

F1 RESPONSES TO COMMENTS FROM THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY DATED FEBRUARY 22, 2000.

- F1-1 Please see Response to Comment F1-9 for a discussion of air quality issues.
- F1-2 The U.S. Army Corps of Engineers has determined by letter dated July 26, 2001, that the proposed Cadiz Project will not discharge dredged or fill material into a water of the United States or an adjacent wetland, that the Cadiz Project is not subject to Clean Water Act Section 404 jurisdiction, and that a Section 404 permit is not required. See Appendix E to the Final EIR/EIS Volume I. Table ES-2, Table 1-1, and Table 13-1 of the Final EIR/EIS have been revised accordingly.
- F1-3 Section 5.8 of the Final EIR/EIS identifies the sensitive habitats that could be potentially affected by the proposed project and the mitigation measures to be implemented to reduce the impact. Permanent and temporary impacts to native habitats are discussed in Section 5.8.4. Mitigation Measures B-26 and B-33 provide for the acquisition of mitigation lands to offset impacts to sensitive habitats. As indicated, all of the habitat types impacted by the project would be mitigated through offsite habitat acquisition. The CDFG and BLM must approve the mitigation lands prior to implementation of the project. In addition, Mitigation Measures B-3 through B-5 will reduce impacts to sensitive habitats in the area.
- F1-4 The Final EIR/EIS does contain sufficient information to fully assess the potential impacts to the environment.
- F1-5 The Final EIR/EIS, including the Management Plan, includes information regarding groundwater modeling and potential impacts. The Final EIR/EIS also includes a Mitigation Monitoring Plan that comprehensively describes all mitigation and monitoring activities.
- F1-6 See Response to Comment F1-9 for a discussion of the air quality conformity determination prepared for the project.
- F1-7 A copy of the Final EIR/EIS will be sent.
- F1-8 General comments are noted. The CDCA Plan is addressed in Section 5.2.1 of the Final EIR/EIS.
- F1-9 The Draft EIR/EIS overestimated construction emissions. The Final EIR/EIS contains revised air emission calculations. A draft air quality conformity determination has been issued for the 30-day comment period required by 40 CFR 93.156 (b). The conformity analysis was designed and conducted in coordination with EPA Region IX, BLM, Mojave Air Quality Management District and Metropolitan. The analysis concludes in a determination that the project is in conformity with the Clean Air Act. The commentor is correct that the proposed project is not in a federal non-attainment area for ozone.
- F1-10 As discussed in Section 5.5.4 of Volume I of the Final EIR/EIS, the movement of the saline water interface is defined by the 1,000 milligram per liter total dissolved solids contour (note that this is not brine). The possibility of water level declines beneath Bristol Dry Lake has been evaluated and the possibility of adverse effects will be managed through the Management Plan. See Section 7.2.6 of the Management Plan.

- F1-11 A detailed summary of water resources data and modeling used to evaluate the project is contained in the two volume Cadiz Groundwater Storage and Dry-Year Supply Program, Draft Environmental Impact Report/Draft Environmental Impact Statement: Groundwater Resources Report (Report No. 1163). This report contains data and modeling results from the eight-month pilot demonstration program and other investigations conducted to characterize the groundwater basin, infiltration rates in the vicinity of the project spreading basins, and recharge rate to the area.

Groundwater modeling is being expanded as part of the project, as described in Section 3 of the Management Plan. For example, the geographic area of certain groundwater models will include the entire Bristol, Cadiz and Fenner Valley watershed areas. While such models are only approximations and simplifications of real systems they can be useful management tools, when used in conjunction with measured data, for testing alternative monitoring designs. Accordingly, groundwater models will be used to aid the process of evaluating and refining the monitoring network and Action Criteria.

To develop a further understanding of the hydrogeologic system, a number of additional models would be prepared including a rainfall-runoff model, an unsaturated zone flow and transport model, a saturated zone flow and transport model, a saturated zone model, and a density dependent groundwater flow and transport model. These models and their uses are described in Section 3 of the Management Plan.

- F1-12 See Master Response “Groundwater Monitoring and Management Plan.” A list of relevant studies of the Mojave Desert used in preparation of the environmental documentation is presented in Section 15 of Volume I of the Final EIR/EIS. In addition, a detailed summary of water resources data and modeling used to evaluate the project is contained in the two volume Cadiz Groundwater Storage and Dry-Year Supply Program, Draft Environmental Impact Report/Draft Environmental Impact Statement: Groundwater Resources Report (Report No. 1163).

Because of technical disagreement regarding the groundwater flow modeling used in the Draft EIR/EIS, the six operational scenarios presented in the Draft EIR/EIS are no longer being utilized to evaluate potential impacts of the proposed project. The Management Plan has replaced the use of the operational scenarios and has been incorporated into the proposed action. The Management Plan will require measurement of physical parameters at key locations throughout the potentially affected region for early detection of changes to groundwater levels, groundwater quality, and air quality related to mobilization of dust from the dry lakebeds. Data obtained from physical monitoring facilities will be used to calibrate models that will be used to predict behavior of the affected aquifers and surface water features. Early modifications to project operations dictated by the Management Plan will avoid adverse impacts to critical resources that could be caused by the project. Impacts are evaluated in Section 5.5.4 of the Volume I of the Final EIR/EIS assuming implementation of the Management Plan.

In response to the comment concerning “reduced indigenous groundwater extraction quantities” note that the actual quantity of water that could be stored and transferred will be governed by the requirements of the Management Plan and is therefore not quantified as of this time. The storage of Colorado River water and the extraction of indigenous groundwater that could be transferred are conditioned by the requirements of the Management Plan, and therefore will be quantified during its implementation. Because there is no set amount of indigenous groundwater to be transferred, the Final EIR/EIS does

not evaluate the potential impacts from the transfer of a set amount of water, but instead requires operation of the aquifer so that no adverse impacts occur to critical resources.

In addition, once the Management Plan models have been expanded and updated, they will be run for various, hypothetical operational scenarios using a range of estimates of natural recharge as described in Section 3 of the Management Plan. This range will include the low end of current natural recharge estimates.

- F1-13 Section 5.5.4 of the Final EIR/EIS Volume I considers the potential impacts to water quality of the Cadiz Project. The Management Plan includes provisions for monitoring, decision-making and implementation of corrective actions, if necessary, to ensure that project operations will comply with applicable water quality regulations. More specifically, the Management Plan addresses four types of potential impacts to water quality: 1) potential impacts to indigenous groundwater quality due to the introduction of water from the Colorado River Aqueduct, 2) potential impacts to indigenous groundwater quality due to induced migration of water from the deeper aquifer zones underlying the project area, 3) potential impacts to indigenous water quality due to induced flow of lower quality water from Bristol and Cadiz dry lakes and, 4) potential impacts to water quality in the Colorado River Aqueduct due to introduction of indigenous groundwater. For a more detailed explanation of Management Plan provisions to protect water quality, see Master Response “Water Quality.”
- F1-14 See Master Response “Water Quality.” The potential for water quality impacts to wells owned by neighboring landowners due to project operations is identified in Section 5.5.4 of the Final EIR/EIS Volume 1 and in the Management Plan.
- All storage and extraction activities will be monitored by and subject to the provisions of the Management Plan and thereby ensure that there will be no adverse impacts to “any water intakes” that are in hydraulic communication with the project area. Section 7.2.1. of the Management Plan specifically addresses potential impacts to indigenous groundwater quality.
- F1-15 No pesticides or any hazardous substances have been detected in groundwater in the project area. A full suite of Title 22 analyses was conducted on the Fenner Gap pilot test production well. These data are reported in the Cadiz Groundwater Storage and Dry-Year Supply Program, Draft Environmental Impact Report/Draft Environmental Impact Statement: Groundwater Resources Report (Report No. 1163). All water produced by the project will comply with applicable water quality standards and is not anticipated to affect the ability to meet drinking water standards. As such, no impacts to human health are anticipated.
- F1-16 A comprehensive Management Plan has been prepared and incorporated in the project. For further details, see the Groundwater Monitoring and Management Plan, Volume IV of this Final EIR/EIS.
- F1-17 The applicability of the Clean Water Act is discussed in response to comment F1-2.
- F1-18 The Desert Tortoise Biological Assessment for the Cadiz Groundwater Storage and Dry-Year Supply Program was submitted by BLM to the USFWS on December 9, 1999 to initiate Section 7 Consultation with the U.S. Fish and Wildlife Service. Section 7 Consultation will be completed prior to implementing the project.

F1-19 The Final EIR/EIS assesses impacts to specific types of plant communities and wildlife habitats found in the washes in the project area, including Mojave wash scrub and Mojave creosote bush scrub. Each specific area containing these habitat types including Schulyler Wash will be subject to mitigation measures provided in the Final EIR/EIS. In addition, no permanent diversion structures are planned for the Schulyler Wash or for any of the washes to be crossed by the pipeline. Spreading basins will be located outside major natural drainages to avoid erosion impacts from flash flooding. Impacts to washes will be limited to periods of construction. The pipeline will be buried sufficient to avoid creating flood diversions. Wellhead structures will have minimal effect of surface flows. Since the washes are ephemeral, the need for temporary diversion structures during construction will be minimal. Nonetheless, Mitigation Measure B-33 would provide mitigation lands on a 1:1 ratio for wash habitats disturbed during construction.

F1-20 Permanent and temporary impacts to native habitats are discussed in Section 5.8.4 of the Final EIR/EIS Volume I. Mitigation Measures B-26 and B-33 provide for the acquisition of mitigation lands to offset impacts to sensitive habitats (Mojave wash scrub, Mojave creosote bush scrub, desert dunes/sand fields) as identified in Table 1. As indicated, all of the habitat types impacted by the project will be mitigated through offsite habitat acquisition. See Mitigation Measure B-26. In addition, Mitigation Measures B-3 through B-5 will also reduce impacts to sensitive habitats in the project area.

No contingency plan for the off-site mitigation land is required to ensure the “success” of this habitat, because it is being acquired and preserved in its existing, pristine condition. Mitigation contingency plans are typically associated with habitats being created or enhanced. Mitigation Measure B3 provides for the removal of invasive species for two years following construction activities along the pipeline corridor, allowing for the replaced top soil to re-establish native species

F1-21 The mitigation measures for loss of native habitat are the transfer of equal areas of comparable habitat to BLM for wildlife management and the salvage of topsoil for revegetation of the disturbed construction footprint. See Mitigation Measures B-1, B-2, B-3, B-32 and B-33 in Section 5.8.5 of the Final EIR/EIS Volume I. The Final EIR/EIS has included (for each alternative) quantification of temporary and permanent impacts to offset impacts to all sensitive habitats, including but not limited to Mojave wash scrub habitat. In addition compensatory mitigation, offsite habitat preservation, will be provided.

F1-22 Temporary impacts will involve the disturbance and/or clearing of vegetation and topsoil, which will be replaced following construction activities. Habitats thus impacted can often recover if the source of disturbance is removed and non-native species are adequately inhibited during the reestablishment. Permanent impacts are limited to developed (e.g., unpaved roads, pumping stations) and/or routinely disturbed habitats (e.g., spreading basins) and result in permanent habitat modification/substrate alteration. Habitats thus impacted (see Table 8.5.1 of the Final EIR/EIS Volume I for totals) will not be likely to recover, or do so in such a way that a pre-impact vegetation assemblage can no longer persist. Page 5-53 of the Draft EIR/EIS discussed the potential for sand flow impacts which were found to be very remote due to project facilities being located away from the areas affected by windblown sand. Biological resources are discussed in Section 5.8 of the Final EIR/EIS Volume I.

The reestablishment of temporarily impacted habitats resulting from the proposed project is discussed in Section 5.8.5 of the Final EIR/EIS Volume I under Mitigation Measures B-1,

B-2, B-3, B-32 and B-33. Vegetation in the temporarily impacted areas will be crushed in place, and the removed plant material, along with the top 4 to 6 inches of topsoil, will be stockpiled (for a period not to exceed 3 months). These stockpiled materials will then be spread over the re-contoured surfaces of previously (temporarily) impacted areas following construction. After spreading the stockpiled material, including salvaged topsoil, a sheepsfoot roller will be used to roughen the surface, and thereby create additional microhabitat for seed germination. Apart from using these techniques, no special revegetation/stabilization techniques are anticipated to be necessary. Regardless of the success of this effort, all temporarily impacted habitats will be mitigated as if they were permanent impacts through offsite habitat acquisition.

Stabilized/partially stabilized desert dunes/sand fields habitat will be impacted by the proposed project, as quantified in Table 5.8.1 of the Final EIR/EIS Volume I. Because temporary impacts will be mitigated as if they were permanent impacts through the establishment of mitigation lands, the length of time required for reestablishment of these areas is compensated for.

F1-23 As discussed in Section 5.8.5 of the Final EIR/EIS, Mitigation Measures B-26 and B-33, all native habitat communities impacted by the proposed project are desert tortoise habitat (Mojave creosote scrub, Mojave wash scrub and stabilized/partially stabilized desert dunes/sand fields) and will be mitigated at a 1:1 ratio by preservation of the offsite desert tortoise habitat.

F1-24 Removal of non-native plants from spreading basins would be accomplished by physical means, no herbicides will be used. See Mitigation Measure B-3.

F2 RESPONSES TO COMMENTS FROM THE UNITED STATES DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE DATED FEBRUARY 28, 2000.

F2-1 Comments noted. The location of the Mojave National Preserve in relation to the project area is depicted on Figure 1-2 of the Final EIR/EIS Volume I.

F2-2 In response to the differences in opinion referenced in this comment, BLM and Metropolitan developed the Management Plan that is incorporated into the project. This Management Plan was developed in consultation with the NPS, USGS and County of San Bernardino. The project will be operated in accordance with the Management Plan to avoid adverse impacts to critical resources, including those in the Mojave National Preserve. For further description of the Management Plan, see Master Response "Groundwater Monitoring and Management Plan" and the Management Plan, Volume IV of the Final EIR/EIS. See Response to Comment F2-60.

F2-3 Comments noted and responded to below.

F2-4 The original public review period for the Draft EIR/EIS was from November 26, 1999 to February 23, 2000 (a period of 90 days). The public review period was extended an additional 14 days, to March 8, 2000.

A total of six public meetings have been held in connection with the Cadiz Project Draft EIR/EIS. Three public scoping meetings for the Draft EIR/EIS were held: Cadiz (2/23/99), the City of Twentynine Palms (2/25/99) and the City of Needles (5/10/99). Additionally, three Draft EIR/EIS public comment meetings were held: Cadiz 12/15/99, City of

Twentynine Palms (12/15/99) and City of Needles (12/16/99). During these public meetings any interested person was provided the opportunity to make oral or written comments and/or to have questions about the Cadiz Project answered by the Metropolitan staff and consultants and BLM staff in attendance at those meetings. Sufficient notification was provided for public review and comment on the Draft EIR/EIS.

- F2-5 Indices for the Draft EIR/EIS and the Supplement were provided in the Supplement, Section 8.0. An index is also included in Section 17 of the Final EIR/EIS Volume I.
- F2-6 Potential aesthetic impacts of construction are disclosed in Section 5.14.4 of the Final EIR/EIS Volume I. The Final EIR/EIS concludes that, based on implementation of mitigation measures, the Cadiz Project will not result in significant adverse impacts related to aesthetics. Therefore, aesthetics is listed in the Final EIR/EIS as a project-related impact, which would not be significant after mitigation.
- F2-7 Comments noted. See Responses to Comments F2-48 through F2-52.
- F2-8 Comment noted. In Section 1 of the Final EIR/EIS Volume I, the language has been revised to read, "...The BLM must consider whether to: 1) amend the California Desert Conservation Area Plan for an exception to the utility corridor requirement; and 2) grant rights-of-way to Metropolitan for construction and operation of the project.
- F2-9 Comments noted. See Response to Comment F2-8.
- F2-10 The initial list of potential project sites included all known potential locations of groundwater basins that could provide storage of Colorado River water, even if they were located within or in close proximity to the Joshua Tree National Park. However, as noted, these locations were screened out because such land use within the Joshua Tree National Park would conflict with designated park purpose and federal law. Similar concerns do not arise from the Cadiz Project's location 15 miles away from the Mojave National Preserve. See Response to Comment F2-12.
- F2-11 See the Final EIR/EIS, Figure 1-2 which depicts the location of the Mojave National Preserve relative to the project area.
- F2-12 Environmental issues were considered in the screening of potential projects, including potential impacts to public uses of National Parks. For example, the "Pinto Valley Groundwater Storage Project" site, while it met all other initial screening criteria, was eliminated for further review because a project at this site would have significant conflicts with existing National Park uses and environmental values. The Mojave National Preserve was not considered an "adjacent public use of park lands" because it is not adjacent to the project. It is located 15 miles away.
- F2-13 The project will not affect or alter the rights of any overlying landowner to continue diverting and using water from surface streams or groundwater basins, including the rights appurtenant to lands in the wilderness areas and Mojave National Preserve. The historic use of groundwater in the Fenner Valley is described in Section 5.5.1 of the Final EIR/EIS.

The Cadiz Project is a conjunctive use storage and transfer project that will use raw water from the Colorado River and could use indigenous groundwater from the Cadiz area. Metropolitan will have a paramount right to recapture water imported from the Colorado

River and stored in the groundwater basin underlying the project site. As to the transfer of indigenous groundwater, California law recognizes that groundwater may be appropriated for non-overlying uses, including exportation for use outside the groundwater basin boundary.

- F2-14 Groundwater mounding resulting from artificial recharge of surface water is well-documented and, in fact, was measured and observed during the pilot infiltration test in Fenner Gap (Metropolitan, 1999). Groundwater mounding theory is described by Hantush (1967), Marino (1974) and more recently by Bouwer (1998). Groundwater mounding is well documented for surface water percolation along the Santa Ana River (Poland, 1947) and the Kern Water Bank (DWR, 1987). The lateral movement of mounded groundwater occurs based on Darcy's Law such that groundwater will move from an area of higher hydraulic head (in this case the area of highest mounding) to an area of lower hydraulic head.
- F2-15 See Master Response "Formulation and Screening of Potential Projects."
- F2-16 See Master Response "Formulation and Screening of Potential Projects." In response to the first part of this comment, "1) other locations for the project," an initial screening of locations for Colorado River water storage projects was evaluated as described in Section 3 of the Final EIR/EIS Volume I. The identification and evaluation of potential projects was conducted in a series of increasingly detailed studies beginning with the evaluation of 13 potential projects for supplying water along the Colorado River Aqueduct. The result of this process was the determination that two projects were feasible: the Hayfield Valley Groundwater Storage Project and the Cadiz/Fenner Valley Project.

Metropolitan and BLM were unable to identify any other feasible locations beyond the two identified in the Final EIR/EIS.

In response to the second part of the comment "2) using the Fenner, Bristol, and Cadiz aquifers for storage of Colorado River water only (i.e. no take of indigenous water)" the use of the aquifer system underlying the project area for "storage-only" of Colorado River water has been evaluated in the Final EIR/EIS. All known potential impacts that could result from the storage of Colorado River water have been identified and evaluated. Examples of potential impacts that could result from the storage of Colorado River water include but are not limited to: reduction of indigenous groundwater quality, impacts to neighboring wells, liquefaction, hydrocompaction, dilution of brine resources, and other impacts analyzed in Section 5.5.4 of the Final EIR/EIS.

In response to the third portion of the comment "3) taking a significantly reduced amount of indigenous water, with the amount reflecting USGS estimates for natural recharge to the area" is discussed in the Management Plan. The actual quantity of water to be stored and transferred is not known at this time. The amount of Colorado River water that could be stored and the quantity of indigenous groundwater that could be transferred are governed by the requirements of the Management Plan, and therefore will be quantified during its implementation. Because there is no set amount of indigenous groundwater to be transferred, the Final EIR/EIS does not evaluate the potential impacts from the transfer of a set amount of water, but instead requires operation of the project so that no adverse impacts occur to critical resources. Therefore, the request to consider the environmental impacts of a "significantly reduced amount" of Colorado River water has essentially been

accommodated, as the Final EIR/EIS evaluates the transfer of any amount of water that will satisfy the provisions of the Management Plan.

All project operations, including extraction of groundwater (if any), will be governed by and subject to the provisions of the Management Plan for the purpose of ensuring there will be no adverse impacts resulting from project operations. For example, potential adverse impacts to critical resources due to the transfer of indigenous groundwater would be avoided by limiting the amounts of transfer (if any) to such amounts that comply with the requirements of the Management Plan.

Incorporation of the Management Plan into the project has the practical effect of combining the storage element and the transfer element of the Cadiz Project into one project alternative. For example, if it were determined that indigenous groundwater could not be transferred in compliance with requirements of the Management Plan, then the project would be operated as a “storage-only” project. Conversely, should transfers of indigenous groundwater comply with the requirements of the Management Plan, including the avoidance of adverse impacts to critical resources, the Cadiz Project would then be able to provide both conjunctive-use storage and transfer. In other words, under the provisions of the Management Plan, critical resources will receive the same level of protection if the project were operated as storage-only project or as a storage and transfer project. Therefore, all of the potential environmental impacts which could result from a storage-only project have been evaluated in the Final EIR/EIS.

F2-17 Conservation is a basic element of Metropolitan’s long-term water management strategy. Metropolitan has historically assumed a leadership role in water management and is currently implementing a comprehensive package of conservation and water management programs to ensure its ability to meet current and projected demand within its service area. Metropolitan and its member agencies have contributed over \$160 million to conservation programs involving retrofitting more than four million residential plumbing fixtures. The result of these and other conservation programs has been the permanent reduction in water demand of 480,000 acre-feet per year. Programs implemented by Metropolitan and its member agencies account for more than half of the water savings due to conservation in California.

The California Urban Water Conservation Council (CUWCC) has established a list of 14 Best Management Practices (BMP’s) to promote water conservation in California. Metropolitan supports the CUWCC as a signatory to *its Memorandum of Understanding Regarding Water Conservation in California* (Urban MOU). Metropolitan also supports CUWCC with technical, administrative, governance and financial assistance. The Association of California Water Agencies and the U. S. Bureau of Reclamation have recognized Metropolitan’s significant contributions to the development and coordination of conservation activities. Metropolitan’s Conservation and Related Programs are described in *The Regional Urban Water Management Plan for the Metropolitan Water District of Southern California, December 2000*. Xeriscaping, water rationing and increased water rates during dry years are measures that are not included in CUWCC’s current list of approved BMP’s. Furthermore, Metropolitan is a wholesale water agency and does not have the authority to regulate water use by retail customers.

Metropolitan’s Integrated Resources Plan (IRP) includes a total conservation saving of 1,000,000 acre-feet per year by the year 2020. This target includes pre-1990 savings, price

effects and continued savings accruing from the effect of BMP implementation. See Master Response “Water Conservation.”

- F2-18 In response to the differences in opinion referenced in this comment, BLM and Metropolitan developed the Management Plan that is incorporated into the project. This Management Plan was developed in consultation with the NPS, USGS and County of San Bernardino. Reference to a sustainable yield of 30,000 acre-feet per year has been deleted from the Final EIR/EIS.
- F2-19 The locations in question are not located within the Mojave National Preserve. They are located on Cadiz Inc. landholdings as identified in the Final EIR/EIS, Figures 3-1 and 3-2. The text of the Final EIR/EIS has been revised to read “...Spreading basins in the upper reaches of Fenner Gap, on Cadiz Inc. landholdings, were initially considered...”
- F2-20 Operation of the project in accordance with the Management Plan will avoid environmental impacts to the Mojave National Preserve.
- F2-21 The Final EIR/EIS concludes that the Cadiz Project will not result in any significant adverse impacts to the Fenner Basin. In fact, the Cadiz Project will establish substantially greater protection of natural resources, in and surrounding the project area than presently exist through the extensive monitoring and management required by the Management Plan.
- F2-22 The commentor is incorrect in stating that the “projected deficit is caused by increase [sic] water consumption without any conservation measures being imposed.” In recent years, per capita water consumption has decreased in the Metropolitan service area. See Master Response “Water Conservation.” Deficits will increase as a result of an inability to convey available supplies to Metropolitan’s service area.
- F2-23 Ocean desalination is not a potential alternative to the proposed project because it does not meet the project objectives related to managing Colorado River water supplies. As stated in Section 4.8.2 of the Final EIR/EIS, desalination is not a feasible solution for seasonal or long-term storage deficit problems and therefore was not considered as an outcome of the No Action alternative.
- F2-24 Comment noted. As stated in the CDCA plan: “The California Desert Plan has been designed to provide a guide for management over a long-term period. In order to do this, a process must be provided that will be flexible enough to permit changes in the face of unanticipated demands or response to future events that, as yet, cannot be foreseen.” Accordingly, chapter seven of the California Desert Conservation Area Plan provides criteria and a procedure for amendments to the Plan. In compliance with these provisions, the BLM is authorized to consider an amendment to the California Desert Conservation Area Plan for an exception to the utility corridor requirement for the Cadiz Project. See also Response to Comment F2-8.
- F2-25 The cited reference is to the area impacted by the project wellfield. This construction would cause a disturbance to existing Cadiz agricultural operations limited to small areas as described in Section 5.1.4 of the Final EIR/EIS Volume I. This disturbance of up to six acres of agricultural operations may be necessary to accommodate construction of pipelines for each of the Cadiz Project build alternatives. As noted in the Final EIR/EIS, the disturbance of up to six acres of agricultural land out of a total of 1,600 acres is negligible and not significant.

- F2-26 Comment noted. The terms “active” and “potentially active” are used in accordance with the definitions of the California State Geologist. The fact that a fault might not be considered under these definitions to be “active” or “potentially active” does not rule out the possibility of future seismic activity. Instead, these definitions are intended to identify such a fault as having a relatively low risk of future seismic activity.
- F2-27 While significant seismic shaking has the potential to alter the subsurface boundaries of groundwater basins, the potential is very remote. As described in the Final EIR/EIS, a magnitude 7.1 earthquake (the Hector Mine Earthquake) occurred along the Lavic Lake Fault on October 16, 1999. The epicenter of this earthquake was approximately 45 miles west of the project area. Even though this earthquake was one of the four largest earthquakes to have occurred in southern California in this century, no changes to groundwater boundaries have been observed. Therefore, no further clarification is necessary.
- F2-28 Section 5.5.4 of the Final EIR/EIS Volume I analyzes the potential for land subsidence related to the Cadiz Project. It identifies the area with the greatest potential for subsidence as the western part of the project wellfield in the vicinity of the Cadiz Inc. agricultural operations.

Subsidence is also addressed in the Management Plan. The potential for land subsidence and loss of groundwater storage capacity due to groundwater withdrawal is addressed in Section 2.2. Section 5 of the Management Plan describes the network of monitoring features. Examples of monitoring features that will protect against potential subsidence include, but are not limited to, land surface elevation surveys (Feature 10), an extensometer (Feature 11), and microgravity stations (Feature 12). Section 6.2. describes monitoring, testing and reporting procedures relating to land subsidence. Section 7.2.3 identifies the action criteria, decision-making process and corrective measures relating to the potential for land subsidence.

If it were determined through the analysis of field monitoring (outlined above) that project operations caused a surface elevation change of 0.5 feet within the project area, all relevant information will be evaluated in accordance with the provisions of the Management Plan. Corrective measures that will be implemented to avoid project impacts include one or more of the following: (a) reduction in pumping from project wells, (b) revision of pumping locations within the project wellfield, (c) stoppage of groundwater extraction for a duration necessary to correct the predicted impact, or (d) delivery of Colorado River water, if available, to the project spreading basins. Accordingly, the anticipated impact of subsidence as a result of project operations is determined to be less than significant.

- F2-29 Not all occurrences of land subsidence are permanent or result in non-recoverable compaction of soils as is implied by the comment. If, through the analysis of field monitoring, it were determined that project operations caused a surface elevation change of 0.5 feet within the project area, all relevant information will be evaluated in accordance with the provisions of the Management Plan. Corrective measures that will be implemented are summarized in Response to Comment F2-28. Accordingly, Section 5.5.4 of the Final EIR/EIS Volume I provides an analysis of potential for land subsidence due to the operation of the Cadiz Project and concludes that “...the anticipated impact of subsidence as a result of project operations is determined to be less than significant.”

- F2-30 Figure 5.5-13 of the Final EIR/EIS Volume I shows the upper elevations of the Fenner watershed within the Mojave National Preserve as requested. The physiology and topography of the Mojave National Preserve, to the extent that it overlies a hydrologically connected aquifer system, is included in the physiology and topological description in Section 5.5.1 of the Final EIR/EIS Volume I
- F2-31 Comment noted. See Response to Comment F2-30.
- F2-32 Comments noted. It is acknowledged that there is a disagreement among technical experts as to the estimates of groundwater recharge contained in the Draft EIR/EIS. In response to the differences in opinion referenced in this comment, BLM and Metropolitan developed the Management Plan that is incorporated into the project. This Management Plan was developed in consultation with the NPS, USGS and County of San Bernardino. The project will be operated in accordance with the Management Plan to avoid adverse impacts to critical resources, including those in the Mojave National Preserve. For further description of the Management Plan, see Master Response “Groundwater Monitoring and Management Plan” and the Management Plan, Volume IV of the Final EIR/EIS.
- F2-33 Because the Cadiz Inc. agricultural wellfield is actively pumped throughout the year, evaluation of water levels based on measurements made in these wells must consider long-term trends, not short-term effects resulting from inadequate recovery from pumping and/or interference from other wells. As many as sixteen years of pumping history and groundwater level data are available for this wellfield. In general, after observing an initial decline in water levels related to the initiation of pumping, water levels stabilized owing to the adjusted equilibrium of the aquifer. This water level response is typical of all groundwater basins in which pumping occurs. Hydrographs for the Cadiz Inc. agricultural wells are presented in the [Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Groundwater Resources Report \(Metropolitan Report No. 1163\)](#).
- F2-34 Section 5.5.1 of the Final EIR/EIS Volume I describes existing water uses in the subsection entitled “Groundwater Use.” The monitoring network and data that was used to collect this information is summarized in the 1993, San Bernardino County certified Final Environmental Impact Report (SCHNo.89020203), (URS Consultants Inc. 1993b). The County of San Bernardino mandated that specific groundwater monitoring activities to be undertaken by Cadiz (see Mitigation Monitoring and Compliance Program Mitigation Measure WR6). To comply with these monitoring requirements, the Cadiz Valley Agricultural Development Ground Water Monitoring Plan was developed in cooperation with San Bernardino County to monitor all potential environmental impacts that could result from the agricultural operations water use. Section 5.5.2 of the Final EIR/EIS Volume I presents the thresholds of significance used to evaluate potential groundwater level declines.
- See Response to Comment F2-33.
- F2-35 The California Environmental Quality Act (CEQA) requires that the CEQA lead agency state in the EIR the thresholds at which potential adverse impacts will be considered significantly adverse to the environment for purposes of environmental review. These thresholds are determined by the CEQA lead agency for the purposes of CEQA compliance. Therefore, the significance thresholds listed in the Final EIR/EIS have been used to evaluate the Cadiz Project with respect to effects that are related to water resources. Section 5.5.4 of

the Final EIR/EIS Volume I, discusses each potential water resources impact of the project, and a determination is made as to whether the impact will be significant.

The Management Plan has been incorporated into the project and potential effects are reviewed in light of its implementation. The Management Plan identifies critical resources, potential adverse impacts of the Cadiz Project on the critical resources and action criteria which, if reached, would serve as a precursor to indicate that an adverse impact may occur as a result of the project. Because the Management Plan has been developed to predict and avoid adverse impacts to critical resources, the action criteria have been set conservatively and would be triggered well in advance of the occurrence of a significant adverse effect as identified by the CEQA significance thresholds listed in Section 5.5.2 of the Final EIR/EIS.

See also Master Response "Groundwater Monitoring and Management Plan" regarding the role of the implementation of the Management Plan in preventing adverse impacts to the aquifer system.

- F2-36 Metropolitan, in compliance with the provisions of the Management Plan, will operate the Cadiz Project including storage of water delivered from the Colorado River Aqueduct and the extraction of stored Colorado River water and indigenous groundwater. The BLM will establish and retain control over the enforcement of the Management Plan through the terms and conditions of any right-of-way grant(s) it issues.

For the purposes of the Cadiz Project, the term "wet" year refers to future years when Colorado River water will be available to divert from the Colorado River Aqueduct to the Cadiz Project conveyance facility and to the spreading basins for percolation to the groundwater basin. The term "dry" year refers to any year in which there would be a need for water within Metropolitan's service area and which Metropolitan would seek to withdraw water from the project area (stored Colorado River water, indigenous groundwater, or both). Regardless of the occurrence of a "wet" or a "dry" year, all Cadiz Project groundwater operations, including the amount of indigenous groundwater extracted, will be governed by and subject to all of the provisions of the Management Plan. The implementation of the project and the Management Plan will ensure the protection of the aquifer system underlying the project area from any adverse impacts related to project operations.

- F2-37 The figure referred to as "Cadiz, Inc., attachment 2" in the comment letter did not appear in either the Draft EIR/EIS or the Supplement. The figure attached to the comment letter illustrates groundwater levels south of the Clipper Mountains, which is not within the boundary of the Mojave National Preserve. Regardless of any prior computer modeling, storage and extraction operations of the project will be governed by the Management Plan that will assure no adverse impacts to critical resources will occur.

- F2-38 See Response to Comment F2-37. As described in Section 3 of the Management Plan, a series of water resource models will be developed and calibrated using available data prior to the commencement of Cadiz Project operations (during the pre-operational phase), during the operational phase, and during the post-operational phase. Although models are only approximations and simplifications of real systems they are considered to be useful management tools, when used in conjunction with measured data, for testing alternative monitoring designs and management options. Accordingly, models will be used to help guide decisions on further evaluating and refining the monitoring network, and evaluating and refining action criteria.

F2-39 The potential for impacts to indigenous groundwater quality due to the introduction of water from the Colorado River Aqueduct are addressed in Section 5.5.4 of the Final EIR/EIS Volume I. The introduction of Colorado River water (approximately 600 mg/L TDS) into indigenous groundwater in the project area (approximately 300 mg/L TDS) will result in an increase in groundwater TDS concentrations. It is anticipated that this effect will be limited to the area of groundwater mounding caused by the project spreading operations. Any introduced Colorado River water will most likely be removed by the project wellfield during extraction operations. To recover stored Colorado River water from the basin, selected production wells will be screened in the more permeable upper alluvial sediment (current unsaturated zone). This design feature will allow for extraction of stored water that contains greater concentrations of TDS than the indigenous groundwater.

Any resulting increase in TDS concentrations within the project area groundwater will be small and will not affect compliance with drinking water standards or other beneficial groundwater uses (municipal, industrial and agricultural) in or adjacent to the project area.

In addition, perchlorate has been identified in Colorado River water and could impact the water quality of the indigenous groundwater in the Cadiz Project area. Recent testing has detected this constituent in Colorado River water at concentrations ranging from non-detectable to as high as 9 micrograms/liter ($\mu\text{g/L}$). The current provisional State of California Department of Health Services maximum contaminant level for perchlorate is 18 $\mu\text{g/L}$ in drinking water, not 18.0 nanograms per liter as stated by commentor. Colorado River Aqueduct water is a raw water source not subject to this provisional limit. Nonetheless, the levels of perchlorate in Colorado River Aqueduct water are approximately one half of this provisional limit. Any increased perchlorate concentrations that may occur in the project area will be within the provisional limit.

The Management Plan, Section 5 describes the Management Plan network of monitoring features. A summary of the types of monitoring features, as well as monitoring frequencies is provided in Table 1, a summary of monitoring features and testing protocols is provided in Table 2 and generalized locations of monitoring facilities are shown in Figures 4 and 5. Section 6.2 identifies monitoring and testing procedures relating to the protection of this aquifer system including the protection groundwater quality. Section 7.2.1 describes the applicable action criteria, decision-making process and corrective measures.

For additional information, see Master Response “Water Quality” sub-heading entitled “Potential Impacts to Indigenous Groundwater Quality due to the Introduction of Water From the Colorado River Aqueduct.”

F2-40 Section 5.5.4 of the Final EIR/EIS Volume I analyzes the potential impacts to water resources, due to change of groundwater elevations as a result of project operations. No springs are known to exist in the project area. The closest spring (Bonanza Spring located on BLM-managed land) is located in the Clipper Mountains approximately 12 miles north of and up gradient of the proposed location for the Cadiz Project spreading basins and wellfield. Other springs in the region are located in the Granite and Old Woman mountains. These springs range in distance from 15 to 20 miles from and are up-gradient of the project area. Springs located within the Mojave National Preserve, federally designated wilderness areas, and Bonanza Spring are identified in the Management Plan as critical resources.

The Management Plan includes a comprehensive program for monitoring and preventing any adverse impact to such springs. Section 2.1 identifies all known potential impacts to such springs. Section 5 describes the Management Plan network of monitoring features.

F2-41 Metropolitan and the BLM are the agencies responsible for approving the Management Plan. Metropolitan, in compliance with the provisions of the Management Plan, will operate the Cadiz Project. The BLM will establish and retain control over the enforcement of the Management Plan through the terms and conditions of any right-of-way grant(s) it issues. See Master Response “Governance.”

F2-42 Comment noted.

F2-43 In response to a number of Draft EIR/EIS comments raising concerns regarding the proposed Cadiz Project operations related to potential impacts to springs, the Cadiz and Fenner groundwater basins, adjacent groundwater basins, and the potential for increased dust mobilization from Bristol and Cadiz dry lakebeds, the Management Plan was prepared by the BLM, NPS, USGS, Metropolitan, the County of San Bernardino, and Cadiz Inc. It will govern water storage and extraction so as to ensure there will be no adverse impacts to critical resources that could result from Cadiz Project operations. Critical resources identified in the Management Plan are as follows:

- Springs Within Affected Watersheds Including Springs of the Mojave National Preserve and BLM-Managed Lands
- Aquifer System
- Brine Resources of Bristol and Cadiz Dry Lakes
- Air Quality in the Mojave Desert Region

The Management Plan has been incorporated into the Cadiz Project proposed action and was published and circulated for public review and comment in the Supplement to the Draft EIR/EIS.

F2-44 See Response to Comment F1-9. Section 5.6 of the Draft EIR/EIS overestimated project-related air emissions (particularly PM₁₀). As a result, the section has been revised for the Final EIR/EIS. On page 5-109 of the Draft EIR/EIS, the project area is said to be located within a non-attainment area for both ozone and PM₁₀. This statement is not correct. As noted on page 1 of the EPA comment letter to the Draft EIR/EIS received on February 22, 2000, the project area is not within a federal non-attainment area for ozone. Nonetheless, the project will be within a non-attainment area for PM₁₀. As such, a draft air quality conformity determination has been issued for the 30-day comment period required by 40 CFR 93.156 (b). The conformity analysis was designed and conducted in coordination with EPA Region IX, BLM, Mojave Air Quality Management District and Metropolitan. The analysis concludes in a determination that the project is in conformity with the Clean Air Act.

F2-45 Sensitive receptors for air quality are defined in Section 5.6 of the Final EIR/EIS Volume I as residences, schools, playgrounds, child care centers, convalescent homes, retirement homes, rehabilitation centers and athletic facilities. The Mojave Desert Planning Area Federal Particulate Matter (PM₁₀) Attainment Plan, published in 1995 states the following:

“Air pollution does not affect the health of exposed persons with equal severity. Although everyone is potentially affected by PM₁₀ exposure, certain sensitive groups are especially vulnerable. These at-risk individuals include people with chronic obstructive lung disease or cardiovascular disease, individuals with influenza and asthma, elderly individuals, and children.”

The threshold of significance in the Final EIR/EIS for assessing impacts to sensitive receptors refers to sensitive groups of people. Although air quality in the Mojave National Preserve is considered a critical resource, it is not considered a “sensitive receptor” for purposes of this analysis. Through implementation of the Management Plan air quality will be monitored as part of the project. See Master Response “Air Quality.”

- F2-46 The analysis of potential air quality impacts related to Bristol and Cadiz dry lakes is set forth in Sections 5.5.1 and 5.5.4 of the Final EIR/EIS Volume I.
- F2-47 Mitigation Measure AS-2 requires that all outdoor lighting and fixtures be shielded or designed and located so that direct light is contained within the Cadiz Project site. This measure ensures that adjacent properties including BLM lands are protected from spillover light. In addition, the following mitigation measure has been added to the proposed Cadiz Project to further control night lighting. New Mitigation Measure AS-3 states: “All permanent project night-lighting will be controlled by a switch or motion sensor so that fixtures do not remain lit continuously during the evening and night hours.”
- F2-48 The definition of cumulative impacts in the Final EIR/EIS is a combination of the definitions found in NEPA (40 CFR 1508.7) and CEQA (CEQA Guidelines § 15355). The phrase "closely related" comes from the CEQA definition. However, the commentor misinterprets how the phrase "closely related" was applied. All past, present and probable future projects in the Cadiz and Fenner valleys, not just other Metropolitan water projects, are considered for cumulative impacts analysis in the Final EIR/EIS. Existing traffic in the area is not a separate project in and of itself to be considered in the cumulative impacts analysis, and, in any event, does not result in water use. However, such traffic is taken into account in the baseline conditions for the used for impact analysis and mitigation, in the transportation portion of the cumulative impacts analysis in the Final EIR/EIS in Section 7.5.7.
- F2-49 The cumulative impact analysis in the Final EIR/EIS assesses the “impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable actions.” 40 C.F.R. § 1508.7. The Final EIR/EIS evaluates cumulative impacts of each alternative in Section 7.
- F2-50 Section 7 of the Final EIR/EIS Volume I specifically addresses the potential for cumulative impacts relating to the Cadiz Valley Agricultural Development. See Sections 7.2.4 and 7.3.5.
- F2-51 The Rail Cycle Project was not considered a reasonably foreseeable future project at the time of the publication of the Draft EIR/EIS. Since that time, all land use approvals for the Rail Cycle Project have been revoked by the County of San Bernardino.
- F2-52 Potential cumulative impacts from linear structures on wildlife movement patterns were not found. See Section 7.3.8 of the Final EIR/EIS. The linear elements of the Cadiz Project are generally below the ground surface (water pipeline) or above the ground surface (electric transmission lines). Therefore, they will not combine with surface features such as the

Cadiz-Rice Road or Arizona California and Burlington Northern Santa Fe Railroads or Historic Route 66 to impair wildlife movement in the area. The Eastern/Canal Alternative is the only alternative with a linear surface feature that could interfere with wildlife migration. The potential to impact wildlife movement is one of the reasons that this alternative is not the preferred alternative.

F2-53 Section 5.5.4 of the Final EIR/EIS analyzes the potential for long-term drawdown of groundwater. During the Cadiz Project operational phase, groundwater levels will rise in the area surrounding the spreading basins in response to storage of Colorado River water, and fall in the area surrounding the project wellfield in response to extraction of stored Colorado River water and indigenous groundwater. The localized area with the greatest potential for long-term drawdown of groundwater levels directly underlies the project wellfield. To a lesser extent, drawdown of groundwater will occur in the area immediately surrounding the project wellfield.

As specified in the Management Plan (Section 6), static groundwater levels will be monitored regularly beginning in the pre-operational phase, throughout the operational phase and through the post-operational phase. Groundwater levels would be monitored continuously.

An analysis of maximum projected subsidence due to project operations is described in Section 5.5.4 of the Final EIR/EIS. No significant impacts in the project area will occur as a result of the maximum projected subsidence, including any significant reduction in “groundwater carrying and holding capacity” in the aquifer system. Accordingly, any such subsidence will not represent a significant irreversible or irretrievable commitment of resources.

To assure no adverse impacts to long-term groundwater levels throughout the aquifer system due to project operations, corrective measures will be implemented as required in Section 7 of the Management Plan. Corrective measures entail modification of project operations such as reduced groundwater extraction. Implementation of the Closure Plan would require that pre-operational static groundwater levels will not be depressed by more than an average of 100 feet in the area underlying the project wellfield at the conclusion of the operational phase. However, no amount of drawdown will be allowed that will cause adverse impacts to critical resources as discussed in the Management Plan.

The Closure Plan will be implemented during the operational phase and will remain in effect through out the entire post-operational phase, which will be a minimum of 10 years, and will continue as long as deemed necessary to prevent potential adverse impacts. All provisions of the Management Plan will remain in effect and run concurrently with the term of the post-operational phase. In addition, all water use associated with the Cadiz Valley Agricultural Development will be conducted without adverse impacts to critical resources in accordance with the Management Plan, including the provisions of the Closure Plan. Therefore, while temporary depressions in the groundwater surface could occur during the operational phase of the project, the maximum allowable drawdown will be controlled by the provisions of the Management Plan, including the Closure Plan (Management Plan Section 8).

As a result of the above provisions, the potential adverse impacts due to the potential for long-term drawdown of groundwater will be less than significant.

F2-54 The definitions for the following terms in Section 16.1 of the Final EIR/EIS have been revised. The CEQA Guidelines define “Cumulative Impacts” in Section 15355 as follows:

“Cumulative Impacts” refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) The individual effects may be changes resulting from a single project or a number of separate projects.
- (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

The CEQA Guidelines define “Effects” as follows:

“Effects” and “Impacts” as used in these guidelines are synonymous.

- (a) Effects include:
 - (1) Direct or primary effects which are caused by the project and occur at the same time and place.
 - (2) Indirect or secondary effects which are caused by the project and are late in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.
- (b) Effects analyzed under CEQA must be related to a physical change.

The term “Direct Impact” has been removed from the Glossary.

F2-55 See Master Response “Air Quality” for a detailed discussion of the potential air quality impacts from Bristol and Cadiz dry lakes.

F2-56 The Management Plan has been developed by BLM and Metropolitan in consultation with the NPS, USGS and County of San Bernardino, and included as an element of the project. The Management Plan was described in the Supplement to the Draft EIR/EIS and circulated for public review and comment. The Management Plan is published as a separate volume of the Final EIR/EIS.

F2-57 See Response to Comment F2-2.

F2-58 Regarding statements relating to the need for a Supplement, see Master Response “Need for a Supplement/Recirculation.”

Preparation of a Groundwater Monitoring and Management Plan was identified as Mitigation Measure WR-1 in the Draft EIR/EIS. In response to comments received on the Draft EIR/EIS, the Supplement was circulated beginning on October 20, 2000 and ending on January 8, 2001 to provide the public with the opportunity to review and comment on clarifications to Cadiz Project water resources information including the Management Plan.

The Management Plan has been prepared by the BLM, NPS, USGS, Metropolitan, the County of San Bernardino, and Cadiz Inc. The NPS and USGS became cooperating agencies pursuant to NEPA for purposes of preparation of this Supplement to the Draft EIR/EIS and the Final EIR/EIS.

F2-59 Comments noted. No response is necessary.

F2-60 Comment F2-60 consists of the February 23, 2000 memorandum prepared by the USGS for the BLM and appended to the NPS letter of comment on the Draft EIR/EIS as Attachment 1: USGS Review. The NPS and USGS, as cooperating federal agencies, assisted in preparation of the Supplement, the Final EIR/EIS and the Management Plan with BLM and Metropolitan to address the concerns raised in the USGS review. Therefore, such comments are responded to in these documents.

S1 RESPONSES TO COMMENTS FROM THE CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 8 DATED DECEMBER 1, 1999.

S1-1 Comments noted. No response is necessary.

S2 RESPONSES TO COMMENTS FROM THE CALIFORNIA STATE LANDS COMMISSION DATED FEBRUARY 22, 2000.

S2-1 It is acknowledged that the State Lands Commission would be a responsible agency under CEQA if the Western Alternative or Combination Alternative is selected. The following are state owned parcels of land. If a project alternative that crosses School Lands is selected, a lease or easement agreement will be obtained.

- T 1 N, R 16 E, S 36 – At the West Portal - State Land that would be crossed by the Western and Combination Alignment Alternatives.
- T 5 N, R 14 E, S 36 – Where the main transmission line crosses Rice Road – Private surface ownership, however the State reserved the mineral rights of the SE ¼. Any required acquisition of mineral rights will be negotiated with the State Lands Commission.
- T 3 N, R 16 E, S 36 – Lies 1 mile east of the Eastern Alignment Alternative.

S2-2 The project does not affect or alter the rights of any landowner to continue diverting and using water from surface streams or groundwater basins, including the rights appurtenant to lands under the jurisdiction of the California State Land Commission (see Comment F2-2; Management Plan Sections 5 and 6.1). No impacts to mineral interests retained by the State have been identified.

S2-3 The potential impacts to resources on lands in the project area are discussed in Section 5 of the Final EIR/EIS Volume I. Maps and figures are provided where thought helpful in understanding the analysis. The analysis of potential for land subsidence is provided in Section 5.5.4.

S2-4 The groundwater analysis depicted in the Draft EIR/EIS, Figure 5.5-13 did not depict the geographic extent of potential impacts to groundwater levels of the Cadiz Project.

Section 5.5.4 of the Final EIR/EIS analyzes the potential for long-term drawdown of groundwater. During the operational phase, groundwater levels will rise in the area

surrounding the spreading basins in response to storage of Colorado River water, and fall in the area surrounding the project wellfield in response to extraction of stored Colorado River water and indigenous groundwater. The localized area with the greatest potential for long-term drawdown of groundwater levels directly underlies the project wellfield. To a lesser extent, drawdown of groundwater will occur in the area immediately surrounding the project wellfield.

To prevent significant adverse impacts to long-term groundwater levels throughout the aquifer system due to project operations, corrective measures will be implemented as required in Section 7 of the Management Plan. Corrective measures may include modification of project operations such as reduced groundwater extraction.

Additionally, implementation of a Closure Plan will require that pre-operational static groundwater levels not be depressed by more than an average of 100 feet in the area underlying the project wellfield at the conclusion of the operational phase.

The Closure Plan will be implemented during the operational phase and will remain in effect through out the entire post-operational phase, which will be a minimum of 10 years, and will continue as long as deemed necessary to prevent adverse impacts. All provisions of the Management Plan will remain in effect and run concurrently with the term of the post-operational phase. In addition, all water use associated with the Cadiz Valley Agricultural Development will be conducted without adverse impacts to critical resources in accordance with the Management Plan, including the provisions of the Closure Plan.

- S2-5 Loss of foraging habitat for raptor species under the Eastern Alternative will result, primarily, from the loss of agricultural habitats (approximately 3.7 acres). However, other habitats within this alternative may be used by raptors to a much lesser extent. It should be recognized that the project generally includes the construction of an underground pipeline and provision of a permanent access road. Short-term construction impacts will occur in an approximately 200-foot corridor. However, upon project completion, permanent habitat loss will consist predominantly of only the footprint associated with the access road. It is not anticipated that this relatively small area of impact, in relation to the overall habitat availability, will result in significant losses to foraging for these species.
- S2-6 Animals removed during pre-construction surveys will be relocated and released in adjacent/offsite habitats under the supervision of the onsite biological monitor following consultation with the CDFG as stated in Mitigation Measure B-7.
- S2-7 Pursuant to consultation with USFWS, a speed limit of 35 miles per hour has been determined adequate for vehicles traveling between Cadiz Road and Iron Mountain Pumping Plant during project construction, to identify and avoid desert tortoise.
- S2-8 All native habitats permanently and temporarily impacted by the proposed project will be mitigated at a ratio of 1:1. Mitigation ratio 1:1 for Category III lands is per BLM policy (California Statewide Desert Tortoise Management Policy Report, USDI Bureau of Land Management, 1992, Sacramento, California, 59 pages). The offsite habitat that will be acquired shall be commensurate with, or exceed the quality of that which was originally impacted. The ultimate determination of suitable habitat for acquisition will be made in coordination with CDFG and BLM. Because the acquired habitat will already be fully established and undisturbed; no modifications will be necessary and no development time is required for it to become fully functional. This ratio is consistent with that required for

potentially suitable desert tortoise habitat and is consistent with the desert tortoise Class 3 designation of the project area.

S2-9 See Response to Comment S2-8.

S3 RESPONSES TO COMMENTS FROM THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, COLORADO RIVER BASIN REGION DATED FEBRUARY 22, 2000.

S3-1 See Response to Comment F2-39 regarding the potential effects of the project on water quality in the aquifer. Water quality analyses for the project did not detect the presence of MTBE in either Colorado River water or in the indigenous groundwater. See Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Groundwater Resources Report (Metropolitan Report No. 1163) Volume II Appendix.

S3-2 Increased production of calcium chloride and sodium chloride will economically benefit the salt mining operations located on the dry lakes by increasing their supply of salt.

S3-3 See Response to Comment F1-10 regarding the hydraulic connectivity between the groundwater underlying the project and the saline water underlying the dry lakebeds.

S4 RESPONSES TO COMMENTS FROM THE CALIFORNIA DEPARTMENT OF FISH AND GAME DATED FEBRUARY 22, 2000.

S4-1 See Master Response “Groundwater Monitoring and Management Plan” and Responses to Comments F2-40 and F2-53 regarding potential impacts to groundwater levels and springs in surrounding mountains.

S4-2 The potential for conditions to be appropriate for botulism to occur is extremely unlikely. Ongoing maintenance and operation of the spreading basin will not create or allow for the creation of a favorable environment for botulism to develop. Information referenced by the United States Geological Survey indicates that Avian Botulism is most likely to occur in the presence of high air temperature, low water levels and a suitable medium for bacterial growth. Other environmental conditions include complete absence of oxygen, temperatures ranging from 60 to 97 degrees Fahrenheit, a source of animal protein, and a pH ranging from 5.7 to 8.0. The water contained in the spreading basins, at no point, meets all these conditions. The basic operation of the spreading basin involves a continuous source of water entering into spreading basin cells through a control structure which will control and divert water from the transmission pipeline to the inlet structure which then discharges water into the cells. The process will provide a continual supply of oxygenated water, which significantly reduces the likelihood of stagnation or the establishment of botulism. Each basin cell will have a maximum water depth of approximately 3.5 feet. The water will then percolate down through the permeable surface, at an approximate rate of 2 to 4 feet per day. At a conservative rate of one foot per day, water will be expected to remain in the basins for a maximum of four days. This short amount of time will not allow for anaerobic stagnation processes to occur. Therefore, there is no reasonable potential for the basin to be stagnant and suitable for botulism.

S4-3 Mitigation measures for the protection of desert tortoise from ravens has been incorporated in the proposed power pole design. These measures will also discourage use of the poles by

raptors, and include anti-perching spikes (see Final EIR/EIS Volume I Figure 4-26) and angled insulators. Additionally, the minimum separation distance between conductors is 6.8 feet, larger than the wingspan of adult raptors found in the area.

- S4-4 See Response to Comment F2-40 regarding potential impacts to springs.
- S4-5 See Sections 5.2, 6.1 and 7.1 of the Management Plan regarding the monitoring of springs.
- S4-6 See Response to Comment S4-2 and G15-11 regarding the time water is present in the spreading basins.
- S4-7 The guidelines regarding power pole design have been incorporated as a project design feature and are set forth in the Mitigation Monitoring Program. See Response to Comment S4-3.

S5 RESPONSES TO COMMENTS FROM THE STATE OF CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE DATED FEBRUARY 23, 2000

- S5-1 Comments noted. No response is necessary.
- S5-2 Comments noted. No response is necessary.

S6 RESPONSES TO COMMENTS FROM THE STATE OF CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE DATED MARCH 2, 2000.

- S6-1 Comments noted. The public review period was extended to March 8, 2000.
- S6-2 See Responses to Comments S3-1, S3-2 and S3-3.

R1 RESPONSES TO COMMENTS FROM THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS DATED FEBRUARY 17, 2000.

- R1-1 Comments noted. Specific comments are responded to below.
- R1-2 Comments noted. All storage and extraction of water will be done in accordance with the Management Plan. Actual quantities of water are dependent on limitations imposed under the Management Plan.
- R1-3 Comments noted. No response is necessary.
- R1-4 Comments noted. No response is necessary.
- R1-5 Comments noted. No response is necessary.
- R1-6 Comments noted. No response is necessary.
- R1-7 Comments noted. No response is necessary.
- R1-8 Comments noted. No response is necessary.

- R1-9 Comments noted. No response is necessary.
- R1-10 Comments noted. No response is necessary.
- R1-11 Comments noted. No response is necessary.
- R1-12 Comments noted. No response is necessary.
- R1-13 Comments noted. No response is necessary.
- R1-14 Comments noted. No response is necessary.
- R1-15 Comments noted. No response is necessary.
- R1-16 Comments noted. No response is necessary.
- R1-17 See Response to Comment F1-9 regarding potential air quality impacts.
- R1-18 Comments noted. See Responses to Comments R1-19 to R1-23, below.
- R1-19 BLM and Metropolitan are unaware of any watershed management plans or programs in the project area. Therefore, the core RCPG policies related to watershed management are not relevant to this project.
- R1-20 See Response to Comment R1-19.
- R1-21 There are no wetlands in the project area. Therefore, the core RCPG policy related to wetlands is not relevant to this project.
- R1-22 Sections 6.2 and 7.2 of the Management Plan provide water quality monitoring and protection.
- R1-23 The need for the project was based on Metropolitan's Integrated Resources Plan (IRP). The IRP includes a target of 500,000 acre-feet per year yield in the year 2020 from water recycling and groundwater recovery, up from the current yield of 230,000 acre-feet per year, an increase of over 100% by 2020. This level of reclamation is supportive of the core RCPG policy.
- R1-24 Comments noted. No response is necessary.
- R1-25 Comments noted. See Responses to Comments R1-17, R1-19, R1-20 and R1-21.
- R1-26 The discussion of consistency or inconsistency of the Cadiz Project with the SCAG policies provided in this comment letter and responses to it are a part of the Final EIR/EIS.
- R1-27 Mitigation monitoring consistent with the requirements of CEQA will be conducted.
- R1-28 Comments noted. No response is necessary.

R2 RESPONSES TO COMMENTS FROM THE VICTOR VALLEY WATER DISTRICT DATED FEBRUARY 25, 2000.

R2-1 Comments noted. No response is necessary.

R3 RESPONSES TO COMMENTS FROM THE COUNTY OF SAN BERNARDINO, ECONOMIC DEVELOPMENT AND PUBLIC SERVICES GROUP DATED MARCH 7, 2000.

R3-1 Comment noted. BLM and Metropolitan have developed the Management Plan to monitor and protect groundwater resources.

R3-2 See Master Response “Groundwater Monitoring and Management Plan” regarding the development of the Management Plan to address concerns raised in this comment.

R3-3 See Response to Comment R3-2.

R3-4 See Response to Comment R3-2.

R3-5 See Response to Comment R3-2.

R3-6 BLM and Metropolitan believe that the Draft EIR/EIS, Supplement to the Draft EIR/EIS, and the Final EIR/EIS serve the purposes and comply with the requirements of NEPA and CEQA.

R3-7 See Master Response “Formulation and Screening of Potential Projects.”

R3-8 See Master Response “Groundwater Monitoring and Management Plan” regarding use of the Management Plan to identify and avoid potential impacts.

R3-9 See Master Response “Growth Inducement.”

R3-10 See Master Response “Groundwater Monitoring and Management Plan” regarding mitigation of potential impacts to water resources. This document was circulated for public review pursuant to NEPA and CEQA. Other Cadiz Project mitigation measures are described in the Final EIR/EIS Section 5 and are summarized in Table ES-2. See “Mitigation Monitoring Program for the Cadiz Project.”

R3-11 See Master Response “Formulation and Screening of Potential Projects” regarding consideration of “storage only” project operations.

R3-12 Regarding an “accurate and adequate project description,” see Response to Comment R3-14. Regarding “a reasonable range of alternatives,” see Master Response “Alternatives.”

R3-13 See Master Response “Need for a Supplement/Recirculation.”

R3-14 The description of the project need and purpose in Section 2 of the Final EIR/EIS does not improperly limit the range of reasonable alternatives considered. Unlike the situation described in the case of *Simmons v. U. S. Army Corps of Engineers* (7th Cir. 1997) 120 F.3d 664, cited in the comment, the Final EIR/EIS discusses all the sources of water available to meet the demands in Metropolitan’s service area. However, the specific need for the Cadiz

Project is to provide storage capacity for water from one of those resources, the Colorado River, and additional high-quality water supply to meet dry-year demands. For further discussion, see Master Response “Formulation and Screening of Potential Projects.”

- R3-15 The comment is a summary of the law and does not state a concern or question regarding the adequacy of the analysis contained in the Draft EIR/EIS, therefore, a response is not required under CEQA or NEPA.
- R3-16 See Master Response “Formulation and Screening of Potential Projects.” Section 11 of the Final EIR/EIS identifies the evaluation criteria used to rank the alternatives. The section further describes why each criterion used to rank the alternatives is important and indicates how each criterion was quantitatively measured. Table 11-4 lists the criteria and the units of measure and weighting for each criterion. Table 11-5 again lists the criteria, the units of measure and weighting for each, and provides the unweighted values for each alternative as measured by each criterion.

Section 11 explains how the series of unweighted values for each alternative were converted to a total normalized score for each alternative (see Table 11-6). Further, Section 11 presents the results of several sensitivity analysis that were conducted to evaluate whether the ranking of alternatives would be altered by various changes in weighting. The Final EIR/EIS indicates that the ranking of alternatives and, thus the selection of the preferred alternative was not susceptible to such changes in the evaluation.

- R3-17 See Master Response “Formulation and Screening of Potential Projects.” Section 3 of the Final EIR/EIS Volume I presents a step-by-step approach for screening potential projects that satisfy the objective of managing Metropolitan’s Colorado River Resource Area supplies, and selecting those potential projects that should be studied in the greatest detail. The storage and transfer components of the Cadiz Project were combined to meet Metropolitan’s dry-year water supply objectives for the Colorado River Aqueduct. The operational scenarios presented in the Draft EIR/EIS have been eliminated from the Final EIR/EIS.
- R3-18 See Master Response “Formulation and Screening of Potential Projects.” The formulation and evaluation of potential projects was conducted in a series of increasingly detailed studies as described in the Final EIR/EIS Volume I, Section 3. The result of this process was the determination that a water storage and transfer project could be feasible at Cadiz and that none of the other potential projects for supplying water in the Colorado River resource area were feasible except the Hayfield Valley Groundwater Storage Project.

As further clarified in the Final EIR/EIS, Section 3.5.4, the Hayfield Project is being separately implemented.

The Final EIR/EIS defines the Cadiz Project, as a conjunctive use storage and transfer project that will use raw water from the Colorado River Aqueduct and indigenous groundwater from the Cadiz area. Therefore, the project is comprised of two integral parts, which constitute the whole project for CEQA and NEPA. The law requires environmental impacts to be analyzed for the project as a whole. *Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3rd 151, 166-169 [217 Cal.Rptr. 893]; 40 CFR §1502.4(a). Any other analytical approach would have been inimical to the objectives of CEQA and NEPA. *McQueen v. Board of Directors of the Mid-Peninsula Regional Open Space District* (1988) 202 Cal.App.3rd 1136, 1143-1144 [249

Cal.Rptr. 439] (overly narrow project description in improperly used notice of exemption is an example of “the fallacy of division,” that is, “overlooking the cumulative impact by separately focusing on isolated parts of the whole.”); *See also No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal.App.3rd 223, 232-238 [242 Cal.Rptr. 37] (EIR on proposed exploratory oil drilling not inadequate for failing to examine impacts of alternative pipeline routes.”); *Kleppe v. Sierra Club* (1976) 427 U. S. 390, 409-410.

R3-19 The Final EIR/EIS defines the Cadiz Groundwater Storage and Dry-Year Supply Program as a conjunctive use storage and transfer project that would store water from the Colorado River Aqueduct and transfer indigenous groundwater from the Cadiz Project area. As stated in Section 3.3 of the Final EIR/EIS Volume I, the objectives of the Cadiz Project are as follows:

1. Storage of up to 1.5 maf of Colorado River water;
2. Capacity to put or withdraw up to 100,000 acre-feet of water in a given year;
3. Potential for dry-year yield of up to 100,000 acre-feet per year;
4. Potential to produce water quality benefits; and
5. Acceptable levels of environmental impacts.

The Cadiz Project is comprised of two integral parts, which constitute the whole project for CEQA and NEPA. *Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3rd 151, 166-169 [217 Cal.Rptr. 893]; 40 CFR §1502.4(a). The law requires that environmental impacts be analyzed for the project as a whole. Therefore, the Final EIR/EIS adequately evaluates the proposed project. Any other analytical approach would have been inimical to the objectives of CEQA and NEPA. *McQueen v. Board of Directors of the Mid-Peninsula Regional Open Space District* (1988) 202 Cal.App.3rd 1136, 1143-1144 [249 Cal.Rptr. 439] (overly narrow project description in improperly used notice of exemption is an example of “the fallacy of division,” that is, “overlooking the cumulative impact by separately focusing on isolated parts of the whole.”); *See also No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal.App.3rd 223, 232-238 [242 Cal.Rptr. 37] (EIR on proposed exploratory oil drilling not inadequate for failing to examine impacts of alternative pipeline routes.); *Kleppe v. Sierra Club* (1976) 427 U. S. 390, 409-410.

The Cadiz Project does not rely on a predetermined conclusion that there is approximately 30,000 acre-feet per year of natural recharge to the basin (or any other specified amount of natural recharge). The Final EIR/EIS Volume I, Section 1.5.2 states: “While there remains disagreement among experts regarding the amount of natural recharge to the project area, the parties agreed that the overriding objective is to ensure the protection of critical resources, and that this objective would best be accomplished through the development and implementation of the Management Plan.”

Preparation of a Groundwater Monitoring and Management Plan was identified as Mitigation Measure WR-1 in the Draft EIR/EIS. In response to comments received on the Draft EIR/EIS, the Supplement was circulated from October 20, 2000 to January 8, 2001 to provide the public with the opportunity to review and comment on clarifications to Cadiz Project water resources information, including the Management Plan. The Management Plan has been prepared by the BLM, NPS, USGS, Metropolitan, County of San Bernardino, and Cadiz Inc. The NPS and USGS became cooperating agencies pursuant to NEPA for purposes of preparation of the Supplement to the Draft EIR/EIS and the Final EIR/EIS.

With implementation of the Management Plan, adverse impacts to critical resources will be avoided regardless of the amount of natural recharge to the project area. This will be accomplished, in part through the oversight, management and control of Cadiz Project water storage and extraction activities, including the implementation of suitable mitigation measures or corrective actions as specified in the Management Plan. Incorporation of the Management Plan into the project also has the practical effect of combining the “Storage and Transfer Alternatives” (identified by the commentor) into one project alternative. If, for example, it were determined that indigenous groundwater could not be transferred in compliance with requirements of the Management Plan, the Cadiz Project will be a conjunctive-use storage-only project. Conversely, should transfers of indigenous groundwater comply with all the requirements of the Management Plan, including the avoidance of adverse impacts to critical resources, the Cadiz Project will then be able to provide both conjunctive-use storage and transfer.

The Final EIR/EIS thus analyzes the proposed project under both potential results, either as a “storage only” project (if the Management Plan implementation results in no transfers occurring), or as a conjunctive-use storage and transfer project if the Management Plan implementation results in the occurrence of indigenous groundwater transfers.

R3-20 See Response to Comment R3-22.

R3-21 The alternatives analysis properly considers the analysis and conclusions reached in the Final EIR/EIS regarding the hydrological impacts of the proposed project and the various alternatives. See Master Response “Groundwater Monitoring and Management Plan” for information regarding potential impacts related to groundwater.

R3-22 The Hayfield Project was properly considered in the screening process to identify potential water storage projects along the Colorado River Aqueduct. Section 3.5.4 of the Final EIR/EIS Volume I states that the Hayfield Project is being implemented separately.

Because of Metropolitan's role as the primary supplier of water to approximately 17 million people, it is constantly looking for new and different ways to fulfill this role. In a sense, all potential projects considered by Metropolitan could also provide additional means (as opposed to alternative means) of providing water supply and reliability. Because the Hayfield Project was determined to be feasible, it was ultimately considered in its own environmental document and is being implemented as an additional project to provide needed water supply and reliability. Should other alternatives later prove to be feasible, Metropolitan may consider implementation of those projects at some point in time. For example, construction and operation of a desalination facility for agricultural drainage water in the Coachella Valley was considered in the screening process and rejected as infeasible for the reasons stated in Section 3.5.3 of the Final EIR/EIS. However, desalination continues to be studied and it is likely that when technological advances permit, such a project would be pursued.

R3-23 Metropolitan is engaged in a continuing process of determining water needs and potential supply options for supplying water to its customers. Thus, Metropolitan properly considered proposals made by other agencies and landowners in determining alternatives to the Cadiz Project. However, such consideration did not lessen Metropolitan's role or responsibility to identify a reasonable range of alternatives to the Cadiz Project and Metropolitan did not rely exclusively on projects proposed by others in determining the list of alternatives to be

considered in the Final EIR/EIS. Also see Master Response, “Formulation and Screening of Potential Projects.”

R3-24 The Draft EIR/EIS did clearly identify meeting dry year water demand through year 2020 as a project objective. See page 1-5 and Section 2.0 of the Draft EIR/EIS. This objective was considered by Metropolitan in its analysis of the need for additional supplies to be provided from the Colorado River Resource Area. See Final EIR/EIS, Volume I Section 2.6.2.

R3-25 Section 3.6.1 of the Final EIR/EIS Volume I, explains the rationale for the siting of project spreading basins in the Fenner Valley. Additional information is presented in technical reports incorporated by reference in the Final EIR/EIS: Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Project Feasibility and Facilities Report (Report No. 1162), and the Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Groundwater Resources Report (Report No. 1163). The alternatives analysis in the Final EIR/EIS is only required to relate to the Cadiz Project as a whole, and is not required to consider alternatives for each individual component of the Cadiz Project. See *Big Rock Mesas Property Owners Association v. Board of Supervisors* (1977) 73 Cal. App. 3d 218, 227; *No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal. App. 3d 223, 234-38; *A Local and Regional Monitor v. City of Los Angeles* (1993) 16 Cal. App. 4th 630, 642 n. 8. Thus, a more detailed analysis of alternative locations for the project spreading basins and well field was not necessary.

As provided in Section 3.6.1 of the Final EIR/EIS Volume I, feasible locations for project spreading basins and for connection to the Colorado River Aqueduct were evaluated based on a criteria to minimize the potential for adverse groundwater impacts and to minimize environmental impacts by optimizing the recharge rate per acre, thereby minimizing the total area of the project spreading basins. The spreading basins will be located on Cadiz Inc. landholdings selected to optimize hydrologic features and to avoid potential for connection with the highly saline soils underlying Bristol Dry Lake to the west and Cadiz Dry Lake to the south, and the Cadiz Dunes Wilderness Area. In addition, the wellfield would be located in the vicinity of the spreading basins to localize the recharge and extraction operations. For additional information see the “Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Project Feasibility and Facilities Report (Report No. 1162).”

R3-26 As explained in Response to Comment R3-25 above, the alternatives analysis in the Final EIR/EIS is only required to relate to the Cadiz Project as a whole, and was not required to consider alternatives for each individual component of the Cadiz Project. Thus, a more detailed analysis of alternative locations for the project pumping stations was not necessary.

Due to the location of the water supply, only two pumping station sites were identified in the alternative analysis—the Iron Mountain Pumping Plant for the east corridor, and the West Portal for the west corridor. These are the only two feasible pump station locations to convey water from the Colorado River Aqueduct to the spreading basins. The location of the pump stations near existing water conveyance facilities results in the least environmental impact.

R3-27 Based on field studies, 27 categories of impact and technical feasibility information were used to score and rank the project-level alternatives. Raw data on these 27 measures were converted to relative scores. The relative importance of each of the 27 measures was then evaluated by a team of experts and each measure was given a weight. Raw scores were

multiplied by weights to produce a set of weighted scores. These weighted scores were then summed, allowing project alternatives to be compared quantitatively on the basis of individual and aggregate weighted scores. For convenience, aggregate scores on all 27 measures were converted to a 0 to 1 scale, one being the highest (best) score. The Final EIR/EIS Volume I, Section 11 explains how the parameters were weighted and the analysis was re-run using three different weighting scenarios to ensure that there was no significant bias caused by the process. The Final EIR/EIS also describes each parameter in detail. The comment does not identify which of the 27 parameters the commentor believes is inadequately explained.

R3-28 “Existing environmental conditions” are fully disclosed in the Final EIR/EIS, Section 5. In addition, the No Project Alternative discussion clearly explains that it assumes the existing delivery priorities and distribution system would be maintained. See Final EIR/EIS Volume I, Section 4.8. The description of the existing environmental conditions need not be repeated under the heading “No Project Alternative.” Therefore, this alternative is described in sufficient detail to meet the requirements of NEPA and CEQA.

R3-29 In general, the alignments are underlain by alluvial and gravel materials and, to a lesser extent, sand dunes. General assumptions on the construction of the water conveyance facilities are provided in Section 4 of the Final EIR/EIS Volume I for each of the alternatives proposed. For additional information see the Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Project Feasibility and Facilities Report (Report No. 1162), Appendix A “Draft Preliminary Geological Assessment Report Alternative Pipeline/Canal Alignments Cadiz Groundwater Transfer and Conjunctive-Use Project.”

R3-30 See Response to Comment R3-28.

R3-31 See Master Response “Groundwater Monitoring and Management Plan.” Regarding the potential impacts from the combination of agricultural and Metropolitan withdrawals from the aquifer, see Response to Comment R3-52.

R3-32 Regarding comments relating to the groundwater consumption associated with full implementation of the agricultural project, see Response to Comment R3-52.

The Cadiz Project will not, as stated by comment, render “future agriculture infeasible.” The Management Plan will ensure that agricultural irrigation water use is conducted without adverse impacts to groundwater-related critical resources.

The availability of water is only one factor that determines when agricultural uses would be expanded or reduced. While Cadiz is entitled to develop agricultural uses on as much as 9,600 acres, there is no minimum acreage that must be developed. Likewise there is no minimum acreage that must be developed in order to avoid a significant impact to agriculture. The County of San Bernardino General Plan’s current land use designations allow for virtually the entire area surrounding the Cadiz Project to cultivate agricultural land uses including but not limited to row crops, vineyards and orchards.

R3-33 See Master Response “Groundwater Monitoring and Management Plan” and Responses to Comments R3-32 and R3-52.

R3-34 See Master Response “Groundwater Monitoring and Management Plan” regarding the operation of the project to avoid potential impacts to groundwater resources.

Regarding the County of San Bernardino General Plan goal to “Provide a balanced hydrological system in terms of withdrawal and replenishment of water from the groundwater basins,” the County has participated in the development of the Management Plan for the purpose of ensuring compliance with all such applicable policies and ensuring that critical resources will not be subject to significant adverse effects as a result of Cadiz Project operations.

R3-35 See Master Response “Groundwater Monitoring and Management Plan.”

R3-36 See Response to Comment R3-32.

R3-37 Comments noted. See responses to comments R3-58 to R3-66, below.

R3-38 See Master Response “Groundwater Monitoring and Management Plan.” The analysis of potential impacts to water resources presented in the Management Plan and Final EIR/EIS is not premised on an estimate of the “natural groundwater recharge rate.” Instead, all Cadiz Project operations, including extraction of groundwater, would be governed by and subject to the provisions of the Management Plan that is incorporated in the Final EIR/EIS.

R3-39 See Master Response “Groundwater Monitoring and Management Plan” regarding the measures that will be undertaken to monitor and avoid adverse impacts. BLM and Metropolitan believe that the presentation of these measures in the Draft EIR/EIS and Final EIR/EIS comply with the requirements of NEPA and CEQA.

R3-40 See Response to Comments R3-58 to R3-66.

R3-41 In response to the differences in opinion referenced in this comment, BLM and Metropolitan developed the Groundwater Monitoring and Management Plan that is incorporated into the project. This Management Plan was developed in consultation with the NPS, USGS, and County of San Bernardino. The project will be operated in accordance with the Management Plan, which will govern the amount of water that may be stored or extracted without causing adverse impacts to critical resources.

For further descriptions of the Management Plan, see the Master Response “Groundwater Monitoring and Management Plan,” and the Management Plan, Volume IV of the Final EIR/EIS.

R3-42 Regarding potential impacts to Bristol and Cadiz dry lakes see Master Response “Air Quality.” Also see Section 5.5 of the Final EIR/EIS Volume I for a description of the monitoring features that will be implemented to identify and avoid potential impacts to water levels under the dry lakes.

R3-43 See Master Response “Groundwater Monitoring and Management Plan.” A more detailed discussion of impacts, that is adequate for the purposes of CEQA and NEPA, is set forth in Section 5.5 of the Final EIR/EIS Volume I.

R3-44 See Master Response “Water Quality.” Section 7.2.1 of the Management Plan requires monitoring of water quality to ensure that it meets the requirements of the California

Regional Water Quality Control Board, Colorado River Basin Region, the agency responsible for regulating water quality relating to the storage of water in the aquifer system underlying the project area.

- R3-45 Comments noted. See Responses to Comments R3-67 to R3-79, below.
- R3-46 Comments noted. See Responses to Comments R3-80 to R3-89, below.
- R3-47 Comments noted. No response is necessary.
- R3-48 Comments noted. See responses to comments R3-90 to R3-104, below.
- R3-49 See Master Response “Growth Inducement.” The conclusions reached in the Growth Inducement Impacts section (Section 6 of the Final EIR/EIS Volume I) are not insufficient simply because the commentor disagrees with them. Use of data developed by regional service and planning agencies such as SCAG, and SANDAG is a generally accepted way of determining anticipated growth and demand for certain types of services. Such data is not less valuable or accurate because it was developed prior to the inception of the Cadiz Project. As the discussion in Section 6 demonstrates, growth projections for Southern California anticipate that projected growth will occur despite shortfalls in water supply, heavy traffic, poor air quality and other factors which are sometimes considered growth limiting. The Cadiz Project responds to this projected growth and anticipated demand; it does not induce it.
- R3-50 See Response to Comment R3-49 and Master Response “Growth Inducement.”
- R3-51 BLM and Metropolitan disagree with the opinion that the Final EIR/EIS Growth Inducement analysis is flawed, as it is based on extensive data regarding projected and historic growth rates in southern California. Section 6 describes the growth forecasts relied upon by regional agencies for planning purposes, including the growth management plans adopted by regional agencies such as Southern California Association of Governments (SCAG), San Bernardino Association of Governments (SANBAG), and San Diego Association of Governments (SANDAG). In the case of *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, cited in the comment, the water agency relied upon growth projections that were included in an unadopted county general plan. The growth projections referenced in the Final EIR/EIS are from adopted growth management plans that were subject to separate CEQA compliance. Furthermore, Metropolitan cites the historic fact that population growth in southern California has continued unabated during periods of drought in which significant water conservation measures were required. The Final EIR/EIS properly concludes that the evidence supports the determination that growth in southern California is driven by economic and social factors (jobs and housing), and that the water supply is neither growth inducing nor a constraint on growth. See Master Response “Growth Inducement.”
- R3-52 As stated in the Management Plan, Section 1.3 and as shown in Figure 3-1 Cadiz Inc. farms approximately 1,600 acres of its landholding located within the project area. In 1993, San Bernardino County certified a Final Environmental Impact Report (FEIR) and granted various land use approvals for expansion of agricultural operations on this property up to 9,600 acres. As a component of this approval, the County identified specific groundwater monitoring activities to be undertaken by Cadiz Inc. To comply with these monitoring requirements, the Cadiz Valley Agricultural Development Ground Water Monitoring Plan

was developed in cooperation with San Bernardino County to monitor all potential environmental impacts that could result from the agricultural irrigation. Cadiz agricultural operations were considered in the Final EIR/EIS in Section 5.1 and the impacts of water usage by the agricultural operations fully considered as part of the baseline for the Cadiz Project.

A specific discussion of the cumulative impacts of the Cadiz agricultural operations is contained in Section 7 of the Final EIR/EIS as follows:

“With approval and implementation of the Cadiz Project, all future groundwater use for irrigation in the project area, including any existing or future expansion of the Cadiz Valley Agricultural Development, will also be conducted without adverse impacts to critical resources in accordance with the Management Plan. The Management Plan provides for a comprehensive program of monitoring designed to ensure that project operations, including future irrigation under the Cadiz Valley Agricultural Development, would be conducted without adverse impact to any critical environmental resources in and surrounding the project area. Thus, with implementation of the Cadiz Project and Management Plan, any potential adverse impact of the Cadiz Valley Agricultural Development would be fully mitigated to below a level of significance.”

All use of indigenous groundwater for current and potential future agricultural operations will be conducted without adverse impacts to critical resources in accordance with the Management Plan. Therefore, the mitigation necessary to avoid significant impacts to water resources is provided and there would be no significant adverse cumulative impacts to critical resources from the project when combined with current and potential future agricultural operations.

R3-53 The Cumulative Impacts section of the Final EIR/EIS appropriately considered as potential cumulative projects those within the general vicinity of the Cadiz-Fenner Valleys because it is within this geographic area that any cumulative impacts of the Cadiz Project will occur. Projects considered in the cumulative impact analysis are those that are related to the Cadiz Project through a physical element of the environment or a physical impact to the environment. Examples are projects that occur in the same watershed, same aquifer, same air basin or same biological communities. The regional context suggested in the comment refers only to governmental boundaries and not to any physical feature of the environment. It would not have been reasonable, appropriate or indeed even practicable under CEQA and NEPA for the Final EIR/EIS to have considered the likely hundreds of past, present and probable future projects within San Bernardino, Riverside and Imperial Counties, or in all of Southern California.

In addition to the specific projects noted in the comment, the Inland Feeder Project and Eastside Reservoir Project were not considered in the Cumulative Impacts section because they are each located over 100 miles away from the proposed Cadiz Project with several intervening mountain ranges between them and the project. Thus, the impacts from these projects would not reasonably combine with the impacts from the Cadiz Project in any way.

R3-54 Comments noted. See Responses to Comments R3-58 to R3-66, below.

R3-55 Comments noted. See Responses to Comments R3-67 to R3-79 below.

R3-56 Comments noted. See Responses to Comments R3-80 to R3-89, below.

R3-57 Comments noted. See Responses to Comments R3-90 to R3-104, below.

R3-58 – R3-66. Comments R3-58 through R3-66 are noted. Comments R3-58 through R3-66 consist of the February 21, 2000 comments prepared by Timothy Durbin and John Foster for the County of San Bernardino and appended to the County of San Bernardino letter of comment on the Draft EIR/EIS. The County of San Bernardino assisted in preparation of the Supplement to the Draft EIR/EIS and the Management Plan, Volume IV of the Final EIR/EIS with BLM and Metropolitan to address the concerns raised in the Durbin/Foster comments. Therefore, such comments are responded to by those documents. See Master Response “Groundwater Monitoring and Management Plan” for a description of how the Management Plan operates to protect the groundwater resources referenced in the comments.

R3-67 An additional mitigation measure (T-5) is included in the Final EIR/EIS. This mitigation measure will require Metropolitan to execute a Memorandum of Understanding (MOU) with the County of San Bernardino to address the County’s requirements regarding Metropolitan’s obligations for mitigation of the temporary impacts of the Cadiz Project construction traffic. To mitigate these impacts, Metropolitan would agree to pay a specific amount to be negotiated with the County. These funds would be used at the County’s discretion for needed permanent improvements in the general project vicinity. Mitigation Measure T-5 states:

“Prior to any construction on Cadiz-Rice Road between SR 62 and Chubbuck, Metropolitan will enter into a Memorandum of Understanding with the County of San Bernardino to address the County’s requirements regarding Metropolitan’s obligations for mitigation of the temporary impacts of the Cadiz Project construction traffic. To mitigate these impacts, Metropolitan will agree to pay a specific amount to be negotiated with the County.”

R3-68 Comments noted. See Response to Comment R3-67 above.

R3-69 Comments noted. See Response to Comment R3-67 above.

R3-70 Comments noted. See Response to Comment R3-67 above.

R3-71 Comments noted. See Response to Comment R3-67 above.

R3-72 Comments noted. See Response to Comment R3-67 above.

R3-73 Comments noted. See Response to Comment R3-67 above.

R3-74 Comments noted. See Response to Comment R3-67 above.

R3-75 Comments noted. See Response to Comment R3-67 above.

R3-76 Comments noted. See Response to Comment R3-67 above.

R3-77 Comments noted. See Response to Comment R3-67 above.

R3-78 Comments noted. See Response to Comment R3-67 above.

R3-79 Comments noted. See Response to Comment R3-67 above.

- R3-80 Comments noted. See Responses to Comments R3-81 to R3-89, below.
- R3-81 The field reconnaissance was specifically detailed for this project. A review was conducted of each of the potential sensitive resources. The period that these resources could be identified was ascertained. Survey schedules were then specifically targeted to maximize the potential for identifying these species. Focused surveys have been conducted for desert tortoise throughout all project alternatives according to survey protocol approved by the USFWS and CDFG. Please refer to the Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report, Biological Resources Report (Report No. 1164), and the Desert Tortoise Biological Assessment for the Cadiz Groundwater Storage and Dry-Year Supply Program.
- R3-82 The entire project area was systematically walked (using transects) during focused surveys for the desert tortoise. The intensive survey methodology required by the USFWS for this species would also have resulted in the detection of a variety of mammal species within the project. Potential den/foraging sites for the American badger were found within the Western and Eastern alternatives, and all alternatives will impact potentially suitable habitat for this species. Therefore, potential impacts to the American badger have been anticipated. No sign, tracks, or scat of Yuma mountain lion or Nelson's bighorn sheep were observed. Because suitable habitat for mountain lion has been identified throughout all alternatives, and potentially suitable habitat for the bighorn sheep occurs in the vicinity of the southern transmission lines (Western and Combination Alternatives) it is highly possible that these mammal species may utilize the site during home range movements. Because of the paucity of sign, however, these species' occupation and/or utilization of the site are not anticipated to be of a high frequency or duration. As a result, potential impacts to Yuma mountain lion and Nelson's bighorn sheep are not significant. See the Cadiz Groundwater Storage and Dry Year Supply Program Environmental Planning Technical Report Biological Resources (Report No. 1164).
- R3-83 Mojave wash scrub occurs in numerous washes that span the project area and overall region. Alternatives have been presented, which differ in their impact of this habitat; however, due to the ubiquity of this resource, it is inevitable that this habitat will be impacted to some extent. The current alternatives all include perpendicular crossings of washes and the wash scrub they contain. This approach is the least impactful when proposing to modify sensitive, relatively linear habitats (e.g., drainages).
- R3-84 The sensitivity of the habitat types within the project site has been discussed in detail. See Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Technical Report, Biological Resources Report (Report No. 1164). All native habitats permanently and temporarily impacted by the proposed project will be mitigated at a 1:1 ratio through offsite habitat acquisition and preservation. This compensation is intended to mitigate for the loss of sensitive habitats within the project footprint and will provide suitable habitat for the desert tortoise. Three alternatives were evaluated, which included fairly substantive realignments. Due to the distribution of these resources, it is infeasible to avoid impacts to these resources.
- R3-85 As indicated in the Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Technical Report, Biological Resources Report (Report No. 1164), 22 plants and 39 animal species of special interest have the potential to occur within the project site. Among the special interest plants, none are listed as federal/state threatened or endangered, and only one species was actually found in the project site (ribbed cryptantha). Out of the

39 sensitive animal species presented, the only listed (federal/state threatened or endangered) species found or detected within the project site was the desert tortoise; however, suitable habitat is present for several other potentially occurring wildlife that were not observed during surveys.

- R3-86 See Master Response “Groundwater Monitoring and Management Plan” regarding the measures that will be implemented to avoid impacts to water resources.
- R3-87 See Response to Comment S4-2.
- R3-88 The project site is not located within the designated area of the San Bernardino MSHCP (personal conversation, Lisa Northrope, San Bernardino County Land Use Planning). Therefore, because it is not located within the sub-area boundaries of the program, conformance with the program is not addressed in the Final EIR/EIS. Neither is the project located within the West Mojave Plan planning area.
- R3-89 See Master Response “Growth Inducement.” As presented in Section 7 of the Final EIR/EIS, there is no current development activity in the Cadiz Project area. Thus, this project would not result in cumulative impacts other than those impacts presented for the project. Cumulative impacts have been analyzed in the context of several regional plans, such as those prepared by the Southern California Association of Governments (SCAG), the San Bernardino Association of Governments (SANBAG) and the San Diego Association of Governments (SANDAG). The proposed project will be coordinated and consistent with these plans and will implement a mitigation program that preserves plant and animal habitats under the guidance of the California Department of Fish and Game, the U.S. Fish and Wildlife Service and the BLM. As a result of this mitigation effort, impacts associated with the project would be offset; therefore, no cumulative loss of biological resources is anticipated to occur.
- R3-90 Comments noted. See Responses to Comments R3-91 to R3-104, below.
- R3-91 As is discussed in Section 5.16.1 of the Final EIR/EIS Volume I, a paleontological survey was conducted for the project area including both the pipeline alternative routes and the spreading areas. The survey consisted of walking the project areas with two-person teams spaced 50 feet apart. The survey identified 23 fossils contained in alluvium soils, carbonate soils, and paleosols. Identified fossils included flamingo, goose, mammoth, camel, horse, coyote, antelope, jack rabbit, ground squirrel, kangaroo rat, and freshwater snail. No technical report was prepared. Rather, the information gathered by the survey teams was used directly to prepare Section 5.16 of the Final EIR/EIS. Table 5.16-1 of the Final EIR/EIS lists the fossil locations identified during the survey. Figure 5.16-1 identifies the locations of soil types in which fossils were located.
- R3-92 Table 5.16-1 lists the locations of fossils identified during the initial survey. For protection of these fossil resources, the types of fossils found at each location were not included in the Final EIR/EIS. The accession inventory, including fossil type and exact location, will be supplied to the San Bernardino County Museum when the resources are curated.
- R3-93 The paleontologists obtained the appropriate permits from the Bureau of Land Management prior to conducting the survey as required by the Antiquities Act. It is the BLM and Metropolitan’s full intention to curate the fossils with the San Bernardino County Museum.

Fossils will be submitted with a list of fossil types, maps of fossil locations, and copies of the appropriate permits acquired before the survey was conducted.

- R3-94 Comment noted. Tables ES-4, 1-1 and 13-1 of the Final EIR/EIS have been modified to include permits required to conduct paleontological surveys prior to collecting fossils during construction activities on BLM land. The permitting agency is the BLM.
- R3-95 The Society of Vertebrate Paleontology (SVP) Guidelines include standard methods for collecting and recording paleontological resources. As such, the Final EIR/EIS notes that these standards were followed during the initial survey conducted for the CEQA process. The survey team also followed BLM requirements including obtaining a permit to collect paleontological resources on BLM lands. San Bernardino County Museum Guidelines were used to establish significance thresholds for the analysis required by CEQA.
- R3-96 Comment noted. The San Bernardino County Museum has not published mitigation guidelines for the collection of paleontological resources so it will not be added to the references in Section 15 of the Final EIR/EIS.
- R3-97 The CEQA statutes Public Resources Code (Section 21083.2(e)) provide for a financial cap for the recovery of archaeological resources not to exceed $\frac{1}{2}$ of one percent of the total cost of the project. In the spirit of this provision, Metropolitan and BLM have established a similar financial cap in Mitigation measure P-6 (costs not to exceed $\frac{1}{4}$ of one percent of the total cost of the project) for paleontological resources with respect to this project. It is the opinion of Metropolitan and BLM that Mitigation Measure P-6 in the Final EIR/EIS provides for a sufficient financial commitment to adequately protect paleontological resources in the project areas. This notwithstanding, the Final EIR/EIS acknowledges that with a construction project of this size, some paleontological resources are bound to be irrevocably damaged, thereby constituting a significant, unavoidable impact of the project.
- R3-98 The mitigation measures provided in the Final EIR/EIS will adequately protect paleontological resources within the project areas. However, the Final EIR/EIS acknowledges that due to the scope of the project, disturbance of paleontological resources is expected. The project involves trenching through extensive open space areas containing substantial paleontological resources. The project areas constitute a small portion of the open space areas. As such, the anticipated fossil discoveries within the construction areas would not be unique in the area. Mitigation Measures P-1 through P-5 provide for a full-time paleontological monitor to be present during construction in areas with high probabilities of containing paleontological resources. Based on the initial field survey and literature search, those areas constitute most of the construction areas. Final EIR/EIS Volume I, Figure 5.16-1 identifies those areas. Some areas with high fossil-bearing potential may be covered by alluvial soils of adequate thickness to avoid impacts of the project. Mitigation measure P-2 requires the monitor to investigate these areas during construction and document that fossil-bearing formations are deeper than the excavations. Only after this assertion would the paleontological monitor not be present during construction.

The mitigation measures contained in the comment are measures recommended by the County of San Bernardino for every construction project in the County. The measures are recommended guidelines. As such, individual construction projects are expected to adapt the measures to suit the scope of the project. Mitigation measures P-1 through P-6 provide for monitoring, fossil collecting, and curating procedures that do not conflict with the

recommended guidelines. Survey methods and curation policies recommended by the County of San Bernardino will be followed where feasible.

R3-99 See Response to Comment R3-98.

R3-100 See Response to Comment R3-98.

R3-101 See Response to Comment R3-98.

R3-102 See Response to Comment R3-98.

R3-103 See Response to Comment R3-98.

R3-104 See Response to Comment R3-98.

R4 RESPONSES TO COMMENTS FROM THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY DATED MARCH 8, 2000.

R4-1 Comments noted.

R4-2 The discussion of the need for the Cadiz Project is clarified in the Final EIR/EIS Volume I, Section 2.5.3 to reflect that the project contributes to Metropolitan's ability to meet the objectives of the California 4.4 Plan.

R4-3 The referenced shortfall does include a San Diego County Water Authority – Imperial Irrigation District (SDCWA-IID) proposed water transfer. The Final EIR/EIS Volume I, Section 2.6.2, and Table 2-7, identify the SDCWA- IID transfer ranging between 130,000 to 200,000 acre-feet.

With regard to the demonstration project with Palo Verde Irrigation District (PVID), it would be difficult to quantify the actual cost of that project to Metropolitan because all the water that was to be supplied under this demonstration project was lost to Colorado River flood release.

R4-4 Without the project it is anticipated that there would be increased shortfalls of up to 150,000 acre-feet during dry years. Interruptible water sales programs would be called upon to make up for such shortfalls.

R4-5 Groundwater storage programs within Metropolitan's service area are discussed in Section 2.5.4 of the Final EIR/EIS Volume I.

R4-6 Fine-grained sediment would be removed from the bottom of the spreading basins using heavy equipment. Such material that was suitable for agricultural purposes would be applied to cultivated Cadiz Inc. agricultural lands. Any such material that is not suitable for agricultural uses would be disposed of at an appropriate landfill. The potential impacts of spreading basin operations on air quality are discussed in Section 5.6.4 of the Final EIR/EIS. During such operations, watering will be used to mitigate the effects of dust (Mitigation Measure AQ-8).

R4-7 The potential for conditions to be appropriate for the creation of wetlands habitat to occur is unlikely. Ongoing maintenance and operation of the spreading basin will not create or allow for the creation of a favorable environment for wetlands habitat. It is anticipated that for

much of each year, spreading basins will be completely dry. During periods of storage of Colorado River Aqueduct water the basic operation of the spreading basin would involve a continuous cycling of water entering into spreading basin cells. Water will percolate down through the permeable surface at a rate of approximately 2 to 4 feet per day. During periods of storage, cells will be routinely taken out of service and dried out for maintenance. Spreading basins will at all times be devoid of vegetation and fine-grained sediments, if present at the bottom of a spreading basin cell, will be removed using heavy equipment.

R4-8 Comment noted.

R4-9 Comments noted. No response necessary

R4-10 Comments noted. No response necessary.

B1 RESPONSES TO COMMENTS FROM ALL AMERICAN PIPELINE, L.P. DATED JANUARY 31, 2000.

B1-1 The change in status of the 30-inch diameter pipeline is reflected in the Final EIR/EIS, Sections 5.5.4 and 5.13.1. The pipeline is now owned and operated to convey natural gas by El Paso Natural Gas Company in place of All American Pipeline, L.P.

B1-2 Comments noted. See Response to Comment B1-1.

B1-3 Comment noted. Thank you for the updated information.

B2 RESPONSES TO COMMENTS FROM THE NATIONAL CHLORIDE COMPANY OF AMERICA DATED DECEMBER 26, 1999.

B2-1 Comments noted. See responses to comments B2-2 and B2-3, below.

B2-2 See Master Response "Groundwater Monitoring and Management." Corrective measures described in Section 7.3.1 of the Management Plan to avoid impacts to brine resources include, but are not limited to, the delivery of Colorado River water, if available, to the project spreading basins.

B2-3 Comments noted. No response is necessary.

B3 RESPONSES TO COMMENTS FROM SILVER VALLEY REALTY DATED DECEMBER 11, 1999.

B3-1 The Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Project Feasibility and Facilities Report (Report No. 1162) identifies the location for the project spreading basins. No other feasible locations are known. If it were feasible to build the wellfield and spreading basins next to the existing Colorado River Aqueduct the potential for avoided construction costs would include a portion of the cost of the conveyance pipeline and pump station facilities.

B3-2 See Response to Comment B3-1. It is not feasible to use the majority of BLM managed lands further south of the spreading basins because such land is contained in designated wilderness areas or overlies dry lake beds unsuitable for project facilities. Therefore the pipeline cannot be made shorter.

- B3-3 See Response to Comment B3-1. The screening process utilized to identify potential projects is described in Section 3.4 of the Final EIR/EIS Volume I. These included ten groundwater storage and conjunctive-use projects, one transfer project and two projects involving desalination of agriculture drainage water.
- B3-4 The potential impacts to wells owned by neighboring landowners due to project operations is discussed in Section 5.5.4 of the Final EIR/EIS Volume I. A summary of the types of monitoring features, as well as monitoring frequencies is provided in Table 1 of the Management Plan; a summary of monitoring features and testing protocols is provided in Table 2; and, locations of monitoring facilities are shown in Figures 4 and 5. Section 6.2 identifies monitoring, testing and reporting procedures relating to the aquifer system, including the potential for impacts to wells owned by neighboring landowners. Section 7.2.2 describes the applicable action criteria, decision-making process and corrective measures.
- B3-5 No water level information from the turn of the century is available for any of the Chambliss area wells. The earliest published water levels were reported in Shafer, 1964 based on data collected between 1960 and 1962. These water levels ranged from approximately 592 to 608 feet above mean sea level (see Shafer, 1964; water well data sheets for Wells 6N/14E-31J1, 6N/14E-31K3 and 6N/14E-31x2). The 1999 groundwater level for 6N/14E-31J1 ranged from approximately 596 to 592 feet above mean sea level (Cadiz Inc., Groundwater Well Monitoring Annual Report, 1999).
- B3-6 Metropolitan could solely construct and operate the project.
- B3-7 This technical report is available for public review at five public libraries, at the offices of the BLM in Needles and in Riverside, and at the office of Metropolitan.
- B3-8 Comment noted. No response is necessary.
- B4 RESPONSES TO COMMENTS FROM CLAYPOOL'S TRUE VALUE HARDWARE DATED DECEMBER 11, 1999.**
- B4-1 Comments noted. No response is necessary.
- B5 RESPONSES TO COMMENTS FROM TATE AND ASSOCIATES, FOR THE ARIZONA AND CALIFORNIA RAILROAD, DATED FEBRUARY 21, 2000.**
- B5-1 Comments noted. See responses to comments B5-2 to B5-4, below.
- B5-2 See Master Response "Groundwater Monitoring and Management." Sections 5.8 and 5.9 of the Management Plan describe the monitoring features that include measurements of surface elevations to identify potential land subsidence. Section 7.2.3 describes the procedure that will be followed to avoid land subsidence. Annual and Five-Year reports containing all monitoring data and analysis will be provided as described in Section 6.8 of the Management Plan. Report information will include electronic data files and will be available to the general public. All such information will routinely be made available to the public.

B5-3 Section 5.7.4 of the Final EIR/EIS provides that Metropolitan will coordinate construction with the railroad.

B5-4 Comments noted. No response is necessary.

B6 RESPONSES TO COMMENTS FROM SF PACIFIC PROPERTIES, INC. DATED MARCH 8, 2000.

B6-1 Comments noted. No response is necessary.

B6-2 The mitigation ratio contained in the Final EIR/EIS for temporary and permanent impacts to habitat lands is consistent with requirements of BLM, USFWS and CDFG.

B6-3 Comments noted. In response to the concerns raised by the USGS, BLM and Metropolitan have developed the Management Plan that is incorporated in the Final EIR/EIS. For a description of the Management Plan see Master Response "Groundwater Monitoring and Management Plan."

B6-4 See Master Response "Need for a Supplement/Recirculation."

B6-5 Comments noted. No response is necessary.

B6-6 Comments noted. No response is necessary.

G1 RESPONSES TO COMMENTS FROM THE NATIONAL PARKS CONSERVATION ASSOCIATION DATED FEBRUARY 14, 2000.

G1-1 See Response to Comment Report F2-4.

G2 RESPONSES TO COMMENTS FROM THE MORONGO BASIN CONSERVATION ASSOCIATION INC. DATED FEBRUARY 18, 2000.

G2-1 Comments noted. No response is necessary.

G2-2 See Master Response "Need for Supplement/Recirculation."

G2-3 The California Environmental Quality Act ("CEQA") Guidelines provide specific criteria for choosing a lead agency for projects to be implemented by a public agency. Section 15051 of the CEQA Guidelines states the following:

"Where two or more public agencies will be involved with a project, the determination of which agency will be the lead agency shall be governed by the following criteria:

- (a) If the project will be carried out by a public agency, that agency shall be the lead agency even if the project would be located within the jurisdiction of another public agency."

Consequently, although the project is situated on land that is outside of Metropolitan's district, the project will be "carried out" by Metropolitan. Pursuant to CEQA guidelines, Metropolitan is designated the CEQA lead agency.

- G2-4 The Cadiz Groundwater Storage and Dry-Year Supply Program is a conjunctive use storage and transfer project that will store raw water from the Colorado River and may transfer indigenous groundwater from the Cadiz area. Metropolitan would have the right to recapture water imported from the Colorado River and stored in the groundwater basin underlying the project site. As to the transfer of indigenous groundwater, Metropolitan would exercise the right under California law to appropriate groundwater for non-overlying uses, including exportation for use outside the groundwater basin.
- G2-5 The water rights for the Colorado River are allocated in accordance with a series of federal and state statutes, United States Supreme Court decisions, and an international treaty with Mexico. Collectively known as the “Law of the River,” these laws allocate a total of 4.4 million acre-feet of water annually, together with one-half of any surplus water, to California. A description of Metropolitan’s share of the California allocation is set forth in Section 2.3.5 of the Final EIR/EIS Volume I. A more detailed analysis of the Law of the River is set forth in the Final Environmental Impact Statement for the Colorado River Interim Surplus Criteria (December 2000) prepared by the U. S. Bureau of Reclamation.
- G2-6 California’s annual allocation of 4.4 million acre-feet of Colorado River water is embodied in the Law of the River and will not change over the fifty year life of the project. However, the distribution of this water within California may change in the future as water agencies work to reduce the amount of Colorado River water used. The Colorado River Board of California has developed a draft Colorado River Water Use Plan (May 2000), which describes projects that may be implemented to achieve the goal of bringing California’s use down to 4.4 million acre-feet. A description of California’s historic usage of Colorado River water and the draft plan to reduce that use is set forth in Section 2.5.3 of the Final EIR/EIS Volume I.
- G2-7 See Master Response “Groundwater Monitoring and Management Plan.” Section 5.5.4 of the Final EIR/EIS Volume I analyses the potential impacts to the aquifer system (including neighboring wells) due to groundwater level fluctuations related to Cadiz Project operations. The communities nearest the project area are Chambless (six miles), Amboy (15 miles), and Essex (20 miles).

Amboy, which is located north of Bristol Dry Lake, is separated from the project area by brine-saturated sediments and salt deposits underlying Bristol Dry Lake. Consequently, there is no potential for continuity of potable groundwater in the project area with groundwater beneath this community. The community of Essex is located in Fenner Valley, approximately 20 miles up-gradient from the project spreading basins and wellfield. Although there is continuity between the aquifer systems underlying the project area and Essex, all the wells in the Essex area are located beyond and up-gradient of what is anticipated to be the maximum area of influence of project operations. To ensure that there will be no significant adverse impacts to wells located in the community of Essex, the Management Plan includes specific provisions (Sections 6.2 and 7.2.2 of the Management Plan) to monitor wells in the area, and to modify project operations if necessary.

The community of Chambless, located approximately six miles from Fenner Gap, is underlain by groundwater that is in hydraulic continuity with that of the project area. As a result, there is potential for project groundwater operations to impact wells in the Chambless area. To ensure that there will be no significant adverse impacts to wells owned by neighboring landowners, the Management Plan includes specific provisions, described above, to monitor wells and modify project operations, if necessary, to avoid adverse impacts.

The project has no effect on the allocation of Colorado River water within California or between California and other states. Therefore, there are no impacts on Colorado River water rights resulting from the project.

- G2-8 Comment noted. Final EIR/EIS Figures 2-1 and 2-2 are provided to clearly show the Metropolitan member agencies.
- G2-9 Metropolitan supports the California Urban Water Conservation Council (CUWCC) adopted Best Management Practices (BMP's). These fourteen measures ensure that water conservation is "built in" to residential, commercial, institutional and industrial water use in southern California. These standards for water conservation have been developed for the urban areas of the state and may meet or exceed existing "desert community standards." Metropolitan does not place any limits on water conservation. The assumptions for reliable measurement of water conservation savings are updated every three years.
1. As a wholesale water supplier, Metropolitan has no retail customers. However, all interagency water service connections are metered. Any new water agency supplied by Metropolitan likewise would be metered.
 2. Metropolitan does not control or issue any building permits.
 3. As a wholesale water supplier Metropolitan relies on its member agencies to develop and enforce local and regional water conservation efforts including car-washing restrictions.
 4. Metropolitan's Conservation Credits Program, established in 1988, provides financial and technical assistance to member agencies for implementing the water conservation BMP's listed in the CUWCC MOU, as well as other programs. Metropolitan pays the lesser of one-half the program cost or the equivalent of \$154 per acre-foot of water saved. A variation of this policy provides funding for the ULF toilet replacement programs at a rate of \$60 per toilet replaced.
- G2-10 Metropolitan's water conservation incentives were developed for its member agencies. These incentives may not be the same as those offered by your local water supplier. Any water supplier is welcome to contact Metropolitan (Ms. Barbara Nadon, 213-217-6000) to discuss any assistance Metropolitan can provide to your organization or local water suppliers.
- G2-11 Conservation activities are closely coordinated with Metropolitan's External Affairs Group. The following table summarizes the major conservation related activities of BMP 7:

Program or activity	Description
Public Speaking Services	Provides speakers for organizations, service clubs, churches, businesses and other community groups and associations. It is estimated that these presentations attract between 15,000 and 20,000 people annually.
Community Relations	Organizes and conducts inspection trips of Metropolitan's distribution system for elected officials, community leaders and members of the public. Several hundred people learn about Metropolitan's conservation and water management policies and practices each year through these trips.
Media and Publications	Conducts editorial briefings and media field trips; assembles press packets; prepares and disseminates news releases, speeches, videos, fact sheets, brochures, articles, water management objectives and programs.
Government Relations	Provides elected officials, public agencies, businesses and organizations with information about Metropolitan's water management objectives and programs.

In addition, Metropolitan maintains an extensive commitment to BMP 8's conservation related education programs. Contact Mr. Adán Ortega (213-217-6000) for additional information on Metropolitan's School Education Programs.

- G2-12 Residential retrofit, home audit, leak detection, and landscape water audit programs are ongoing at Metropolitan regardless of the shortage or surplus conditions in any one year.
- G2-13 The Williamson Act (Government Code section 51200 *et seq.*) was adopted by the California State Legislature to reduce the real estate tax burden on owners of farm land to preserve agricultural land uses in the state. The Williamson Act allows owners of prime agricultural land to contract with the cities or counties in which they are located to limit the use of their lands to agricultural purposes for a period of ten years. The contracts are automatically renewed for a standing ten-year period after the end of each year. The contracts can be allowed to expire over a ten-year period by filing a notice of intent not to renew or can be cancelled on mutual agreement of all parties to the contract and the State. As stated in the Final EIR/EIS, there are no Williamson Act contract lands in the Cadiz Project area. Therefore, the project will have no impact on such lands.
- G2-14 As provided for in the Final EIR/EIS (mitigation measures B-26 and B-33), all native habitats (excluding agriculture) permanently and temporarily impacted by the proposed project will be replaced at a ratio of 1:1. The offsite habitat that will be purchased will be commensurate to, or exceed the quality of that which is impacted. The ultimate determination of suitable habitat for acquisition will be made in coordination with the BLM and CDFG. Mitigation lands will be acquired after certification of environmental documentation and approval to proceed with the project.
- G2-15 Preparation of a Groundwater Monitoring and Management Plan was identified as mitigation measure WR-1 in the Draft EIR/EIS. In response to comments received on the Draft EIR/EIS, the Supplement was circulated from October 20, 2000 to January 8, 2001 to provide the public with the opportunity to review and comment on clarifications to Cadiz

Project water resources information, including the Management Plan. The Management Plan has been prepared by the BLM, NPS, USGS, Metropolitan, County of San Bernardino, and Cadiz Inc. The NPS and USGS became cooperating agencies pursuant to NEPA for purposes of preparation of the Supplement to the Draft EIR/EIS and the Final EIR/EIS.

Under the Cadiz Project, the transfer of indigenous groundwater to the Colorado River Aqueduct could occur, but only in compliance with the provisions of the Management Plan that were developed to avoid adverse impacts.

For additional information see Master Response “Groundwater Monitoring and Management Plan.”

G2-16 There are differences of opinion regarding the age of the groundwater. For that reason, the Final EIR/EIS Volume I, Section 5.5.1, provides that additional isotopic sampling and analysis will be conducted on groundwater samples from production wells and observation wells during the pre-operational phase of the project to refine estimates of the age of the indigenous groundwater.

G2-17 BLM and Metropolitan have developed the Management Plan, incorporated into the project, to provide a monitoring and management procedure to avoid adverse impacts. For further details, see Master Response “Groundwater Monitoring and Management Plan.”

G2-18 Section 8 of the Management Plan provides for a Closure Plan to govern project storage and extraction in a manner that ensures no residual effects of the project will result in adverse impacts to critical resources. The maximum allowable decline from pre-operational static groundwater levels is 100 feet at the end of project operations, or any lesser decline that would be required to avoid adverse impacts. During the operational phase, groundwater level declines could potentially be greater than this amount, however, no amount of groundwater level decline will be permitted that does not comply with the requirements of the Management Plan.

Groundwater levels will be monitored regularly, as described in Section 6.2.1 of the Management Plan. A summary of the monitoring features and frequencies is set forth in Table 1, and the locations of the monitoring facilities are shown on Figures 4 and 5, of the Management Plan. See Master Response “Groundwater Monitoring and Management Plan” for additional information.

G2-19 An analysis of the potential impacts from migration of saline groundwater due to project operations is set forth in Section 5.5.4 of the Final EIR/EIS Volume I. A description of the Management Plan provisions that relate to migration of saline groundwater is set forth in Sections 6.2, 6.3, 7.2.6, and 7.3.1 of the Management Plan.

G2-20 Section 7 of the Management Plan sets forth the procedures for operating the project in accordance with monitoring to identify potential adverse impacts, and action criteria and corrective measures to avoid adverse impacts. The procedures and authority for making and implementing decisions under the Management Plan are described in Sections 7, 9, and 10.

G2-21 See Master Response “Water Quality.” As described in Section 6.2.2 of the Management Plan, water quality analyses will be conducted weekly at Lake Havasu during periods when Colorado River water will be stored in the basin. Section 7.2.1 identifies the action criteria and corrective measures related to spreading Colorado River water in the basin.

- G2-22 The project is proposed to deliver water to the Colorado River Aqueduct during dry years and when the aqueduct is not full. Metropolitan relies on other facilities such as the newly constructed Diamond Valley Lake for emergency water storage and supply.
- G2-23 The Management Plan was developed by BLM and Metropolitan as the lead agencies for the project; NPS and USGS as cooperating federal agencies; the County of San Bernardino; and Cadiz Inc. The Management Plan provides for a Technical Review Panel (TRP) made up of technical representatives from certain public agencies to provide technical assistance and recommendations to the BLM regarding the implementation of the Management Plan and operation of the project. The TRP is described in Section 9 of the Management Plan.
- G2-24 See Response to Comment G2-23.
- G2-25 The Technical Review Panel will convene as requested by the BLM. Its activities are described in Section 9 of the Management Plan. Although its meetings will not be public, the annual and five-year reports describing the operation of the project and monitoring under the Management Plan will be made public. These reports are described in Section 6.8.
- G2-26 Comments noted. As noted in Response to Comment G2-25, all annual and five-year reports will be made available to the public.

G2-27 Comments noted. No response is necessary.

G3 RESPONSES TO COMMENTS FROM THE CALIFORNIA FARM BUREAU FEDERATION DATED FEBRUARY 22, 2000.

G3-1 Comments noted. No response is necessary.

G4 RESPONSES TO COMMENTS FROM THE CALIFORNIA/NEVADA REGIONAL CONSERVATION DESERT COMMITTEE DATED FEBRUARY 25, 2000.

G4-1 See Master Response "Groundwater Monitoring and Management Plan" regarding the Management Plan developed in response to concerns raised about groundwater recharge.

G4-2 The original public review period for the Draft EIR/EIS was extended from November 26, 1999 to February 23, 2000, a period of 90 days. The public review period was extended an additional 14 days, to March 8, 2000.

G5 RESPONSES TO COMMENTS FROM THE SIERRA CLUB (NO DATE)

G5-1 Comments noted. See Responses to Comments G5-2 to G5-6, below.

G5-2 See Master Response "Need for Supplement/Recirculation."

G5-3 There will be some losses of imported Colorado River water during the spreading operation due to evaporation when the water is in the spreading basins and exposed to the air. As described in the Final EIR/EIS Volume I, Section 5.5.4, the amount of water expected to evaporate from the project spreading basins will be approximately 3 percent of the total volume of water stored. For comparison, Lake Havasu, located on the Colorado River east

of the Cadiz Project area, loses approximately 22 percent of its capacity each year to evaporation.

G5-4 See Response to Comment G2-6. The Secretary of the Interior currently makes the annual determination of water supply conditions in consultation with the seven Basin States, Indian Tribes and other parties, as required by the “Law of the River.” California’s rights to water from the Colorado River are determined by the Law of the River, which includes international treaties, interstate compacts, federal and state laws, court cases, contracts and regulations. Metropolitan will continue to receive its share of Colorado River water under the Law of the River after 2015. In wet years, when the Secretary of the Interior determines that there is surplus water available, Metropolitan will be entitled to receive a share of the surplus. In addition, as described in Section 2.5.3 of the Final EIR/EIS Volume I, Metropolitan is working with other agencies in California that use Colorado River water to develop conservation programs and voluntary water transfers from agricultural to urban agencies. Through all of these measures, Metropolitan will continue to receive supplies of Colorado River water that may be stored for dry year use.

G5-5 In response to the differences in opinion referenced in this comment, BLM and Metropolitan developed the Groundwater Monitoring and Management Plan that is incorporated into the project. This Management Plan was developed in consultation with the NPS, USGS, and County of San Bernardino. The project will be operated in accordance with the Management Plan to avoid impacts to critical resources. For further descriptions of the Management Plan, see Master Response “Groundwater Monitoring and Management Plan.”

G5-6 The Management Plan described in Response to Comment G5-5 is a comprehensive groundwater monitoring plan, that includes oversight by Metropolitan and BLM. The annual and five-year reports containing information on resources monitoring and project operations will be public documents. The Management Plan will also ensure that all agricultural water use on Cadiz Inc. lands in the project area will be conducted without adverse impacts to critical resources.

G6 RESPONSES TO COMMENTS FROM DESERT SURVIVORS DATED MARCH 5, 2000.

G6-1 Comments noted. A description of existing land uses in the project area is set forth in the Final EIR/EIS Volume I, Section 5.2.1. In addition to the uses described in the comment, land uses include existing and approved agricultural development and salt mining operations. Three separate interstate utilities are located within the project area. The project area also encompasses the Colorado River Aqueduct, the Iron Mountain Pumping Plant and community. Section 5.7 describes existing transportation infrastructure within and surrounding the project area. Figure 5.2.1 depicts land ownership within and surrounding the project area.

G6-2 In response to the differences in opinion referenced in this comment, BLM and Metropolitan developed the Groundwater Monitoring and Management Plan that is incorporated into the project. This Management Plan was developed in consultation with the NPS, USGS, and County of San Bernardino. The project will be operated in accordance with the Management Plan to avoid impacts to critical resources. For further information regarding the Management Plan, see Master Response “Groundwater Monitoring and Management Plan.” Two potential projects, the Cadiz Valley Groundwater Storage Project (Draft EIR/EIS, page 3-4) and the Cadiz Valley Dry-Year Transfer Project (Draft EIR/EIS, page 3-10) were combined to meet the project objectives.

G6-3 See Master Response “Need for Supplement/Recirculation.”

G6-4 Comments noted. See responses to comments G6-5 to G6-22, below.

G6-5 The BLM is authorized and required to manage the lands under its jurisdiction for multiple use and sustained yield. 43 U.S.C. §1732. Such uses include rights-of-way for pipelines for the transportation or distribution of water and systems for the transmission and distribution of electricity. 43 U.S.C. §1761. The BLM is fulfilling its obligations under the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA), through the preparation of the environmental review documents and the Groundwater Monitoring and Management Plan. In particular, the Management Plan, which was developed in conjunction with the cooperating federal agencies, National Park Service and U. S. Geological Survey, provides a process for the operation of the project in a manner that avoids adverse impacts to critical resources.

G6-6 See Response to Comment G6-5. BLM is fulfilling its obligations as the lead federal agency to consider the proposed project in accordance with NEPA. BLM will also perform its legal responsibilities in connection with any exercise of its jurisdiction over the Hayfield Project that is separately being developed by Metropolitan.

The Groundwater Monitoring and Management Plan has been developed for the project and provides for the protection of groundwater related resources against project impacts. The Management Plan includes enforcement procedures for the BLM to ensure compliance with its provisions. For further information, see Master Response “Groundwater Monitoring and Management Plan.”

G6-7 A comprehensive groundwater monitoring and management plan has been prepared. See the Management Plan volume of this Final EIR/EIS.

G6-8 All systems of water storage are subject to loss. Under the Cadiz Program, the amount of potential water losses would not approach the amount lost to evaporation from a surface reservoir in a similar environment. Underground storage of Colorado River water to limit evaporative losses is a benefit of the project. For comparison, Lake Havasu, located on the Colorado River east of the Cadiz Project area, loses approximately 22 percent of its capacity each year

Although there will be potential additional evaporative losses under the Cadiz Project if the stored water needs to be re-spread to avoid loss through dispersal, such losses should remain lower than losses for surface storage in the Colorado River area. Section 5.3.3 of the Groundwater Resources Report stated that groundwater in the project area moves at a velocity of approximately 1 to 2 feet per day (approximately 365 to 730 feet per year). Considering an average rate of 550 feet per year, it would take over 10 years for stored water migrate from the spreading basin to the periphery of the recovery wellfield; therefore, it is not anticipated that there will be losses due to migration of the water to the dry lakes. The stored water will be monitored, and may be extracted and delivered to the CRA or re-spread if necessary to retain the stored water in the area of the project wellfield.

G6-9 The extraction wells will be completed in both the upper and lower alluvial aquifer systems to ensure efficient operation of the wellfield. The amount of water pumped from the wellfield would be the same, regardless of the specific depth to which well are drilled.

Additionally, Section 5.5 of the Final EIR/EIS Volume I, under discussion of principal aquifer systems, states that the project wells will not be drilled in to the carbonate bedrock aquifer.

Regarding the statement that the project should “Take out what you put in,” implementation of the Management Plan would also have the practical effect of combining the storage and transfer alternatives into one project. The Management Plan has been fully incorporated into the proposed project, which is also the environmentally preferred alternative, as discussed in Section 11 of the Final EIR/EIS Volume I. If, for example, it was determined that indigenous groundwater could not be transferred in compliance with requirements of Management Plan, the Cadiz Project would be a conjunctive-use storage only project. Conversely, should transfers of indigenous groundwater comply with all the requirements of the Management Plan, including the avoidance of adverse impacts to critical resources, the Cadiz Project would then be able to provide both conjunctive-use storage and transfer.

- G6-10 The program operational scenarios identified in the Draft EIR/EIS have been deleted from the analysis and replaced with the Management Plan which ensures avoidance of impacts to critical resources regardless of the amount of indigenous groundwater withdrawn, if any. For further details of the Management Plan see Master Response “Groundwater Monitoring and Management Plan.”
- G6-11 The potential impacts to groundwater quality from the introduction of Colorado River water are discussed in Section 5.5.4 of the Final EIR/EIS. Measures that will be implemented to avoid these impacts are set forth in Section 7.2.1 of the Management Plan.
- G6-12 The Cadiz Project will not impact Cadiz Dunes Wilderness Area or other sand dunes habitats for insect, plant and wildlife as the result of impacts to “stored water within and under desert sand dunes.”

There is no site-specific information that suggests that wildlife is dependent on groundwater underlying Cadiz Dunes or other sand dunes in the vicinity of the project area. To the contrary, the Final EIR/EIS, Section 15 cites the following reference:

Shafer, R.A. 1964 Report on Investigations of Conditions which Determine the Potential for Development in the Desert Valleys of Eastern San Bernardino County California. Unpublished Report, Engineering Department, Southern California Edison Company, 172 pp. 12 plates.

This report provides information regarding the elevation of water levels underlying and adjacent to the Cadiz Dunes wilderness area. Based on the information contained in this report, the depth to groundwater underlying the Cadiz Dunes Wilderness Area is not near (within inches of) the surface. The depth to groundwater is approximately 100 feet below the surface of the Cadiz Sand Dunes.

- G6-13 See Response to Comment F2-40.
- G6-14 See Master Response “Alignment Alternatives” for a discussion of an alignment that does not cross Class L lands.
- G6-15 The comment does not raise an issue under CEQA or NEPA. The project is not expected to appreciably affect Metropolitan’s water rates and thus will not impact water demands.

- G6-16 There is not a CDCA Plan Utility Corridor that connects the Iron Mountain Pumping Plant with the project spreading basins or wellfield, nor is one proposed. For this reason the project will require an amendment to the CDCA Plan for an exception to the utility corridor requirement regardless of the route selected. Existing utility corridors are shown on Figure 5.2-2 of the Final EIR/EIS Volume I.
- G6-17 Mitigation Measure B-23 is specifically provided to minimize impacts to desert tortoise from construction of new access roads by requiring barrier fences, boulders, topographic impediments (grading potential access points such that vehicles would have difficulty gaining access), and signage. Because this mitigation measure reduces ability to access any new roads, the concern raised in the comment is addressed.
- G6-18 The existing expansive landscape in the project area and the potential visual impacts associated with the Cadiz Project are described in detail in Section 5.15 of the Final EIR/EIS Volume I. Photographs of the existing landscape in the area are also provided in Section 5.15. The new features the Cadiz Project will introduce into the landscape are identified. It is acknowledged that these new features, especially the utility poles and scarring from construction and the maintenance road, will contrast with the existing views of vast expanse of desert land, and that this contrast will be most noticeable from near views. However, these features will be much less distinct from more distant views. The disturbance associated with the Cadiz Project will not be noticeable in the distance from the valley floor but will be more noticeable from higher elevations that may be used by visitors on BLM lands. These project elements, although they contrast with the existing landscape, will still be subordinate to the panoramic views of the desert. This contrast is within the BLM's Visual Resource Management contrast parameters established for the area.
- G6-19 Comments noted. See Response to Comment G6-18. The project has no impact on the continued operation of the rail line.
- G6-20 Comment noted. Section 5.14.4 and Section 5.17.4 of the Final EIR/EIS Volume I have been revised to clarify that the single-wire, wood pole-supported electric line along a segment of the ARZC track ends approximately three miles north of the Cadiz Dunes Wilderness Area; that the electric lines along the BNSF rail line cross the Cadiz project area on the north side of the spreading basins; and that there are also overhead electric lines providing service to the El Paso Natural Gas Company facility and to facilities located at Cadiz. Also see Response to Comment G6-18.
- G6-21 NEPA requires an evaluation of reasonable alternatives, and a brief discussion of the reasons for eliminating alternatives that are not studied in detail. 40 CFR §1502.14. At the time it makes its decision, the NEPA lead agency must identify all the alternatives considered, and specify which alternative is considered to be environmentally preferable. 40 CFR §1505.2. Section 11 of the Final EIR/EIS discusses identification of the environmentally preferred alternative.

The "alternatives" suggested in the comment have been considered and eliminated from detailed study. The proposed alignments across the Danby Dry Lake are discussed at Section 3.6 of the Final EIR/EIS. The undergrounding of power lines was considered and eliminated from further study as technically infeasible. See also Master Response "Alignment Alternatives."

The references to a CDCA Plan utility corridor are generally not correct. A relatively short segment (approximately five miles) of a CDCA Plan utility corridor is located within the Cadiz Project area north of the Iron Mountain Pumping Plant. This utility corridor accommodates aboveground utility lines (two power lines and telephone lines) for pumping plants along the Colorado River Aqueduct, and bisects CDCA Plan Class L lands. The Arizona and California Railroad and the El Paso Natural Gas Company pipeline are not located within a CDCA Plan utility corridor. There is not a CDCA Plan utility corridor that connects the Iron Mountain Pumping Plant with the project spreading basins of wellfield, nor is one proposed. For this reason, any alignment (including ES-2 and ES-3 as referenced in the comment) will require an amendment to the CDCA Plan for an exception to the utility corridor requirement.

Although the preferred alternative is not within a CDCA Plan utility corridor, much of it is adjacent to existing utility or transportation facilities. Approximately one half to the preferred Eastern Alternative would follow an alignment within or adjacent to Cadiz-Rice Road, the Arizona California Railroad and the El Paso Natural Gas pipeline.

In response to the statement regarding “cultural and archaeological resources”, the extent of these resources located within “existing rights of way” is not known. Because the facilities located in these “rights of way” were constructed prior to present-day requirements for the protection of cultural and archaeological resources, such information regarding these facilities is incomplete.

A 69kV aboveground power transmission system is proposed to provide power to the project wellfield. An underground power transmission cable was evaluated and determined to be fatally flawed on both technical and environmental basis. The environment concerns attributable to an underground power transmission cable are inefficient management and use of electrical power, increased environmental impacts during construction and increased environmental impacts during project operation and maintenance.

An underground power transmission cable would require approximately one additional megawatt of electrical power for wellfield operation. The additional electrical power would be required to compensate for inefficiencies of an underground power transmission cable and resulting loss (waste) of electrical power. The area of disturbance for an underground power cable would be approximately double that required for an aboveground power line. The engineering constraints of an underground power cable require that it be located in a right-of-way separate from the underground water conveyance pipeline. By contrast the aboveground power transmission line and below groundwater conveyance pipeline share one common right-of-way.

During project construction, installation of a below ground power transmission cable would require the removal of approximately 62,000 cubic yards of excess material that would be transported and disposed off-site. Importation of approximately 55,000 cubic yards of concrete would also be required. The removal and disposal 62,000 cubic yards of excess material would necessitate approximately 7,700 additional truck trips. The importation of 55,000 cubic yards of concrete would require 12,200 additional truck trips. These more than 20,000 additional truck trips would result in increased air and traffic impacts. By contrast, the above ground power transmission line does not require the disturbance, use, transportation or disposal of such materials.

During project operations the restoration of a line fault on an underground power cable would be problematic. Locating and repairing a fault would create new areas of disturbance.

By contrast, restoration of an aboveground line fault is substantially easier and would not require disturbance outside of the project right-of-way. In addition, to mitigate the engineering problems specific to transporting abnormally high voltages in an underground power cable of this length, control devices such as switched shunt reactors and associated switching stations are required. The addition of these reactors and the control systems required for their operation would significantly increase the operation and maintenance of the project wellfield and reduce its reliability during critical periods of operation, that is during dry-years when water to be supplied by the Cadiz Project will most needed.

A natural gas powered system was similarly considered and rejected.

Regarding the pre-treatment of Colorado River water prior to storage and pumping only from the “upper alluvial aquifer, see Responses to Comments G6-11 and G6-9.

G6-22 Comments noted. Development of the Groundwater Monitoring and Management Plan have addressed the need for further information as suggested by the comments.

G7 RESPONSES TO COMMENTS FROM THE SAN BERNARDINO VALLEY AUDUBON SOCIETY DATED MARCH 6, 2000

G7-1 Comments noted. See Responses to Comments G7-2 to G7-10, below.

G7-2 See Response to Comment R3-82.

G7-3 The Management Plan has been developed to address potential impacts on groundwater related resources, including springs. Sections 6.1 and 7.1 of the Management Plan describe the monitoring and management procedures to avoid adverse impacts to these resources. See Master Response “Groundwater Monitoring and Management Plan.”

G7-4 See Response to Comments S4-2.

G7-5 Section 6 of the Final EIR/EIS Volume I provides a thorough discussion of the growth inducement impacts of the project. For further discussion, see Master Response “Growth Inducement.”

G7-6 Section 7 of the Final EIR/EIS Volume I provides a thorough discussion of the cumulative impacts of the project. Specifically, Section 7.3.5 discusses the potential cumulative impacts to water resources.

G7-7 The correct name of the referenced plan is the West Mojave Plan. The Cadiz Project area is not located within designated areas of, nor will it have an impact on, the West Mojave Plan or the San Bernardino MSHCP. Furthermore, the project is not anticipated to have a significant cumulative effect on regional biological resources.

G7-8 In response to the differences in opinion referenced in this comment, BLM and Metropolitan developed the Groundwater Monitoring and Management Plan that is incorporated into the project. This Management Plan was developed in consultation with the NPS, USGS, and County of San Bernardino. The project will be operated in accordance with the Management Plan to avoid impacts to critical resources.

G7-9 Cadiz Valley Agricultural Development water use will be conducted in accordance with the Management Plan and, as such, the action criteria for all of the critical resources would apply to groundwater withdrawn for both the agricultural operation and the project. Section 7.3.5 of the Final EI/EIS Volume I contains a full discussion of the potential cumulative impacts of past, present, and reasonably foreseeable water uses in the project area, including Cadiz agricultural uses.

G7-10 See Master Response “Need for Supplement/Recirculation.”

G8 RESPONSES TO COMMENTS FROM THE RED ROCK AUDUBON SOCIETY DATED MARCH 6, 2000

G8-1 Comments noted.

G8-2 See Response to Comment F2-2 and Master Response “Need for Supplement/Recirculation.”

G8-3 Sections 6.1 and 7.1 of the Management Plan provide for the monitoring and management of the project to avoid adverse impacts to groundwater related resources, including springs. See Master Response “Groundwater Monitoring and Management Plan.”

G9 RESPONSES TO COMMENTS FROM THE CALIFORNIA/NEVADA REGIONAL CONSERVATION DESERT COMMITTEE DATED MARCH 7, 2000.

G9-1 Comments noted. See responses to comments G9-2 to G9-18, below.

G9-2 Regarding “draw down of the aquifer,” see Master Response “Groundwater Monitoring and Management Plan.” Regarding recirculation of the EIR/EIS, see Master Response “Need for Supplement/Recirculation”.

G9-3 See Response to Comment F2-2, and Master Response “Groundwater Monitoring and Management Plan.”

G9-4 The monitoring and mitigation plan referenced as WR-1 in the Draft EIR/EIS has been developed and circulated for public comment in the Supplement to the Draft EIR/EIS. The Groundwater Monitoring and Management Plan is presented in the Final EIR/EIS, Volume IV.

G9-5 The “railroad right-of-way” is not an existing utility corridor under the CDCA as stated in the comment. See Master Response “Alignment Alternatives.”

G9-6 Sections 6.1 and 7.1 of the Management Plan provide for the monitoring and management of the project to avoid adverse impacts to groundwater related resources, including springs in the Trilobite Wilderness Area. See Master Response “Groundwater Monitoring and Management Plan.”

G9-7 See Response to Comment F2-2.

G9-8 Regarding potential impacts to Cadiz Sand Dunes, see Response to Comment G6-12. Regarding potential impacts to springs, see Response to Comment F2-40.

- G9-9 Section 4 of the Management Plan discusses the mobilization of lakebed dust. Sections 6.4 and 7.4 provide monitoring and management measures to ensure that the project does not contribute to the mobilization of lakebed dust.
- G9-10 Existing conditions related to light and glare in the project area are described in Section 5.14.1 of the Final EIR/EIS Volume I. Potential light and glare impacts of the project are described in Section 5.14.4. Mitigation Measure AS-3 has been added to the Final EIR/EIS to address the potential impacts.
- G9-11 See Response to Comment F2-28.
- G9-12 See Master Response “Water Quality.”
- G9-13 See Response to Comment G6-9.
- G9-14 Comment noted. No further response is possible because the commentor does not identify any specific communities that are considered to be affected. See Response to Comment F2-4.
- Regarding the potential for “large dust storms,” see Response to Comment G9-9.
- G9-15 Figures within the Final EIR/EIS have been revised to identify all wilderness areas located within approximately twenty miles of the project area.
- G9-16 See Section 5.5.2 of the Final EIR/EIS Volume I and Response to Comment G10-11.
- G9-17 Comments noted. No response is necessary.
- G9-18 See Master Response “Need for Supplement/Recirculation.”

G10 RESPONSES TO COMMENTS FROM THE CALIFORNIA NATIVE PLANT SOCIETY DATED MARCH 8, 2000.

- G10-1 Comments noted. See Responses to Comments G10-2 to G10-19, below.
- G10-2 Metropolitan supports water conservation efforts as described in Section 2.3.3 of the Final EIR/EIS Volume I. The effect of conservation efforts on the need for water storage and dry year supply programs is discussed in Section 2.4.4.

Metropolitan also participates in development of conservation measures through the California Urban Water Conservation Council (CUWCC). This organization has developed Best Management Practices (BMPs) to identify urban water conservation measures. Metropolitan supports Landscape Training and Education under BMP 5, Large Landscape Audits. Metropolitan funds, develops, and coordinates training and education programs for landscape workers and professionals. Metropolitan also collects and disseminates information about the effectiveness of landscape water conservation programs and strategies, participates in landscape research projects, and investigates and tests promising new technologies.

Metropolitan participated on the committee that developed the BMP 5 Handbook, which outlines implementation methods, and it continues to develop and test projects to meet the requirements of BMP 5 – Large Landscape Water Conservation Programs and Incentives.

Metropolitan and its member agencies have conducted a training course known as “Protector de Agua” for landscape maintenance technicians. In keeping with the original goal of providing technical information to Spanish-speaking participants, approximately 28 percent of the classes held during fiscal year 1998 – 1999 were taught in Spanish. This course is now certified through the Irrigation Association, which allows participants to earn up to 21 Continuing Education credits for attending. To date, more than 5,000 participants have completed the course.

In response to member agencies and participants, a new “plant class” was added to the training program. This class provides landscape technicians with information about low-water using plants suitable for use in Southern California. Participants receive a reference booklet, which includes color photos and maintenance information, as well as water use guidelines for various landscape species. To address residential outdoor water use, Metropolitan offers a Saturday morning workshop for home gardeners.

- G10-3 See Master Response “Alignment Alternatives.” Temporary impacts to habitats would occur during construction for each alignment alternative, however, Mitigation Measure B-1 provides for the re-establishment of native habitats.
- G10-4 Please refer to Biological Resources mitigation measures described in Section 5.8.5 of the Final EIR/EIS Volume I. Mitigation Measure B-3 addresses post-construction weed control, and has been revised to specifically include control of tamarisk
- G10-5 The Final EIR/EIS Volume I addresses fluctuations of water levels in Sections 5.5.1 and 5.5.4. However, the implementation of the Management Plan would govern all groundwater storage and extraction to ensure protection of critical resources and thereby address these concerns. Significant impacts to these plant communities will be prevented by avoiding significant fluctuations in groundwater levels and changes in groundwater quality as described in the Management Plan (Sections 6.3 and 7.3).
- G10-6 Dust suppression during construction will primarily involve using soil binders. Mitigation Measure AQ-4 in the Draft EIR/EIS included the possibility of watering unpaved roads and areas as a method of dust suppression. After discussions with the California Department of Fish and Game and the Mojave Desert Air Quality Management District, watering has been removed from the mitigation measure to avoid attracting desert tortoises and to prevent the establishment of exotic plant species.
- G10-7 In response to this comment, the Final EIR/EIS Volume I, Section 5.8, has been revised clarify that the acreage estimates for Mojave wash scrub and desert dunes and sand fields habitat Volume I are according to the cited reference of Sawyer and Keeler-Wolfe, 1995.
- G10-8 See Response to Comment G10-7.
- G10-9 Please refer to the Biological Resources Section 5.8 of the Final EIR/EIS Volume I. The existing resources and the impact acreage for the two plant communities referenced in the comment letter are described for each project alternative. Table 5.8.3 summarizes the impacts to existing resources for all the proposed alternatives. By implementing the mitigation measures in Section 5.8.5, impacts to Mojave wash scrub, stabilized and partially stabilized desert dunes and desert sand fields will be reduced below a level of significance.

- G10-10 Please refer to the Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Technical Report, Biological Resources, Report (Report No. 1164). General and focused botanical field surveys were conducted in 1999 on March 22-24, April 5-7, April 27-29, May 11-14, and May 25 and 26 to best observe bloom time for a variety of species. Appropriate measures were taken to conduct an efficient quantifiable analysis of plant communities on the project site. It should also be noted that most of the sensitive species are perennial. Thus, even during a dry year, these species would generally be identifiable.
- G10-11 The CEQA Thresholds of Significance were adopted from the CEQA Guidelines, Appendix G. Determination of significance requires the exercise of judgment on the part of the public agency involved. 14 Cal. Code of Regulations §15064(b).
- G10-12 Blowoff structures have been identified on the preliminary design plan and profile sheets for the proposed conveyance pipeline alignment alternatives as shown in the Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Project Feasibility and Facilities Report (Metropolitan Report No. 1162). These blowoff structures are located at wash crossings as the comment suggests.
- G10-13 The Executive Summary section of the Final EIR/EIS has been revised to state, “4 to 6 inches of topsoil to be salvaged.” Similar revisions have been made in Sections 4.2.3, 4.3.2, 4.4.3, and 4.5.1. of the Final EIR/EIS.
- G10-14 Please refer to Biological Resources mitigation measures in Section 5.8.5 of the Final EIR/EIS. Mitigation Measure B-1 states that topsoil storage shall not exceed three months, reducing degradation of the cryptobiotic soils.
- G10-15 Crushed shrubs and stockpiled topsoil will be spread following placement of the pipe and grading of the area to pre-construction contours. Mitigation Measure B-1 specifies that topsoil stockpiles will not exceed four feet in height.
- G10-16 Stockpile locations will be identified within the 200-foot wide construction right-of-way. Plans and specifications would enumerate the stockpiling requirements identified in Mitigation Measure B-1.
- G10-17 Mitigation Measure B-3 has been revised to include the scientific name for camel knapweed, “*Centaurea ssp.*”
- G10-18 The 1:1 mitigation ratio is for temporary and permanent impacts to habitat lands and is consistent with requirements of BLM, USFWS and CDFG.
- G10-19 Regarding the need for a Supplement, see Master Response “Need for Supplement/Recirculation.”
- G11 RESPONSES TO COMMENTS FROM THE NATIONAL PARKS CONSERVATION ASSOCIATION AND THE WILDERNESS SOCIETY DATED MARCH 8, 2000**
- G11-1 Comments noted. No response is necessary.

- G11-2 Comment noted. The comment is too general to permit a response. BLM believes that the Final EIR/EIS serves the purposes and complies with the requirements of NEPA.
- G11-3 Comment noted. The comment is too general to permit a response. Regarding a need to revise and re-circulate the document, see Master Response “Need for a Supplement/Recirculation.”
- G11-4 See Master Response “Groundwater Monitoring and Management Plan” and Response to Comment F2-2.
- G11-5 The Management Plan has been developed by Metropolitan, Cadiz, the County of San Bernardino, NPS, USGS, and BLM to avoid adverse impacts to groundwater related resources, including springs and seeps. The Management Plan specifies a monitoring network and groundwater level action criteria so that adverse impacts to critical resources do not occur as a result of project operations (see Management Plan Sections 6.1 and 7.1, Final EIR/EIS, Volume IV).
- G11-6 See Response to Comment G6-12 regarding potential impacts to the Cadiz Dunes Wilderness. See Response to Comment G6-20 regarding aesthetic impacts.
- G11-7 See Response to Comment G9-6.
- G11-8 Section 1.3.2 of the Final EIR/EIS Volume I properly reflects BLM’s role in the project. The project includes the need for an amendment for an exception to the utility corridor requirement of the CDCA Plan. The impacts to aesthetic, biological, and land use resources are identified and considered in the Final EIR/EIS, Sections 5.14, 5.8, and 5.2, respectively.
- G11-9 See Master Response “Alignment Alternatives.”
- G11-10 The project will not cause any adverse impacts to groundwater levels in the Mojave National Preserve. The Management Plan, Sections 6.1 and 7.1, provides a monitoring and management program to identify and avoid adverse impacts to groundwater resources. The comment incorrectly states that the Draft EIR/EIS indicates that groundwater drawdown could occur as much as 25 miles away from the pumping site. See Master Response “Groundwater Monitoring and Management Plan.”
- G11-11 The comment incorrectly states that the Draft EIR/EIS indicates that Colorado River water is two orders of magnitude more polluted than safe levels for human consumption. Water quality impacts from the introduction of Colorado River water into the basin are discussed in Section 5.5.4 of the Final EIR/EIS Volume I.
- G11-12 Potential subsidence impacts from project operations are discussed in Section 5.5.4 of the Final EIR/EIS Volume I. Section 7.2.3 of the Management Plan provides the monitoring and management procedures that apply to avoid adverse impacts of subsidence. The Management Plan adopts a 0.5 foot subsidence as the action criteria; and includes cessation of groundwater extraction as a potential corrective measure. Also see Responses to Comments F2-28 and F2-29.
- G11-13 The Final EIR/EIS has been revised to remove references to projected drops in groundwater levels. The development and incorporation of the Management Plan in the project has provided a monitoring and management procedure to avoid adverse impacts to groundwater

resources. The Closure Plan, required under Section 8 of the Management Plan, restricts the drop in groundwater levels beneath the project wellfield to an average of 100 feet, or such other level as will avoid adverse impacts, at the end of the project term.

G11-14 See Response to Comment F2-36.

G11-15 See Response to Comment F2-38.

G11-16 See Response to Comment G9-9.

G11-17 BLM and Metropolitan have developed a detailed Groundwater Monitoring and Management Plan that is incorporated into the project and provides the level of meaningful, enforceable regulatory controls suggested in the comment. The Management Plan was circulated for public review and comment in the Supplement to the Draft EIR/EIS, and is set forth in the Final EIR/EIS, Volume IV. For further information, see Master Response “Groundwater Monitoring and Management Plan.”

G11-18 See Master Response “Formulation and Screening of Potential Projects.”

G11-19 See Response to Comment F2-16.

G11-20 See Response to Comment F2-17.

G11-21 See Master Response “Alignment Alternatives.” All conveyance pipelines will be constructed underground, which will minimize aesthetic impacts to the region. The only utility that will affect the visual quality of the region will be the overhead power line that will follow the pipeline alignment.

G11-22 The extraction of groundwater for the project is limited by the provisions of the Management Plan (Final EIR/EIS, Volume IV) to avoid adverse impacts to groundwater resources in the project area. The No Action alternative would most probably result in overdraft of groundwater basins within Metropolitan’s service area through pumping by local agencies to satisfy water demands.

G11-23 California law recognizes that groundwater may be appropriated for non-overlying uses, including exportation for use outside the groundwater basin. The transfer of any indigenous groundwater as part of the project will not compete with reasonable, beneficial overlying uses of water from the basin, including such uses on overlying federal lands.

G11-24 The Management Plan has been developed by Metropolitan, Cadiz, the County of San Bernardino, NPS, USGS, and BLM to avoid adverse impacts to groundwater related resources, including springs and seeps. The Management Plan specifies a monitoring network and groundwater level action criteria so that adverse impacts to critical resources do not occur as a result of project operations (see Management Plan).

G11-25 The cumulative impacts analysis (Final EIR/EIS Volume I, Section 7) has been expanded to discuss other projects, including the Cadiz agricultural development and salt mining operations on Bristol and Cadiz dry lakes. The use of groundwater for Cadiz agricultural operations will be conducted in accordance with the Management Plan. The Rail Cycle project is not reasonably foreseeable for the reasons stated in Section 7.1.

G11-26 The Final EIR/EIS serves the purposes and complies with the requirements of NEPA and CEQA.

G12 RESPONSES TO COMMENTS FROM PEOPLE AGAINST RADIOACTIVE DUMPING DATED MARCH 8, 2000

G12-1 In water quality analyses for the project, none of the radiological constituents listed in the California Department of Health Services standards set forth in Title 22 of the California Code of Regulations have been detected in Colorado River water at concentrations that exceed federal and/or state maximum contaminant levels for drinking water. Likewise, with the exception of perchlorate, no contaminants associated with industrial or medical waste have been detected in Colorado River water. Perchlorate has not been detected in Colorado River water at concentrations above the current provisional maximum contaminant level for this constituent (Final EIR/EIS, Section 5.5.4).

It should be noted that the natural concentrations of radiological elements detected in groundwater collected from the production well in Fenner Gap during the pilot test program were approximately the same or slightly higher than concentrations detected in the Colorado River water.

Regardless of the historical database, Colorado River water diverted to the project area for spreading and storage will be analyzed on an annual basis for all of the Title 22 radiological and other compounds as specified in Section 6.2.2 of the Management Plan (Final EIR/EIS, Volume IV).

G12-2 Concentrations of radiological compounds measured in Colorado River water do not exceed the concentrations measured in indigenous groundwater in the project area. Therefore, the mixing of the two water sources will not result in higher concentrations of these compounds and will have no impact on existing mineral deposits in the area, including the brine resources on Bristol and Cadiz dry lakes.

G13 RESPONSES TO COMMENTS FROM PEOPLE AGAINST RADIOACTIVE DUMPING DATED MARCH 8, 2000.

G13-1 The comment relating to use of public funds does not raise an issue under CEQA or NEPA, and therefore, no response is required. The Final EIR/EIS serves the purposes and complies with the requirements of CEQA and NEPA. See Responses to Comments G13-2 to G13-15, below.

G13-2 The comments relating to the use of public funds do not raise an issue under CEQA or NEPA, and therefore, no response is required. The purpose and need for the project are discussed in Section 2 of the Final EIR/EIS Volume I. The storage capacity available through construction of the Eastside (Diamond Valley) reservoir is included in this analysis (Table 2-3).

G13-3 The comment relating to the use of public funds does not raise an issue under CEQA or NEPA, and therefore, no response is required. The reasons for the siting of the project wellfield are discussed in Section 3.6 of the Final EIR/EIS Volume I.

G13-4 See Response to Comment G13-3.

- G13-5 The comment relating to the use of public funds does not raise an issue under CEQA or NEPA, and therefore, no response is required. There is no groundwater continuity or flow between the project area and the Colorado River for the reasons discussed in Section 5.5.4 of the Final EIR/EIS. Maps which show siphons in the Colorado River Aqueduct system refer to a pipeline segment, termed a siphon because it is a pressurized conduit, not a facility that extracts water from the groundwater basin.
- G13-6 The comment relating to the use of public funds does not raise an issue under CEQA or NEPA, and therefore, no response is required. The purpose and need for the project are discussed in Section 2 of the Final EIR/EIS Volume I. The use of water conservation measures to help reduce demand in Metropolitan's service area is included in this analysis (Section 2.4.4). The Diamond Valley Lake reservoir was built to meet water supply and reliability needs, and not for recreational purposes.
- G13-7 The BLM is authorized and required to manage the lands under its jurisdiction in the California Desert Conservation Area for multiple use and sustained yield. 43 U.S.C. §1781. With regard to the use of indigenous groundwater in the project, California law recognizes that groundwater may be appropriated for non-overlying uses, including exportation for use outside the groundwater basin. The screening process that identified potential project sites along the Colorado River Aqueduct is discussed in Sections 3.4 and 3.5 of the Final EIR/EIS.
- G13-8 The comment relating to the use of public funds does not raise an issue under CEQA or NEPA, and therefore, no response is required. There is no groundwater continuity or flow between the project area and Ward Valley for the reasons discussed in Section 5.5.4 of the Final EIR/EIS.
- G13-9 California law recognizes that groundwater may be appropriated for non-overlying uses, including exportation for use outside the groundwater basin. The comment relating to the use of state funds is incorrect, as state funds are not involved in the project. Furthermore, the comments relating to such funds and political contributions do not raise an issue under CEQA and NEPA, and therefore, no response is required.
- G13-10 Section 5.5.4 of the Final EIR/EIS discusses the potential impacts of the project on water resources, including springs and movement of saline water from below the Bristol and Cadiz Dry Lakes. BLM and Metropolitan have developed the Management Plan that is incorporated in the Final EIR/EIS (Volume IV) to avoid adverse impacts to critical resources such as springs and groundwater quality. The USGS, as cooperating federal agency, assisted in preparation of the Management Plan.

Regarding impacts to other groundwater basins, Figure 5.5-2 in the Final EIR/EIS shows the watersheds in the Eastern Mojave Desert. The subsurface aquifers follow these same boundaries. The Ward Valley and Piute Valley aquifer systems are separate from the Fenner Valley aquifer system. The Ward Valley aquifer system flows towards Danby Dry Lake, while the Fenner Valley aquifer system generally flows towards Bristol and Cadiz dry lakes. Of all the regional watersheds shown in the Final EIR/EIS, Figure 5.5-2 only the Piute aquifer system flows towards the City of Needles. This aquifer will not be affected by the Cadiz Project because it is hydrologically distinct from the Fenner Valley aquifer system, which flows towards Bristol and Cadiz dry lakes. The Cadiz Project would affect neither the Piute nor the Ward Valley aquifer systems.

- G13-11 The project does not involve the diversion of more Colorado River water than Metropolitan is entitled to receive. Colorado River water will be held in storage for use by Metropolitan to meet dry year demand, and not to sell for profit. The operating scenarios presented in the Draft EIR/EIS have been deleted, and the project will be operated in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid adverse impacts to critical resources. The storage capacity provided by the project is in addition to the storage capacity provided by Diamond Valley Lake.
- G13-12 The project does not involve the diversion of more Colorado River water than Metropolitan is entitled to receive, and therefore, will not have any impact on the Colorado River or Gulf of California.
- G13-13 The water rights for the Colorado River are allocated in accordance with a series of federal and state statutes, United States Supreme Court decisions, and an international treaty with Mexico. Collectively known as the “Law of the River,” these laws allocate a total of 4.4 million acre-feet of water annually, together with one-half of any surplus water, to California. A description of Metropolitan’s share of the California allocation is set forth in Section 2.3.5 of the Final EIR/EIS Volume I. The project does not involve an increase in Metropolitan’s share of Colorado River water. Therefore, the project has no effect on the amount of Colorado River water that is delivered to Mexico in accordance with the Law of the River.

Regarding impacts on the “Needles and Havasu Land [sic] water system,” Figure 5.5-2 in the Final EIR/EIS shows the watersheds in the Eastern Mojave Desert. The subsurface aquifer system follow these same boundaries. The Piute (for Needles) and Chemehuevi Valley (for Lake Havasu) aquifer systems are separate from the Fenner Valley aquifer system (for the Cadiz Project). Both the Piute and Chemehuevi Valley aquifer systems flow towards the Colorado River and, as a result, are hydrologically distinct from the Fenner Valley aquifer system, which flows towards Bristol and Cadiz dry lakes. The Cadiz Project will affect neither the Piute nor the Chemehuevi aquifer systems.

- G13-14 Regarding the No Project alternative, Section 4.8 of the Final EIR/EIS Volume I describes this alternative and its impacts are evaluated throughout the document in accordance with the requirements of NEPA and CEQA. Regarding water quality, BLM and Metropolitan have developed the Management Plan that is incorporated in the Final EIR/EIS (Volume IV) to avoid adverse impacts to critical resources, including water quality. Section 6.2 of the Management Plan describes the groundwater testing that will be performed to ensure that water delivered under the project meets applicable water quality standards.
- G13-15 The comment does not raise an issue under CEQA or NEPA. A response is not necessary. Metropolitan will not execute an agreement with Cadiz Inc. unless the project is approved after certification that the Final EIR/EIS has been completed in compliance with CEQA.

G14 RESPONSES TO COMMENTS FROM PEOPLE AGAINST RADIOACTIVE DUMPING DATED MARCH 8, 2000.

- G14-1 Comments noted. See responses to comments G12-1 and G12-2.
- G14-2 EPA Region IX has reviewed and commented on the Draft EIR/EIS and the Supplement to the Draft EIR/EIS. See comment letters F1 and F3. Although the project is not subject to the federal Underground Injection Control regulations because there are no injection wells, BLM and Metropolitan have developed the Management Plan that is incorporated in the Final

EIR/EIS (Volume IV) to avoid adverse impacts to critical resources, including water quality. Section 6.2 of the Management Plan describes the groundwater testing that will be performed to ensure that water delivered under the project meets applicable water quality standards.

G14-3 Comments noted. No response is necessary.

G15 RESPONSES TO COMMENTS FROM DESERT WATCH DATED JANUARY 18, 2000.

G15-1 Comments noted.

G15-2 Comments noted. Metropolitan is the lead agency for the project under CEQA, and BLM is the lead agency under NEPA.

G15-3 Metropolitan and BLM believe that the Final EIR/EIS serves the purposes and complies with the requirements of CEQA and NEPA.

G15-4 The Fish and Wildlife Coordination Act requires federal agencies to coordinate with the U.S. Fish and Wildlife Service (USFWS) “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened...with a view to the conservation of wildlife resources...” (16 USC 662(a)). Implementation of this Act has focused on water-resource development projects that impound or divert surface waters for purposes of navigation, water supply or flood control.

The Cadiz Project does not propose to modify any surface water body. Field surveys have been conducted by consulting biologists, and many of the findings and mitigation measures have been discussed at length with the USFWS and the California Department of Fish and Game.

Regarding scientific evidence and evaluation of impacts, please refer to Response to Comments G15-27 through G15-32 for specific responses to concerns raised in this comment letter.

G15-5 The Final EIR/EIS provides a full and accurate description of all project alternatives and their respective potential adverse impacts in Sections 4 and 5.

G15-6 Comments noted. See Response to Comment G15-4.

G15-7 See Master Response “Need for Supplement/Recirculation.”

G15-8 Comments noted. No response is necessary.

G15-9 See Master Response “Alignment Alternatives.”

G15-10 See Master Response “Alignment Alternatives.”

G15-11 Section 5.8.1 of the Final EIR/EIS Volume I discusses the two man-made habitats that have been created in the project area: agriculture and open-water. Section 5.8.4 discusses the potential impacts of the project, including growth of non-native plant and animal species. The potentially beneficial impact of an available water source for bats and birds is also discussed. Mitigation measures B-3, B-19, B-21, B-22, and B-24 will be implemented to mitigate potential adverse impacts associated with man-made features and non-native plant and animal species.

G15-12 Table 5.8-1 of the Final EIR/EIS Volume I lists all the special interest plant species that have the potential to occur in the project area. The discussion of potential impacts in Section 5.8.4 includes the potential direct and indirect impacts on special interest plant species, and identifies mitigation measures that will be implemented to mitigate the impacts.

Special status species include those listed as threatened or endangered as well as those whose status is less critical. The Biological Resources Technical Report discloses the probability of the occurrence of these species along the project alignment based upon their known habitat requirements. Tables 1-2 and 1-3 (pages 13 – 20) explain the habitat occurrence for both special status plants and animals along the project route.

G15-13 The Southern Transmission Line is used only in connection with the Western and Combination project alternatives. The survey of this transmission line route is described on pp. 21-22 of the Cadiz Groundwater Storage and Dry Year Supply Program Environmental Planning Technical Report—Biological Resources (Report No. 1164). The potential occurrence of special interest wildlife species for the Western and Combination alternatives is shown on Table 5.8-2. The potential impacts to wildlife species for these alternatives is discussed in Section 5.8.4 of the Final EIR/EIS Volume I, along with mitigation measures that will be implemented to mitigate the potential impacts.

G15-14 As noted on page 20 of Appendix B to the Cadiz Groundwater Storage and Dry Year Supply Program Environmental Planning Technical Report—Biological Resources (Report No. 1164), the potential impacts to Mojave fringe-toed lizard were based on field surveys only, and not on the maps which were found to be inaccurate during field survey work.

G15-15 See Response to Comments G15-12 and G15-13.

G15-16 The potential impacts of the project on desert tortoise are discussed in Section 5.5.4 of the Final EIR/EIS Volume I. Specific mitigation measures (B-8 through B-31, and B-33), developed in cooperation with CDFG and USFWS, will be implemented mitigate the potential impacts.

G15-17 The proposed mitigation measures have been developed in coordination with USFWS and CDFG.

G15-18 Mitigation Measure B-18 requires that vehicles be inspected for presence of desert tortoise by workers prior to moving the vehicle. Signs will be posted to remind workers of this requirement. Mitigation Measure B-9 also provides an education program for all workers to provide training on desert tortoise requirements. As noted in the Final EIR/EIS, upon completion of federal and state endangered species permitting, the mitigation measures may be refined or additional measures required.

G15-19 Mitigation Measure B-28 applies to operations and maintenance personnel after construction is completed. Because a highly-trained biologist cannot be present with field personnel at all times, such field personnel will be trained as specified in mitigation measure B-27 to handle tortoises in an appropriate manner when it cannot be avoided.

G15-20 See Mitigation Measure AQ-4. During construction, soil binders other than water will be used on unpaved roads and parking areas.

- G15-21 Mitigation Measure B-22 was developed in discussion with USFWS and CDFG. This measure will be implemented in the manner that complies with the requirements of USFWS and CDFG.
- G15-22 Landscaping of project facilities is not proposed. New buildings will be constructed at the existing Iron Mountain Pumping Plant on the Colorado River Aqueduct where buildings currently exist. The proposed wellfield and spreading basins will be constructed in the vicinity of existing agricultural operations and buildings. Power poles will be constructed with a design to minimize raven nesting (Mitigation Measure B-24). As a result, opportunity for ravens to become more numerous or to extend their range further into desert tortoise habitat is minimized.
- G15-23 For the reasons stated in Response to Comment G15-22, it is not anticipated that the Cadiz Project will contribute to predator nesting.
- G15-24 Mitigation Measure B-25 was developed in discussion with USFWS and CDFG. This measure will be implemented in the manner that complies with the requirements of USFWS and CDFG. Additionally, any relocation of tortoises or eggs recovered from excavated burrows will be conducted in accordance with the “Guidelines for Handling Desert Tortoises During Construction Projects” as specified in Mitigation Measure B-13.
- G15-25 Please refer to Mitigation Measure B-13.
- G15-26 Comments noted. See Responses to Comments G15-27 to G15-32, below.
- G15-27 The existence of cryptogamic soils in Mojave wash scrub habitat is noted as present for each alternative (Final EIR/EIS Volume I, Section 5.8.1) The impacts to this habitat are discussed in Section 5.8.4, and Mitigation Measures B-1 through B-4 will be implemented to mitigate these impacts.
- G15-28 The potential impacts to water resources are discussed in Section 5.5.4 of the Final EIR/EIS Volume I. In addition, the project impacts to Mojave wash scrub habitat are discussed in Section 5.8.4. The Management Plan (Final EIR/EIS, Volume IV) provides monitoring and mitigation measures that will be implemented to avoid impacts to groundwater resources. Sections 5.8.4 and 5.8.5 discuss mitigation measures that will be implemented to mitigate impacts on Mojave wash scrub.
- G15-29 The project impacts to habitats and species is discussed in Section 5.8.4 of the Final EIR/EIS Volume I, and mitigation measures that will be implemented to mitigate impacts on habitat and species are set forth in Section 5.8.5.
- G15-30 Compensation for permanent and temporary impacted areas will be in the form of offsite habitat acquisition. Mitigation Measure B-33 in Section 5.8.5 of the Final EIR/EIS Volume I indicates a 1:1 mitigation ratio for both temporary and permanent impacts for either alternative. See Response to Comment G15-14.
- G15-31 See Response to Comment G6-18.
- G15-32 Section 8.3 of the Draft EIR/EIS completely states, “With the implementation of the extensive mitigation measures that are proposed, the impacts of the build alternatives on sensitive plant communities are not significant.” Such mitigation measures include

acquisition and preservation of offsite habitat for both permanent and temporary impacts at a ratio of 1:1 (Mitigation Measures B-26 and B-33).

- G15-33 Comments noted. See Responses to Comments G15-34 to G15-36, below.
- G15-34 Analysis of the potential cumulative impacts associated with aesthetics is provided in Section 7.5.14 of the Final EIR/EIS Volume I. As discussed in that Section, the cumulative impacts of the Cadiz Project and the Hayfield Project construction activities when considered together would result in a temporary cumulative adverse impact on aesthetics. However, the area where the Cadiz Project water conveyance and power distribution facilities would be developed would be reestablished, although it would take some years for the vegetation to mature because of the limited amount of local rainfall. The Hayfield Project is adjacent to the Colorado River Aqueduct and the Eagle Mountain Mine and, therefore, the new wells, spreading areas and ancillary facilities would not adversely affect the long-term appearance of that area. For these reasons, jointly the Cadiz and Hayfield projects were determined not to result in a long term significant adverse cumulative aesthetic impact.
- G15-35 The reestablishment of temporarily impacted habitats resulting from the Cadiz Project is discussed in the Final EIR/EIS Volume I under Mitigation Measures B-1, B-2, B-3, and B-4, Section 5.8.5. Vegetation in temporarily impacted areas would be crushed in place, and the removed plant material, along with the top 4 to 6 inches of topsoil, would be stockpiled (for a period not to exceed 3 months). These stockpiled materials would then be spread over the re-contoured surfaces of previously (temporarily) impacted areas following construction. Furthermore, all temporarily impacted habitats would be mitigated at 1:1 ratio (as if they were permanent impacts) through offsite habitat preservation (Mitigation Measures B-26 and B-33). Permanent impacts will also be mitigated through offsite habitat preservation. As a result of these restoration and preservation measures, there will not be cumulative significant impacts to biological resources as a result of the Cadiz and Hayfield projects.
- G15-36 Analysis of the potential cumulative impacts associated with wilderness/recreation is provided in Section 7.5.17 of the Final EIR/EIS Volume I. The Hayfield Project would not result in the loss of any wilderness resources. The Cadiz Project will not directly impact any wilderness or recreational resources. Visitors to wilderness areas in the vicinity of the Cadiz Project would have temporary off site views of the construction of the water conveyance and power distribution facilities and some construction activity may be audible in areas closer to active construction zones. These impacts would not be cumulatively significant because no wilderness or recreational areas will be lost or directly impacted and construction noise and construction view impacts will be limited to the construction period only. Refer also to Response to Comment G15-34.
- G15-37 Analysis of the potential impacts of the Cadiz Project related to wilderness recreation is provided in Section 5.17 (Wilderness/Recreation) in the Final EIR/EIS Volume I. Aesthetic impacts are addressed in Section 5.14 (Aesthetics). Mitigation Measure B-4 in Section 5.8.5 (Biological Resources) will be implemented to discourage unauthorized vehicle access into the desert from project maintenance roads or any other new access created by the Cadiz Project. These methods will also discourage access into wilderness areas. Cumulative impacts of the Cadiz Project are discussed in Section 7 (Cumulative Impacts) in the Final EIR/EIS Volume I. The Final EIR/EIS acknowledges that in some cases impacts could occur. However, such impacts either do not exceed the thresholds of significance or can be mitigated below a level of significance. As a result, such effects are considered insignificant.

G15-38 The discussion of potential construction related impacts to wilderness areas analyzed in Sections 5.14 and 5.17 of the Final EIR/EIS Volume I has been revised to specifically mention staging activities. However, noise, excavation, vegetation removal and other associated construction activities were previously addressed in the Draft EIR/EIS and there will be no additional impacts from staging activities than those discussed for construction. Construction related impacts, including any associated with staging areas would be temporary and of relatively short duration.

G15-39 The comment incorrectly interprets Section 103(d) of the California Desert Protection Act. This provision expressly states the intent of Congress that the designation of wilderness areas under the Act does not lead to creation of buffer zones around such areas. The section is not limited to existing rights for use of adjacent lands.

The comment also incorrectly interprets Section 406 of the Act (incorrectly referred to as section 604 in the comment). This section, codified at 16 U.S.C. section 410aaa-26, preserves Metropolitan's rights-of-way and operations activities within the boundaries of Joshua Tree National Park, but outside the Joshua Tree Wilderness. This section does not pertain to the Old Woman Mountains Wilderness or the Cadiz Dunes Wilderness.

G15-40 The Final EIR/EIS recognizes that the re-establishment of habitats will occur over a period of time (Volume I Section 5.8.4). As a result, compensation for habitat impacts is two fold: 1) provide for natural re-establishment of habitats through topsoil salvage and re-spreading and minimized vegetation removal (vegetation would be crushed in place wherever possible to promote crown sprouting), and 2) off-site preservation of habitat lands for both temporary and permanent habitat losses. Containerized planting and supplementary watering is avoided to reduce potential for weed establishment.

G15-41 Mitigation Measures B-4 and B-23 require access barriers to be installed to discourage unauthorized entry onto the proposed maintenance road. Such barriers could consist of fences, boulders and topographic impediments to obstruct unauthorized vehicle entry. Such barriers will be routinely inspected in the course of project operations.

G15-42 The construction staging area shown in Figure 4-28 of the Final EIR/EIS Volume I is located between Cadiz-Rice Road and the AZRC railroad rail line. The road and rail line are used daily and field surveys did not locate sensitive biological, cultural or other resources at this location.

G15-43 Mitigation Measures B-11 and B-12 require all construction vehicles to remain within the construction rights-of-way, unless permits explicitly allow otherwise. Mitigation Measure B-21 requires all trash and food items to be promptly contained within closed, raven and wildlife-proof containers with regular removal from the site. The Final EIR/EIS Volume I, Section 5.11.4 discusses construction noise impacts to wilderness areas. Mitigation Measure N-1 requires feasible muffling and noise control devices to be installed on construction vehicles.

G15-44 Biological field surveys conducted for the project alternatives identified raptor foraging habitat in the project vicinity, but did not identify breeding roosts along any of the project alternatives. Final EIR/EIS Volume I, Section 5.8.4.

G15-45 Mitigation Measure B-7 has been modified to specify burrow removal procedures to avoid reoccupation of burrows upon clearance.

- G15-46 Public agencies at the local regional, state and federal levels routinely propose and implement projects in the course of meeting the responsibilities vested in them by the public. Metropolitan, as a public agency, is the CEQA lead agency for projects it proposes and is responsible to adopt and implement a Mitigation Monitoring Plan for projects it undertakes.
- G15-47 Should a video be utilized for purposes of training construction personnel, Metropolitan would ensure that it addresses the topic areas specified in Mitigation Measure B-9 and meets any other training requirements of CDFG, USFWS, and BLM.
- G15-48 Construction activities will not occur in critical habitat. Furthermore, as discussed in Section 5.11.4 of the Final EIR/EIS Volume I, any blasting for the project will be over a limited period (only 6 to 8 days) and may only be audible in the Cadiz Dunes and Old Woman Mountain wilderness areas. The potential impacts are deemed to be less than significant because of the short time involved, the limited area in which the impacts would occur, and the absence of nesting or lambing areas near the construction area. See Final EIR/EIS Volume I, Section 5.8.4.
- G15-49 Comments noted. Mitigation Measure B-12 specifies that construction employees must use existing or proposed roads unless absolutely required by the project and as explicitly stated in the project permits. The right-of-way permit granted by BLM will need to authorize such travel for it to occur.

G16 RESPONSES TO COMMENTS FROM THE ENVIRONMENTAL DEFENSE FUND DATED MARCH 8, 2000

- G16-1 Comment noted. The comment is too general to permit a response.
- G16-2 The “alternatives” referred to in the comment are operating scenarios that were considered in the Draft EIR/EIS. These scenarios have been removed from the Final EIR/EIS. The project will be operated in accordance with the Management Plan that has been developed by BLM and Metropolitan, together with NPS and USGS as cooperating federal agencies, and the County of San Bernardino. The Management Plan provides monitoring and management criteria for avoiding adverse impacts to critical resources as a result of project operations.
- G16-3 See Master Response “Groundwater Monitoring and Management Plan.” Also, the Final EIR/EIS Volume I, Section 5.5.4, provides a discussion of potential impacts to water quality and groundwater related resources. The Management Plan has been developed, in conjunction and cooperation with the NPS and USGS, to provide monitoring and management criteria for avoiding adverse impacts to critical resources.
- G16-4 See Section 7.2.6 of the Management Plan for the monitoring and management criteria that will be implemented to avoid impacts related to movement of saline water from Bristol Dry Lake. A discussion of this potential impact is set forth in Section 5.5.4 of the Final EIR/EIS Volume I.
- G16-5 The analysis of potential impacts to water resources presented in Section 5.5.4 of the Final EIR/EIS Volume I is not premised on an estimate of a natural groundwater recharge rate of “30,000 acre-feet per year” or any other amount. Instead, all Cadiz Project operations, including extraction of groundwater, will be governed by and subject to the provisions of the

Management Plan. Regarding the comment “the drying out of the upper layer sediments at Cadiz Dry Lake (or even Bristol Dry Lake) and the creation of dust problems” see Master Response “Air Quality.” Regarding the comment “potential for land subsidence” see Response to Comment F2-28. Regarding the reference to “the analysis by the United States Geological Survey” see Master Response “Groundwater Monitoring and Management Plan.”

G16-6 See Master Responses “Groundwater Monitoring and Management Plan” and “Need for Supplement/Recirculation.”

G17 RESPONSES TO COMMENTS FROM DESERT SURVIVORS DATED FEBRUARY 12, 2000

G17-1 Comments noted. See Responses to Comments G17-2 through G17-11, below.

G17-2 See Master Response “Groundwater Monitoring and Management Plan.”

G17-3 See Master Response “Groundwater Monitoring and Management Plan.”

G17-4 See Management Plan (Final EIR/EIS, Volume IV), Section 6.1, for a description of the monitoring measures applicable to springs located in wilderness areas.

G17-5 See Master Response “Groundwater Monitoring and Management Plan.” The operating scenarios that were considered in the Draft EIR/EIS have been removed from the Final EIR/EIS.

G17-6 See Response to Comment G6-8.

G17-7 See Response to Comment R3-52.

G17-8 The analysis of potential impacts in the Final EIR/EIS is not premised on an estimate of the groundwater recharge or assumed amount of groundwater withdrawal. Final EIR/EIS Volume I, Section 5.5.4. All project operations will be governed by the provisions of the Management Plan to avoid adverse impacts to critical resources.

G17-9 See Response to Comment F2-4.

G17-10 See Master Response “Groundwater Monitoring and Management Plan.”

G17-11 See Response to Comment F2-4. The Supplement to the Draft EIR/EIS, including the Management Plan (Section 3.0) was published and circulated for public review and comment.

G17-12 Comment noted. No response is required.

G17-13 Comments noted. No response is required.

G17-14 Comments noted. No response is required.

G17-15 Comments noted. No response is required.

P1 RESPONSES TO COMMENTS FROM A FRIEND OF THE DESERT DATED DECEMBER 28, 1999

P1-1 Comments noted. See responses to comments P1-2 to P1-12, below.

P1-2 See Responses to Comment R3-52. The No Project alternative would not preclude the expansion of existing Cadiz agricultural operations to the extent permitted by the County, but would not meet the purpose and need of the project as described in Section 2 of the Final EIR/EIS Volume I.

P1-3 The analysis of potential impacts in the Final EIR/EIS is not premised on an estimate of the groundwater recharge or assumed amount of groundwater withdrawal. Final EIR/EIS Volume I, Section 5.5.4. All project operations will be governed by the provisions of the Management Plan to avoid adverse impacts to critical resources. See Master Response “Groundwater Monitoring and Management Plan.

P1-4 See Master Response “Air Quality.”

P1-5 See Master Response “Water Quality.”

In the Final EIR/EIS Volume I, Section 5.5.4, water quality impacts from the effects of mixing Colorado River water with indigenous groundwater underlying the Cadiz Project area are discussed. With regard to increased salinity due to storage of Colorado River water, much of the salinity will be removed when the stored water is extracted. The remaining increase in TDS concentrations will be small and will not affect use of the groundwater for other beneficial uses.

Groundwater quality in California is protected pursuant to the California Porter-Cologne Water Quality Control Act. Surface water quality is protected pursuant to the federal Clean Water Act as well as the Porter-Cologne Act. The U.S. Environmental Protection Agency has delegated implementation of water quality provisions of the Clean Water Act to the State of California. In the Cadiz Project area, water quality statutes are administered by the State Water Resources Control Board (State Board) and the California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Regional Board). Section 7.2.1 of the Management Plan (Final EIR/EIS, Volume IV) requires that Colorado River water be monitored to ensure compliance with standards established by the Colorado River Regional Board. Corrective measures, including the curtailment of delivery of Colorado River water to the spreading basins, would be implemented in the event that the quality of the water to be delivered to the spreading basins does not meet the applicable water quality requirements.

P1-6 The potential for impacts to wells owned by neighboring landowners due to project operations is identified in Section 5.5.4 of the Final EIR/EIS. Section 7.2.2 of the Management Plan (Final EIR/EIS, Volume IV) requires that action be taken to correct any complaint from a neighboring landowner that is caused by the project. The project would not affect or alter the rights of any landowner to continue diverting and using water from surface streams or groundwater basins, including the rights reserved to federal lands.

P1-7 The Final EIR/EIS Volume I contains a discussion of potential impacts on sensitive species in Section 5.8.4. In addition, Section 5.5.4 discusses the potential impacts to groundwater related resources, including springs used by wildlife. BLM has initiated a consultation with the U. S.

Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act. Regarding the comment related to the “Owens Lake effect,” see Master Response “Air Quality.”

- P1-8 The purpose and need and selection of the project are discussed in Section 2 of the Final EIR/EIS Volume I. Alternatives other than those near the Colorado River Aqueduct would not meet Metropolitan’s objective of maintaining a full aqueduct in the Colorado River area. Metropolitan has implemented storage programs in the Central Valley that have stored approximately 550,000 acre-feet of water and have an anticipated dry-year yield of 140,000 acre-feet of water. See Final EIR/EIS Volume I, Section 2.5.4. These Central Valley programs are required in addition to programs along the Colorado River Aqueduct.
- P1-9 The project does not include any use of surface flows or the capture of surface flows for groundwater recharge.
- P1-10 Metropolitan will operate the project based on water demands in its service area, and all project operations will be governed by the Management Plan with oversight by the BLM.
- P1-11 Neither BLM nor Metropolitan has provided stock in Cadiz to any consultants that have been involved in the preparation of the Final EIR/EIS.
- P1-12 Comment noted. No response is necessary.

P2 RESPONSES TO COMMENTS FROM MR. RAMON A. MENDOZA DATED JANUARY 20, 2000

- P2-1 Comments noted. See Responses to Comments P2-2 to P2-11, below.
- P2-2 Boundaries of the watersheds in the eastern Mojave Desert are shown on Figure 5.5-2 of the Final EIR/EIS Volume I. The boundaries of the groundwater basins generally match the watershed boundaries presented on this figure. The Fenner, Bristol and Cadiz groundwater basins form a closed system that is not connected to the Ward Valley or Chemehuevi Valley aquifer systems, as described in Section 3.2 of the Cadiz Groundwater Storage and Dry-Year Supply Program, Draft Environmental Impact Report/Draft Environmental Impact Statement: Groundwater Resources Report (Metropolitan Report No. 1163).
- P2-3 See Response to Comment P2-2. Since the adjacent basins are not hydraulically connected no study or monitoring is required.
- P2-4 Yield from the upper and lower aquifer systems was not projected. Downhole flowmeter surveys will be generated in five selected extraction wells as part of the Management Plan. These flowmeter surveys will provide data regarding vertical variation in groundwater flow, and will be used to refine geohydrologic parameters used in groundwater models. Estimates of water yield from the upper and lower aquifers will then be modeled under the Management Plan. Extraction wells will not be drilled in bedrock aquifer mentioned in the comment. Actual yield will be governed by the Management Plan.
- P2-5 Regarding the amount of natural recharge to the project area, see Master Response “Groundwater Monitoring and Management Plan.” The determination that groundwater cannot escape from the Bristol, Cadiz and Fenner basins is based on the fact that, by definition, water cannot flow uphill (upgradient) or migrate through an impermeable material. Comments noted regarding Section 8.0 of the Groundwater Resources Technical Report.

- P2-6 Comments noted. See Responses to Comments P2-7 to P2-11, below.
- P2-7 Extraction of both stored Colorado River water and indigenous groundwater will be subject to the provisions of the Management Plan to avoid adverse impacts to critical resources. See Master Response “Groundwater Monitoring and Management Plan.”
- P2-8 Comment noted. Because the groundwater basin underlying the Ward Valley is not connected to the Cadiz/Fenner groundwater basin, no threat of contamination exists. Additionally, the “Ward Valley” project referred to is not considered a reasonably foreseeable future project.
- P2-9 See Responses to Comments P2-2 and P2-5.
- P2-10 The volume of water in the Bristol, Cadiz and Fenner basins is estimated to be 16.9 million acre-feet (California Department of Water Resources, 1975) as is stated in Section 5.5.4 of the Final EIR/EIS. Refining estimates of the volume of groundwater in the surrounding basins is not proposed under this project. Surrounding basins are not connected as discussed in Responses to Comments P2-2 and P2-5.
- P2-11 By statute, Metropolitan can provide water only within its service area. The southwestern portion of San Bernardino County lies within the service area. Metropolitan currently supplies more 60,000 acre-feet of water per year to the Inland Empire Utilities District in San Bernardino County. This amount is projected to increase to 125,000 acre-feet per year by the year 2020.

P3 RESPONSES TO COMMENTS FROM MRS. MARK BRUBAKER DATED DECEMBER 9, 1999

- P3-1 Metropolitan is not required by law to mail a Notice of Availability of a Draft Environmental Impact Report by certified mail. However, Metropolitan has historically used certified mail to assure that these types of notices are properly received by the intended recipients. Approximately 500 NOA’s were mailed. At a cost of \$3.20/each, the mailing cost was \$1,600. Metropolitan’s water rates are adopted annually but have remained constant over the last five years.
- P3-2 Although the financial information requested is not an issue under CEQA or NEPA, it is available at the Metropolitan Water District of Southern California’s Annual Report.

P4 RESPONSES TO COMMENTS FROM MARJORIE M. MIKELS DATED FEBRUARY 21, 2000

- P4-1 An overview of comments received at the scoping meetings was provided in Section 1.6 of the Draft EIR/EIS and in Sections 1.5.1 and 12.2 of the Final EIR/EIS. As noted in the Final EIR/EIS, the Cadiz Groundwater Storage and Dry-Year Supply Program Draft EIR/EIS: Public Participation Report (Metropolitan Report No. 1161), containing all material received during the scoping process, including transcripts of the meetings is available for review at Metropolitan and BLM offices. The referenced attachment is included in this document. Please see Responses to Comments P4-17 through P4-58.
- P4-2 Comments noted. Metropolitan has not applied for any public funding from the State of California for the Cadiz Project, and does not propose to.

P4-3 Because the conveyance pipeline and electrical distribution system would cross federal lands administered by the BLM, the BLM must consider whether to: 1) amend the California Desert Conservation Area Plan for an exception to the utility corridor requirement; and 2) grant rights-of-way to Metropolitan for construction and operation of the project. The information in the Final EIR/EIS, including the public and agency comments received, will be used by the BLM in considering whether or not to approve the amendment and grant necessary rights-of-way. The BLM's decision will be reflected in a Record of Decision(s) that will be issued following receipt of public comments on the Final EIR/EIS.

The commentor is on the mailing list of persons and agencies who received the Notice of Preparation of the EIR/EIS. The commentor attended and participated in the Cadiz Project scoping meeting at the Cadiz Ranch on February 23, 1999. A Notice of Intent to Prepare an Environmental Impact Statement was published in the Federal Register on Monday March 1, 1999. That notice stated that "The proposed action would also include a proposed plan amendment to the California Desert Plan." A Notice of Public Meeting and an extension of the original comment period also appeared in the Federal Register on May 4, 1999. That notice also specifically mentioned the CDCA Plan amendment.

P4-4 The comments do not raise issues under CEQA or NEPA and, therefore, no response is required.

P4-5 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.

P4-6 The Final EIR/EIS does not presuppose a minimum amount of withdrawal of indigenous groundwater. BLM and Metropolitan, together with representative of the NPS, USGS and the County of San Bernardino, have developed the Groundwater Monitoring and Management Plan that is incorporated in the Final EIR/EIS to avoid impacts to critical resources. In compliance with CEQA and NEPA, an analysis of the potential impacts to water related resources and the Management Plan provisions that will monitor and manage the project operations to avoid those impacts, are set forth in Section 5.5.4 of Volume 1, and Sections 6 and 7 of Volume IV of the Final EIR/EIS.

P4-7 See Response to Comment P4-6, and Master Response "Water Quality."

P4-8 The impact of the Hector Mine earthquake on wells and other installations in the project vicinity is discussed in Section 5.4.1 of the Final EIR/EIS. As noted in that text, no damage to area wells and other installations as a result of this earthquake was observed. As noted in the discussion on regional seismicity, also in Section 5.4.1 of the Final EIR/EIS, the return interval for earthquakes on faults in the Mojave Desert area is typically on the order of 5,000 years or more. Therefore, the occurrence of an event such as the Hector Mine earthquake is a relatively rare event compared to earthquakes on some other faults in southern California, such as the San Andreas Fault.

P4-9 Section 5.10 (Hazards and Hazardous Materials) in the Final EIR/EIS discusses the potential impacts related to unexploded ordnance in the vicinity of the construction limits for the Cadiz Project. As discussed in Section 5.10.4, there is potential for significant adverse impacts associated with ordnance and explosive waste hazards. Mitigation Measures HM-1, HM-2 and HM-3 specifically address potential ordnance and explosive waste impacts associated with past military uses and activities in this area. However, as noted in Section 5.10.5, even with these

mitigation measures, there is potential for significant adverse impacts after mitigation associated with ordnance and explosive wastes. This is acknowledged as a potentially significant unavoidable adverse impact of the Cadiz Project in Section 8 (Unavoidable Significant Adverse Impacts).

- P4-10 These comments do not raise an issue under CEQA or NEPA and , therefore, no response is required.
- P4-11 See Response to Comment G13-10.
- P4-12 See Response to Comments G13-10 and G13-13.
- P4-13 California law recognizes that groundwater may be appropriated for non-overlying uses, including exportation for use outside the groundwater basin. Twentynine Palms is not within Metropolitan's service area and will not be served by the project.
- P4-14 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- P4-15 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- P4-16 The use of groundwater for the Cadiz agricultural operations will be conducted in accordance with the Management Plan that is incorporated in the project (Final EIR/EIS, Volume IV). Operation of the project in accordance with the provisions of the Management Plan will avoid potential impacts to critical resources, as discussed in Section 5.5.4 and 5.5.5, Volume I, of the Final EIR/EIS.
- Note: Comments P4-17 to P4-35 are from the March 21, 1999 NOP comment letter cited earlier in comment P4-1.*
- P4-17 Comments noted. See Responses to Comments P4-18 to P4-35, below.
- P4-18 Metropolitan is the lead agency for purposes of CEQA because it is the public agency that will carry out the project. Metropolitan is seeking the grant of a utility right-of-way across the federal lands under the jurisdiction of the BLM in accordance with the Federal Land Policy and Management Act, 43 U.S.C. section 1761. The project does not involve any change in the amount of water Metropolitan receives from the Colorado River, and is in accordance with California law authorizing the appropriation of groundwater for non-overlying uses, including exportation for use outside the groundwater basin.
- P4-19 The comment regarding Best, Best & Krieger does not raise an issue under CEQA or NEPA and, therefore, no response is required. Regarding the exportation of groundwater for use in Metropolitan's service area, see Response to Comment P4-13.
- P4-20 There is no "connection" between the Cadiz Project and the "land deal" and "exchange" referenced in the comment.
- P4-21 Metropolitan is the agency that will carry out the project. The use of groundwater outside the basin is authorized under California law.

- P4-22 Metropolitan is complying with federal and state laws protecting species including the desert tortoise. A discussion of the mitigation measures that will be implemented to mitigate impacts to desert tortoise is set forth in Section 5.8.5, Volume I, of the Final EIR/EIS.
- P4-23 The comment does not mention any specific corporations or groundwater basins, however, the project does not involve a transfer of water to a Cadiz Water Bank. The project is a conjunctive use project that provides storage of Colorado River water and the potential transfer of indigenous groundwater to meet dry year demand in Metropolitan's service area.
- P4-24 The project is unrelated to any use of the Ward Valley basin. The potential use of Ward Valley for storage of Colorado River water was considered and eliminated from detailed analysis for the reasons stated in Section 3.5.3 of Volume I of the Final EIR/EIS.

There is no basis for the comment that the groundwater basin underlying the Cadiz Project is "salty." The water quality is discussed in Section 5.5.1 of Volume I of the Final EIR/EIS.

- P4-25 The potential transfer of indigenous water as part of the project has been analyzed, and the Management Plan has been incorporated into the Final EIR/EIS, Volume IV, to avoid any potential impacts to critical resources from operation of the project including such transfers. The project does not involve any change in the amount of water Metropolitan receives from the Colorado River, and is in accordance with California law authorizing the appropriation of groundwater for non-overlying uses, including exportation for use outside the groundwater basin.
- P4-26 The comment does not raise issues under CEQA or NEPA and, therefore, no response is required.
- P4-27 The project is not being carried out under the authority granted by Congress pursuant to the Act of June 18, 1932. Metropolitan is the lead agency under CEQA because it is the public agency that will carry out the project. The BLM is the lead agency under NEPA because it will grant the rights-of-way required to construct the pipeline and electric transmission lines across federal lands. Other comments are noted, and because they do not raise issues under CEQA or NEPA, no response is required.
- P4-28 The absence of any hydrologic continuity between the Fenner groundwater basin and the Ward Valley is discussed in Section 5.5.4, Volume I, of the Final EIR/EIS. The other comments do not raise an issue under CEQA or NEPA, and no response is necessary.
- P4-29 There are no "connections" between the Cadiz Project and the "land deals" referenced in the comment. Land ownership in the project area is shown on Figure 5.2-1 of the Final EIR/EIS. The project wellfield will be constructed entirely on land owned by Cadiz Inc. Other comments do not raise an issue under CEQA or NEPA and no response is necessary.
- P4-30 With the exception of the reference to the desert tortoise, these comments do not raise an issue under CEQA or NEPA and no response is required. Regarding the desert tortoise, see Response to Comment P4-22.
- P4-31 Regarding the desert tortoise, see Response to Comment P4-22. The Cadiz Project will not extract water from Ward Valley.

P4-32 The Cadiz Project will not “store” water from the Ward or Fenner valleys. With this project, Metropolitan proposes to utilize the aquifer system underlying a portion of the Cadiz and Fenner valleys to store Colorado River water imported from the Colorado River Aqueduct. When needed, as in dry years, the stored water and indigenous groundwater will be extracted with wells and returned to the Colorado River Aqueduct for use within Metropolitan’s service area. The project does not involve the delivery or use of water in groundwater basins along the Santa Ana River watershed. All Cadiz Project operations, including extraction of groundwater, will be governed by and subject to the provisions of the Management Plan, presented in Volume IV of the Final EIR/EIS. The issue of growth inducement is discussed in Section 6, Volume I, of the Final EIR/EIS. The project does not involve any change in the amount of water received by Metropolitan from the Colorado River.

P4-33 The Cadiz Project will not extract water from Ward Valley.

P4-34 As discussed in Section 5.5.4, Volume I, of the Final EIR/EIS, the Cadiz Project will not have an adverse effect on the water supply of the Needles area.

P4-35 Comments noted. No response is necessary.

Note: Comments P4-36 to P4-58 are from the March 23, 1999 NOP comment letter cited earlier in comment P4-1.

P4-36 Comments noted. See Responses to Comments P4-17 to P4-35, above, for responses to the cited March 1999 letter.

P4-37 Comments noted. See Responses to Comments P4-38 to P4-58, below.

P4-38 Metropolitan and BLM are the state and federal lead agencies for preparation of the EIR and the EIS pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), respectively. Because the Cadiz Project conveyance pipe-line and electrical distribution system will cross federal lands administered by the BLM, the BLM must consider whether to: 1) amend the California Desert Conservation Area Plan for an exception to the utility corridor requirement; 2) grant rights-of-way to Metropolitan for construction and operation of the project.

Regarding Metropolitan’s authority to act as CEQA lead agency, see Response to Comment G2-3.

P4-39 BLM must consider whether to: 1) amend the California Desert Conservation Area Plan for an exception to the utility corridor requirement; and 2) grant rights-of-way to Metropolitan for construction and operation of the project. The information in the Final EIR/EIS, including the public and agency comments received, will be used by the BLM in considering whether or not to approve the amendment and grant necessary rights-of-way. When the BLM has made a determination, it will issue its Record of Decision.

The economic issues referenced in the comment do not raise issues under CEQA or NEPA and, therefore, no response is required. Regarding the exportation of groundwater for use in Metropolitan’s service area, see Response to Comment P4-13.

P4-40 See Response to Comment G2-4.

- P4-41 The comment is too general to permit a response.
- P4-42 Comment noted. The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- P4-43 Regarding the authority of Metropolitan to act as CEQA lead agency, see Response to Comment G2-3. BLM is the lead agency for NEPA purposes. The project does not include the extraction of water from the Ward Valley. The potential impacts to water resources in the Fenner Valley are discussed in Section 5.5.4, Volume I, of the Final EIR/EIS. California law authorizes the appropriation of groundwater for non-overlying uses, including exportation for use outside the groundwater basin.
- P4-44 See Response to Comment P4-3.
- P4-45 The economic issues referenced in the comment do not raise issues under CEQA or NEPA and, therefore, no response is required.
- P4-46 See Response to Comment P4-3.
- P4-47 As noted in the comment, California law authorizes the appropriation of groundwater. The uses to which groundwater may be put include non-overlying uses outside the groundwater basin.
- P4-48 Ownership of land in the project area is depicted in Figure 5.2-1 in Volume I of the Final EIR/EIS. The extraction of groundwater for use in Metropolitan's service area is authorized under California law without any requirement that "rights" to surplus water be purchased. The use of groundwater by Cadiz Inc. for agricultural operations on overlying land is discussed in Section 7.2.4, Volume I, of the Final EIR/EIS. The amount of indigenous water that may be extracted under the project is subject to the provisions of the Management Plan (Volume IV, Final EIR/EIS).
- P4-49 In response to differences of opinion among experts regarding the amount of recharge to the project area groundwater basin, BLM and Metropolitan developed the Groundwater Monitoring and Management Plan that is incorporated in the Final EIR/EIS (Volume IV). The project will be operated in accordance with the Management Plan to avoid impacts to critical resources.
- P4-50 As discussed in Section 5.5.4, Volume I, of the Final EIR/EIS, there is no groundwater continuity between the project area and the City of Needles.
- P4-51 The Metropolitan Water District of Southern California will operate the project. Cadiz Inc. will grant Metropolitan a right to use of its overlying land for the operation of the project, including the extraction of groundwater from the overlying land.
- P4-52 California law recognizes that groundwater may be appropriated for non-overlying uses, including exportation for use outside the groundwater basin.
- P4-53 See Master Response "Groundwater Monitoring and Management Plan."

- P4-54 California law recognizes that groundwater may be appropriated for non-overlying uses, including exportation for use outside the groundwater basin.
- P4-55 The project does not include any change in the amount of water received by Metropolitan from the Colorado River, nor is there any groundwater continuity between the Fenner Valley and the Colorado River. See Section 5.5.4, Volume I, Final EIR/EIS. Therefore, the project will not have any impact on the Lower Colorado River.
- P4-56 Metropolitan will not “take” water rights held by other property owners in the implementation of the Cadiz Groundwater Storage and Dry-Year Supply Program. California law authorizes the use of groundwater for non-overlying uses, including exportation for use outside the groundwater basin.
- P4-57 See Response to Comment P4-56.
- P4-58 BLM is performing its obligations in accordance with the National Environmental Policy Act (NEPA) and Federal Land Policy and Management Act (FLPMA). The contamination of other groundwater basins referenced in the comment is not related to this project, and no comment is required. The project does not involve the dilution of polluted groundwater basins with indigenous groundwater from the project area. Regarding the desert tortoise, see Response to Comment P4-22.

P5 RESPONSES TO COMMENTS FROM JEFF WRIGHT DATED FEBRUARY 22, 2000

- P5-1 Project financing does not raise an issue under CEQA or NEPA and, therefore, no response is required. However, Metropolitan does not intend to apply for state bond funds for the project.
- P5-2 See Response to Comment F2-4.

P6 RESPONSES TO COMMENTS FROM KEVIN EMMERICH AND LAURA CUNNINGHAM DATED FEBRUARY 25, 2000

- P6-1 Comments noted. See responses to comments P6-2 to P6-15, below.
- P6-2 Comments noted. No response is necessary.
- P6-3 Section 5.5.4, Volume I, of the Final EIR/EIS, identifies the amount of water lost to evaporation from the project spreading basins as 3 percent of the total volume of water delivered for storage.
- P6-4 The project does not make any change in the amount of water received by Metropolitan from the Colorado River. As noted in the comment and discussed in Section 2.5.3, Volume I, of the Final EIR/EIS, the adoption of Interim Surplus Criteria by the Secretary of the Interior is anticipated to make available to Metropolitan adequate supplies of Colorado River water to allow storage as part of the Cadiz Project. Water held in storage will be available to be extracted during any dry years that occur during the project for delivery to Metropolitan’s service area.
- P6-5 The Cadiz Project does not presume to extract 2,000,000 acre feet of indigenous groundwater, or any other predetermined amount. BLM and Metropolitan have developed the Management Plan that is incorporated in the Final EIR/EIS (Volume IV) to avoid adverse impacts to critical

resources. The project will be operated in accordance with the Management Plan. For a discussion of potential impacts from land subsidence and changes in groundwater levels, see Section 5.5.4, Volume I, of the Final EIR/EIS. For the monitoring and management measures that will be implemented to avoid such impacts, see Sections 6 and 7 of the Management Plan (Volume IV of the Final EIR/EIS).

- P6-6 The Cadiz Project does not presume to extract 30,000 acre feet of indigenous groundwater per year. See Response to Comment P6-5.
- P6-7 See Master Response “Groundwater Monitoring and Management.”
- P6-8 BLM is the federal lead agency for preparation of the EIS pursuant to the National Environmental Policy Act (NEPA), and will retain the authority to enforce the terms and conditions of any right-of-way grant(s) issued for the project. This will include authority to enforce provisions of the Management Plan, as described in Section 10 of the Plan (Volume IV, Final EIR/EIS).
- P6-9 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required. Regarding the time provided for public review and comment, see Response to Comment F2-4.
- P6-10 The Cadiz Project does not presume that any amount of indigenous groundwater will be extracted. The amount will be subject to operation of the project in accordance with the Groundwater Monitoring and Management Plan. Section 5.3.3 of the Cadiz Groundwater Storage and Dry Year Supply Program Environmental Planning Technical Report, Goundwater Resources Report—Volume 1 (Report No. 1163), stated that groundwater in the project area moves at a velocity of approximately 1 to 2 feet per day (approximately 365 to 730 feet per year). Considering an average rate of 550 feet per year, it would take over 10 years for stored water migrate from the spreading basin to the periphery of the recovery wellfield; therefore, it is not anticipated that there will be losses due to migration of the water to the dry lakes. The stored water will be monitored, and may be extracted and delivered to the CRA or re-spread if necessary to retain the stored water in the area of the project wellfield.
- P6-11 Comments noted. See Master Response “Groundwater Monitoring and Management Plan,” and Responses to Comments F2-60 and R3-58.
- P6-12 Regarding water demand projections in the Metropolitan service area, see Sections 2.3 and 2.4 of the Final EIR/EIS, Volume I. Regarding request for supplement see Master Response “Need for Supplement/Recirculation.”
- P6-13 Potential impacts of the project on biological resources, including the desert tortoise and Mojave fringe-toed lizard, are discussed in Section 5.8.4 of the Final EIR/EIS, Volume I. Mitigation measures to mitigate the impacts on such resources and species are discussed in Section 5.8.5.
Potential impacts of the project associated with wilderness values are discussed in Section 5.17.4 (Wilderness/Recreation) of the Final EIR/EIS, Volume I. Mitigation measures to mitigate impacts on wilderness resources are discussed in Section 5.17.5.
- P6-14 Comments noted. No response is necessary.

P6-15 See Response to Comment F2-4.

P7 RESPONSES TO COMMENTS FROM CHRISTINE CARRAHER AND JERRY SMITH DATED FEBRUARY 29, 2000

P7-1 Comment noted. No response is necessary.

P7-2 See Master Response “Need for Supplement/ Recirculation.”

P7-3 A copy of the cited March 16, 1999 letter is attached; responses to those comments are provided below. See Responses to Comments P7-18 to P7-32.

P7-4 See Response to Comment G2-3.

P7-5 Section 2.4.4 of the Final EIR/EIS, Volume I, discusses the conservation programs that are being implemented by Metropolitan and its member agencies.

P7-6 The potential impacts on other communities related to water resources is discussed in Section 5.5.4 of the Final EIR/EIS, Volume I.

P7-7 The project includes the extraction of indigenous groundwater that is surplus to overlying uses for use in Metropolitan’s service area. The project will be implemented in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid impacts to critical resources in the project area. Since Metropolitan provides water to its member agencies and does not deliver water to retail consumers, it has no authority to require installation of water meters.

P7-8 See Master Response “Groundwater Monitoring and Management Plan.”

P7-9 Implementation of the Groundwater Monitoring and Management Plan is an obligation of Metropolitan pursuant to CEQA. The BLM will retain authority to enforce the Management Plan through the terms and conditions of its right-of-way grant(s) for the project. The BLM will also consider technical comments and recommendations received from other federal agencies and the County of San Bernardino as described in Section 9 of the Management Plan (Final EIR/EIS, Volume IV). No other committee will be created to administer the project. Information on the implementation of the Management Plan will be available to the public through the annual and five-year reports described in Section 6.8 of the Management Plan.

P7-10 See Response to Comment P7-9.

P7-11 As described in Section 6.8 of the Management Plan, annual and five-year reports that summarize all the data collected will be made available to the public.

P7-12 The potential impacts to indigenous groundwater quality due to storage of Colorado River water is discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. Monitoring and management measures to avoid such impacts are described in Sections 6 and 7 of the Management Plan (Final EIR/EIS, Volume IV).

P7-13 See Response to Comment P7-12.

P7-14 Section 5.5.4 of the Final EIR/EIS, Volume I, discusses the potential impacts on water related resources, including changes in groundwater elevations. Sections 6 and 7 of the

Management Plan (Final EIR/EIS, Volume IV) describes the monitoring and management measures that will be implemented to avoid adverse impacts to groundwater related critical resources from project operations, including subsidence.

- P7-15 See Master Response “Groundwater Monitoring and Management Plan.” For additional information regarding “trigger thresholds,” Management Plan action criteria, decision-making process and corrective measures are defined in Section 7 of the Final EIR/EIS, Volume IV.
- P7-16 Implementation of the Closure Plan described in Section 8 of the Management Plan (Final EIR/EIS, Volume IV), requires that any decline in static groundwater levels not exceed an average of 100 feet or lead to projections of adverse impacts to critical resources.
- P7-17 Comments noted. No response is necessary.
- P7-18 Comments noted. See Responses to Comments P7-19 to P7-32.
- P7-19 For information regarding water quality issues, see Master Response “Water Quality.” The potential impacts to water quality in the aquifer from project operations is discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. Monitoring and management measures that will be implemented to avoid water quality impacts from the project are described in Sections 6.2 and 7.2 of the Management Plan (Final EIR/EIS, Volume IV).
- P7-20 See Responses to Comments G2-5 and G2-6.
- P7-21 Analysis of water supply and demand in the entire Southern California region is beyond the scope of the analysis required by CEQA and NEPA for a project-level EIR/EIS. The Final EIR/EIS discusses water demand projections in the Metropolitan service area in Section 2.0 as part of the purpose and need for the project. The project will not affect water supply or demand projections in the Mojave desert areas.
- P7-22 The Cadiz Project does not provide that any specific amount of indigenous groundwater will be removed. Instead, operations of the project will be implemented in accordance with the Management Plan to avoid adverse impacts to critical resources. See Master Response “Groundwater Monitoring and Management Plan.”
- P7-23 See Master Response “Growth Inducement.”
- P7-24 Regarding water conservation, see Master Response “Water Conservation.” BLM and Metropolitan have developed the Groundwater Monitoring and Management Plan that will be implemented to avoid adverse impacts to water resources in the project area. See Final EIR/EIS, Volume IV.
- P7-25 The Groundwater Monitoring and Management Plan incorporates protections to prevent impacts to wells and springs outside of the Cadiz Project area. No adverse impacts to existing or foreseeable overlying uses will occur and the project does not affect the water rights of adjacent property owners. Therefore, there would be no effects on development in desert areas through loss of water supply. Since there would be no loss of water supply, there would be no adverse environmental justice impacts.

- P7-26 See discussion of “Potential Impacts to Fenner Gap Microclimate” in Section 5.5.4 of the Final EIR/EIS, Volume I.
- P7-27 Section 5.8.4 of the Final EIR/EIS, Volume I, includes a discussion of potential impacts on biological resources, including effects on wildlife movement, effects of increased human activities, and effects of soil disturbance and erosion on habitat. The potential impacts to biological resources related to springs is discussed in Section 5.5.4 .
- P7-28 The potential effects of subsidence resulting from project operations is discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. The potential effects of the project on erosion, soils, and geology are discussed in Section 5.5.4 of the Final EIR/EIS, Volume I.
- P7-29 Visual changes that will result from implementation of the project are discussed in Section 5.14 (Aesthetics) of the Final EIR/EIS, Volume I.
- P7-30 Impacts to vistas in wilderness areas are discussed in Section 5.14 of the Final EIR/EIS, Volume I.
- P7-31 The impact analyses in Section 5.0 (Affected Environment, Impacts and Mitigation) of the Final EIR/EIS, Volume I, considers project impacts through the 50 year life of the project.
- P7-32 Comments noted. No response is necessary.

P8 RESPONSES TO COMMENTS FROM WILLIAM T. MCCARVILL DATED MARCH 2, 2000

- P8-1 BLM and Metropolitan have developed the Groundwater Monitoring and Management Plan that is incorporated in the Final EIR/EIS (Volume IV). The project will be implemented in accordance with the Management Plan to avoid impacts to critical resources, including springs.

P9 RESPONSES TO COMMENTS FROM ALAN SIRACO AND AMANDA K. ROZE DATED MARCH 3, 2000

- P9-1 See Master Response “Need for Supplement/Recirculation.”
- P9-2 See Master Response “Growth Inducement.”
- P9-3 See Master Response “Alignment Alternatives.”
- P9-4 See Master Response “Groundwater Monitoring and Management Plan.”
- P9-5 See Response to Comment F2-2.
- P9-6 Comments noted. No response is necessary.

P10 RESPONSES TO COMMENTS FROM DENNIS BELL DATED MARCH 4, 2000

- P10-1 See Response to Comment F2-4.
- P10-2 See Response to Comment F2-4.

- P10-3 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- P10-4 Comments noted. No response is necessary.
- P10-5 See Master Response “Growth Inducement.”
- P10-6 See Master Response “Water Conservation.”

P11 RESPONSES TO COMMENTS FROM STAN HAYE DATED MARCH 4, 2000

- P11-1 Comments noted. See Responses to Comments P11-2 to P11-12, below.
- P11-2 BLM and Metropolitan have developed the Groundwater Monitoring and Management Plan that is incorporated in the Final EIR/EIS (Volume IV). This Management Plan includes modeling of the groundwater to assist in the analysis of project operations and avoid adverse impacts to critical resources (Section 3). These models, in conjunction with monitoring data, will provide information regarding basin recharge and the effect of project operations on the basin which will be used to identify the effects of subsurface geologic conditions.
- P11-3 The Cadiz Project does not include any specific amount of groundwater extraction. Project operations will be implemented in accordance with the Management Plan to avoid adverse impacts to critical resources. The potential for saltwater intrusion is discussed in Section 5.5.4 of the Final EIR/EIS, Volume I, and the monitoring and management measures to avoid this impact are discussed in Sections 6.2 and 7.2.6 of the Management Plan (Final EIR/EIS, Volume IV).
- P11-4 In accordance with California law, the project includes the potential extraction of groundwater for use outside the basin. Any water extraction will be implemented in accordance with the provisions of the Management Plan to avoid adverse impacts to critical resources.
- P11-5 See Master Response “Groundwater Monitoring and Management Plan.”
- P11-6 Project operations will be implemented in accordance with the Management Plan to avoid adverse impacts to critical resources, including springs. See Sections 6.1 and 7.1, Final EIR/EIS, Volume IV.
- P11-7 Project operations will be implemented in accordance with the Management Plan to avoid adverse impacts to critical resources, including water quality in the groundwater basin. See Sections 6.2 and 7.2.1, Final EIR/EIS, Volume IV.
- P11-8 The potential for subsidence and loss of storage capacity due to groundwater extraction are discussed in Section 5.5.4 of the Final EIR/EIS, Volume I and Section 2.2 of the Management Plan (Final EIR/EIS Volume IV).
- P11-9 See Response to Comment G6-8.
- P11-10 The project does not make any change in the amount of water received by Metropolitan from the Colorado River. As discussed in Section 2.5.3, Volume I, of the Final EIR/EIS, the

adoption of Interim Surplus Criteria by the Secretary of the Interior is anticipated to make available to Metropolitan adequate supplies of Colorado River water to allow storage as part of the Cadiz Project. Water held in storage will be available to be extracted during any dry years that occur during the project for delivery to Metropolitan's service area.

P11-11 See Master Response "Alignment Alternatives."

P11-12 Comment noted. No response is necessary.

P12 RESPONSES TO COMMENTS FROM CAROL A. LANDRY DATED MARCH 5, 2000

P12-1 Comments noted. No response is necessary.

P12-2 The Cadiz Project does not include any specific amount of indigenous groundwater that may be extracted. Project operations will be implemented in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid adverse impacts to critical resources.

P12-3 The potential impacts to springs used by bighorn sheep or other species is discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. Monitoring and management measures to avoid impacts to springs are set forth in Sections 6.1 and 7.1 of the Management Plan (Final EIR/EIS, Volume IV).

P12-4 Comments noted. See Master Response "Need for Supplement/Recirculation."

P12-5 Comment noted. No response is necessary.

P12-6 See Response to Comment F2-4.

P13 RESPONSES TO COMMENTS FROM INGRID CRICKMORE DATED MARCH 6, 2000

P13-1 See Master Response "Need for a Supplement/Recirculation."

P13-2 The Cadiz Project does not include a specific amount of indigenous groundwater that may be extracted. Project operations will be implemented in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid adverse impacts to critical resources.

P13-3 See Response to Comment P13-2.

P13-4 See Response to Comment P13-2.

P13-5 Comment noted. No response is necessary.

P13-6 See Response to Comment F2-2.

P13-7 See Response to Comment P6-10.

There will be some losses of imported Colorado River water during the spreading operation due to evaporation when the water is in the spreading basins and exposed to the air. As described in the Final EIR/EIS, Volume I, Section 5.5.4, the amount of water expected to

evaporate from the project spreading basins will be approximately 3 percent of the total volume of water stored.

P13-8 See Response to Comment P6-4.

P13-9 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.

P13-10 The aesthetic impacts from project facilities, including impacts from the project power distribution facilities, are discussed in Section 5.14.4, of the Final EIR/EIS, Volume I.

The preferred alternative (the Eastern Alignment) by passes the Cadiz Dunes Wilderness Area. The segment of this alignment referenced in the comment follows an existing, maintained roadway (Cadiz Rice road) and is immediately adjacent to the Arizona California rail line and accompanying overhead telephone lines. This rail line is used on a daily basis.

Regarding undergrounding of the power distribution lines, see Response to Comment G6-21.

P13-11 The aesthetic impacts from project facilities are discussed in Section 5.14.4, of the Final EIR/EIS, Volume I. Regarding the potential right-of-way along the existing railroad corridor, see Master Response "Alignment Alternatives."

P13-12 As discussed in Section 3.7.3 of the Final EIR/EIS, crossing the Danby Dry Lake was seen as an undesirable route for both engineering and environmental reasons. As part of the alternatives screening process, three separate pipeline design alternatives were considered for crossing Danby Dry Lake. See Master Response "Danby Dry Lake Alignment."

P13-13 The Groundwater Monitoring and Management Plan is set forth in Volume IV of the Final EIR/EIS. BLM oversight is described in Section 10. Annual and five year reports on project operations will be made available to the public as described in Section 6.8.

P13-14 See Master Response "Water Quality."

P13-15 See Master Response "Need for Supplement/Recirculation."

P13-16 Comments noted. No response is necessary.

P14 RESPONSES TO COMMENTS FROM HANAFI RUSSELL DATED MARCH 7, 2000

P14-1 Comments noted. Regarding the letter of comment submitted by "Desert Survivors" see Responses to Comments G6-1 through G6-22. Regarding the "USGS Report" see Response to Comment F2-60.

P15 RESPONSES TO COMMENTS FROM JERRY SMITH DATED MARCH 8, 2000

P15-1 See Response to Comment F2-4. In addition to a February 5, 1999 mailing, a notice of the February 1999 scoping meetings was published in the *San Bernardino Sun*. These meetings were held at Cadiz Ranch and the Twentynine Palms City Hall. Follow-up articles appeared in the *San Bernardino Sun* on March 29 and May 10, 1999. Notices appeared in the Federal Register on March 1, 1999 and May 4. The latter, and the May 10 *San Bernardino Sun* article, noticed an additional public meeting to be held on May 10, 1999 in the Needles City

Hall and extended the public comment period for scoping to May 10, 1999. In addition articles also appeared in the *Needles Desert Star* on April 28, 1999 and the *Paramount Journal* of May 13, 1999.

- P15-2 See Master Response “Formulation and Screening of Potential Projects” and Response to Comment F2-16.
- P15-3 See Master Response “Groundwater Monitoring and Management Plan.” A discussion of potential impacts related to groundwater resources is set forth in Section 5.5.4 of the Final EIR/EIS, Volume I. Monitoring and management measures to avoid adverse impacts to critical resources are described in Sections 6 and 7 of the Management Plan (Final EIR/EIS, Volume IV).
- P15-4 The Draft EIR/EIS consists of one volume, Draft Environmental Impact Report/Draft Environmental Impact Statement, SCH. No 99021039, Metropolitan Water District Report (Report No. 1157). As cited on the preface page in the Draft EIR/EIS (the first page following the three page cover letter), there are a number of technical reports in support of the Draft EIR/EIS. The findings of each of these technical reports are described in detail in the Draft EIR/EIS. Therefore, the Draft EIR/EIS is a complete technical analysis of the potential impacts of the proposed Cadiz Project. The technical reports were made available during the public review period at Metropolitan’s office in Los Angeles, the BLM office in Riverside, the San Bernardino County Library branches in San Bernardino, Needles, Twentynine Palms, and Barstow.

P16 RESPONSES TO COMMENTS FROM CAROL A. WILEY DATED MARCH 6, 2000

- P16-1 Regarding the USGS report, see Master Response “Groundwater Monitoring and Management Plan.”
- P16-2 See Master Response “Need for Supplement/Recirculation.”
- P16-3 Comments noted. No response is necessary.

P17 RESPONSES TO COMMENTS FROM BARRY AND LESLIE MELIUS (NO DATE)

- P17-1 Regarding bighorn sheep, see Response to Comment P12-3. The Chukar Grouse is not indicated to be a special interest species, therefore, a focused survey was not conducted.
- P17-2 The potential impacts to springs are discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. Monitoring and management measures to avoid adverse impacts to critical resources, including springs, are set forth in Sections 6.1 and 7.1 of the Management Plan (Final EIR/EIS, Volume IV).
- P17-3 Comments noted. No response is required.

M1 RESPONSES TO COMMENTS RECEIVED AT THE DECEMBER 15, 1999 PUBLIC HEARING (CADIZ)

The December 15, 1999 Public Hearing at Cadiz consisted of formal presentations by Metropolitan and P&D Environmental staff, followed by public comment. The transcript for this meeting includes both the formal presentations and the public comments. The transcript

of the formal presentation is on pages 1 through 17 of the transcript. The part of the transcript for public comments is on pages 17 through 19 of the transcript.

M1-1 The potential for migration of saline water underlying the Bristol and Cadiz Dry Lakes is discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. Monitoring and management measures to avoid adverse impacts to critical resources, including migration of the saline water, are set forth in Sections 6.2, 6.3, and 7.2.6 of the Management Plan (Final EIR/EIS, Volume IV).

M1-2 Comments noted. No response is necessary.

M2 RESPONSES TO COMMENTS RECEIVED AT THE DECEMBER 15, 1999 PUBLIC HEARING (TWENTYNINE PALMS)

The December 15, 1999 Public Hearing at the City of Twentynine Palms City Hall consisted of formal presentations by Metropolitan and P&D Environmental staff, followed by public comment. The transcript for this meeting includes both the formal presentations and the public comments. The transcript of the formal presentation is on pages 1 through 23 of the transcript. The part of the transcript for public comments is on pages 23 through 39 of the transcript. There are also intermittent public comments on pages 39 through 61 of the transcript.

M2-1 The project does not affect existing or foreseeable uses of the groundwater by overlying owners. Potential impacts to adjoining landowners are discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. Monitoring and management measures to avoid adverse impacts to critical resources, including groundwater use by other overlying owners, are set forth in Section 6.2 and 7.2.2 of the Management Plan (Final EIR/EIS, Volume IV). Regarding potential non-overlying users in San Bernardino, see Response to Comment P2-11.

M2-2 The solicitation of public comments during the Scoping/Notice of Preparation (NOP) phase of the environmental process is intended to solicit input from responsible agencies, other agencies and members of the general public regarding what issues should be addressed in an environmental document. Section 1.5 (Background to the EIR/EIS) in the Final EIR/EIS, Volume I, summarizes the public scoping process during the NOP phase and the types of input received regarding issues which should be addressed in the EIR/EIS. Compliance with the California Environmental Quality Act (CEQA) does not require interim reporting to commentors. The EIR/EIS is the document that provides detailed analysis responding to issues raised during the NOP phase.

M2-3 The 90-day comment period, later extended to 104 days, was adopted to provide more time for public review and comment than the minimum required review period of 60 days for an EIS and 45 days for an EIR. The time needed to prepare the Draft EIR/EIS reflected, among other things the need for alignment surveying and staking, seasonal biological resource surveys, pilot studies for groundwater spreading and groundwater modeling. Also see Response to Comment F2-4.

M2-4 Regarding the potential for long-term drawdown of groundwater within and surrounding the project area please see Master Response "Groundwater Monitoring and Management Plan" and Response to Comment F2-53.

M2-5 See Response to Comment P4-8.

- M2-6 The Draft EIR/EIS and the supporting technical reports were made available at four public libraries in the project area, including the Twentynine Palms Branch Library as cited on page three in the cover sheet of the Draft EIR/EIS. Metropolitan confirmed that each library had their copies available to the public. The 90-day (not 60 day) comment period was extended an additional two weeks for a total of 104 days.
- M2-7 Comment noted. See Response to Comment M2-6.
- M2-8 The reference to internal pressure in Table ES-2 of the Draft EIR/EIS is a measure of the pressure exerted on the inside of the pipeline wall. The measurement in the table indicates the height water would rise to if not contained in the pipeline. It is measured in feet.
- M2-9 A biological assessment was prepared in October 1999, entitled Desert Tortoise Biological Assessment for the Cadiz Groundwater Storage and Dry-Year Supply Program, addressing impacts to the desert tortoise and its natural habitat. During the year 1999 biological resources were surveyed by field teams on February 17, 20, and 21, March 22-30, April 1, 5-7 and 27-29, May 10-14, 24, 26, 30, and 31, 1999. Surveys of the pipeline alignment and spreading basins were performed specifically for the desert tortoise biological assessment between March 24 and March 30, 1999.
- M2-10 The Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Project Feasibility and Facilities Report (Report No. 1162) presents the preliminary work that has been completed for the major project components. Specifically, a process flow schematic for all project alternatives is presented in Figures ES-2 and ES-3. Schedule (phase) information is also provided. See Figures 11-1 and 11-2.
- M2-11 Section 5.4 (Topography, Geology, Seismicity and Soils) of the Final EIR/EIS, Volume I, summarizes the appropriate facilities and operational procedures necessary to minimize potential impacts due to seismic events and water discharge due to earthquake-related damage. No “active”, “sufficiently active” or “well defined” faults have been identified in proximity to the Cadiz Project Area . However, in order to minimize potential seismic impacts, design measures would include ensuring that all structures associated with the Cadiz Project, including the water conveyance facility and wellfield manifold, would be designed and constructed in compliance with current engineering practices, including the Uniform Building Code and all applicable seismic engineering guidelines (Mitigation Measure G-1).
- M2-12 See Response to Comment M2-11.
- M2-13 Comments noted. See Response to Comment M2-3.
- M2-14 See Master Response “Groundwater Monitoring and Management Plan.”
- M2-15 In general, if precipitation exceeds infiltration capacity (this would include flood events), overland flow occurs. When overland flow occurs, some amount of surface water flows to the surface of Cadiz or Bristol dry lake. These lake surfaces are normally dry, but runoff from major winter storms and late summer thunderstorms can result in occasional standing water. The potential impacts on groundwater resources from project operations, including storage operations, are discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. Monitoring and management measures to avoid adverse impacts to critical resources are set forth in Sections 6 and 7 of the Management Plan (Final EIR/EIS, Volume IV).

- M2-16 See Master Response “Groundwater Monitoring and Management Plan.”
- M2-17 Metropolitan is responsible for implementing the Groundwater Monitoring and Management Plan pursuant to CEQA. The Management Plan includes monitoring and management measures related to protection of water quality (Sections 6.2 and 7.2.1 of the Management Plan, Final EIR/EIS, Volume IV). BLM has authority to enforce the Management Plan through the terms and conditions of the right-of-way grant(s) for the project (Section 10 of the Management Plan).
- M2-18 The potential impacts on groundwater resources from project operations, including the effect of higher total dissolved solids (TDS) in Colorado River water, are discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. Extraction wells will be screened in the upper alluvial sediment to allow extraction of the stored water containing the higher levels of TDS.
- M2-19 Sections 1.5 (Background to the EIR/EIS) of the Final EIR/EIS, Volume I, summarizes the public scoping process during the NOP phase and the types of input received regarding issues which should be addressed in the EIR/EIS. The Cadiz Groundwater Storage and Dry-Year Supply Program Draft EIR/EIS: Public Participation Report (Report No. 1161) (November 1999) provides a detailed summary of all public comments received at the NOP Public Scoping Meetings, including the meeting held in Needles on May 10, 1999.
- M2-20 Disposal of accumulated sediments in the spreading basins that is suitable for agricultural purposes would be applied to cultivated Cadiz Inc. agricultural lands. Any such material that is not suitable for agricultural uses would be disposed of at an appropriate landfill.
- M2-21 See Master Response “Groundwater Monitoring and Management Plan.”
- M2-22 The absence of a connection between the groundwater in the Twentynine Palms area and the project area is discussed in Section 5.5.4 of the Final EIR/EIS, Volume 1.
- M2-23 See Response to Comment P4-8.
- M2-24 See Response to Comment M2-8.
- M2-25 See Response to Comment M2-6.
- M2-26 Comment noted.
- M2-27 See Master Response “Groundwater Monitoring and Management Plan.”
- M2-28 All the comments received at the three Public Hearings for the Draft EIR/EIS are included in the meeting transcripts included in this Responses to Comments Report. For additional information refer to the Draft Environmental Impact Report/Draft Environmental Impact Statement Public Participation Report (Report No. 1161), November 1999.
- M2-29 The salinity of Colorado River water is the result of: 1) dissolution of naturally-occurring salt deposits in sediments that occur in contact with both surface and subsurface tributary flow to the Colorado River; 2) increases in salinity due to man-made causes (for example, agricultural irrigation run-off); and 3) increases in salinity due to evaporation of water from the Colorado River (for example, evaporation loss that occurs from surface reservoirs).

M2-30 The State of California guideline for TDS concentration in drinking water is a maximum of 1,000 mg/L. However, all groundwater having a TDS below 3,000 mg/L is considered by the State to be a potential domestic or municipal source of supply.

M2-31 The potential impacts to air quality from sediment in the spreading basins is discussed in Section 5.6.4 of the Final EIR/EIS, Volume I. Mitigation Measure AQ-9 provides for the application of soil binders to the spreading basins to control wind-blown dust.

M2-32 The comments from the public hearing have been addressed in this Responses to Comments Report and are part of the Final EIR/EIS that will be considered by the BLM and Metropolitan in their subsequent decision-making on the Cadiz Project.

M3 RESPONSES TO COMMENTS RECEIVED AT THE DECEMBER 16, 1999 PUBLIC HEARING (NEEDLES)

The December 16, 1999 Public Hearing at the City of Needles City Hall consisted of formal presentations by Metropolitan and P&D Environmental staff, followed by public comment. The transcript for this meeting includes both the formal presentations and the public comments. The transcript of the formal presentation is on pages 1 through 19 of the transcript. The part of the transcript for public comments is on pages 19 through 31 of the transcript. There are also intermittent public comments on pages 31 through 48 of the transcript.

M3-1 The Metropolitan Water District of Southern California (Metropolitan) and the United States Department of the Interior, Bureau of Land Management (BLM) are jointly evaluating the Cadiz Project. Metropolitan and BLM are the state and federal lead agencies for preparation of the EIR and the EIS pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), respectively.

M3-2 Comments noted. No response is necessary.

M3-3 Comments noted. No response is necessary.

M3-4 See Response to Comment M3-1.

M3-5 The legal requirements under CEQA and NEPA for a sufficient EIR/EIS are generally contained in California Public Resources Code sections 21000- 21178; CEQA Guidelines, 14 Cal. Code of Regs. sections 15000-15387, 42 U.S.C. sections 4321-4347, and 40 C.F.R. Parts 1500-1508.

M3-6 No new legislation has been enacted since the publication of the Draft EIR/EIS that would affect the environmental analysis for the Cadiz Project.

M3-7 See Response to Comment G2-4.

M3-8 The comment does not identify the referenced people and, therefore, no response is possible.

M3-9 See Response to Comment G12-1.

M3-10 See Response to Comment G13-13.

- M3-11 The amount of indigenous groundwater that could be supplied by the Cadiz Program, if any, will be subject to the provisions of the Management Plan. See Response to Comment F2-2. Metropolitan does not receive any water from the Owen's Valley. The amount of water that is imported by the Los Angeles Department of Water and Power from the Eastern Sierra Nevada mountains is discussed in Section 2.5.4 of the Final EIR/EIS, Volume I. Metropolitan's use of Colorado River water is discussed in Section 2.5.3.
- M3-12 These comments do not raise issues under CEQA or NEPA and, therefore, no response is required.
- M3-13 See Response to Comment G13-13.
- M3-14 No response is necessary.
- M3-15 No water will be taken from Ward Valley under this project.
- M3-16 The potential impacts to adjacent landowners is discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. Monitoring and management measures to avoid adverse impacts to critical resources, including the wells of adjacent landowners, are set forth in Sections 6 and 7 of the Management Plan (Final EIR/EIS, Volume IV).
- M3-17 As part of the environmental review process required by CEQA, a survey of paleontological resources was conducted of the project areas. The review included both a field survey and a literature search. Section 5.16 of the Final EIR/EIS, Volume I, provides a discussion of the results of the paleontological review.
- M3-18 Projects that still have remaining significant adverse impacts after mitigation are allowed to proceed if the approving agency recognizes these effects would occur and determines that there are overriding considerations to approve the project despite these impacts. In such cases, under CEQA, such agencies must adopt a Statement of Overriding Considerations in conjunction with project approval. Under NEPA, the Record of Decision(s) must reflect these considerations as part of the decision making process.
- M3-19 These comments do not raise issues under CEQA or NEPA and, therefore, no response is required.
- M3-20 The determination regarding project approval will be made by the Board of Directors of the Metropolitan Water District of Southern California and the Bureau of Land Management upon completion of the Final EIR/EIS.
- M3-21 Procedures for administrative protests of the BLM decision on the California Desert Conservation Plan amendment are set forth in 43 CFR 1610.5-2. Procedures for administrative appeals of the BLM decision on the right-of-way grant(s) are set forth in 43 CFR 4.

There are no administrative protest or appeal procedures for Metropolitan's action on the project. After the posting of the Notice of Determination on the Final EIR, CEQA allows a 30-day challenge period. A party seeking to challenge an action under CEQA may file a petition for writ of mandate, requesting that the court issue an order requiring the lead agency correct a perceived CEQA violation.

- M3-22 These comments do not raise issues under CEQA or NEPA and, therefore, no response is required.
- M3-23 These comments do not raise issues under CEQA or NEPA and, therefore, no response is required.
- M3-24 Public comments were solicited during the scoping/Notice of Preparation (NOP) phase of the environmental process. That part of the process is intended to solicit input from responsible agencies, other agencies and members of the general public regarding what issues should be addressed in an environmental document. Section 1.5 (Background to the EIR/EIS) of the Final EIR/EIS, Volume I, summarizes the public scoping process during the NOP phase and the types of input received regarding issues which should be addressed in the EIR/EIS. The Draft Environmental Impact Report/Draft Environmental Impact Statement Public Participation Report (Report No. 1161), November 1999) provides a detailed summary of all public comments received at the NOP public scoping meetings, including the meeting held in Needles on May 10, 1999.

While the Draft EIR/EIS was being prepared, a number of public information meetings regarding this proposed project were held throughout the project area. CEQA and NEPA do not require the inclusion of comments from informational meetings to be included in a Draft EIR/EIS. However, it should be noted that the questions and comments at those information meetings were similar to the questions and comments provided in the earlier Scoping Meetings and in written comments in response to the NOP.

As part of the circulation of the Draft EIR/EIS for public review and comment, two public hearings, in addition to the hearing at Needles, were held, as described elsewhere in these Responses to Comments. The transcripts from all three Public Hearings are included in these Responses to Comments.

- M3-25 Notices of Public Scoping Meetings were transmitted to approximately 12 newspapers in the project area. Not all the local papers elected to print this notice. For additional information refer to the Draft Environmental Impact Report/Draft Environmental Impact Statement Public Participation Report (Report No. 1161), November 1999, which provides documentation on the public information and participation program conducted for the Notice of Preparation phase of the environmental document in early 1999.
- M3-26 These comments do not raise issues under CEQA or NEPA and, therefore, no response is required.
- M3-27 See Response to Comment G2-4.
- M3-28 No water will be taken from Ward Valley under this project .
- M3-29 Under the terms of Metropolitan's water service contract with the Bureau of Reclamation, the United States delivered Colorado River water to Metropolitan for twenty-five cents (\$0.25) per acre-foot, during the cost repayment period for Hoover Dam, which has since expired.
- M4 **RESPONSES TO COMMENTS RECEIVED AT THE THREE PUBLIC SCOPING MEETINGS****
- M4-1 See Response to Comments M2-17 and M2-18.

M4-2 See Master Response “Groundwater Monitoring and Management Plan.” The amount of indigenous groundwater that would be withdrawn for the project would be governed by the Management Plan (Final EIR/EIS, Volume IV).