

Letter F: California Department of Parks and Recreation



State of California • The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION

Colorado Desert District  
200 Palm Canyon Drive  
Borrego Springs, CA 92004

November 16, 2000

Don Young, Assistant Manager  
Yuma Area Office,  
Bureau of Reclamation  
P.O. Box D  
Yuma, Arizona 85366

Re.: SCH #1990020408

Dear Mr. Young:

Thank you for the opportunity to review the Draft Environmental Impact Statement/Report for the Coachella Canal Lining Project.

The Coachella Canal Lining Project will potentially impact the natural resources and recreational values of three units of the California Department of Parks and Recreation: Picacho State Recreation Area (PSRA), located on the lower Colorado River; Salton Sea State Recreation Area (SSSRA), located on the northeast shore of the Salton Sea; and Indio Hills Palms, located just north of Interstate 10 at Indio.

Our primary concerns are in regard to:

- the natural systems and sensitive habitats of Salt Creek and Whitefield Creek
- reduction of water in the Colorado River
- loss of habitat between siphon 18 and siphon 32, an area that may be used as a transportation corridor to similar habitat within the Salton Sea SRA
- reduction in the amount of water entering the Salton Sea both from canal seepage and as a result of water redistribution within the Coachella and Imperial Valleys
- increased levels of salt in the Salton Sea resulting from increased levels of salt in the Colorado River
- the impact of increased population within the Coachella Valley as a result of delivering additional water to support population and development

F-1

**Letter F**  
**California Department of Parks and Recreation**

**F-1** The Department's primary concerns are addressed in response to the general and specific comments that follow (comments F-2 through F-29).

Letter F: California Department of Parks and Recreation (continued)

- the corresponding effect upon the State Park resources within the region, specifically at Indio Hills Palms
- and the cumulative impacts of this project when combined with other water conservation or transfer projects which are in the planning process.

F-1  
cont.

**GENERAL COMMENTS**

**Salt Creek:** A portion of Salt Creek runs through the SSSRA, at Salt Creek Campground. In this area, Salt Creek provides habitat to the desert pupfish, Yuma clapper rail, and possibly, the California black rail and the snowy plover. Loss of water to this habitat could be disastrous for these endangered and sensitive species. The historic water flow of Salt Creek should be evaluated throughout its entire length, not solely from the U.S. Geological Survey's single monitoring gauge near the mouth of the creek. Historic and baseline data is necessary in advance of the project to enable comparison of post lining data.

F-2

**Whitefield Creek:** Located just south of SSSRA's "New Camp" Campground, Whitefield Creek provides habitat for the Yuma clapper rail and possibly, the California black rail. This area also is used as a heron roost and possibly rookery. The DEIS/DEIR does not mention nor evaluate the affect, if any to Whitefield Creek due to reduced seepage from the canal.

F-3

**Colorado River:** The DIES/DEIR states that lining the Coachella Canal would reduce the level of the Colorado River by 1/10 of one percent. While this appears to be a very small amount, when considered with the cumulative effect of other conservation/transfer proposals, this project may affect the marsh/aquatic and desert riparian habitat along the Colorado River, including the region including PSRA. The project's impacts should be considered in concert with the Coachella Valley Groundwater Management Plan, the San Luis Rey Indian Water Rights Settlement, the Quantification Settlement Agreement and California's Colorado River Water Use Plan, the Lower Colorado River Water Supply Project, the All-American Canal Lining Project, the IID-San Diego County Water Authority Water Conservation and Transfer Project, and any other water management projects.

F-4

**Salton Sea:** The cumulative impact of this project when combined with the above-named projects will have an effect on the amount of runoff water entering the Salton Sea. Additionally, while this single project may cause only a minor increased salinity in the Colorado River, the cumulative effect of increased salinity in the Colorado River will compound the impact. Currently increasing salt levels in the Sea are expected to threaten the survival of many of the birds that depend upon the Sea's fish for sustenance. These impacts should be addressed in the subject document.

F-5

**Groundwater:** It does not necessarily follow that because the canal project "is not a naturally occurring source of groundwater recharge," the effect of the loss of this groundwater recharge will be insignificant. Whether or not the seepage from the canal

F-6

## California Department of Parks and Recreation (continued)

**F-2** Reclamation and CVWD are committed to maintaining flows in areas of Salt Creek that support endangered and sensitive species, including the desert pupfish. The maintenance of current mean annual flow levels in portions of Salt Creek that support these species would be accomplished through a combination of (1) providing water supplies in the Dos Palmas Area of Critical Environmental Concern at the head of the north fork tributary to Salt Creek and (2) the removal of salt cedar within Salt Creek, thereby recovering water lost due to evapotranspiration. This method of water supply and recovery would provide water in the creek from the artesian wells downstream to the stream gauge near Highway 111. To further ensure that populations of desert pupfish are not affected by the project, additional gauges would be added to the creek in areas of known pupfish populations. The gauges will be sited appropriately to ensure the maintenance of current mean annual flow levels in areas supporting pupfish or other threatened or endangered species that would be affected by a reduction in Salt Creek flows.

**F-3** Field investigations by Reclamation and CVWD indicate that Whitefield Creek's source is not seepage from Coachella Canal but rather a spring which is suspected to be of deeper origin and from a fracture or fault conveyance. Accordingly, the proposed project would not adversely affect any sensitive species residing in Whitefield Creek.

**F-4** Based on the technical appendix prepared by Reclamation for the 1994 All-American Canal Lining EIS/EIR, the proposed project would reduce the average flow of the lower Colorado River by approximately one-third of one percent, and it would reduce the level of the river downstream from Blythe, California by approximately one-tenth of an inch. This one-tenth of an inch reduction was reflected in the Coachella Canal Lining Project Revised and Updated Draft EIS/EIR. More recent analysis completed by Reclamation for the "Final Biological Assessment for Proposed Surplus Water Criteria, Secretarial Implementation Agreements for California Water Plan Components and Conservation Measures on the Lower Colorado River (Lake Mead to Southerly International Boundary)" confirmed the inconsequential nature of this reduction in flow. Based on the data used for the analysis in the Biological Assessment, a 26,000-acre-foot reduction in flow was calculated to reduce surface water elevation in the Colorado River between 0.0 inch and 0.19 inch at various locations between Parker Dam and Imperial Dam (see Section 3.2.3 of the Final EIS/EIR). This change would not be significant to the resources along the river, but the change is included among the cumulative impacts discussed in Chapter 4.0 of the EIS/EIR. Section 4.2.5 of the Final EIS/EIR states Reclamation and CVWD's commitment to mitigating the Coachella Canal Lining Project's incremental contribution to cumulative impacts along the Colorado River. This assessment of cumulative impacts includes the projects referenced in comment F-4. Section 4.2.5 of the Final EIS/EIR indicates the level of mitigation necessitated to offset the Coachella Canal Lining Project's incremental contribution to this cumulative effect. Specifically, Reclamation and CVWD will create or restore 2.9 acres of backwaters along the lower Colorado River. Reclamation and CVWD will also create between 24 and 74 acres of willow flycatcher habitat between Parker and Imperial dams, with the specific mitigation requirement based on monitoring results. This mitigation is based on (1) the incremental contribution of the Coachella Canal Lining Project when considered with other projects affecting the lower Colorado River and (2) the mitigation requirements identified by U.S. Fish and Wildlife Service (FWS) in 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).

Letter F: California Department of Parks and Recreation (continued)

- the corresponding effect upon the State Park resources within the region, specifically at Indio Hills Palms
- and the cumulative impacts of this project when combined with other water conservation or transfer projects which are in the planning process.

F-1  
cont

**GENERAL COMMENTS**

**Salt Creek:** A portion of Salt Creek runs through the SSSRA, at Salt Creek Campground. In this area, Salt Creek provides habitat to the desert pupfish, Yuma clapper rail, and possibly, the California black rail and the snowy plover. Loss of water to this habitat could be disastrous for these endangered and sensitive species. The historic water flow of Salt Creek should be evaluated throughout its entire length, not solely from the U.S. Geological Survey's single monitoring gauge near the mouth of the creek. Historic and baseline data is necessary in advance of the project to enable comparison of post lining data.

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F-5

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F-6

**California Department of Parks and Recreation (continued)**

**F-5** The Coachella Canal Lining Project would not measurably affect the amount of water entering the Salton Sea. Flows from Salt Creek into the Salton Sea would be maintained at current mean annual levels, as measured at the USGS stream gauge near Highway 111. Because conserved water would be diverted at Lake Havasu, the proposed action would have no measurable effect on water deliveries to the Coachella Valley Water District or any other district whose agricultural runoff contributes to the Salton Sea.

As addressed in Section 3.4.3, under the heading “Colorado River,” lining the Coachella Canal may increase the salinity of the Colorado River water between Lake Havasu and Imperial Dam by up to one-tenth of a milligram per liter. Baseline salinity concentrations 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 (i.e., the change in salinity would be less than two-hundredths of one percent in comparison to existing salinity levels). The nominal change would have no measurable effect on the Salton Sea, even in consideration with other projects or over long periods of time.

**F-6** The Revised and Updated Draft EIS/EIR finding that the project-related reduction in groundwater supply would not be significant was made with regard to the seepage as a water resource. As indicated in Section 3.5 of the Revised and Updated Draft EIS/EIR, in the absence of mitigation, the associated impacts that the reduction in seepage-dependent groundwater would have on habitat down-gradient from the canal would be significant. As described Section 3.5.3, however, these impacts would be mitigated to less than significant levels.

**Letter F: California Department of Parks and Recreation (continued)**

is natural, it has become essential for supporting fragile habitats within the Salton Sea region.

**F-6  
cont.**

**Marsh/Aquatic and desert Riparian Habitats Along the Coachella Canal:** At the October 25, 2000, public hearing held at the Coachella Valley Water District Office, proponents of the canal lining project stated that mitigation for lost habitat would occur off-site. Desert habitats are notoriously difficult to replicate, and the riparian habitat along the proposed lining project should be evaluated to ensure that its loss will not eliminate an essential habitat corridor to the Salton Sea. Over the last 100 years, more than 95% of California's riparian habitat has been consumed by development. The species that depend upon this habitat cannot withstand additional loss, particularly in this region.

**F-7**

**Cultural Resources:** We agree with the finding that this area contains significant cultural and paleontologic resources and recommend that professional archeological and paleontologic staff be required to monitor project activities to ensure protection of these valuable cultural and natural resources.

**F-8**

**Recreation:** This project could significantly adversely affect the recreational activities at PSRA and at SSSRA if the Colorado River water level is reduced or the Sea's water level/salt content is affected due to the cumulative affect of projects.

**F-9**

**Growth Inducement:** We question the finding that this project would not induce growth in the Coachella Valley or Imperial Valley. Additional water could increase growth, and this possible impact should be addressed in this DEIS/DEIR.

**F-10**

**SPECIFIC COMMENTS**

**Figure 1-1:** The map does not identify the Salton Sea SRA or Picacho SRA. These parks should be identified so the reader has a clear understanding of their proximity to the project.

**F-11**

**Pg. S-3, Hydrologic effects of seepage:** Hydrologists advise that the underground formations that make up the Dos Palmas to Frink Wash area are highly complex and suggest that years of study are necessary to firmly grasp how this system works. A better description of the hydrogeology for the entire Salt Creek watershed should be provided. This analysis should identify flow volumes from all sources within the complete watershed, not just the Dos Palmas area. This DEIS/DEIR should ensure that a complete evaluation and understanding of this underground system has been achieved.

**F-12**

**Pg. S-5, Use of Conserved Water:** As noted earlier, the loss of water conserved as a result of this project that would normally flow in the Colorado River, or into the Salton Sea should be mitigated so there is no net loss of water in the River or Sea. This discussion should take place in this DEIS/DEIR.

**F-13**

**California Department of Parks and Recreation (continued)**

**F-7** Consistent with Sections 7.2.4 of the Revised and Updated Draft EIS/EIR, titled Marsh/Aquatic and Desert Riparian Habitat Along the Coachella Canal, the preference ranking (from highest to lowest) for siting mitigation areas is: BLM's Dos Palmas ACEC, areas adjacent to other lands managed for wildlife, areas downstream from the canal on federal or State lands with favorable soil and electroconductivity and texture and other conditions (e.g., Frink Springs area), and Salton Sea shoreline areas including the marsh/aquatic habitat at the mouth of CVWD's Whitewater Stormwater Channel and within the Sonny Bono Salton Sea National Wildlife Refuge. Accordingly, the project proposes to consolidate project-wide habitat resource values within the Dos Palmas ACEC area as the highest preference. The purpose is to preserve much of the existing habitat in the ACEC core area and to expand and enhance the resource value of this area. Consolidation of desert riparian habitat in the core area is expected to maintain the essential habitat corridor from the Chocolate/Orocopia Mountains to the Salton Sea along the Salt Creek drainage and to sustain wildlife species associated with desert riparian habitat types. Interagency cooperation and land acquisition opportunities will facilitate the successful outcome of this effort.

**F-8** The Department's agreement with the requirement for future surveys and mitigation efforts is noted.

**F-9** A reduction of up to 0.19 inch in the Colorado River's surface water elevation would not affect recreation opportunities along the river because of the nominal nature of this change (the change in surface water elevation would be less noticeable than a boat wake). As noted in response to comment F-5, the Coachella Canal Lining Project would not have a measurable effect on the salinity of the Salton Sea, and it would also not measurably affect the Salton Sea's water level.

**F-10** The proposed project would not change any water district's priority rights to Colorado River water. It is not reasonably foreseeable that water conserved by the proposed action would be delivered to users in the Coachella or Imperial Valley. Accordingly, it is not reasonably foreseeable that the project would induce growth in these areas.

**F-11** The Salton Sea SRA and the Picacho SRA have been added to Figure 1-1 in the Final EIS/EIR.

**F-12** Detailed analyses of the project area's geohydrology were conducted during the preparation of the Draft EIS/EIR. In addition to the information and analyses contained in Chapter 3.0 of the Revised and Updated Draft EIS/EIR, readers are also referred to the accompanying Geohydrology Appendix and Engineering Appendix. Flows from sources up-gradient and higher in the watershed (i.e., east and north of the canal) were not evaluated in detail because the proposed action would have no effect on those flows.

**F-13** The proposed project would result in a reduction of flows in the Colorado River of approximately 26,000 acre-feet per year between Lake Havasu and Imperial Dam. For the reasons described in Section 3.2 of the Revised and Updated Draft EIS/EIR, this impact is not considered significant; therefore, no mitigation is required. Please see response to comment F-4 regarding mitigation for the proposed project's incremental contribution to cumulative effects on marsh/aquatic vegetation along the Colorado River. Please see response to comment F-5 regarding impacts to the salinity of the Colorado River and the Salton Sea.

Also, please note that below Imperial Dam, there would be no net reduction in Colorado River flows because the water which now seeps from the canal is diverted above Imperial Dam and would no longer be diverted from the river at that location subsequent to project implementation. As referenced in response to comment F-9, the Coachella Canal Lining Project would not have a measurable effect on the water level of the Salton Sea.

Letter F: California Department of Parks and Recreation (continued)

**Pg. S-5 & S-6, Hydrologic Effects of Canal Lining:** The DEIS/DEIR should ensure that Frink Springs and Hot Mineral Spa are not seepage dependent. Additionally, if those wells that are above lakebed clay support riparian areas or native vegetation, then the loss of their water should be mitigated on site. F-14

**Pg. S-9 & S-10, Marsh/Aquatic and Desert riparian Habitats Along the Coachella Canal:** As noted in the DEIS/DEIR there is significant occurrence of phreatophytes, including marsh/aquatic and desert riparian vegetation types that are supported by seepage from the canal. Loss of seepage will reduce these wetlands and possibly cause a transition to xerically adapted desert riparian communities. The DEIS/DEIR should discuss the possibility that these areas act as a conduit for wildlife movement to similar wetlands within the Salton Sea SRA. The Yuma clapper rail and California Black Rail are either confirmed or believed to exist within the park, as are other "significant" species that may travel within the canal habitat. F-15

**Pg. S-11 Terrestrial Habitat:** Mitigation for loss of vegetation should be accomplished at the same location as the damage, not off site. F-16

**Pg. 1-2, 1.3, Project Purpose:** Same comment as in "use of conserved water." If this project will result in a loss of water that flows into the Salton Sea by facilitating transfers then this affect should be mitigated. F-17

**Pg. 1-5, 1.5, Water Need:** Same comment as above. F-18

**Pg. 1-9, 1.8 through 1.8.10, Relationship to Other Projects:** This DEIS/DEIR should discuss whether these projects combined with the Coachella Canal Lining Project will have a cumulative negative impact upon the Colorado River, the Salton Sea, Pichacho SRA and Salton Sea SRA. F-19

**Pg. 1-14, 1.8.11, Salton Sea Restoration Project:** The Salton Basin is actually within the Colorado River Delta system. The flooding of the Basin in 1905 was more an act of high Colorado River water flows than the installation of canals for irrigation in support of Imperial County land development requirements. The proposed Coachella Canal Lining Project may have an impact upon the Salton Sea if the project increases salt levels within the Sea because of increase salt within the Colorado River. The project may also affect the Sea if water is moved from the Imperial and Coachella Valley because of conservation from the lining of the canal. This DEIS/DEIR should discuss these issues. F-20

**Pg. 2-11,2.2.7, Use of Conserved Water:** Same comments as page S-5, and sections 1.3 and 1.5. F-21

**Pg. 2-12, 2.3.1 Lining Design:** The use of the concrete ridges that are designed to provide grip for humans and wildlife as a means of escape should be better evaluated to ensure effectiveness. To date, per the October 25, 2000 public hearing held at the Coachella Valley Water District Office, the structure has been tested by "encouraging" a F-22

**California Department of Parks and Recreation (continued)**

**F-14** The presence of artesian flows in the Frink Springs/Hot Mineral Springs Spa area prior to the construction of the canal provides evidence supporting the determination that non-seepage dependent groundwater is present in that area. Mitigation for impacts to marsh aquatic and desert riparian habitat affected by the project would be focused on the Dos Palmas ACEC to maximize the benefits of that mitigation.

**F-15** With mitigation, the marsh/aquatic and desert riparian habitat in the Dos Palmas Area of Critical Environmental Concern would continue to function as a wildlife corridor from the canal to the Salton Sea. (Please also see response to comment F-7.) In other areas, bands of vegetation which connect from the canal area to the Salton Sea are dominated by salt cedar. These stands provide minimal value as wildlife corridors, and their replacement by more xerically adapted desert vegetation would not constitute a significant impact to wildlife.

**F-16** Reclamation and CVWD agree with this comment regarding mitigation for impacts to terrestrial vegetation.

**F-17** The proposed action would not measurably affect the volume of water in the Salton Sea. Please see response to comment F-5.

**F-18** As indicated in response to comment F-5, the proposed action would not measurably affect the volume of water in the Salton Sea.

**F-19** The cumulative impacts analysis in Chapter 4.0 of the EIS/EIR addresses the incremental effect of the proposed Coachella Canal Lining Project in relationship to the projects listed in Section 1.8 as well as in relationship to the projects listed in Section 4.1. The Final EIS/EIR provides specific discussion of how the canal lining project would mitigate for its incremental contribution to marsh/aquatic vegetation impacts along the lower Colorado River. The analysis of the cumulative effects reflects the fact that the proposed project would not contribute to cumulatively considerable effects at the SRA's mentioned in this comment.

**F-20** Comments regarding the historic relationship of the Salton Sea and the Colorado River system and delta are noted. As noted in response to comment F-5, the Coachella Canal Lining Project would not measurably affect salinity levels within the Salton Sea, and it would not measurably affect Sea water levels.

**F-21** As indicated in response to comment F-5, the proposed action would not measurably affect the volume and salinity of water in the Salton Sea.

**F-22** The addition of escape ridges along the currently unlined portion of the canal, as well as the addition of escape ramps at areas of high wildlife visitations, represents a fundamental improvement in both large mammal and human safety as compared to the existing condition in the earthen canal reaches. Monitoring the effectiveness of the escape ridges and ramps would be conducted the summer following construction (see Section 3.10.3 of the EIS/EIR). Monitoring would assess whether there is an increase in large mammal mortality in comparison to baseline (pre-lining) conditions. If no increase is observed, monitoring would cease following the first season. If results are inconclusive, an additional season of monitoring would be conducted. If the monitoring shows that there is an increase in large mammal mortality, additional escape ramps or other measures would be constructed in the respective canal reaches to improve the ability of large mammals to escape from the canal.

Letter F: California Department of Parks and Recreation (continued)

deer to enter and exit the canal several times and no monitoring has been performed. This sole test does not seem to be adequate, especially in light of the build up silt on the ridges after the lined portion has been in operation for some time. In addition, monitoring is important to evaluate the effectiveness of the ridges.

F-22  
cont.

**Pg. 3-5, 3.2, 3.2.1, Surface Water/Affected Environment:** This section comments that "... (A)t one point there was perennial (year-round) flow from Salt Creek into the Salton Sea, U.S. Geologic Survey (USGS) stream flow records indicate that since 1994 creek flows have been ephemeral ... for many days." It is our observation of the portion of Salt Creek from the USGS gauge to several hundred feet from the Sea, that the creek may in fact become dry, however the creek has always (by our observation) contained water in it for the last several hundred feet of its reach. This may indicate that the creek continues to flow, though does so underground in this portion during the driest times of the year.

F-23

**Figure 3-1, Hydrologic Setting:** The map does not show the Salton Sea SRA that extends from just south of North Shore to just south of Bombay Beach and parallels almost the entire length of the canal lining project. The park should delineated accurately on the map so readers understand its proximity to the project and the affected seepage supported wetlands.

F-24

**Pg. 3-15, 3.2.2, Significance Criteria:** In regard to the Salton sea and the Colorado River, same comments as page S-5, and sections 1.3 and 1.5. and page 2-11,2.2.7.

F-25

**Pg. 3-35, 3.4.2, Salton Sea:** As discussed in this letter we have a concern that the project will increase both the salinity of the Salton Sea and the salinity of the Colorado River.

F-26

**Figure 3-4, Dos Palmas ACEC:** This graphic does not show the location of Salton Sea SRA. The park should be accurately depicted on the graphic so readers understand its proximity to the project

F-27

**Pg. 4-9, 4.2, Cumulative Impacts by Issue Area:** There was no discussion concerning the cumulative impacts this project may have on the Salton Sea. This discussion should be included in this DEIS/DEIR.

F-28

**Pg. 4.13, 4.2.12, Recreation:** There was no discussion concerning the cumulative impacts this project may have upon the recreation trends of the Salton Sea. This discussion should be included in this DEIS/DEIR.

F-29

In conclusion, we have many concerns regarding the project's impacts on the natural and recreational resources of Indio Hills Palms, Salton Sea State Recreation Area, Picacho State Recreation Area, and upon the resources of the Salton Sea and Lower Colorado River regions. We are particularly concerned about the cumulative impacts of the many water-related projects currently on the table.

F-30

**California Department of Parks and Recreation (continued)**

**F-23** Section 3.2 of the Final EIS/EIR has been revised to reflect that *surface* flows are intermittent along portions of Salt Creek.

**F-24** The Salton Sea SRA has been added to Figure 3-1 in the Final EIS/EIR.

**F-25** Please see responses to comments F-4 and F-5 regarding why the proposed action would not measurably affect the salinity of or volume of water in the Salton Sea or have a significant effect on the Colorado River.

**F-26** Please see responses to comments F-4 and F-5 regarding why the proposed action would not measurably affect the salinity of the Salton Sea or have a significant effect on the salinity of the Colorado River.

**F-27** The Salton Sea SRA has been added to Figure 3-4 in the Final EIS/EIR.

**F-28** The Salton Sea was not included in the cumulative impacts analysis by issue area because the proposed Coachella Canal Lining Project would not incrementally contribute to any cumulative impacts to the Salton Sea. Please see responses to comments F-4 and F-5.

**F-29** No discussion of cumulative impacts to recreation trends at the Salton Sea was included in the EIS/EIR because the proposed Coachella Canal Lining Project would not incrementally contribute to cumulatively considerable impacts to the Salton Sea, and it would have no effect on recreational use of the Sea.

**F-30** The Department of Parks and Recreation's concerns are noted. As addressed in the responses to previous comments, the proposed Coachella Canal Lining Project would not, as mitigated, measurably affect the resources of the Salton Sea or the associated Salton Sea SRA. Additionally, the project would include mitigation for its incremental contribution to cumulative marsh/aquatic and special status species impacts on the Colorado River, and it would not otherwise contribute to significant cumulative resource impacts along the lower Colorado River, including the recreation areas such as the Picacho SRA. Similarly, the Coachella Canal Lining Project would not affect the recreational resources of Indio Hills Palms.

**Letter F: California Department of Parks and Recreation (continued)**

Again, we appreciate the opportunity to comment on this important issue. If you have any questions on our comments, please contact Superintendent Steve Horvitz at 760-393-3059.

Sincerely,

A handwritten signature in black ink, appearing to read "D.H. Van Cleve". The signature is fluid and cursive, with a prominent initial "D" and a long, sweeping underline.

David H. Van Cleve  
District Superintendent

cc: State Clearinghouse  
Nadell Gayou, Projects Coordinator, The Resources Agency  
Resource Management Division  
Steve Horvitz



**DEPARTMENT OF FISH AND GAME**

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November 20, 2000

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7301 Calle Agua Salada  
Yuma, AZ 85366

Mr. Steve Robbins, Assistant to the General Manager  
Coachella Valley Water District  
P.O. Box 1058  
Coachella, CA 92236

**Draft Environmental Impact Statement (DEIS)/Draft Environmental Impact Report  
(DEIR) for the Coachella Canal Lining Project  
SCH# 1990020408**

Dear Mr. Young and Mr. Robbins,

The California Department of Fish and Game (Department) appreciates the opportunity to comment on the above referenced project. The project proposes to concrete line 33.2 miles of the Coachella Canal from Siphon 7, in Imperial County to Siphon 32, in Riverside County. Lining of the canal will conserve up to 32,000+ acre-feet (AF) of water per year that is lost due to seepage. The Department has several concerns about the impacts of lining to the fish and wildlife resources of the area.

G-1

The Department's primary concern is the loss of wetland and phreatophyte vegetation that is currently being supported by seepage water from the canal. Lining of the canal will reduce the amount of water available and eventually cause the vegetation to dessicate and die. This vegetation occurs along the length of the canal, but is concentrated in the Salt Creek watershed. This is a dynamic system in which the geohydrology is poorly understood. To offset impacts, the

G-2

**Letter G**  
**California Department of Fish and Game**

**G-1** Introductory text; no response necessary.

**G-2** Reclamation and CVWD concur that the geohydrology of the project area in general, and of the Salt Creek Watershed in particular, represents a dynamic and complex system. Reclamation and CVWD are also committed to ensuring that mitigation efforts meet the success criteria included in this Final EIS/EIR. As referenced in EIS/EIR Section 3.2.1, Seepage and Geohydrology Studies, Reclamation has undertaken extensive engineering and geohydrologic investigations of the project area that included the drilling of numerous wells, collection of groundwater elevation data, chemical and isotope analysis of groundwater samples, procurement and analysis of aerial infrared photography, review and incorporation of past studies, and development of a groundwater model. Reclamation's work incorporated the findings of geohydrologic investigations conducted by the USGS in the 1960s and 1970s. Reclamation's investigations and its findings were incorporated into the EIS/EIR Geohydrology Appendix. Please see response to comment M-4 from the U.S. Fish and Wildlife Service (FWS) regarding water sources in the watershed.

The identification of success criteria contained in the EIS/EIR meets the requirements for CEQA and NEPA analyses, and Reclamation and CVWD will continue to work in consultation with several agencies, including the California Department of Fish and Game (DFG), FWS, Bureau of Land Management (BLM), and other applicable agencies and landowners to ensure that these criteria are met. The success criterion for establishing desert riparian vegetation is a density of 100 mature trees per acre (see Section 3.5.3, under the heading "Mitigation Plan Performance Standards"). This consultation process includes the meeting held with DFG, BLM, California Department of Parks and Recreation, and the Center for Natural Lands Management at the Dos Palmas ACEC in November 2000, and will include additional meetings with interested agencies as the process continues. Monitoring will be conducted as part of the mitigation process to determine the success of the mitigation efforts.

In the event that initial mitigation plantings are not successful, additional measures such as soil treatments (e.g., flushing the soil with water to reduce salinity) or planting in different areas will be used to meet the mitigation requirements specified in the EIS/EIR and required by P.L. 100-675. The mitigation plan incorporates monitoring to ensure that the success criteria are met.

Letter G: California Department of Fish and Game (continued)

project proposes to maintain the wetlands with water supplied by the canal and to revegetate with native species with lower water needs. The mitigation will occur in an area to be impacted by the lining. The document does not adequately explain in detail the mechanisms that will be used to maintain the vegetation, nor does it detail the monitoring to assure that the mitigation is successful. The DEIR/DEIS should provide data on the sources of all water in the watershed, both surface and subsurface, along with a discussion on what the impacts lining will have on them. It is necessary to understand how water moves through the system in order to be sure that any new means of delivery will be adequate to maintain the system. In addition, before the Department can determine that the mitigation will be successful, success criteria must be established, a detailed monitoring plan outlined, and a detailed adaptive management plan developed to address what will occur if the mitigation is unsuccessful.

G-2  
cont.

The Department recommends that an additional alternative be added and adequately analyzed as to costs and impacts to the species. This alternative would require that the portion of the canal above the Salt Creek watershed (siphons 23 through 29) be left unlined. This could be coupled with salt cedar removal along the lower Colorado River that may provide the necessary water savings through removal of this high - water using plant. The analysis would compare this alternative to complete lining. The analysis would include, but not be limited to, the amount of water loss due to seepage, the amount of water saved through removal of salt cedar on the Colorado River, the cost of that removal, the cost of not lining, the cost of providing mitigation for lining, the cost of monitoring that mitigation, the amount of water that would be necessary to adequately maintain the mitigation area, and the ongoing management costs.

G-3

Specific Comments:

**Section 2.2.4 Permits, Agreements, and Approvals**

In addition to consultation under the Federal Endangered Species Act (FESA), any impacts to state listed species that are not Fully Protected will require an Incidental Take permit from the Department under the California Endangered Species Act (CESA).

G-4

**Table 2-7 Summary of Environmental Effects**

**Sand and Gravel**

A discussion is needed on the location of new sand and gravel quarries and the impacts associated with them.

G-5

**Page 3-6**

In addition to the average annual flow in Salt Creek, data needs to be provided on the seasonal and daily flows in order to assure that mitigation flows can adequately support the desert pupfish.

G-6

**Page 3-27**

Data on the amount of seepage at each hydrologic unit needs to be provided rather than relative values such as "relatively low" or "much greater than in units A and B".

G-7

**California Department of Fish and Game (continued)**

**G-3** 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 objectives of the proposed action's purpose and need and why this alternative has not been carried forward for detailed environmental analysis. 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 cause the project to fall more than 50 percent short of its 30,850-acre-foot annual water conservation objective, as stated in the Purpose and Need (see EIS/EIR Section 1.3). This conserved water is one of the components of the overall water plan for California to reduce its use of Colorado River water to within its non-surplus annual apportionment of 4.4 million acre-feet.

Additionally, water is not diverted by any federal or other agencies in California to irrigate salt cedar. Thus, a reduction in the use of water by salt cedar along the Colorado River would not result in a reduced diversion. As such, an amount of water equivalent to the amount not used by salt cedar would not be available for diversion.

**G-4** With the implementation of mitigation developed in consultation with resource agencies, the proposed Coachella Canal Lining Project will avoid incidental take of any State-listed threatened or endangered species.

**G-5** Given the number of potential sources of sand and gravel resources in the region, it is not feasible to assess the environmental effects that would result from sand and gravel extraction during canal lining. As noted in Section 3.16.3, if a contractor were to request using a sand and gravel source not previously certified and assessed environmentally, the use of that source would necessitate compliance with applicable environmental laws and regulations, including NEPA and CEQA compliance. The potential "new" source of sand and gravel would be selected in the future by a construction contractor in consultation with Reclamation and CVWD. Given the number of potential sand and gravel sources in the region, it is too speculative to address the development of specific sources in this EIS/EIR.

**G-6** The assessment of Salt Creek flows was based on monthly USGS stream gauge data—the mean annual flow levels are addressed in the EIS/EIR to provide guidance for the overall surface flow levels in Salt Creek. As indicated in response to comment F-2 from the California Department of Parks and Recreation, additional gauges will be added to Salt Creek and monitored to ensure that adequate water levels are maintained to support existing pupfish locations. The gauges will be sited to ensure that flow levels in desert pupfish habitat can be monitored. Seasonal streamflow data are being made available to resource agencies during informal Section 7 consultations for the proposed project.

**G-7** Estimated annual seepage per canal hydrologic unit is as follows:

Unit A	1,480 acre-feet
Unit B	2,640 acre-feet
Unit C	11,410 acre-feet
Unit D	16,500 acre-feet
Unit E	320 acre-feet

**Page 3-57**

Please provide the data used to revise the habitat boundaries, arrive at new figures, and change the mitigation ratios from those developed for the 1993 Coordination Act Report.

G-8

**Page 3-72**

The survival of crushed vegetation will need to be monitored after removal of the pipes, and contingencies developed for replacement if it does not survive. Additionally, the success of the replacement trees will have to be monitored and criteria developed to determine if additional plantings are necessary.

G-9

**Page 3-74**

In addition to being state listed species, the Yuma clapper rail and the California black rail are also Fully Protected Species. No take is allowed of Fully Protected Species. Section 3511 of the Fish and Game Code states "Fully protected birds or parts thereof may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected bird and no such permits or licenses heretofore issued shall have any force or effect for any such purpose; except that the commission may authorize the collecting of such species for necessary scientific research and may authorize the live capture and relocation of such species pursuant to a permit for the protection of livestock. Legally imported fully protected birds or parts thereof may be possessed under a permit issued by the department." Therefore measures must be incorporated into the project design that will avoid loss of any wetlands occupied by either species of rail.

G-10

The fairy duster (*Calliandra eriophylla*) is not a state listed plant. It is on the Department's special plant list.

G-11

The bighorn sheep in the Orocopia and Chocolate Mountains are not the Peninsular bighorn sheep and are not listed.

Other Species of Special Concern that could occur in the project area are the Palm Springs pocket mouse (*Perognathus longimembris bangsi*), LeConte's thrasher (*Toxostoma lecontei*), and burrowing owl (*Speotyto cunicularia*). Project impacts to these species should also be analyzed.

G-12

Impacts to the state and federally listed razorback sucker (*Xyrauchen texanus*) also need to be addressed. Razorback suckers are occasionally retrieved from terminal reservoirs in the Imperial Valley (K. Nicol pers. comm.), therefore the possibility exists for them to be present in the canal and could be impacted during the lining process. The razorback sucker is also a Fully Protected Species. Measures need to be taken during the pumping of canal water to the pipes under the Preferred Alternative to assure that no individuals are taken.

G-13

**Page 3-88**

Please provide details of the monitoring plan for the escape ridges. The Department is concerned that the increased velocity and slope under the Preferred Alternative may cause the escape ridges to be less successful. Before full implementation the Department wants to be assure that large mammals will not be trapped and drowned.

G-14

**California Department of Fish and Game (continued)**

**G-8** The method used to revise the habitat boundaries consisted primarily of interpreting satellite images and conducting field verification to document changes from the previous vegetation mapping. This effort is described in Attachment A to the EIS/EIR. Additional field verification of project area vegetation was conducted in October and November 2000, and the vegetation acreages presented in Section 3.5 of the Final EIS/EIR have been revised accordingly. The proposed mitigation ratios reflect the value of the affected habitat. This assessment of habitat value and mitigation ratios incorporated the results of the previous Biological Work Group as well as more current data on the value of salt cedar (see Sections 3.5.1 and 3.5.3). The determination to adjust the mitigation ratio for salt cedar to a 1:10 ratio was based on consideration of the items discussed under the heading “Value of Salt Cedar (Tamarisk)” on Page 3-42 of the Revised and Updated Draft EIS/EIR. Please see comment M-9 from FWS concurring that the lower mitigation ratio for salt cedar is acceptable provided that all replacement of salt cedar is with native species and the revegetation effort meets all appropriate success criteria.

**G-9** Trees along the bypass pipeline routes will be monitored for survival and replaced at a 2:1 mitigation ratio. Replacement tree growth will also be monitored to evaluate its success. Impacts to other (non-tree) terrestrial vegetation crushed during construction are not considered significant based on the relatively low sensitivity of the affected terrestrial vegetation and its abundance in the area. Accordingly, crushed non-tree terrestrial vegetation will not be monitored for survival.

**G-10** Reclamation and CVWD concur that maintaining occupied marsh/aquatic (wetland) habitat within the Dos Palmas ACEC and at the mouth of Salt Creek will avoid impacts to the Yuma clapper rail and the California black rail, and maintenance of this rail habitat is proposed as project mitigation.

**G-11** References to the fairyduster and bighorn sheep have been revised in Section 3.8 of the Final EIS/EIR per this comment.

**G-12** Assessments of impacts to the Palm Spring’s pocket mouse, LeConte’s thrasher, and burrowing owl are included in Final EIS/EIR Section 3.8, Special Status Species. The inclusion of these species, none of which is federally or State-listed as threatened or endangered, does not affect the significance determinations contained in the EIS/EIR. As indicated, the proposed project would not, as mitigated, have a significant impact on any of these species.

**G-13** There is no record of razorback sucker occurring in the Coachella Canal; accordingly, lining the canal would not be expected to affect this species. However, in response to DFG’s concerns, Sections 3.8.3 and 7.2.6 of the Final EIS/EIR has been revised to include the use of basket strainers on bypass system pump intakes. The basket strainers will be designed such that intake flow velocities at the periphery of the strainer mesh will be low enough to allow razorbacks to escape, and with a mesh size small enough to restrict uptake of juvenile through adult classes.

**G-14** The addition of escape ridges along the currently unlined sections of canal and the inclusion of escape ramps at areas of high wildlife visitation represent a fundamental improvement in both large mammal and human safety as compared to the existing condition in the earthen canal reaches. Monitoring the effectiveness of the escape ridges and ramps would be conducted the summer following construction (see Section 3.10.3 of the EIS/EIR). Monitoring would assess whether there is an increase in large mammal mortality in comparison to baseline (pre-lining) conditions. If no increase is observed, monitoring would cease following the first season. If results are inconclusive, monitoring would be conducted for a second season. If the monitoring shows that there is an increase in large mammal mortality, additional escape ramps or other measures would be constructed in the respective canal reaches to improve the ability of large mammals to escape from the canal.

Letter G: California Department of Fish and Game (continued)

Thank you for the opportunity to comment on this project. The Department looks forward to working with your agencies on this project. Questions regarding this letter should be directed to Ms. Kimberly Nicol, Associate Biologist, at (760) 251-4827.

Sincerely,



Kimberly Nicol  
Acting Environmental Services Supervisor  
Eastern Sierra and Inland Deserts Region

cc: C. Taucher  
A. Pickard  
T. Foreman  
G. Black  
J. Dice  
C. Roberts, USFWS Carlsbad  
K. Hanson, BLM Palm Springs



Letter H: The Torres Martinez Desert Cahuilla Indians



MAU-WAL-MAH  
SU-KUTT MENYIL

THE TORRES MARTINEZ DESERT CAHUILLA INDIA

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November

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

Re: Torres Martinez Comments on the Coachella Canal Lining Project Draft Environmental Impact Statement/Draft Environmental Impact Report

Gentlemen:

The United States Bureau of Reclamation (USBR) and the Coachella Valley Water District (CVWD) have proposed to line over 30 miles of the Coachella Canal in southeastern California. A portion of this project will occur within four miles of the Torres Martinez Indian Reservation. The project will also extend through areas historically used by the Tribe. Based upon a review and analysis of the Coachella Canal Lining Project Draft Environmental Impact Statement/Draft Environmental Impact Report (Draft EIS/EIR), the Torres Martinez Desert Cahuilla Indians (Tribe) submits the following comments. These comments are based on the selection of conventional canal lining as the preferred alternative. Other alternatives may prove unacceptable to the Tribe due to the potential for greater disturbance of cultural resources, extended project periods, and increased air quality impacts.

H-1

Hydrologic Impacts

The Draft EIS/EIR does not completely address the hydrologic concerns of the Tribe. The Draft contemplates affects to the level of the Salton Sea and the potential decrease or increase of Tribal land that is inundated by the Sea. However, the Draft EIS/EIR does not address potential alteration of the shallow groundwater table that may create negative impacts to Tribe's trust resources. A forecast of possible fluctuations in the shallow groundwater table northwest of siphon 32 will assist the Tribe's land management efforts.

H-2

The Draft EIS/EIR also does not fully consider impacts to the quality of the water in the canal. After lining, the sediment load of the canal water will likely decrease. The environmental impacts of using clearer water in traditional earthen ditches off the lined canal should be considered. For example, will earthen ditches experience a higher rate of seepage due to the lower sediment load? Also, lining of the canal will allow a higher velocity flow. What will the effects of increased velocity be on turnout and diversion capabilities?

H-3

The potential interruption of irrigation deliveries is also not fully explored by the Draft EIS/EIR. Specifically, what measures will be taken to accommodate irrigators in case of a breakdown in bypass pipelines during canal lining? Will the irrigators be beneficiaries of USBR insurance contracts in case of a significant interruption of irrigation deliveries?

H-4

Air Quality

**Letter H**  
**The Torres Martinez Desert Cahuilla Indians**

**H-1** Introductory comment noted; no response necessary.

**H-2** The effects of the Coachella Canal Lining Project on the shallow groundwater table down-gradient from the canal would be limited to the local area. Effects on shallow groundwater resources would not extend northwest of Siphon 32 to the Torres Martinez Indian Reservation. As noted in comment H-1, at their closest points, the Torres Martinez Indian Reservation and the unlined canal section are four miles apart, and this distance is further than the proposed project's groundwater effects would extend.

**H-3** The effects of canal lining on water quality would be negligible. The turnouts for canal water are lined with concrete, and canal water is delivered to CVWD customers through pipes. Furthermore, the in-canal water velocity would not affect the canal's turnout and diversion capabilities. In terms of the overall sediment carrying capacity of the delivered water, impacts would be negligible for the reason described below.

As stated in Section 3.11.3 of the Revised and Updated Draft EIS/EIR, "experience with the recently lined canal between siphons 14 and 15 indicates that the canal bottom would return to its present condition of drifting sand and silt after a year of operation." The source of this sand and silt is primarily wind-blown sediments that are carried into the canal. The presence of sand and silt on the canal bottom indicates that the canal water is not "sediment starved" and would not cause erosion impacts to unlined irrigation ditches fed by canal water.

**H-4** The use of multiple (up to five or more) pumps and bypass pipelines during water diversion reduces the risk of loss of service to negligible levels. Additionally, water in the canal downstream from the construction area can serve as storage in the unlikely event that water flows are temporarily disrupted by pump or pipeline malfunctions. As a result, Reclamation and CVWD do not foresee any impacts to irrigators or any need for insurance contracts.

Letter H: The Torres Martinez Desert Cahuilla Indians (continued)

The construction period for lining of the canal is predicted to be three years. During this time fugitive dust and exhaust is anticipated to affect surrounding areas. Tribal members may be impacted by these increased emissions. Three continual years of air quality impacts would be unacceptable to the Tribe, although short-term impacts from the lining of just the northern portion of the project should be tolerable. The EIR/EIS should provide information regarding the projected completion time of each segment of the canal lining.

H-5

Cultural Resources

Disturbances to canal banks and surrounding construction zones may impact areas of cultural importance. This is especially possible in the canal areas near ancient Lake Cahuilla and the Salt Creek-Dos Palmas areas. The Draft EIS/EIR contemplates the use of Class II archaeological surveys and compliance with both the National Historic Preservation Act and the Native American Graves Protection and Repatriation Act. Commendably, the USBR has initiated a new Native American contact program. The Tribe looks forward to working with the USBR to assure the preservation of cultural resources. To this end it is highly desirable that a representative of the Native American community be directly involved in archaeological surveys or that a similar mechanism is provided to guarantee the sharing of any culturally-related findings.

H-6

Human Resources

The engagement of a native representative for archaeological surveys is not the only possibility for employment of the local community. The Draft EIS/EIR states that there will be a population increase due to the influx of construction workers. However, there is no consideration of the local employment potential. Imperial County in particular has experienced the greatest population growth in the country, but has an annual personal income growth rate that is only one-fourth the national average. The socioeconomic impact of the canal lining project may prove to be positive if local labor forces are employed. Analysis of available local labor and potential incentives for the hiring of Imperial and Riverside County residents should be performed.

H-7

Canal Safety

The Draft EIS/EIR considers the inclusion of safety ladders. If canal safety ridges are found to be inadequate, safety ladders will be added. Regardless of the efficacy of safety ridges, we suggest that safety ladders be installed. The use of safety ladders will provide superior assurance that children who fall into the canal will be able to escape.

H-8

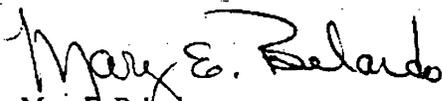
Sand and Gravel

The canal lining project will require a local supply of sand and gravel. The preferred alternative is estimated to require approximately 105,000 cubic yards of sand and gravel. In its comments on the first Draft EIS/EIR, the Bureau of Land Management points out that there is only one approved gravel pit in the area of the project and that aggregate is in short supply. While abundant supplies do exist near the Chocolate Mountains, they are generally unavailable due to military operations. The Bureau of Indian Affairs has requested that commercial sand and gravel supplies on Indian land be considered. Torres Martinez lands include sand, gravel, and aggregate deposits that could serve the canal lining project. Potential use of these supplies should be analyzed.

H-9

Thank you for giving the Torres Martinez Desert Cahuilla Indians the opportunity to comment on the Draft EIS/EIR for the lining of the Coachella Canal. We look forward to continuing consultation regarding this project.

Sincerely,

  
Mary E. Belardo  
Tribal Chairwoman

## **The Torres Martinez Desert Cahuilla Indians (continued)**

**H-5** The closest that project construction would occur in relationship to the Torres Martinez Reservation is four miles, making it unlikely that construction-related pollutants, such as dust, would affect residents on tribal lands. Additionally, the generation of fugitive dust would be minimized during construction by the application of water to unpaved roads (see Section 3.18.3 of the EIS/EIR). Prevailing winds would carry the vast majority of dust and other project-related pollutants onto the unpopulated Chocolate Mountains Aerial Gunnery Range (see Section 3.18). Based on these factors, dust-related impacts would be less than significant, and construction would not cause adverse effects to the Torres Martinez Reservation or other residential areas. It is not feasible to accurately provide information regarding the projected completion time of each segment of the canal lining as any such information would be purely speculative.

**H-6** Reclamation has completed a Class I cultural resources records search for the affected environment. Consultation with the State Historic Preservation Officer (SHPO) was initiated during the preparation of the previous Draft EIS/EIR and is being reinitiated with the current SHPO as part of ongoing National Historic Preservation Act compliance efforts. Reclamation is advising SHPO that one or more Native American Indian Tribal representatives will be invited to assist and/or advise Reclamation and CVWD's cultural resources contractor in the Class III archaeological survey that will be required prior to project construction.

**H-7** As stated in Section 3.21.3 under the heading "Employment and Income," it is anticipated that 75 percent of construction labor would be obtained locally. Because it is projected that the majority of construction labor would be from the local area, there would be no need for a local employment incentive program.

**H-8** Reclamation and CVWD concur and the Final EIS/EIR has been revised to indicate that safety ladders will be installed in addition to the concrete ridges. Escape ramps will also be added in areas of high wildlife visitation, such as at siphon 20. See Final EIS/EIR Sections 2.2.2, 2.3.1, and 2.4.1.

**H-9** The availability of sand and gravel resources on Torres Martinez lands is noted. (Section 3.16.1 of the EIS/EIR addresses the general potential of sand and gravel sources on Native American tribal lands.) The contractor(s) selected for canal construction will ultimately be responsible for obtaining sand and gravel. Accordingly, the specific sources for sand and gravel are not known at this time.



# CENTER FOR BIOLOGICAL DIVERSITY

Protecting endangered species and wild places of Western North America through science, policy, education, and environmental law.

November 20, 2000

VIA FAX AND U.S. MAIL.

Mr. Don Young  
Bureau of Reclamation  
Yuma Office  
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Yuma, AZ 85366

Mr. Don Mitchell  
Coachella Valley Water District  
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Coachella, CA 92236  
Fax: (760) 398 3711

Dear Mr. Young and Mr. Mitchell.

This letter transmits the comments of the Center for Biological Diversity ("CBD") on the Revised Draft EIS/EIR for the Coachella Canal Lining Project. In general, the Center find that the EIS/EIR is inadequate for a number of reasons, most notably because of grossly inadequate mitigation measures to compensate for harm to federally and state listed, special status, and sensitive species. Much more mitigation should be provided before this project proceeds. The CBD's comments are set forth below.

I-1

I. The Proposed Mitigation Measures for the Project are Inadequate

The Draft EIS/EIR appears to rely on the San Luis Rey Indian Water Rights Settlement Act (Public Law 100-675) and California State Water Code Section 12565(c), and Executive Order 13112, (64 Fed. Reg. 6183) for the proposition that the mitigation proposed by the Draft EIS/EIR is adequate. (Page 3-54<sup>1</sup>). The requirements of these authorities are less than the requirements of the Endangered Species Act, 16 U.S.C. §§ 1531 et seq. ("ESA"), the Clean Water Act, 33 U.S.C. §§ 1251 et seq. ("CWA"), the National Environmental Quality Act, 42 U.S.C. §§ 4321 et seq. ("NEPA"), and the California Environmental Quality Act, Pub. Res. Code §§ 21000 et seq. ("CEQA"), and the case law interpreting these statutes. Therefore, such reliance is inappropriate and renders the Draft EIS/EIR inadequate.

I-2

<sup>1</sup>Citations are to the Draft EIS/EIR unless otherwise noted.

Center for Biological Diversity - California & Pacific Office  
P.O. Box 40990  
Berkeley, CA 94704  
(510) 841-8112

**Letter I**  
**Center for Biological Diversity**

**I-1** Reclamation and CVWD respectfully disagree that the EIS/EIR is inadequate, as indicated in the responses to the following comments.

**I-2** The impacts analysis presented in the Revised and Updated Draft EIS/EIR was conducted in full consideration of the requirements of all the acts cited by the commentor. Sustainability of habitat suitable to support existing populations of protected species is the objective of mitigation and monitoring commitments included in the EIS/EIR and developed by Reclamation and CVWD in consultation with FWS, DFG, and other resource agencies.

Reclamation and CVWD consider all relevant Acts of Congress to be of equivalent authority, including P. L. 100-675; the Endangered Species Act (16 U.S.C. §§ 1531 et seq.); the Clean Water Act (33 U.S.C. §§1251 et seq.); and the National Environmental Policy Act (42 U.S.C. §§ 4321 et seq.). Furthermore, Reclamation and CVWD consider the mitigation requirement stated in § 203(a)(2) of P.L. 100-675 to be compatible with the three acts cited above and, accordingly, it constitutes appropriate and adequate mitigation. The referenced mitigation requirement reads, in part, as follows:

The Secretary, in order to reduce the seepage of water, is authorized to implement measures for the replacement of incidental fish and wildlife values adjacent to the canals foregone as a result of lining the canal or mitigation of resulting impacts to fish and wildlife resources from construction of a new canal, or a portion thereof. Such measures shall be on an acre-for-acre basis, based on ecological equivalency, and shall be implemented concurrent with the construction of the works.

On the basis of this requirement, the project impacts to fish and wildlife values shall be appropriately and adequately mitigated with no net loss of values and no temporal loss of values.

In like manner, the Coachella Canal Lining Project will, as mitigated, be in compliance with California State Senate Bill 1765 (1998), which added the California Water Code §§ 12560 – 12565; California Environmental Quality Act (Pub. Res. Code §§ 21000 et seq.); California Fish and Game Code; and policies adopted by the California Fish and Game Commission pursuant to § 703 of the Fish and Game Code. Furthermore, Reclamation and CVWD consider the mitigation requirement stated in California Water Code § 12565(c) to constitute appropriate and adequate mitigation. The referenced mitigation requirement reads, in part, as follows:

Pursuant to its responsibilities as a trustee agency under the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code), the Director of Fish and Game makes a finding that a canal lining project that is the subject of a request for funding pursuant to this chapter will avoid or mitigate all significant effects of the project on fisheries and other wildlife. The finding shall be accompanied by a statement from the United States Secretary of the Interior certifying that measures for the replacement of incidental fish and wildlife values adjacent to the All American Canal and the Coachella Branch of the All American Canal foregone as a result of the lining of the canal, or the mitigation of resulting impacts of fish and wildlife resources from the construction of a new canal, or a portion thereof, meet the statutory requirements of Section 203(a)(2) of Public Law 100-675. These mitigation measures shall be on an acre-for-acre basis, based on ecological equivalency, and shall be implemented concurrent with the canal lining project.

On the basis of this requirement, significant effects of the project to fisheries and other wildlife shall be appropriately and adequately mitigated with no net loss of values and no temporal loss of values.

Letter I: Center for Biological Diversity (continued)

The ratios proposed to mitigate for loss of desert riparian and wetland habitat are insufficient and unsupported. (Page 3-53.) As the Draft EIS/EIR acknowledges, native desert riparian vegetation has extremely high habitat value for wildlife. Compensating the loss of this habitat at a ratio of 1:1 is grossly inadequate. The CBD feels strongly that anything less than 4:1 mitigation is unacceptable. Further, stands of native vegetation mixed with salt cedar should be compensated at the same ratio as stands of native vegetation. To do otherwise provides an incentive for agencies to allow salt cedar incursion to continue unchecked. While the CBD agrees, of course, that salt cedar eradication is desirable, the mitigation ratio of 1:10 for salt cedar habitat loss is inadequate and ignores the known habitat value of this vegetation type. Eliminating salt cedar is still in effect eliminating potential foraging and breeding habitat for the southwestern willow flycatcher and Least Bell's vireo. Additionally, any existing salt cedar habitat has the potential to be restored to high value native vegetation. Loss of the habitat also means loss of this potential. The loss of salt cedar habitat should be compensated with native riparian vegetation at a ratio of at least 1:1.

I-3

There are many additional reasons why the mitigation proposed is inadequate and why the ratios of mitigation habitat must be increased. First, the CBD is gravely concerned about the efficacy of salt cedar removal as a way to maintain flows in Salt Creek. (Page 7-7). As the document acknowledges, salt cedar regenerates and spreads at an incredibly fast rate. Any effort to conserve water via salt cedar removal will fail unless the salt cedar eradication project is adequately funded and maintained in perpetuity. Cutting down a quantity of salt cedar in year one will likely yield exactly zero water conservation in year two if salt cedar is not also removed in year two as well. The Draft EIS/EIR fails to address this issue. While the CBD encourages all agencies to implement salt cedar eradication programs, the CBD feels that salt cedar reduction should not be used as mitigation unless there is a fully funded, long-term, enforceable eradication plan to ensure that any water conservation claimed as mitigation continues for the life of the project.

I-4

More than one acre of native vegetation must be planted to mitigate for each acre destroyed by the project. This is because there is no guarantee that the vegetation will survive, because the newly-created habitat may be less valuable to wildlife for any number of reasons, and because the mitigation must compensate not only for the lost habitat, but also for the species that are killed or injured during project construction. Replacing lost habitat at a ratio of 1:1 does nothing to compensate for the species that were killed or injured when the original habitat was destroyed. Mitigating for lost wildlife habitat at a ratio greater than 1:1 is not only common sense, it is also common practice. The Draft EIS/EIR gives no acceptable rationale why this practice is not followed in this case. The State Water Code does not control in this instance, where the numerous other statutes, listed above, all more protective of wildlife than the Water Code, apply.

I-5

Similarly, habitat that is purchased and turned over to the BLM or other agency as mitigation must be purchased at a ratio of greater than 1:1.<sup>2</sup> If the habitat purchased would not have been developed anyway, then this obviously represents no net conservation gain, but rather a loss. To insure against the possibility that some of the mitigation lands purchased would not have been developed during the life of the project, the ratio must be at least 4:1. Otherwise, the mitigation lands are in effect

I-6

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<sup>2</sup>The CBD encourages Reclamation and the CVWD to use the California Department of Parks and Recreation as the custodian of mitigation land. This agency has indicated its willingness to manage these lands. (Attachment G).

## Center for Biological Diversity (continued)

**I-3** If the affected salt cedar were suitable for use as breeding habitat, higher mitigation ratios could be appropriate. However, the Coachella Canal Lining Project would impact salt cedar stands that lack the conditions necessary for salt cedar to provide suitable southwestern willow flycatcher or least Bell's vireo breeding habitat. During field reviews the habitat observed along the Coachella Canal was, at best, rated marginal due to its linear nature, lack of saturated soil, and/or overall paucity of dense vegetation with associated (underlying) surface water or saturated substrate (see EIS/EIR Attachment E-1). The salt cedar in the project area also does not provide suitable foraging habitat for southwestern willow flycatcher or other native species, including least Bell's vireo. Section 3.5.3 of the EIS/EIR summarizes salt cedar's extremely low foraging habitat value for native wildlife species. As stated under the heading "Value of Salt Cedar (Tamarisk)":

The seed of tamarisk is too small to be eaten by rodents or birds, and its thin, scaly leaf is unpalatable to native browsing animals and to leaf-eating insects. (William Neill, President of the Desert Protective Council 1993)

Based on the absence of specific conditions that would make the salt cedar potential breeding habitat for southwestern willow flycatcher or least Bell's vireo, and in consideration of salt cedar's low value as foraging habitat for native species, the identified mitigation ratios in the EIS/EIR are appropriate.

Public Law 100-675 directs the agencies to design mitigation for project impacts to fish and wildlife resources based on ecological equivalency, an approach which is also consistent with NEPA and CEQA. The mitigation ratios specified in Section 3.5.3 of the EIS/EIR are based on consideration of the factors described in Section 3.5.1 under the heading "Value of Marsh/Aquatic and Desert Riparian Habitat" and "Value of Salt Cedar (Tamarisk)." Please see also comment M-9 from FWS concurring that the mitigation ratio for salt cedar is acceptable provided that all replacement of salt cedar is with native species and the revegetation effort meets all appropriate success criteria. As indicated in Section 3.5.4 of the EIS/EIR, all mitigation plants would consist of suitable native species, and these have much higher habitat value than the nonnative salt cedar currently benefiting from canal seepage. As a result, project mitigation will allow the area to support more abundant and diverse native wildlife than current conditions. Thus, the mitigation will maintain or enhance the area's ecological value. Additionally, impact assessments and the corresponding mitigation requirements are based on existing habitat values, not on potential future habitat values that could occur with human intervention (such as future restoration projects).

Reclamation and CVWD do not believe that agencies would intentionally allow salt cedar to establish in areas simply to achieve lower mitigation ratios for future development projects. Such an approach to salt cedar management would contradict Executive Order 13112, which directs federal agencies to prevent the introduction of invasive species and detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner. Intentionally allowing the establishment of salt cedar would also run counter to the missions of agencies charged with land management and natural resources protection.

**I-4** Reclamation and CVWD concur that long-term maintenance is necessary in order to realize the benefits of salt cedar eradication. It is anticipated that this long-term maintenance would be accomplished by establishing a trust fund for that purpose, with long-term maintenance actions being implemented by one of the agencies with land management responsibility in the mitigation area (e.g., the BLM). As part of the mitigation effort, salt cedar eradication and native plant establishment will be aggressively monitored. Please see response to comment I-3 explaining why the mitigation ratios for impacts to marsh aquatic and desert riparian habitat are appropriate.

Letter I: Center for Biological Diversity (continued)

The ratios proposed to mitigate for loss of desert riparian and wetland habitat are insufficient and unsupported. (Page 3-53.) As the Draft EIS/EIR acknowledges, native desert riparian vegetation has extremely high habitat value for wildlife. Compensating the loss of this habitat at a ratio of 1:1 is grossly inadequate. The CBD feels strongly that anything less than 4:1 mitigation is unacceptable. Further, stands of native vegetation mixed with salt cedar should be compensated at the same ratio as stands of native vegetation. To do otherwise provides an incentive for agencies to allow salt cedar incursion to continue unchecked. While the CBD agrees, of course, that salt cedar eradication is desirable, the mitigation ratio of 1:10 for salt cedar habitat loss is inadequate and ignores the known habitat value of this vegetation type. Eliminating salt cedar is still in effect eliminating potential foraging and breeding habitat for the southwestern willow flycatcher and Least Bell's vireo. Additionally, any existing salt cedar habitat has the potential to be restored to high value native vegetation. Loss of the habitat also means loss of this potential. The loss of salt cedar habitat should be compensated with native riparian vegetation at a ratio of at least 1:1.

I-3

There are many additional reasons why the mitigation proposed is inadequate and why the ratios of mitigation habitat must be increased. First, the CBD is gravely concerned about the efficacy of salt cedar removal as a way to maintain flows in Salt Creek. (Page 7-7). As the document acknowledges, salt cedar regenerates and spreads at an incredibly fast rate. Any effort to conserve water via salt cedar removal will fail unless the salt cedar eradication project is adequately funded and maintained in perpetuity. Cutting down a quantity of salt cedar in year one will likely yield exactly zero water conservation in year two if salt cedar is not also removed in year two as well. The Draft EIS/EIR fails to address this issue. While the CBD encourages all agencies to implement salt cedar eradication programs, the CBD feels that salt cedar reduction should not be used as mitigation unless there is a fully funded, long-term, enforceable eradication plan to ensure that any water conservation claimed as mitigation continues for the life of the project.

I-4

More than one acre of native vegetation must be planted to mitigate for each acre destroyed by the project. This is because there is no guarantee that the vegetation will survive, because the newly-created habitat may be less valuable to wildlife for any number of reasons, and because the mitigation must compensate not only for the lost habitat, but also for the species that are killed or injured during project construction. Replacing lost habitat at a ratio of 1:1 does nothing to compensate for the species that were killed or injured when the original habitat was destroyed. Mitigating for lost wildlife habitat at a ratio greater than 1:1 is not only common sense, it is also common practice. The Draft EIS/EIR gives no acceptable rationale why this practice is not followed in this case. The State Water Code does not control in this instance, where the numerous other statutes, listed above, all more protective of wildlife than the Water Code, apply.

I-5

Similarly, habitat that is purchased and turned over to the BLM or other agency as mitigation must be purchased at a ratio of greater than 1:1.<sup>2</sup> If the habitat purchased would not have been developed anyway, then this obviously represents no net conservation gain, but rather a loss. To insure against the possibility that some of the mitigation lands purchased would not have been developed during the life of the project, the ratio must be at least 4:1. Otherwise, the mitigation lands are in effect

I-6

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<sup>2</sup>The CBD encourages Reclamation and the CVWD to use the California Department of Parks and Recreation as the custodian of mitigation land. This agency has indicated its willingness to manage these lands. (Attachment G).

**I-5** The survival of mitigation plantings will be monitored pursuant to the criteria included in Section 3.5.4 of the Final EIS/EIR and in accordance with a Mitigation Monitoring and Reporting Program that must be adopted by CVWD at the time of project approval. The newly created habitat will consist of native vegetation. In consideration of the habitat being affected, much of which is nonnative salt cedar with low wildlife habitat value (as described in Section 3.5.1), the newly created habitat will be as valuable or more valuable to wildlife. Furthermore, the proposed project would entail few direct impacts to native desert riparian vegetation. Rather, impacts to native and mostly nonnative vegetation would occur over a period of several years as seepage-dependent groundwater tables lower. This timeframe allows for the establishment of mitigation plantings prior to the demise of existing, native vegetation. Additionally, project construction is not projected to have a significant effect on wildlife. Wildlife impacted by the loss of canal seepage-dependent vegetation would eventually be displaced rather than be directly affected by construction activity. Similarly, the habitat that would be affected by the reduction in canal seepage generally occurs hundreds to thousands of feet down-gradient from the canal in areas not directly disturbed by construction. Mitigation will be in accordance with NEPA, CEQA, and the Endangered Species Act, and it will also be required to meet the performance criteria established in the EIS/EIR and mandated by P.L. 100-675. Accordingly, no change to the mitigation ratios included in the Revised and Updated Draft EIS/EIR is proposed by Reclamation and CVWD, and no such change is required by law. Please see also response to comment I-3.

**I-6** Purchasing privately owned property and transferring land to the BLM or the California Department of Parks and Recreation allows for the protection of core areas in the Dos Palmas Area of Critical Environmental Concern and provides a buffer between future development and lands that are already owned by the BLM, State of California, or private conservancy organizations. Additionally, lands under BLM ownership would be managed in compliance with the *Dos Palmas Area of Critical Environmental Concern Management Plan and Decision Record*, allowing the enhancement of those lands' habitat values. The decision as to which parcels would be purchased will be made in consultation with the BLM and other agencies with management responsibility in the Dos Palmas Area of Critical Environmental Concern, maximizing the benefits of land purchase. Accordingly, a ratio of 1:1 is appropriate.

one acre of speculative conservation gain to compensate for each acre of definite and irrevocable habitat loss. The same problem described above is also apparent. One acre of habitat preserved may compensate for one acre lost in the most basic sense, but it does nothing to compensate for the species that are lost when their habitat is destroyed. Additional acreage is needed to compensate for this loss.

I-6  
cont.

Further problems with the mitigation plan are apparent on Page 7-9. Two new (presumably young trees) are not sufficient to mitigate for the loss of old growth ironwood, Palo verde, and mesquite trees that may be many decades old. Obviously, there is a high probability that the trees planted will not survive. A ratio of 10:1 with a monitoring program is more appropriate. In addition, there is no mitigation proposed for the disruption of desert washes. The agencies propose only to "recontour" the washes to "approximate pre-construction conditions." This is inadequate. Some mitigation must be provided for the harm to wildlife that results from the desert wash habitat being trampled, crushed, bulldozed, and otherwise disturbed during construction. Mitigation could consist of vegetation improvement projects within in the Dos Palmas ACEC, or additional off-site habitat preservation.

I-7

## II. Provisions Made for Federally and State Listed Species are Inadequate

Reclamation and the CVWD appear to rely upon the "Not Likely to Adversely Affect" determination in the Biological Assessment submitted to the FWS (Attachment E) for the proposition that no mitigation is needed for harm to the southwestern willow flycatcher and the Least Bell's vireo, both listed under the ESA. The fact that a willow flycatcher was found in the pre-construction survey (not conducted to protocol), and the fact that willow flycatcher and Least Bell's vireo habitat will definitely be destroyed by this project shows that this is clearly a "likely to adversely affect" situation. Section 7 consultation must be completed before this project can move forward. The Draft EIS/EIR presupposes the results of Section 7 consultation ("not likely to adversely affect") and is therefore inadequate. Mitigation for the southwestern willow flycatcher and Least Bell's vireo must be included and analyzed in the EIS/EIR. To the extent that Reclamation and the CVWD rely on a future or existing "not likely to adversely affect" concurrence from the FWS, that determination is subject to legal challenge. Additional mitigation measures such as habitat enhancement projects or off-site habitat preservation must be added to this project to avoid that result.

I-8

An additional problem is that Reclamation and the CVWD themselves appear to be uncertain about the success of the proposed mitigation measures. The Draft EIS/EIR states "Because Salt Creek includes habitat for the federally endangered desert pupfish and Yuma clapper rail, this impact would be avoided by provision of this 623-acre-foot level of flow, which *ostensibly* would provide for no net loss of suitable habitat for these species, as discussed under "Special Status Species." (Page 3-18 (emphasis added)). Proposed mitigation measures that "ostensibly" mitigates project impacts are unacceptable. As the courts have repeatedly held in this context, mitigation measures must be definite and certain. See, e.g., Idaho Sporting Congress v. Thomas, 137 F. 3d 1146, 1151 (9<sup>th</sup> Cir. 1998).

I-9

Contrary to assertions in the Draft EIS/EIR, the project as proposed does not represent a net benefit to the peninsular bighorn sheep ("PBS"). Much to the contrary, the preferred alternative will greatly increase the risk of PBS individuals drowning in the canal. The canal will have a 1.5:1 concrete slope and a 45% faster velocity than the existing canal. (Page 3-87). Use of this canal near siphon 20 as a water source by PBS is frequent and predictable between May-September. Id. If a single PBS individual falls into the new canal, this constitutes take and Reclamation and the CVWD will be liable.

I-10

## Center for Biological Diversity (continued)

**I-7** The 2:1 ratio for replacement of terrestrial ironwood, Palo Verde, and mesquite trees is appropriate given the relative abundance of this type of vegetation in the project area, its overall sensitivity, and the anticipated success rate for plantings. Additionally, monitoring will be conducted to verify the survival of replacement trees and additional plantings will be made if necessary to ensure the success of the 2:1 mitigation ratio.

In addition, the Coachella Canal passes under washes via a series of siphons. The areas where the washes pass over the canal siphons are generally disturbed and contain adequate room to allow bypass pipeline installation with minimal disturbance to desert wash vegetation. Accordingly, disturbances to desert wash vegetation and associated wildlife will be less than significant.

**I-8** The determinations regarding the significance of potential impacts to wildlife and the mitigation measures that would avoid or mitigate impacts to less than significant levels are based on the information and analyses presented in the EIS/EIR; this determination was not made simply on the basis of an anticipated “Not Likely to Adversely Affect” finding. As described in Section 3.9, informal Section 7 consultations with FWS are in progress.

Based on the information presented in the EIS/EIR and as noted in the response to comment I-5, mitigation plantings will have time to establish prior to the ultimate desiccation and loss of seepage-dependent desert riparian vegetation along the canal. As addressed in Section 3.5.3 of the EIS/EIR, marsh aquatic habitat along the canal will be maintained or mitigated, and overall the project will result in substantially more native habitat along the canal than currently exists. This increase in native habitat will occur as a result of replacing affected native marsh/aquatic and desert riparian habitat at a 1:1 ratio and replacing nonnative, invasive salt cedar stands at a 1:10 ratio. The increase in native habitat will benefit native species in the project area. As indicated in Attachment E-1, Dr. Robert McKernan from the San Bernardino County Museum surveyed the project area and found that the salt cedar stands along the Coachella Canal have marginal value for southwestern willow flycatcher at best due to their linear nature, lack of saturated soil, and/or overall paucity of dense vegetation with associated (underlying) surface water or saturated substrate. (The observed flycatcher was considered to be a transient; see Attachment E-1). The habitat is similarly unsuitable for least Bell’s vireo. For these reasons, no protocol surveys are necessary, and no additional mitigation beyond what is currently included in the EIS/EIR is required to ensure that the project is not likely to adversely affect southwestern willow flycatcher and least Bell’s vireo. See also response to comment M-50.

**I-9** Reclamation and CVWD are confident that pupfish habitat loss would not occur with implementation of the proposed mitigation, and monitoring will be conducted to ensure the success of project mitigation. Based on these factors, Reclamation and CVWD concur that the use of the word “ostensibly” is not appropriate, and it has been deleted from the Final EIS/EIR.

It is also worth noting that *Idaho Sporting Congress v. Thomas* does not provide any requirement that mitigation be “definite and certain.” The discussion of mitigation in *Idaho Sporting Congress v. Thomas* addresses the inadequacy of mitigation that was found by the court to be a “mere listing” of good management practices and that was not supported by analytical data. The mitigation contained in the Coachella Canal Lining Project Revised and Updated Draft EIS/EIR and in the Final EIS/EIR is based on analytical data, as presented in the body of the EIS/EIR and its attachments and appendices.

**I-10** Reclamation and CVWD respectfully disagree that, as proposed, lining the canal will increase the drowning hazard for large mammals (please see response to Comment I-11). Additionally, the Final EIS/EIR has been revised to reflect that Peninsular bighorn sheep do not utilize the canal (please see comment G-11 from the California Department of Fish and Game). Accordingly, there is no risk of Peninsular bighorn sheep drowning in the canal.

Letter I: Center for Biological Diversity (continued)

These proposed escape ridges have never been tested at the currently proposed slope of 1.5:1. Rather, a single test was performed with a tame mule deer at a slope of 2.5:1. Id. In addition, testing the effectiveness of the ridges after installation is unacceptable. Experimental mitigation will not suffice to lower an effect on listed species from significant to insignificant. In addition, the monitoring program is inadequate and vague. The Draft EIS/EIR states only "Monitoring would be completed during the first summer following construction. If the first season's observations conclusively reconfirm the effectiveness of the entry/escape ridges or other escape mechanisms, the monitoring program would be concluded..." (Page 7-10). "Conclusively" is not defined. This is not a minor technical defect. Mitigation and monitoring that is excessively uncertain or vague is of no conservation value and is unacceptable under the ESA, CEQA, and other laws.

I-11

I therefore, the proposed mitigation is inadequate and unacceptable. In order to avoid litigation over this issue, additional mitigation should be added to this project. This should include escape ramps in addition to the ridges as well as off-site habitat acquisition and protection.

An additional problem is that Reclamation and the CVWD propose to relocate any desert tortoises that may be found during construction. Any such relocation is take under the ESA. The agencies must obtain an Incidental Take Permit pursuant to a Habitat Conservation Plan from the US Fish & Wildlife Service, or the agencies will be liable under Section 9 of the ESA if even a single desert tortoise is harmed during this project. The project should also include a definite monitoring program for the desert tortoise, as well as preventative measures such as tortoise exclusion fences to protect them from being crushed or otherwise harmed during construction. Mitigation must be included for the desert tortoise habitat that will be destroyed by this project.

I-12

III. Conclusion

In summary, the Draft EIS/EIR for the Coachella Canal Lining Project proposes grossly inadequate mitigation measures for the federally and state listed and sensitive species that will be impacted by the project. Additional mitigation measures must be added to the project before it can move forward. Thank you for your consideration of these comments.

I-13

Sincerely,



Kassie Siegel  
Conservation and Litigation Associate

**Center for Biological Diversity (continued)**

**I-11** The addition of escape ridges represents a fundamental improvement in both large mammal and human safety as compared to the existing condition in the earthen canal reaches. The addition of escape ramps in areas of high wildlife visitation, such as at siphon 20, will also help to reduce drowning hazards. Monitoring the effectiveness of the escape ridges would be conducted the summer following construction (see Section 3.10.3 of the Revised and Updated Draft EIS/EIR). Monitoring would assess whether there is an increase in large mammal mortality in comparison to baseline (pre-lining) conditions. If no increase is observed, monitoring would cease following the first season. If results are inconclusive, additional monitoring would be conducted for a second season. If the monitoring shows that there is an increase in large mammal mortality, escape ramps or other measures would be constructed in the respective canal reaches to improve the ability of large mammals to escape from the canal. Please see response to comment I-10 regarding the Peninsular bighorn sheep. This proposed mitigation and monitoring is considered adequate, and no additional mitigation such as off-site habitat acquisition is considered necessary.

**I-12** Due to the poor quality of desert tortoise habitat in the project area and the absence of tortoises detected during wildlife surveys conducted by Reclamation in 2000, no tortoise occurrences are expected. Reclamation will complete the ongoing Section 7, Endangered Species Act consultation with the FWS prior to implementing the project (see EIS/EIR Section 3.9). Measures to deal with incidental discovery of desert tortoises are being addressed during this informal consultation. Section 3.8 of the Final EIS/EIR has been revised to contain the information provided in this response.

**I-13** Reclamation and CVWD respectfully disagree. The measures presented in the EIS/EIR are more than adequate to avoid or mitigate impacts to federally and State-listed or protected species. These measures are also being addressed in ongoing Section 7 consultation with FWS.