft EIS/EIR, no specific responses to EPA's previous (1994) comments were provided. However, comments on the previous draft document, including the EPA's comments, were considered during the preparation of the Revised and Updated Draft EIS/EIR. At the request of EPA (see comment K-2), specific responses to their 1994 comments on the previous Draft EIS/EIR are included in this Final EIS/EIR.

Letter K: U.S. Environmental Protection Agency (EPA) (continued)

Yuma clapper rail. The DEIS states that formal consultation was initiated in July 1993, but a biological opinion, which could affect design of the project and mitigation measures, has not been released yet. Our detailed comments (enclosed) describe additional documentation which should be provided in the Final EIS.

We appreciate the opportunity to review this DEIS. We are encouraged by Reclamation's clear commitment to mitigating wetlands impacts and urge you to continue this work in close collaboration with the responsible resource agencies, the U.S. Bureau of Land Management and U.S. Fish and Wildlife Service. When the Final EIS is officially filed with EPA's Washington, D.C. office, please also send a copy of the Final EIS to this office. If you have any questions, please call me at (415) 744-1574 or Carolyn Yale at (415) 744-1580.

K-8
cont.

Sincerely,



David Farrel, Chief
Environmental Review Section
Office of Federal Activities

Enclosures

000438/94-024

cc: Steve Nagel, Bureau of Land Management
Ray Bransfield, Fish and Wildlife Service

Wetlands habitat

The DEIS estimates that over a period of several decades elimination of canal seepage would result in loss of up to 4293 acres of wetlands habitat, including 3420 acres of salt cedar, 112 acres of marsh, and over 400 acres of mesquite-related vegetation types. The extent and timing of these changes are approximate because of limited information on the local hydrogeology and interrelationship of canal seepage and naturally occurring artesian conditions (p. III-7). The DEIS states that mitigation commitments would include avoidance of impacts to 105 acres of marsh by providing replacement water and in-kind creation of seven acres of marsh to replace lost acreage. Mitigation for other habitat types, to occur within the Salt Creek Area of Critical Environmental Concern (ACEC), will be based on equivalent habitat values, emphasizing native desert species.

K-9

In general, the DEIS provides a good description of mitigation planning and Reclamation's mitigation commitments. However, we believe the Final EIS should provide additional information on several issues which could affect the long-term viability of mitigation.

K-10

1. The Final EIS should provide more detail on the quality of the non-potable ground water which is proposed as a priority source for replacement water. There should also be discussion of any water quality requirements for the vegetation and fish species, such as the desert pupfish, protected in the mitigation plan. The Final EIS should evaluate the suitability of ground water quality for the proposed uses.

K-11

The DEIS suggests that over time there could be a problem of salt buildup in soils (p. VII-3). Is this a condition which would be exacerbated by use of certain water sources (for example, ground water)?

K-12

2. The Final EIS should explain in more detail how continued supplies of water needed to sustain the mitigation areas will be guaranteed. The DEIS anticipates that over 5000 acre feet/year of Canal water will be required to supplement existing wells and springs and new ground water. If ground water is not available or is not of suitable quality, what mechanisms will Reclamation use to guarantee supplies from the Coachella Canal?

K-13

3. The DEIS suggests that the deep-rooted salt cedar would be less sensitive to reduced canal seepage and, absent the

K-14

U.S. Environmental Protection Agency (EPA) (continued)

K-9 This comment restates portions of the previous Draft EIS/EIR impact assessment. As described in Chapter 3.0 of the Revised and Updated Draft EIS/EIR, the impact analysis has been updated to reflect current project area conditions. No response is necessary.

K-10 Reclamation and CVWD appreciate EPA's comments concerning a "good description of mitigation planning and Reclamation's mitigation commitments." Responses to specific comments are provided below.

K-11 The springs and wells in the Dos Palmas Area of Critical Environmental Concern are currently fed by a mix of canal-seepage induced groundwater and regional groundwater. Thus, the pupfish and vegetation within Salt Creek are currently supported by water from the same regional aquifer that may be used as a source of water for project mitigation. The use of regional groundwater would be combined with the supply of supplemental irrigation water from the Coachella Canal and other sources as listed in Section 3.5.4 of the EIS/EIR. Accordingly, there would continue to be a mix of water sources contributing to flows in Salt Creek and its tributaries.

As noted in the *Desert Pupfish Recovery Plan* (prepared for the U.S. Fish and Wildlife Service, Region 2, by Marsh, Paul C., and Donald W. Sada, with assistance from the Arizona Game and Fish Department and Tonto National Forest, September 1993),

Pupfish have an extraordinary ability to survive under conditions of high water temperature (to 45°C, Lowe et al. 1967), low dissolved oxygen concentration [0.1–0.4 milligrams per liter (mg/L), (Barlow 1958b)], and high salinity [salt concentrations twice (68 grams per liter) that of seawater, Lowe et al. 1967], which exceed tolerances of virtually all other freshwater fishes (see also Kinne 1960, Kinne and Kinne 1962 a,b). They also survive abrupt, absolute changes in both salinity [10–15 grams per liter (gm/L)] and temperature (22–26°C) (Kinne 1960, Lowe and Heath 1969) that are lethal to most fishes. (Recovery Plan pg. 9, "Habitat")

Prior to the use of well water to supplement other sources of water for mitigation purposes, the potential well sites would be tested for water quality, including salinity. However, based on the above-referenced ability of pupfish to survive in water with high water temperatures, low dissolved oxygen levels, and high salinity levels, no water quality-related impacts to pupfish habitat in Salt Creek are anticipated from the use of regional water supplies for mitigation. Waters of insufficient quality to support pupfish would not be used as mitigation water for maintaining flows in Salt Creek. The specific plantings and irrigation methods used to meet the mitigation success criteria established in the Final EIS/EIR will be selected to ensure compatibility between salinity of the source water and the salt tolerance of the vegetation.

Wetlands habitat

The DEIS estimates that over a period of several decades elimination of canal seepage would result in loss of up to 4293 acres of wetlands habitat, including 3420 acres of salt cedar, 112 acres of marsh, and over 400 acres of mesquite-related vegetation types. The extent and timing of these changes are approximate because of limited information on the local hydrogeology and interrelationship of canal seepage and naturally occurring artesian conditions (p. III-7). The DEIS states that mitigation commitments would include avoidance of impacts to 105 acres of marsh by providing replacement water and in-kind creation of seven acres of marsh to replace lost acreage. Mitigation for other habitat types, to occur within the Salt Creek Area of Critical Environmental Concern (ACEC), will be based on equivalent habitat values, emphasizing native desert species.

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K-11

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K-12

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K-13

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K-14

U.S. Environmental Protection Agency (EPA) (continued)

K-12 Water used to irrigate mitigation plantings will be of suitable quality for that purpose, in consideration of soil conditions, the species planted, and other site-specific conditions. Irrigation-related salt buildup will be addressed through the design of irrigation systems that allow flushing of soils as necessary to alleviate the buildup.

K-13 Additional discussion of water supplies was added to the Revised and Updated Draft EIS/EIR—see Section 3.5.3 under the heading “Water Supply for Mitigation Plan.” CVWD is legally bound to provide enough canal water necessary to meet the mitigation success criteria established in the Final EIS/EIR. These criteria were established in compliance with NEPA and CEQA and in keeping with P.L. 100-675.

K-14 The assessment of project impacts included an assessment of areas where existing native vegetation would be displaced or degraded by salt cedar as a result in changing groundwater levels. Reclamation and CVWD propose to establish a trust fund to allow one or more of the agencies with land and resource management in the project area (particularly in the Dos Palmas Area of Critical Environmental Concern) to implement a long-term salt cedar eradication program. Aggressive monitoring is a component of the mitigation plan for this project.

mitigation plan, its decline would take decades. This contrasts with marsh habitat and natives, such as mesquite, which would be affected within one to ten years (p. III-31). Is there potential, even with the mitigation plan, for declining ground water levels in areas currently supporting vegetation types such as mesquite, arrowweed and sueda? If so, to what extent is there potential for salt cedar to move into these areas and undermine efforts to reestablish an ecosystem based on native species? To what extent is need for control of salt cedar being evaluated in the mitigation plan?

K-14
cont.

4. The Final EIS should report the results of consultation with the Fish and Wildlife Service and the biological opinion now in preparation. This effort should be closely coordinated with the Bureau of Land Management (BLM), considering BLM's responsibilities for the Salt Creek ACEC.

K-15

Socioeconomic impacts

1. The DEIS mentions briefly that canal seepage currently supports some aquaculture farmers and is used by local residents and resorts (S-3 and III-8). The DEIS also clearly states Reclamation's position that these users have no legal claim to the water. Consequently, there is no consideration of compensation or mitigation. We believe, nonetheless, that these are effects which merit coverage in the EIS section on "socioeconomic aspects" (DEIS p. III-84). We request that the Final EIS include in this section information on effects which the proposed canal lining would have on residents and businesses currently using seepage water. The Final EIS should be more specific regarding the number and location of people and businesses affected.

K-16

Air quality

As the DEIS acknowledges, the Coachella and Imperial valleys are non-attainment areas for ozone and PM-10. The Coachella Valley is classified as a "serious" PM-10 nonattainment area and an "extreme" ozone nonattainment area. Imperial Valley is classified as a "moderate" PM-10 nonattainment area and a "transitional" ozone nonattainment area. Given this situation, the Final EIS should discuss compliance with the conformity provisions of the Clean Air Act [Section 176(c)] and recently promulgated regulations implementing conformity (Federal Register, November 30, 1993, pp. 63214-63259; 40 CFR Part 93, Subpart B).

K-17

U.S. Environmental Protection Agency (EPA) (continued)

K-15 Consultation with the U.S. Fish and Wildlife Service (FWS) and Bureau of Land Management (BLM) is ongoing. In February 2001, Reclamation (re)initiated consultation with FWS for the proposed action, and as a follow-up, Reclamation and CVWD met with the FWS staff at the FWS Carlsbad Field office on March 3, 2001. (See EIS/EIR Section 3.9.) Thus, the Section 7 consultation process initiated during preparation of the previous Draft EIS/EIR has continued through preparation of the Revised and Updated Draft EIS/EIR and Final EIS/EIR. Coordination with resource agencies also included a meeting at the Dos Palmas ACEC in November 2000. The expertise of both the BLM and FWS is being solicited to help ensure that the mitigation for this project meets the success criteria contained in the Final EIS/EIR. Reclamation and CVWD expect that because the project, as mitigated, is not likely to adversely affect any threatened or endangered species, no Biological Opinion will be required.

K-16 The Revised and Updated Draft EIS/EIR identifies that unauthorized users of the canal include aquacultural operators and residents who use canal seepage to irrigate their lawns (see Page 3-12 of the Revised and Updated Draft EIS/EIR under the heading “Local Uses of Seepage Water”). Because the unauthorized users of this water do not have rights to it, and because they have legal access to domestic water, the loss of unauthorized access to canal water would have minimal socioeconomic impacts. Accordingly, the socioeconomic effects of losing unauthorized access to canal water do not require further evaluation in the EIS/EIR. Users of unauthorized seepage water within the service area of CVWD (which includes residents in the Frink Springs/Hot Mineral Spa area and residents near Parkside Drive north of Salt Creek) may purchase domestic (non-canal) water from CVWD to help offset the loss of unauthorized access to canal seepage. Also, please see response to comment B-3 regarding why the Coachella Canal Lining Project would not affect geothermal well supplies for aquacultural operations in the area.

K-17 A Clean Air Act conformity analysis was added to the Revised and Updated Draft EIS/EIR (see Section 3.18). With mitigation, the preferred (Conventional Lining) alternative would not exceed *de minimis* levels of criteria pollutants, as established in the Clean Air Act and its amendments. Accordingly, implementation of the Conventional Lining Alternative would be exempt from requiring a Clean Air Act conformity determination. As identified in Section 3.18.3 of the Revised and Updated Draft EIS/EIR, the Conventional Lining Alternative and the Underwater Lining Alternative would not exceed *de minimis* levels for ozone precursors. The Parallel Canal Alternative would exceed *de minimis* levels for the ozone precursor oxides of nitrogen (NO_x), and a General Conformity determination would be required prior to selecting and implementing this alternative. For all project alternatives, excluding No Action, mitigation would be required to ensure that the generation of particulate matter less than ten microns in diameter (PM₁₀) would not exceed *de minimis* levels.

The information provided in the DEIS suggests that projected PM-10 and VOC emissions for the preferred alternative are below the de minimus levels established in the regulations. NOx emissions in the Coachella Valley would, however, exceed the 10 ton/year minimum for ozone precursors (assuming that half of the 55 tons of NOx/year projected for the project as a whole would occur in the Coachella Valley). Thus, Reclamation will be required to make a positive conformity determination for the NOx emissions in the Coachella Valley.

Pursuant to Section 176(c) of the Clean Air Act, as amended November 15, 1990, all federal agencies have an affirmative responsibility to assure that their actions conform to the attainment (implementation) plan approved for the area in which the action is located. As defined in Section 176(c), conformity means:

conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards, and that such activities will not:

(1) cause or contribute to any new violation of any standard in any area; (2) increase the frequency or severity of any existing violation of any standard in any area; or (3) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

The Final EIS should acknowledge the specific requirements of Section 176(c). We recommend that Reclamation review the project air emissions in light of conformity requirements and explain its determination in the Final EIS.

K-17
cont.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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IN REPLY REFER TO:
1795
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CA-660.22)

MEMORANDUM

To: Assistant Manager, Yuma Field Office
Bureau of Reclamation, Yuma, Arizona

From: Field Manager, Palm Springs South Coast Field Office
Bureau of Land Management, North Palm Springs, California

Subject: Draft Environmental Impact Statement/Draft Environmental Impact Report
for the Coachella Canal Lining

We appreciate the opportunity to review the draft environmental impact statement/
environmental impact report (DEIS/DEIR) for the proposed Coachella Canal Lining
Project in Riverside and Imperial Counties, California. The BLM offers the following
comments for your consideration.

General Comments

The BLM is concerned about the potential impacts this proposal will have on the Salt
Creek watershed, especially the threatened and endangered species dependent on
these waters. BLM's concern arises out of BLM's mandate to conserve and recover
threatened and endangered species in accordance with the Federal Land Policy and
Management Act (FLPMA) and the Endangered Species Act (ESA) of 1973 as
amended. Under the current water regime (i.e. unlined canal since 1948), the BLM has
made great strides in improving habitat for the federally listed desert pupfish and the
Yuma clapper rail through a series of reconfigured fish ponds. The water flowing
through these ponds eventually flows into Salt Creek, which also supports desert
pupfish habitat. Under the current water regime, vegetation communities, wildlife and
human uses, have become established in response to the percolating water.

L-1

Ideally, BLM would like to see the current, complex and dynamic system maintained

L-2

Letter L

U.S. Department of the Interior, Bureau of Land Management

L-1 Reclamation and CVWD acknowledge that the canal seepage currently helps support vegetation and wildlife on BLM lands and in other portions of the project area, as well as unauthorized human use. Reclamation and CVWD must also comply with the Endangered Species Act of 1973, and consultation with the U.S. Fish and Wildlife Service (FWS) is an ongoing part of the proposed project's environmental compliance process.

L-2 While leaving the canal unlined (i.e., the "No Action Alternative" evaluated in the EIS/EIR) would continue to provide benefits for seepage-dependent vegetation and associated wildlife, leaving the canal unlined would not accomplish the purpose and need of the proposed action.

As noted in response to comment G-3 from the California Department of Fish and Game (DFG), Final EIS/EIR Section 2.7, Alternatives Considered but Eliminated, has been revised to indicate why leaving the canal unlined between siphons 23 through 29 (hydrologic unit D) would not meet the proposed action's purpose and need and why this alternative has not been carried forward for detailed environmental analysis. Hydrologic unit D corresponds to much of the Dos Palmas Area of Environmental Concern (ACEC), and this unit represents the source for much of the canal-seepage within the Salt Creek watershed. The DFG requested analysis of an alternative that would leave the canal unlined between siphons 23 and 29; this would be similar in function to the alternative mitigation measure (leaving the canal unlined north of the Dos Palmas ACEC) suggested by the BLM.

The estimated seepage between siphons 23 and 29 is 16,500 acre-feet per year. Lining this section of canal is projected to annually conserve 15,800 acre-feet of water. Accordingly, leaving the canal unlined between siphons 23 and 29 would result in approximately 40 percent less water conservation in comparison to the projected net (post-mitigation) conservation of 26,000 acre feet that would result from the proposed action. This would not meet the purpose and need of the proposed action (see Section 1.3 of the Final EIS/EIR). Based on these factors, leaving the canal unlined north of the Dos Palmas ACEC has not been carried forward as a proposed mitigation measure.

Letter L: U.S. Department of the Interior, Bureau of Land Management (continued)

with modifications to control water use by exotic plants (tamarisk). At the same time, BLM acknowledges the importance of providing water to the communities of Southern California. BLM requests that an alternative mitigation measure be considered in the EIS/EIR such that a canal segment north of Dos Palmas ACEC be left unlined, but enough of the remaining canal be lined in order to produce the minimum acre-feet of water required for service. In some areas, especially southeast of the Dos Palmas ACEC, lining the canal will help to eliminate the nearly pure stands of tamarisk which are a source of re-infestation within the ACEC.

L-2
cont.

Short of that, any mitigation program will need to be executed with great care to ensure no harm to wetlands, wetland dependent species, and the resident threatened and endangered species in the Salt Creek watershed. The BLM supports the intention laid out in the DEIS/DEIR to "...providing a sufficient flow of water through the marsh/aquatic areas in the Dos Palmas ACEC and lower Salt Creek areas to maintain their habitat values." The DEIS/DEIR lacks sufficient detail to explain how this will be achieved. However, the BLM believes that a more detailed mitigation program needs to be developed which will ensure success in maintaining these habitat values. A successful program would include the following elements:

L-3

1. As a first step, it is crucial to have accurate vegetation maps depicting vegetation in the Salt Creek watershed. This will serve as the baseline for future monitoring efforts and to track mitigation program success.

L-4

2. Establish a network of monitoring wells throughout the Salt Creek watershed to measure seepage flow. This information will provide a baseline for measuring changes in the water regime.

L-5

3. Establish an aggressive tamarisk eradication effort prior to lining of the canal in areas of mixed vegetation types. This will provide an increase in available water and provide native vegetation a greater chance of survival when water levels drop.

L-6

4. Establish a clear plan of committed action to preserve and protect water-dependent natural communities, to be implemented in the event monitoring indicates a downward trend. These remedial actions would be implemented before harm to threatened and endangered species and their habitat occurs.

L-7

The DEIS/DEIR identified the establishment of a trust fund for preserve management. Part of these funds would be used to conduct vegetation, water and species monitoring. Funds would also be used for continued, more aggressive tamarisk eradication effort after the canal is lined.

L-8

The DEIS/DEIR outlines land acquisition as a mitigation measure. The BLM supports this measure and offers its assistance in identifying parcels with high resource values for acquisition.

L-9

U.S. Department of the Interior, Bureau of Land Management (continued)

L-3 Reclamation and CVWD appreciate the recommendations offered by BLM for consideration in the development of the mitigation plan for Salt Creek and the Dos Palmas ACEC. These recommendations, along with those of other federal and State agencies, will be considered to help ensure that the mitigation success criteria described in the Final EIS/EIR are met. The level of mitigation detail in the Final EIS/EIR is adequate for the purposes of NEPA and CEQA. In compliance with the Endangered Species Act, Reclamation and CVWD have identified measures that make the proposed project not likely to adversely affect resident threatened and endangered species. The provision of water to maintain pupfish habitat would be implemented by providing supplemental water at the headwaters of Salt Creek's north tributary (via development of groundwater resources, supplemental water from the Coachella Canal, or both) and through the eradication of salt cedar and the establishment of native vegetation. The mitigation effort for this project will continue to include consultation and coordination with the BLM (a cooperating agency under NEPA) and other landowners and agencies with land or natural resource management responsibilities in the project area. These mitigation commitments will be established in the federal Record of Decision and in the CEQA-mandated Mitigation Monitoring and Reporting Program.

L-4 Reclamation and CVWD concur with regard to the importance of accurate vegetation maps. Accurate vegetation maps of the project area, verified by ground-truthing and including potentially affected portions of the Salt Creek watershed, were prepared during the NEPA/CEQA review process. Updated vegetation maps of the Dos Palmas ACEC were presented to the BLM and other agencies in November 2000 as part of the mitigation planning effort. Based on input from the BLM and the Center for Natural Lands Management, and in association with further field verification of satellite image interpretation efforts, minor revisions to the vegetation maps were made subsequent to the distribution of the Revised and Updated Draft EIS/EIR. Tables 3-4 and 3-5, which summarize impacts to marsh/aquatic and desert riparian vegetation, have been revised as reflected in the Final EIS/EIR, as have the associated mitigation requirements.

L-5 Reclamation and CVWD respectfully disagree that seepage flow monitoring wells are a necessary component of the mitigation plan. The reduction in seepage from the canal is the key component of this project. The EIS/EIR identifies no significant impact due to loss of groundwater per se, only the loss of seepage-dependent vegetation and habitat. Accordingly, the mitigation monitoring efforts for this project will focus on monitoring the continued viability of vegetation and Salt Creek flows, not groundwater elevations.

L-6 Reclamation and CVWD propose to eradicate salt cedar **concurrent** with the lining of the Coachella Canal and concurrent with other mitigation measures being implemented for the proposed project. Following completion of the lining project, it will be years before the perched groundwater table declines sufficiently to result in vegetation loss down-gradient from the canal. Accordingly, salt cedar removal concurrent with, not prior to, canal lining and the implementation of other mitigation measures is considered adequate.

L-7 Reclamation and CVWD are committed to preserving and protecting, at an ecologically equivalent level, the natural resources affected by lining the canal. Mitigation for the proposed project will include monitoring the respective mitigation measures to ensure that the success criteria established in the Final EIS/EIR are met. Should initial mitigation efforts not meet these success criteria, corrective action will be taken by Reclamation and CVWD. The specific remedial measures that would be implemented in the event that initial efforts do not meet the success criteria established in the EIS/EIR may include soil treatments (e.g., flushing soils to reduce salinity) or planting additional native species at other areas where a higher survival rate might result.

L-8 Reclamation and CVWD concur that the trust fund established to ensure long-term success of the proposed mitigation would be used, in part, to accommodate monitoring and salt cedar eradication.

L-9 Reclamation and CVWD will continue to work with the BLM to identify potential land purchase areas that would provide the greatest benefits as part of the overall mitigation effort for this project.

Letter L: U.S. Department of the Interior, Bureau of Land Management (continued)

The Dos Palmas Area of Critical Environmental Concern (ACEC) is commonly referred to as the Dos Palmas Preserve.

L-10

The location and use of the term Dos Palmas Spring area is unclear throughout the DEIS/EIR. Dos Palmas Spring is located in the north-central portion of T7S R12E Section 3, and is bisected by the property line between Dos Palmas Preserve and Aquafarms International. Another artesian spring is located approximately 200 meters northwest, inside a large fan palm oasis called Folger's Grove. Water is captured from both these springs in a system of canals and pipes which carry it to two large ponds in the south end of the Dos Palmas Preserve pond system and eventually the water drains into Salt Creek. Adjacent to the artesian spring in Folger's Grove is a 50-foot-deep well, sunk in 1960, which supplies water through pipes to the three S-ponds in the north end of the Dos Palmas Preserve pond system.

L-11

The DEIS/DEIR needs a clearer commitment to deliver the necessary amount of water for mitigation as well as an explanation of how the conserved canal water will be allocated and delivered.

L-12

Specific Comments

1. On page 3-2 the description of the Salt Creek area or Salt Creek complex is inaccurate. The Salt Creek watershed drains the western flank of the Orocopia, Chuckwalla and Chocolate mountains, an area stretching from siphon 30 to siphon 21, a much larger area than described.

L-13

2. Regarding the second paragraph on page 3-12; BLM installed a flow meter on the well in Folger's Grove in November 1999. Flow rates remained at 200 gpm until March 2000, when they steadily declined to 120 gpm, where they have remained constant a year later. The combined flow rates from the Dos Palmas Spring and the Folger's Grove Spring (measured at a weir) have held steady at 350 gpm.

L-14

3. The use of groundwater extracted from newly drilled wells as a source for mitigation water as described in the DEIS/DEIR on pages 3-17 and 3-18, poses a potential threat to the wetlands at Dos Palmas Preserve. We do not have a clear understanding of the aquifer's capacity for pumping and recharge. Once the negative effects of the reduction in the aquifer are visible at the surface, it may be too late for remedial action. For this reason, the BLM is opposed to drilling wells to access potential groundwater for extraction in the areas that may affect the ability to meet habitat goals for the Salt Creek watershed (See *Dos Palmas Area of Critical Environmental Concern Management Plan and Decision Record*).

L-15

4. The discussion of water flows in Salt Creek on page 3-18, fourth paragraph, does not take into consideration the heavy infestation of saltcedar within the streambed from the headwaters to the mouth. This poses a substantial impediment to water flows and would obviously affect flow rates.

L-16

U.S. Department of the Interior, Bureau of Land Management (continued)

L-10 The common name of the Dos Palmas ACEC is noted. The EIS/EIR uses the term “Area of Critical Environmental Concern” or “ACEC” to reflect the official designation of this area and to show its relationship to the guidance provided in the BLM’s *Dos Palmas Area of Critical Environmental Concern Management Plan and Decision Record*.

L-11 Reclamation and CVWD appreciate the clarifications provided by BLM with regard to common and alternative names of natural features in the project area. The term “Dos Palmas Spring,” as used in the EIS/EIR, collectively refers to both springs identified in the comment. Please see Figure 17 of the EIS/EIR Geohydrology Appendix.

L-12 Reclamation and CVWD are committed to providing the water necessary to ensure the success of the required mitigation. The potential sources of mitigation water are described in Section 3.5.4 of the EIS/EIR. The specific sources, allocation, and delivery methods of water used for mitigation will be selected from that identified group. Reclamation and CVWD’s commitment to providing necessary water is reinforced by their legal obligations pursuant to P.L. 100-675 and conditions set forth in the Endangered Species Act, Section 7 consultation with FWS.

L-13 Comment noted. The terms “Salt Creek Area” and “Salt Creek Complex” are not intended as synonyms for the Salt Creek watershed and are not used as such in the Revised and Updated Draft EIS/EIR or Final EIS/EIR.

L-14 The flow data provided by BLM has been incorporated into Section 3.2.1 of the Final EIS/EIR under the heading “Surface Seeps and Flows” and the subheading “General Surface Conditions.”

L-15 Reclamation and CVWD would approach the drilling of wells and extraction and use of groundwater for mitigation purposes with the understanding that drawdown may occur. Contingencies would be planned for alternative water sources, should the use of newly drilled wells indicate a problem with aquifer recharge. The use of well water would be in addition to other sources of water, as identified in Section 3.5.4 of the EIS/EIR. The geohydrologic studies associated with the proposed project indicate well water could be used to supply some of the mitigation requirements. The evaluation of potential groundwater sources under public land for mitigation purposes is consistent with P.L. 100-675.

L-16 Reclamation and CVWD agree that salt cedar acts as an impediment to flows, and this was considered in the analyses in Chapter 3.0. The EIS/EIR acknowledges that salt cedar has likely contributed to the recent flow reductions in Salt Creek (see the discussion of Salt Creek in Section 3.2.1), and the removal of salt cedar along the creek and the establishment of native vegetation will increase creek flows. The “worst case” scenario presented on Page 3-18 of the Revised and Updated Draft EIS/EIR reflects a total loss of flow in Salt Creek. Thus, the presence of salt cedar along the creek would not increase the severity of this “worst case” impact assessment. Please note that mitigation for the proposed project provides for the removal of salt cedar within Salt Creek, which will make available to the natural Salt Creek system water supplies formerly used by nonnative salt cedar.

Letter L: U.S. Department of the Interior, Bureau of Land Management (continued)

5. The discussion of precanal groundwater on page 3-22 is somewhat unclear. It may assist the reader if you provide a clearer explanation of how the DEIS/DEIR defines the terms spring, well and artesian. | L-17
6. On page 3-44, in the second paragraph, Russell L. Kaldenberg is identified as the Area Manager for FWS (U.S. Fish and Wildlife Service). Mr. Kaldenberg is actually the former Palm Springs South Coast Area Manager for the BLM. | L-18
7. On page 3-57, under Land Ownership, the private land within the Dos Palmas Preserve formerly owned by The Nature Conservancy is currently owned and managed by the Center for Natural Lands Management (CNLM), BLM's primary partner in managing the preserve. | L-19
8. On page 3-61, the DEIS/DEIR recommends that additional water for mitigation could be obtained by drilling additional wells to develop non-potable artesian aquifer water in the vicinity of the canal. As mentioned above, we are concerned about any groundwater extraction that may pose a threat to the wetlands at Dos Palmas. Once the negative effects of the reduction in the aquifer are visible at the surface, it may be too late for remedial action. | L-20
9. There is no mention of springsnails in the section on Special Status Species starting on page 3-74. During the numerous flooding events that formed ancient Lake Cahuilla, springsnails were widespread throughout the basin. Now that the lake has been reduced to the very saline Salton Sea, springsnails are limited to wetlands. Two narrowly distributed springsnail species are found within the Dos Palmas Preserve. The *Pyrgulopsis longinqua* may be endemic to a single spring in the Salt Creek drainage. *Tryonia protea* is found only in three small springs in Salt Creek and one in Sonora, Mexico. | L-21
10. First sentence at the top of page 3-76 should be changed to read: "Past introductions of tilapia and large-mouth bass may have reduced the population of pupfish in this area." | L-22
11. On page 3-102, under Impacts to Archeological Resources, the National Historic Preservation Act, as implemented in 36 CFR 800, requires that proposed undertakings be evaluated for their potential to affect historic properties. The first step in meeting this obligation is to determine whether cultural resources are present in the Area of Potential Effect (APE). Cultural resources within the APE must then be evaluated as to their eligibility for listing on the National Register of Historic Places. If eligible properties are located, the potential effects of the undertaking upon those historic properties must be evaluated according to the Criteria of Effect in 36 CFR 800.9(a). Evaluation of effect must be conducted through consultation between the land management agency and the State Historic Preservation Officer (SHPO), with consideration of comments from interested parties. It is unclear how this is being accomplished. | L-23

U.S. Department of the Interior, Bureau of Land Management (continued)

L-17 Within the context of this EIS/EIR, the word *spring* refers to a flow of water that occurs where the groundwater table intersects the surface, excluding the minor seeps that occur where the clay layer surfaces down-gradient of the canal. The word *well* refers to locations where a hole was drilled or excavated to allow groundwater to surface or to provide access to subsurface groundwater. An *artesian* well is one that flows at the surface without pumping because its hydraulic head lies above ground level. It should be noted, however, that for the purposes of the EIS/EIR, the term “Dos Palmas Spring” collectively refers to the spring located in the north-central portion of Township 7S, Range 12E, Section 3 that is bisected by the property line between Dos Palmas Preserve and Aquafarms International and the spring and well located 200 meters west inside Folger’s Grove (see comment L-11).

L-18 This error has been corrected in the Final EIS/EIR.

L-19 This change in land ownership has been reflected in the Final EIS/EIR.

L-20 Please see response to comment L-15 with regard to the topic of well water for mitigation.

L-21 As indicated in this comment, the springsnail habitat is located in wetlands that remained after Lake Cahuilla’s shoreline retreated. These remnant wetland areas are associated with springs that pre-date canal construction, and the analysis shows that these spring flows would not be significantly affected by lining the canal. Accordingly, springsnail habitat would not be adversely affected by the proposed project.

L-22 The suggested text regarding large mouth bass has been added to the Final EIS/EIR.

L-23 Reclamation and CVWD concur that the project must comply with the National Historic Preservation Act, as well as other related laws and Executive Orders. Section 8.9 of the EIS/EIR, “National Historic Preservation Act Compliance” provides additional discussion of this topic and how compliance with the Act will be accomplished.

In further reference to page 3-102, if an eligible property located in one of the ". . . areas of impact where avoidance is not possible," a determination of adverse effect is likely. Mitigation alternatives will need to be developed through consultation with SHPO. Mitigation may include data collection through excavation of the site with the results being documented through preparation of a scientific report. Complete documentation of the site and submission of the site for nomination to the National Register of Historic Places may also be necessary. It is important to remember that data collection through excavation is itself an adverse effect. Given the potential for significant (eligible) cultural resources to exist in the area, it is important to ensure that cultural resources are properly assessed, and required analysis and consultation occurs.

L-23
cont.

12. On page 3-114, the Coachella Canal currently passes through two sections of the BLM's Dos Palmas Preserve (Area of Critical Environmental Concern - ACEC). These are located at T7S R11E Section 34 and T7S R11E Section 2. The Coachella Canal right-of-way is approximately 1,000 feet wide in the project area. If construction activity during the canal lining should fall outside of the BLM right-of-way terms and conditions, an amendment to the right-of-way application to BLM would be required.

L-24

13. On page 3-122, under TRANSPORTATION, it must be pointed out that the dirt road which parallels the Coachella Canal on the south side between siphon 31 and siphon 22 is used extensively by four-wheel drive enthusiasts, hunters and other recreationists to travel across the Dos Palmas Basin, to access the canal for fishing, and to access the Bradshaw Trail, a designated BLM Backcountry Byway that traverses the canal at siphon 24. Please address whether construction activity along the canal will detour travelers further south and across the Dos Palmas Preserve and property belonging to Aquaculture International. Such a detour could cause problems.

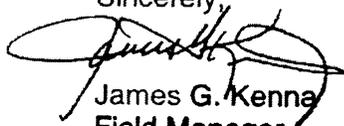
L-25

14. Additionally, on page 3-122, the Eagle Mountain Railroad could be reactivated to service the Eagle Mountain Landfill project. This DEIS/DEIR section needs to reflect the current situation more fully, including the possible use of this railroad as it relates to Dos Palmas Preserve and the Salt Creek drainage.

L-26

We appreciate your coordination efforts for this project. BLM is committed to work with your office to develop the best possible federal decision that recognizes the public values of the lands within the Dos Palmas/Salt Creek region. If you have any questions, please contact Mr. Kevin Hansen of my staff at (760) 996-2091.

L-27

Sincerely,

James G. Kenna
Field Manager

U.S. Department of the Interior, Bureau of Land Management (continued)

L-24 Reclamation and CVWD have noted the BLM requirement for an amended right-of-way should construction activity be necessary beyond the current right-of-way. At this time, such an amendment is not expected to be necessary.

L-25 Any detour of off-highway vehicle (e.g., four-wheel drive) traffic would be contained to existing public roads or within the existing right-of-way for the Coachella Canal (e.g., along the graded access road on the opposite side of this canal from the bypass pipelines). Note that no detours will be provided specifically to accommodate canal fishing, as this is an unauthorized activity.

L-26 Lining the Coachella Canal would have no effect on the viability for future use of the Eagle Mountain Railroad; accordingly, such potential future use is not addressed in this EIS/EIR.

L-27 Reclamation and CVWD look forward to continued coordination with the BLM on this project.