F3 RESPONSES TO COMMENTS FROM THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY DATED JANUARY 3, 2001.

- F3-1 Comment noted. No response is required.
- F3-2 Comments noted. The Management Plan (Final EIR/EIS, Volume IV) contains detailed information regarding groundwater monitoring and impacts. See also Responses to Comments F3-4 through F3-18.
- F3-3 Copies of the Final EIR/EIS will be provided as requested.
- F3-4 The governance structure of the Groundwater Monitoring and Management Plan has been finalized and is presented in Sections 9 and 10 of the Management Plan. The Technical Review Team (TRT) and Basin Management Group (BMG) have been removed. Metropolitan will implement the Management Plan pursuant to its obligations under CEQA. BLM will retain authority to enforce the Management Plan through the terms and conditions of the right-of-way grant(s) for the project. BLM will receive technical support and recommendations from other public agencies through a Technical Review Panel (TRP). Members of the TRP will be selected based on their expertise in a given subject area (e.g. hydrology, air quality). See Master Response "Governance."
- F3-5 Participation and responsibilities of the BLM, U.S. Geological Survey and National Park Service are stated in Sections 9 and 10 of the Management Plan. There are no conflicts of interest with San Bernardino County related to enforcement of special use permits because Metropolitan is not required to obtain permits from the County to implement and operate the project. See Master Response "Governance."
- F3-6 Section 10 of the Management Plan states that BLM retains the ultimate control over the enforcement of the right-of-way terms and conditions under 43 CFR Section 2800. See Master Response "Governance."
- F3-7 BLM may only make decisions related to enforcement of the terms and conditions of any right-of-way grant(s) it issues. It is not anticipated that any decisions will be required on issues not covered under the right-of-way grant(s). The decisions of the BLM Authorized Officer are subject to appeal to the Interior Board of Land Appeals in accordance with 43 CFR Part 4.
- F3-8 The terms and conditions of the right-of-way grant(s) will be contained in the Records of Decision (ROD) for the project. All potential impacts of the project and appropriate mitigation measures have been identified in the Final EIR/EIS and will be contained in the Mitigation Monitoring Plan and the ROD. See Section 10 of the Management Plan for a discussion of the decision-making process.
- F3-9 Action criteria are based on "early warning" triggers that are set below the significance thresholds in order to ensure there will be adequate opportunity to avoid potential significant adverse impacts to critical resources. Sections 9 and 10 of the Management Plan specify that TRP members may submit requests to the BLM Authorized Officer for a meeting of the TRP.

- F3-10 As described in Section 3.1.4 of the Management Plan, density dependent flow and transport models that employ numerical methods will be used. These models will be employed as predictive tools in conjunction with actual sampling and analysis of groundwater that occurs at different levels within the aquifer system. Such sampling will be facilitated by cluster wells as illustrated in Figure 6 of the Management Plan.
- F3-11 Table 1 of the Management Plan summarizes water quality testing frequencies. Samples will be collected on a quarterly or annual basis and analytical results published in the annual report.

Sampling and analysis of groundwater for total chromium and hexavalent chromium (Cr-VI) was conducted in the vicinity of the proposed project wellfield . This sampling yielded total chromium values in the range of approximately 0.013 mg/L (13 ppb) to 0.024 mg/L (24 ppb) and hexavalent chromium values in the range of approximately 0.015 mg/L (15 ppb) to 0.026 mg/L (26 ppb). The distribution of these groundwater samples within the sampled area and the similarity in values to other groundwater basins suggest that the total chromium and hexavalent chromium in the groundwater are a natural phenomenon, unrelated to industrial sources or other man-made causes. These values are below the current state and federal maximum contaminant levels (MCLs) for drinking water. Under the provisions of the Management Plan (Final EIR/EIS, Volume IV) groundwater quality, including both total chromium and hexavalent chromium, will be monitored on a routine basis, and conveyance of water to the Colorado River Aqueduct will be subject to all applicable federal and state regulations.

- F3-12 All agricultural irrigation on the Cadiz Inc. properties in the project area has utilized highly efficient and water conserving drip and micro-spray methods. Because of the efficiency of these methods, and the depth to the underlying water table (approximately 200 feet and greater), no return flow of irrigation water to the aquifer system is anticipated. In addition, the Management Plan ensures that project operations and all agricultural irrigation will be conducted without adverse impacts to critical resources.
- F3-13 No injection wells or injections of fluids are proposed as part of the project; therefore, the project is not subject to federal underground injection control regulations. The Cadiz Project also will comply with applicable state Water Code regulations. Diagrams showing a typical project spreading basin and inlet structure are presented in Figures 4-17, 4-18, 4-19 and 4-20 of the Final EIR/EIS. Note that this structure is designed to discharge water conveyed from the Colorado River Aqueduct to the surface of the spreading basins.
- F3-14 See Master Response "Water Quality." An eight month pilot demonstration program was conducted and the results are summarized in the Cadiz Groundwater Storage and Dry Year Supply Program Environmental Planning Technical Report, Groundwater Resources Volume 1. This report characterizes the basin in the project area. The proposed project wellfield has been designed to efficiently extract the mound of stored water and indigenous groundwater that will form as a result of spreading operations. In addition, the wellfield has been designed to accommodate long hold periods. As described in Section 5.5.4 of the Final EIR/EIS, Volume I, individual wells will be screened to facilitate selective removal of stored water if necessary to comply with applicable regulations.
- F3-15 Potential lateral migration of groundwater having undesirable compounds, such as high-TDS groundwater underlying Bristol and Cadiz dry lakes, is addressed in Section 5.5.4 of the Final EIR/EIS, Volume I and Section 7.2.6 of the Management Plan (Final EIR/EIS, Volume IV). Routine sampling of both observation wells and production wells in

compliance with the Management Plan will also identify potential lateral migration of undesirable compounds from other areas adjacent to the project wellfield.

- F3-16 The "maximum area of influence of project operations" refers to potential impacts to groundwater levels and water quality as a result of project operations. This area of influence, which is anticipated to change over time, will be monitored on a continual basis in dedicated observation wells as outlined in the Management Plan.
- F3-17 The analyses that will be conducted will not include CALPUFF modeling. Under the Management Plan, potential changes to air quality (airborne dust), groundwater levels beneath the dry lakes, soil moisture and evapotranspiration (ET) at the dry lake surfaces, and wind speed and direction at the dry lakes and at meteorological stations will be monitored and analyzed. Correlation of groundwater level information, soil moisture, ET, airborne particulate measurements, and wind speed will allow judgments to be made as to whether the Cadiz Project was contributing to any increase in the frequency or severity of dust mobilization from the surfaces of the dry lakes. It is not necessary to identify an air quality model to be used for the analyses. However, should modeling become appropriate at a future time, EPA would be consulted to identify the appropriate model for use.
- F3-18 Comment summarizes background information and does not state a concern or question under CEQA or NEPA. No response is required.

F4 RESPONSES TO COMMENTS FROM THE UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE MOJAVE NATIONAL PRESERVE DATED JANUARY 8, 2001

- F4-1 Comment noted. The governance structure and responsibilities of the BLM and the Technical Review Panel (TRP) are presented in Sections 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV). Regarding air quality, see Master Response "Air Quality."
- F4-2 The governance structure and responsibilities of the BLM and the Technical Review Panel (TRP) are presented in Sections 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV) and incorporate many of the suggestions in this comment. See Master Response "Governance."
- F4-3 Comment noted. The Management Plan (Final EIR/EIS, Volume IV) ensures protection of air quality of park units as presented in Sections 4, 6.4, and 7.4.
- F4-4 See responses to comments below. The Management Plan adequately protects air quality in the Mojave Desert region, and provides necessary monitoring data and assessment criteria to make proper decisions regarding project operations.
- F4-5 Air quality throughout the Mojave Desert region is treated equally in the Management Plan (Final EIR/EIS, Volume IV, Section 1).
- F4-6 All areas of the Mojave Desert region are afforded equal protection under the Management Plan. Differentiation between Class I and Class II as defined in the Clean Air Act has been eliminated from the Management Plan. Regarding the Organic Act, see Response to Comment T2-79. Also see Master Responses "Air Quality" and "Groundwater Monitoring and Management Plan."

- F4-7 Comment noted. Operation of the Cadiz Project in accordance with the Management Plan will avoid adverse impacts to the Mojave National Preserve.
- F4-8 To address the concern stated in this comment, the Management Plan requires collection of meteorological and other data for a period of five years to document existing conditions in the area. See Section 6.4 of the Management Plan (Final EIR/EIS, Volume IV), and Master Responses "Air Quality" and "Groundwater Monitoring and Management Plan."
- F4-9 The Management Plan provides for the collection of appropriate data to determine whether the project is causing changes in air quality, and requires implementation of corrective measures to avoid adverse impacts to air quality. See Sections 6.4 and 7.4 of the Management Plan, Final EIR/EIS, Volume IV, and Master Responses "Air Quality" and "Groundwater Monitoring and Management Plan."
- F4-10 See responses to comments below regarding changes that have been made to provisions of the Management Plan.
- F4-11 The portions of the Final EIR/EIS discussing the general purpose of the Management Plan have been revised to state that the Management Plan will "ensure that project operations will not result in any adverse impacts to groundwater resources or air quality."
- F4-12 The stated need for the proposed revision is not clear. The operations of the project are governed by the Management Plan for the purpose of avoiding adverse impacts to critical resources.
- F4-13 The project is clearly and adequately described throughout the Final EIR/EIS. The requested change is not necessary.
- F4-14 This comment number does not refer to a comment due to a bracket numbering error.
- F4-15 The words "withdrawal" and "extraction" are used interchangeably in the Final EIR/EIS when referencing the removal of groundwater. Using the two words does not confuse the meaning of either word.
- F4-16 This suggested revision has been made in the Final EIR/EIS, Volume IV (Management Plan).
- F4-17 The Management Plan has been clarified to state that the "adverse impacts" will be prevented.
- F4-18 The BLM is responsible for all decisions related to enforcement of the terms and conditions of any right-of-way grant(s) it issues. Revision has been made in the Management Plan as suggested in the comment to provide that provisions relating to implementation of the Management Plan will be included in the terms and conditions of the right-of-way grant(s). See Master Response "Governance."
- F4-19 A revision has been made in the Final EIR/EIS. The definitions contained in Section 16 of the Final EIR/EIS have been revised to state that "effect" is synonymous with "impacts," per CEQA and NEPA definitions. A cross-reference entry has also been added for "impact." With regard to the use of the term "adverse," this term remains in use in the Final EIR/EIS

where appropriate in order to differentiate impacts that are adverse from impacts that are "beneficial."

- F4-20 A revision has been made in the Final EIR/EIS as suggested in the comment.
- F4-21 Provisions to protect regional air quality have been developed in cooperation with NPS representatives and are included in the Management Plan. See Master Responses "Groundwater Monitoring and Management Plan" and "Air Quality." Also see the Final EIR/EIS, Volume I, Section 5.6.
- F4-22 Section 1.7 of the Final EIR/EIS, Volume I, has been revised to state that the mitigation monitoring plan covers mitigation measures "for all resources categories identified in the Final EIR/EIS."
- F4-23 See Response to Comment F4-15.
- F4-24 The National Park Service (NPS) and U. S. Geological Survey (USGS) are cooperating agencies pursuant to NEPA for purposes of preparation of the Supplement to the Draft EIR/EIS and the Final EIR/EIS, and thus have contributed to the development of the project mitigation measures. Although the Mitigation Monitoring Plan is a state-required document which will be adopted by Metropolitan's Board, it is designed to ensure the implementation of all the mitigation measures as contained in the Final EIR/EIS and which NPS has helped develop.
- F4-25 See Master Response "Formulation and Screening of Potential Projects." BLM and Metropolitan believe the alternatives analysis serves the purposes of and complies with CEQA and NEPA.
- F4-26 Regardless of whether the County of San Bernardino executes the MOU referenced in the comment, the Management Plan ensures all water use associated with the Cadiz Valley Agricultural Development will be conducted without adverse impacts to critical resources. The Management Plan will be a condition of the of right-of-way grant(s) issued by the BLM. Therefore, the MOU is not needed to finalize the EIR/EIS and need not be an attachment to the Final EIR/EIS.
- F4-27 As a regional map intended to provide an overview of the geologic setting of the Cadiz Project area, generalizations are made for legibility. More specific detail regarding the geologic setting of the proposed wellfield and spreading basin is provided in Figure 5.4-4 of the Final EIR/EIS, Volume I.
- F4-28 Quantified annual precipitation information is provided in Section 5.5.1 of the Final EIR/EIS, Volume I.
- F4-29 Surveys to quantify the average annual amount of snowpack for the referenced mountain ranges have not been performed.
- F4-30 Beginning in the pre-operational phase and extending into the initial years of project operation, three meteorological towers will be installed in the region for a period of five years to establish patterns of wind speed and direction. See Master Response "Air Quality." Also see the Management Plan, Section 5.22.
- F4-31 See Response to Comment F4-28.

- F4-32 BLM and Metropolitan disagree with the opinion that it is misleading to state that "major precipitation events" occur in the region or that "winter rainfall occurs in events lasting several hours to a day or more." Both of these statements are correct. The fact that annual precipitation levels are generally low for the region is clearly stated in the document. Figures 5.5-3 and 5.5-4 in the Final EIR/EIS, Volume I, show historic rain amounts for the region. Nonetheless, both summer and winter storms can be severe, causing flash flooding.
- F4-33 The Management Plan provides the ability to gather data regarding the carbonate bedrock aquifer from observation wells. This data will aid in characterizing the bedrock aquifer system. Production wells will not be drilled into the bedrock aquifer system. See the Final EIR/EIS, Volume I, Section 5.5.1.
- F4-34 The comment number does not refer to a comment due to a numbering error.
- F4-35 Since technical comments of the USGS and others containing this suggestion were attached to the comment letters of the NPS and County of San Bernardino and are indexed as such, BLM and Metropolitan believe it is appropriate to state that this suggestion came from the comment letters of NPS and County of San Bernardino.
- F4-36 See Master Response "Water Quality" and Response to Comment F3-11. Revisions to the Final EIR/EIS, Volume I, have been made where appropriate to indicate the presence of hexavalent chromium. 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.
- F4-37 Comment noted.
- F4-38 The Figure 5.5-1 of the Final EIR/EIS, Volume I, has been modified to reflect the changes suggested in the comment.
- F4-39 The Joshua Tree National Park is designated as a Class I area under the Clean Air Act; however, the statement of this fact has been removed from the Final EIR/EIS.
- F4-40 The Technical Review Team (TRT) and the Basin Management Group (BMG) have been removed from the Groundwater Monitoring and Management Plan. Metropolitan will implement the Management Plan pursuant to its obligations under CEQA. BLM will retain authority to enforce the Management Plan as described in Section 10 (Final EIR/EIS, Volume IV). BLM will receive technical support and recommendations from other federal agencies and the County of San Bernardino through a Technical Review Panel (TRP), whose functions are described in Section 9. Pursuant to NEPA, BLM cannot approve the Final EIR/EIS until thirty (30) days after its publication. Metropolitan's Board of Directors will consider certification of the Final EIR/EIS in a public meeting at which public comments may be made in accordance with California law. Therefore, there will be an adequate opportunity for public review and comment on the TRP and governance structure.
- F4-41 The BLM is responsible for all final decisions related to the enforcement of the terms and conditions of any right-of-way grant(s) it issues and the terms and conditions will include provisions relating to implementation of the Management Plan. BLM will retain authority to enforce any terms and conditions of the right-of-way grant(s) and thus retains authority over the Management Plan. The governance structure and the responsibilities of the BLM and the TRP are presented in Sections 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV).

F4-42 The definition of "feature," including natural and man-made, is provided in the Introduction to Section 1 of the Management Plan (Final EIR/EIS, Volume IV). The definition of "feature" contained in the Glossary in Section 16 of the Final EIR/EIS, Volume I, has been expanded to include water features as used in the Management Plan and elsewhere in the Final EIR/EIS.

During the pre-operational phase, field reconnaissance will be conducted of 28 known springs in the Fenner and Orange Blossom Wash watersheds. Each of these springs will be classified based on discharge rate in accordance with the following criteria as specified by Meinzer (1942). See Management Plan, Final EIR/EIS, Volume IV, Table 3.

Data to be collected and recorded at each spring will include:

- GPS coordinates
- Spring type
- Geology of Immediate Surroundings
- Vegetation Type and Cover
- Flow Rate and/or Water Level in Associated Shallow Piezometer
- Temperature, Electrical Conductivity, and pH

Approximately eight springs will be selected for on-going monitoring during the term of the Cadiz Project. BLM and Metropolitan have consulted with National Park Service staff regarding the appropriate assessment of springs.

Spring survey and monitoring tasks will be coordinated with the National Park Service. The Revised Draft Environmental Impact Statement and General Management Plan for the Mojave National Preserve (*produced as a component to the Northern & Eastern Mojave Planning Effort*) (page 116) states:

"The National Park Service in its general planning process for each unit of the national park system and the Bureau of Land Management in its planning process for each wilderness area, have jointly agreed to incorporate their respective policies, guidelines, and administrative procedures and apply the following principles to discharge their responsibilities under the section 706 of the California Desert Protection Act to manage and protect federal reserved water rights (Desert Managers Group (1995):

• Inventory all water sources within the boundaries of the wilderness area/park unit."

The inventory and monitoring of springs located in the Mojave National Preserve that will be undertaken in connection with the Cadiz Project Management Plan may be useful to National Park Service efforts to "assess 'natural flows' from springs."

- F4-43 See Response to Comment F4-41. See Master Response "Governance."
- F4-44 See Response to Comment F4-41. See Master Response "Governance."
- F4-45 See Response to Comment F4-41. See Master Response "Governance."
- F4-46 The mandatory monitoring provisions of the Management Plan are stated in the Management Plan, Section 5 (Final EIR/EIS, Volume IV). The Management Plan includes the provision for 24 separate types of monitoring features. Table 1 of the Management Plan

identifies these monitoring features and distinguishes which are mandatory and which will be implemented only if warranted. Metropolitan will operate the Cadiz Project in compliance with the provisions of the Management Plan and the BLM will retain authority to enforce the terms and conditions of any right-of-way grant(s) it issues.

- F4-47 Heading numbering and cross-referencing have been revised in the Management Plan.
- F4-48 The suggested changes have been made to Table 1 of the Management Plan (Final EIR/EIS, Volume IV).
- F4-49 Figure 3-1 has been revised in accordance with this comment.
- F4-50 See Response to Comment F4-26.
- F4-51 Section 1.4 of the Management Plan has been revised to read: ". . . protection of critical resources in or near the Fenner, Bristol, and Cadiz Valleys."
- F4-52 Comment noted.
- F4-53 See Master Response "Air Quality." For a discussion of air basin designations under the Federal Clean Air Act, see Response to Comment G33-13. Regarding the Organic Act, see Response to Comment T2-79.
- F4-54 See Response to Comment F4-41. The information in the Final EIR/EIS, including the public and agency comments received, will be used by the BLM in considering whether to approve the amendment and rights-of-way grant(s), and what terms and conditions to impose.
- F4-55 The comment correctly notes that the water resources modeling required by the Management Plan will be used to predict long term effects from project operations. This role is described in Section 3 of the Management Plan. Final EIR/EIS, Volume IV.
- F4-56 See Response to Comment F4-41.
- F4-57 Section 3.2.2 of the Management Plan (Final EIR/EIS, Volume IV) states that the water resources models will be calibrated throughout the project based on the data collected. Such calibration will enable more accurate predictions of long term effects based on varying natural recharge conditions.
- F4-58 See Response to Comment F4-41.
- F4-59 As noted in Response to Comment F4-57, there is a natural variation in recharge conditions. Data collection to refine water resource models will allow the calibration of models to more accurately predict long term effects of project operations. The potential air quality impacts related to groundwater recharge are based on the assumption of possible lowering of water levels below Bristol and Cadiz dry lakes. The Management Plan requires monitoring of wind mobilized particulate matter from these lakebeds in addition to the monitoring and modeling of groundwater levels. This combination of monitoring will be used to identify changes in groundwater levels and changes in airborne particulate matter to assure that project operations do not cause air quality impacts. See Section 4, 6.4, and 7.4 of the

Management Plan, Final EIR/EIS, Volume IV, and Master Responses "Air Quality" and "Groundwater Monitoring and Management Plan."

- F4-60 BLM and Metropolitan have consulted with National Park Service staff regarding the appropriate location for nephelometers. The locations discussed in Section 4.1 of the Management Plan, Final EIR/EIS, Volume IV, were agreed upon by NPS.
- F4-61 The language referenced in the comment has been revised to reflect that air quality in all areas of the Mojave Desert region will be afforded equal protection under the Management Plan. Section 4.2 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-62 See Response to Comment F4-61.
- F4-63 The Management Plan has been revised to provide for regional monitoring of air quality. An additional meteorological tower has been added to provide additional data. See Section 5.22, Final EIR/EIS, Volume IV.
- F4-64 The Management Plan has been revised to make the correction noted.
- F4-65 The Management Plan has been corrected to delete the reference noted in the comment. All observation wells will be constructed to allow for geophysical logging. Such logging will be performed on the six deepest wells at the margins of Bristol and Cadiz Dry Lakes. See Section 5.18 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-66 Footnote b in Table 2 of the Management Plan, Final EIR/EIS, Volume IV has been revised to reflect the comment. Section 5.5 of the Final EIR/EIS Volume I states that additional isotopic sampling and analysis will be performed during the pre-operational phase to refine estimates of the age of groundwater. Table 1 of the Management Plan, Final EIR/EIS, Volume IV identifies that water quality sampling would be conducted on an annual basis in the S-Series observation wells throughout the term of the project and also indicates that He³ and stable isotopes of oxygen and hydrogen will be sampled semi-annually during the pre-operational phase. Appendix D contains protocols related to drinking water, and has not been modified to reflect the changes suggested in this comment. Table 3-2 has been revised to reflect the correct state well number as suggested.
- F4-67 Figure 4 of the Management Plan, Final EIR/EIS, Volume IV has been revised to reflect the comment.
- F4-68 See Response to Comment F4-67.
- F4-69 The location of springs identified in Features 2 and 3 were developed in consultation with NPS staff during preparation of the Management Plan. Refinements to the Management Plan will be implemented in accordance with the processes presented in Sections 9 and 10 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-70 See Response to Comment F4-41.
- F4-71 Because water quality in the Colorado River Aqueduct does not appreciably vary between Lake Havasu and Iron Mountain Pumping Plant, utilizing data from sampling at Lake Havasu is appropriate, as identified in the Management Plan, Final EIR/EIS, Volume IV.

- F4-72 The land surface elevation in the vicinity of the Cadiz Project wellfield and spreading basins is currently stable. Four annual monitoring surveys conducted under the Cadiz Valley Agricultural Development indicate that no land subsidence has occurred in the Cadiz agricultural wellfield area.
- F4-73 As set forth in Section 10 of the Management Plan, Final EIR/EIS, Volume IV, the BLM Authorized Officer will review the details of the initial set of monitoring features submitted by Metropolitan. The BLM Authorized Officer may consult with members of the TRP to obtain recommendations regarding the final design of the monitoring facilities.
- F4-74 This paragraph has been revised and is included in Section 5.16.2 of the Management Plan, Final EIR/EIS, Volume IV to describe regional meteorological monitoring. Reference to the Class I designation has been removed from the Management Plan and replaced with a discussion of regional air quality. Section 5.16.2 deleted the discussion related to shortening the monitoring period for regional wind patterns and states that data collection may be extended if warranted.
- F4-75 This paragraph has been revised and is included in Section 5.22 of the Management Plan, Final EIR/EIS, Volume IV to describe regional meteorological towers. See Response to Comment F4-74 regarding the monitoring period for meteorological data.
- F4-76 See Response to Comment F4-41.
- F4-77 See Response to Comment F4-69. Metropolitan is responsible for conducting the field reconnaissance of the 28 known springs.
- F4-78 The suggested revision has been incorporated and is contained in Section 6.1.1 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-79 The suggested reference to the table has been added in Section 6 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-80 The suggested change has been incorporated and is contained in Section 6.1.3 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-81 See Response to Comment F4-41.
- F4-82 The use of digital cameras in conjunction with open-air nephelometers has been incorporated as suggested, see Section 6.4 and Figure 9 of the Management Plan, Final EIR/EIS, Volume IV. See Response to Comment F4-74 regarding the monitoring period for meteorological data.
- F4-83 The use of digital cameras has been included and is contained in Section 6.4.3 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-84 See Response to Comment F4-74 regarding the monitoring period for meteorological data.
- F4-85 The suggested change has been incorporated and is contained in Section 6.6 of the Management Plan, Final EIR/EIS, Volume IV.

- F4-86 Comment noted. The BLM Authorized Officer could require preparation of a baseline conditions report as noted in Section 6.8 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-87 Regional wind data is not exclusively used to determine whether wind-mobilized particulate matter could be transported throughout the Mojave Desert region. See Sections 4, 5.16, 6.4 and 7.4 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-88 Reference to the Class I designation has been removed from the Management Plan and replaced with a discussion of regional air quality.
- F4-89 The sixth bullet of Section 6.8.2 of the Management Plan, Final EIR/EIS, Volume IV has been revised to provide a more comprehensive description of information and analysis associated with regional air quality. The seventh bullet of Section 6.8.2 has been revised to include the possibility that collection of meteorological data may be extended beyond the first five years of the program. Reference to the Class I designation has been removed from the Management Plan and replaced with a discussion of regional air quality.
- F4-90 The potential impacts related to the long-term drawdown of groundwater are evaluated in Section 5.5.4 of the Final EIR/EIS Volume I.
- F4-91 The fourth column (Close Watch Measures) of Table 4 has been deleted in the Management Plan, Final EIR/EIS, Volume IV.
- F4-92 The fourth column of the referenced table has been deleted.
- F4-93 The referenced action criteria has been revised to state that project operations would meet the requirements of the Water Quality Control Plan adopted by the California Regional Water Quality Control Board, Colorado River Basin Region. See Section 7.2.1 and Table 4 of the Management Plan, Final EIR/EIS, Volume IV.
- F4-94 The Management Plan, Final EIR/EIS, Volume IV does not incorporate the use of transmissometers. The reference to transmissometers has been deleted from Table 4 of the Management Plan.
- F4-95 See Response to Comment F4-69 regarding selection of springs.
- F4-96 See Response to Comment F4-40.
- F4-97 See Response to Comment F4-41. Figure 10 of the Management Plan, Final EIR/EIS, Volume IV has been revised to reflect Sections 9 and 10.
- F4-98 See Response to Comment F4-90.
- F4-99 See Response to Comment R12-2 and Master Response "Water Quality" regarding compliance with the Basin Plan and SWRCB Resolution 68-16.
- F4-100 See Response to Comment F4-93 regarding action criteria. Potential impacts of storing Colorado River water in the basin are discussed in Section 5.5.4 of the Final EIR/EIS Volume I, and do not rely on conclusory statements.

- F4-101 The comment is incorrect. The referenced significance criteria used to evaluate potential impacts in the Final EIR/EIS are taken directly from the California Environmental Quality Act Guidelines.
- F4-102 The Management Plan, Final EIR/EIS, Volume IV identifies Metropolitan and BLM as the parties to be contacted regarding issues related to the Cadiz Project.
- F4-103 The referenced sentence is not inconsistent with the stated purpose of preventing adverse impacts.
- F4-104 The comment is correct, such change will be measured against a baseline level.
- F4-105 Comment noted. Corrective measures will be implemented based on measured data.
- F4-106 Comment noted. The referenced sentence is correct and consistent with the description of monitoring features 14 and 15.
- F4-107 Comment noted. This suggestion is not incorporated in the Management Plan, Final EIR/EIS, Volume IV.
- F4-108 Comment noted. See Section 7.4.1 Decision-Making Process of the Management Plan, Final EIR/EIS, Volume IV which defines an adverse impact to air quality and specifies location.
- F4-109 See Response to Comment F4-41. An appropriate monitoring system and decision-making process has been devised in cooperation with the NPS, USGS and the County of San Bernardino.
- F4-110 The discussion of potential air quality impacts has been revised. See Section 7.4 of the Management Plan, Final EIR/EIS, Volume IV and Master Response "Air Quality."
- F4-111 See Response to Comment F4-6 regarding the Clean Air Act and T2-79 regarding the Organic Act.
- F4-112 See Response to Comment F4-40 and F4-41.
- F4-113 Adequate protection of air quality in the Mojave Desert region has been provided. See Section 7.4 of the Management Plan, Final EIR/EIS, Volume IV and Master Response "Air Quality."
- F4-114 See Responses to Comments F4-6 and F4-41. See Section 7.4.1 of the Management Plan, Final EIR/EIS, Volume IV regarding a "trigger" statement. Also see Master Response "Air Quality."
- F4-115 Section 8 of the Management Plan, Final EIR/EIS, Volume IV states that the referenced 100 foot average drawdown is for the area underlying the project wellfield (see footnote 7). However, no amount of drawdown will be allowed that does not comply with other provisions contained in the Management Plan. Section 3.2.2 of the Management Plan states that the water resources models will be calibrated throughout the project based on the data collected. Such calibration will progressively improve the accuracy of predictions of long term effects based on varying natural recharge conditions. The long-term effects of project

operations will be evaluated in the Closure Plan, and ensure that by the end of the project, groundwater level drawdown in the area underlying the project wellfield will not exceed an average of 100 feet, and that critical resources will not be adversely impacted in the future.

- F4-116 See Response to Comment F4-40.
- F4-117 See Response to Comment F4-40.
- F4-118 Many of the NPS recommendations have been incorporated in the Management Plan, Final EIR/EIS, Volume IV. See Responses to Comments F4-40 and F4-41 regarding the responsibilities of the TRP and BLM. Monitoring of critical resources within the Mojave National Preserve is proposed. With implementation of the Management Plan, no adverse impacts to critical resources in the Preserve are anticipated.
- F4-119 See Response to Comment F4-41 regarding BLM's decision-making authority.
- F4-120 See Responses to Comments F4-40 and F4-41.
- F4-121 Reference to "significant adverse impacts" has been removed from the Management Plan, Final EIR/EIS, Volume IV as suggested.
- F4-122 See Response to Comment F4-40 regarding the BMG.
- F4-123 See Responses to Comments F4-40 and F4-41 regarding the TRT, BMG and authority of BLM.
- F4-124 See Response to Comment F4-101 regarding the definition of CEQA thresholds of significance. Reference to "significant adverse impacts" has been removed from the Management Plan, Final EIR/EIS, Volume IV.
- F4-125 CEQA generally does not set the thresholds of significance for particular environmental categories. Rather, such thresholds are to be determined by the lead agency, in this case Metropolitan. Consistent with this obligation, Metropolitan has included in the EIR/EIS qualitative or quantitative standards which are appropriate for use in judging whether this project will cause significant adverse impacts on the physical environment. Metropolitan used as guidance in setting the thresholds of significance the factors suggested by CEQA Guidelines Appendix G (which is a sample environmental checklist to be used when making the initial determination of whether an EIR should be prepared). Contrary to the statement made in the comment, the thresholds of significance provided in Section 4.0 of the Supplement do not formulate a circular argument. The second bullet-pointed threshold addresses potential impacts to neighboring land uses from drawdown of the aquifer, while the second to last threshold specifically addresses potential impacts to the Mojave National Preserve. Having two different thresholds of significance for these different resources is appropriate because merely lowering the water table within defined limitations will not constitute a significant impact of the project.
- F4-126 See Response to Comment R12-2 and Master Response "Water Quality" regarding compliance with the Basin Plan and SWRCB Resolution 68-16.
- F4-127 Static groundwater levels will be monitored regularly throughout all phases of the project as part of the Management Plan (Final EIR/EIS, Volume IV). To prevent adverse impacts

related to changes in long-term groundwater levels due to Cadiz Project operations, corrective measures will be implemented as required by the Management Plan. The commentor is correct that the Closure Plan has not yet been written. It will not be possible to prepare a Closure Plan before the program has been operated. However, the Closure Plan will require that pre-operational average static groundwater levels not be depressed by more than 100 feet in the area underlying the project wellfield at the conclusion of the project operational phase. As a result of such provisions, the potential for adverse impacts due to long-term drawdown of groundwater will be less than significant. While knowledge of a "reliable rate of recharge" would be useful prior to formulation of a Closure Plan, it is not "essential." The Management Plan was developed by the BLM and Metropolitan, in cooperation with NPS, to protect critical resources during project operations and after closure regardless of whether the experts can someday agree on the rate of recharge in the project area. See also Response to Comment F4-115.

- F4-128 The analysis of the potential for long-term drawdown of groundwater, with the correct application of significance thresholds required under CEQA, is presented in Section 5.5.4 of the Final EIR/EIS Volume I. The potential adverse impacts due to the potential for long-term drawdown of groundwater are determined to be less than significant. Section 10 of the Final EIR/EIS evaluates the irreversible and irretrievable commitment of resources and properly concludes that water resources impacts are not irreversible due to implementation of the Management Plan.
- F4-129 Protection of critical resources by the Closure Plan is not speculative. See Response to Comment F4-127. There was no MOU discussed in Section 6.2.7 of the Supplement. Implementation of the Closure Plan is contingent on a verifiable trigger of a 10 foot drop in pre-operational static groundwater levels underlying the project wellfield (see Section 8 of the Management Plan, Final EIR/EIS, Volume IV).
- F4-130 Because there is the potential for adverse air quality impacts should the project cause an increase in dust mobilization from the dry lakebeds, the Management Plan contains specific monitoring features and corrective measures to ensure there will be no adverse impacts to air quality in the Mojave Desert region. See Final EIR/EIS, Volume IV, Sections 6.4 and 7.4.
- F4-131 See Response to Comment F4-124 regarding the definition of significant adverse impacts. The conclusions of the impact analysis contained in the Final EIR/EIS are correct and consider the incorporation of the Management Plan. Regarding item: 1) see Responses to Comments F4-127 and F4-129, 2) see Response to Comment R12-2 and Master Response "Water Quality", 3) see Master Response "Air Quality", 4) see Response to Comment F4-127, 5) a Memorandum Of Understanding is not required to subject Cadiz agricultural irrigation to the provisions of the Management Plan, and 6) the Final EIR/EIS Volume I utilizes proper CEQA thresholds of significance to evaluate potential impacts to environmental resources.
- F4-132 Comment noted. A response is not required.

S7 RESPONSES TO COMMENTS FROM STATE OF CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH STATE CLEARINGHOUSE DATED OCTOBER 25, 2000.

S7-1 Comment noted.

S8 RESPONSES TO COMMENTS FROM STATE OF CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH STATE CLEARINGHOUSE DATED DECEMBER 5, 2000.

S8-1 Comment noted.

S9 RESPONSES TO COMMENTS FROM STATE OF CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH STATE CLEARINGHOUSE DATED DECEMBER 7, 2000.

S9-1 Comment noted. The referenced comments in the February 22, 2000 letter were submitted in response to the Draft EIR/EIS and have been responded to in Responses to Comments S3-1 through S3-3.

S10 RESPONSES TO COMMENTS FROM THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD DATED DECEMBER 4, 2000.

S10-1 See Response to Comment S9-1.

S11 RESPONSES TO COMMENTS FROM THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD DATED DECEMBER 5, 2000.

S11-1 See Response to Comment S9-1.

S12 RESPONSES TO COMMENTS FROM THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD DATED JANUARY 8, 2001.

- S12-1 Comment noted.
- S12-2 Comments noted. With regard to total chromium and hexavalent chromium in the indigenous groundwater underlying the proposed project area please see responses to comments F1-13 and F3-11. The presence of arsenic in the indigenous groundwater is addressed in Section 5.5 of the Final EIR/EIS Volume I. The distribution of these groundwater samples within the project area and the similarity in values to other desert groundwater basins suggest that the concentrations of chromium and arsenic in the groundwater are a natural phenomenon, unrelated to industrial sources or other man-made causes.

S13 RESPONSES TO COMMENTS FROM STATE OF CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH STATE CLEARINGHOUSE DATED JANUARY 10, 2000.

- S13-1 Comment noted. The comment period was extended until January 8, 2001.
- S13-2 Comment noted.
- S13-3 Comment noted.

R5 RESPONSES TO COMMENTS FROM THE CITY OF SAN DIEGO DATED OCTOBER 23, 2000.

R5-1 A copy of the Draft EIR/EIS and the Supplement to the Draft EIR/EIS was provided to this commentor as requested.

R6 RESPONSES TO COMMENTS FROM THE RIVERSIDE COUNTY SHERIFF DATED NOVEMBER 1, 2000.

R6-1 Comment noted.

R7 RESPONSES TO COMMENTS FROM THE U.S. BUREAU OF LAND MANAGEMENT DATED NOVEMBER 16, 2000.

R7-1 Please see Response to Comment F3-11 and Master Response "Water Quality" regarding total hexavalent chromium in the indigenous groundwater. Metropolitan does not have the ability to regulate or control growth. Its mission and obligation is to provide water to its service area. The remaining comments do not raise an issue under CEQA or NEPA and thus no response is required.

R8 RESPONSES TO COMENTS FROM THE CITY OF TWENTYNINE PALMS DATED NOVEMBER 23, 1987.

R8-1 Comment noted.

R9 RESPONSES TO COMMENTS FROM THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS DATED NOVEMBER 29, 2000.

- R9-1 Comment noted. See Response to Comments R9-2 through R9-9.
- R9-2 Comment noted. No response is necessary.
- R9-3 Comment noted. No response is necessary.
- R9-4 Comment noted. No response is necessary.
- R9-5 Comment noted. No response is necessary.
- R9-6 Comment noted. No response is necessary.
- R9-7 As discussed in Section 2.4.2 of the Final EIR/EIS Volume I, the need for the Cadiz Project has been analyzed in accordance with the adopted population projections of SCAG's regional growth plan (SCAG's Regional Comprehensive Plan and Guide) as well as the population projections of SANDAG's regional growth plan. Section 6.3 of the Final EIR/EIS Volume I provides a discussion of the relationship of the Project to regional growth management plans. The consistency with local general plans and land use planning documents is discussed in Section 5.2.
- R9-8 Comment noted. As noted in Section 1.7 of the Final EIR/EIS Volume I, a Mitigation Monitoring Plan has been completed in conjunction with the project.

R9-9 Comment summarizes background information and does not state a concern or question under CEQA or NEPA. A response is not required.

R10 RESPONSES TO COMMENTS FROM THE BALDY MESA WATER DISTRICT DATED JANUARY 1, 2001.

R10-1 Comment noted.

R11 RESPONSES TO COMMENTS FROM THE CUCAMONGA COUNTY WATER DISTRICT DATED JANUARY 4, 2001.

- R11-1 Comment noted.
- R11-2 See Master Response "Water Quality." Regarding the issue of costs, the Cadiz Project is not anticipated to appreciably affect Metropolitan's water rates.

R12 RESPONSES TO COMMENTS FROM THE COUNTY OF SAN BERNARDINO ECONOMIC DEVELOPMENT AND PUBLIC SERVICES GROUP DATED JANUARY 5, 2001.

- R12-1 Comment noted. Responses to the County's comments on the Draft EIR/EIS are set forth in the Final EIR/EIS, Volume II. Responses to the County's comments on the Supplement to the Draft EIR/EIS are set forth below.
- R12-2 The potential for impacts to indigenous groundwater quality due to the introduction of water from the Colorado River are addressed in Section 5.5 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. In addition to this design feature, during periods of prolonged storage of Colorado River water in the aquifer system the project wellfield will be operated to manage the mounding of Colorado River water to prevent it from migrating outside the zone of influence of the extraction wellfield. This will consist of pumping the stored water from selected wells at the edges of the wellfield into the spreading basins for percolation back into aquifer storage.

Any resulting increase in TDS concentrations within the project area groundwater will be small and will not affect compliance with applicable water quality standards or other beneficial groundwater uses (municipal, industrial and agricultural) in or adjacent to the project area. The State Policy with Respect to Maintaining High Quality of Waters in California ("State Anti-Degradation Policy") is discussed in Section 7.2.1 of Volume IV of the Final EIR/EIS. For additional information see Master Response, "Water Quality."

The Technical review Team (TRT) and the Basin Management Group (BMG) have been removed from the Groundwater Monitoring and Management Plan. Metropolitan will

implement the Management Plan pursuant to its obligations under CEQA. BLM will retain its authority to enforce the Management Plan as described in Section 10 of the Management Plan, Final EIR/EIS Volume IV. BLM will receive technical support and recommendations from other federal agencies through a Technical Review Panel, whose functions are described in Section 9.

- R12-3 See Response to Comment F3-11.
- R12-4 Comment noted. See Response to Comments R12-5 to R12-32, below.
- R12-5 The statement referenced in the comment has been deleted from the Final EIR/EIS, Volume I. The Management Plan (Final EIR/EIS Volume IV) ensures that future water use for the Cadiz Valley Agricultural Development will be conducted without adverse impacts to critical resources. This does not affect the obligations of Cadiz Inc. to comply with the Cadiz Valley Agricultural Development Groundwater Monitoring Plan developed with the County.
- R12-6 The Management Plan referenced in the comment has been incorporated as part of the project. Metropolitan will implement the Management Plan pursuant to its obligations under CEQA. BLM will retain its authority to enforce the Management Plan as described in Section 10 of the Management Plan, Final EIR/EIS, Volume IV.
- R12-7 As discussed in Response to Comment R12-2, the TRT and BMG have been removed from the Management Plan. Instead, BLM will receive technical support and recommendations from other public agencies through a Technical Review Panel (TRP). See Master Response "Governance" and Section 9 of the Management Plan (Final EIR/EIS, Volume IV). As discussed in Section 9.3 of the Management Plan, the models including model input and output data will regularly be made available to the TRP. In addition, the BLM, at its discretion, may make the water resource models and data available at other times and to others as it deems appropriate to facilitate the functions of the TRP.
- R12-8 Sections 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV) define the collaborative function of the TRP. See also Master Response "Governance."
- R12-9 It is acknowledged that the County and other parties may seek enforcement of the Management Plan through CEQA and NEPA. Revisions have been made throughout the Final EIR/EIS to clarify that BLM's control over the enforcement of the Management Plan is through the terms and conditions of the right-of-way grant(s) it issues.
- R12-10 Although major expansion of agricultural operations in the project area is not anticipated, all use of groundwater for irrigation, including any increased use, would be conducted in accordance with the Management Plan, Final EIR/EIS, Volume IV. Section 8 of the Management Plan identifies provisions of the Closure Plan that ensure that any decline in static groundwater elevations (from pre-operational levels) would not exceed an average of 100 feet at the end of project operations or lead to projections of exceeding any action level criteria during the post-operational phase of the project.
- R12-11 The Management Plan, Final EIR/EIS, Volume IV, stresses the importance of acquiring project area site-specific data. With regard to regional precipitation data this is also acknowledged as extremely important, since numerous factors result in varied precipitation patterns in different watersheds throughout the Mojave Desert region. Such factors include

rain shadow effects, orographic effects, monsoonal patterns of summer precipitation, and particular storm tracks for winter precipitation. The Management Plan will incorporate regional data to site the precipitation station in the Fenner watershed.

- R12-12 Comment noted. The groundwater flow model would be calibrated to a reasonable range of measured and assumed input parameters.
- R12-13 As discussed in Response to Comment R12-2, the TRT has been removed from the Management Plan. Instead, BLM will receive technical support and recommendations through a Technical Review Panel (TRP). See Master Response "Governance" and Section 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV). Sections 9 and 10 of the Management Plan provide that the TRP will meet as requested by BLM, and that members of the TRP may also submit requests to BLM for meetings of the TRP.
- R12-14 The project will comply with all applicable water quality standards, including those imposed by the California Regional Water Quality Control Board, Colorado River Basin Region. See Master Response "Water Quality."
- R12-15 The project will be operated in accordance with the Management Plan and will meet all applicable water quality standards. Section 7.2.1 of the Management Plan, Final EIR/EIS Volume IV, notes that future updates of the Regional Board's Water Quality Control Plan may alter the requirements that the project operations must meet. It is the intent of the Management Plan to comply with all applicable water quality regulations during all the operational phases of the project, however, it is not possible at this time to know what, if any, changes there might be to such regulations. In any event, based on existing regulations and conditions, any resulting increase in TDS concentrations within the project area groundwater will be small, as discussed in Section 5.5.4 of the Final EIR/EIS and in Master Response "Water Quality." See also Response to Comment R12-16.
- R12-16 Should a situation arise that implicates the State Board "Anti-Degradation" policy noted in the comment (State Board Resolution No. 68-16), Metropolitan as the responsible party under the Management Plan will make any necessary demonstration to the State Board according to the procedures of the State Board.
- R12-17 Comment noted.
- R12-18 The comment correctly notes that, as discussed in Section 8.1 of the Management Plan (Final EIR/EIS Volume IV), a Closure Plan will be prepared when static groundwater levels have declined 10 feet from pre-operational levels, but not later than 25 years from commencement of project operations. Contrary to the comment, there are no provisions identified for modifying the parameters that trigger preparation of the Closure Plan.
- R12-19 As discussed in Response to Comment R12-2, the TRT and BMG have been removed from the Management Plan. See Master Response "Governance" and Section 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV).
- R12-20 See Response to Comment R12-19, above.
- R12-21 See Response to Comment R12-13.
- R12-22 See Response to Comment R12-7.

- R12-23 As discussed in Response to Comment R12-2, the TRT and BMG have been removed from the Management Plan. See Master Response "Governance" and Section 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV).
- R12-24 As discussed in Response to Comment R12-2, the BMG has been removed from the Management Plan. See Master Response "Governance" and Section 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV).
- R12-25 See Response to Comment R12-9.
- R12-26 See Response to Comment R12-13.
- R12-27 See Response to Comment R12-13.
- R12-28 See Response to Comment R12-7.
- R12-29 As discussed in Response to Comment R12-2, the BMG has been removed from the Management Plan. See Master Response "Governance" and Section 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV).
- R12-30 Because the BMG has been removed from the Management Plan as discussed in Response to Comment R12-2, there will be no BMG operating agreement.
- R12-31 Comment noted. No major expansion of agricultural operations in the project area is anticipated. See Response to Comment R12-10. BLM and Metropolitan recognize that changes in Cadiz Inc. agricultural operations will remain subject to the Cadiz Valley Agricultural Development Groundwater Management Plan.
- R12-32 Comment noted.
- R13-1 Comment noted.
- R13-2 Comment noted.
- R13-3 Comment noted.

B7 RESPONSES TO COMMENTS FROM THE CLAYPOOL & COMPANY DATED NOVEMBER 29, 2000.

- B7-1 Comment noted. No response is required
- B8 RESPONSES TO COMMENTS FROM THE GAS COMPANY DATED OCTOBER 26, 2000.
- B8-1 Comment noted. The project is not planned to require natural gas.

B9 RESPONSES TO COMMENTS FROM GIS WATER DATED JANUARY 3, 2001.

- B9-1 Comment noted. No response is required.
- B9-2 Comment noted. No response is required.

- B9-3 Comment noted. No response is required.
- B9-4 Comment noted. No response is required.
- B9-5 Tetra Technologies, Inc. will remain on the mailing list for new technical information regarding the Cadiz Project.
- B9-6 Public comments on the Draft EIR/EIS and the Supplement are included in this Final EIR/EIS which is available for public review. In addition, copies of all project reports are available at the offices of the Metropolitan Water District in Los Angeles and the Bureau of Land Management in Riverside and Needles.
- B9-7 Comment noted. No response is required.

B10 RESPONSES TO COMMENTS FROM PALECEK & SKAJA ATTORNEYS DATED JANUARY 2, 2001.

- B10-1 Comment noted. See Response to Comments B10-2 through B10-10, below.
- B10-2 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 at this time. The storage of Colorado River water and the extraction of indigenous groundwater that could be transferred will be conditioned by the requirements of the Management Plan.

Potential adverse impacts to critical resources due to the transfer of indigenous groundwater will be avoided by governing (limiting) the amounts of transfer (if any) to such amounts that comply with the requirements of the Management Plan. Because there is no set or minimum amount of indigenous groundwater to be transferred under the Cadiz Project, 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.

The Management Plan will establish a comprehensive network of monitoring and data collection facilities combined with procedures for comprehensive scientific review of all actions and decisions. The Management Plan is designed to ensure there would be no significant adverse impacts is by providing "early warning" of potential adverse impacts to critical resources that could result from Cadiz Project operations. The Management Plan specifies action criteria (trigger levels) and mandates specified responses if an action criterion is reached. These action criteria have been set at conservative levels to provide an early warning of potential future impacts. With such early warning, adverse impacts will be prevented by implementation of corrective measures specified in the Management Plan. See Master Response "Groundwater Monitoring and Management Plan" and the Management Plan (Final EIR/EIS Volume IV).

The BLM is responsible for all final decisions related to the enforcement of the Management Plan through enforcement of the terms and conditions of any right-of-way grant(s) it issues in connection with the Cadiz Project. A BLM Authorized Officer will be designated to enforce the terms and conditions of any right-of-way grant(s) the BLM issues for the Cadiz Project in accordance with the statutory and regulatory provisions governing the right-of-way grant.

The BLM Authorized Officer will consult with technical specialists from other public agencies in a TRP. The TRP will consist of experts in various fields from the National Park Service, the U.S. Geological Survey, and the County of San Bernardino. The BLM Authorized Officer may also consult with any other public agency deemed to have relevant expertise (e.g., Environmental Protection Agency for air quality issues), the California State Department of Water Resources and/or the Regional Water Quality Control Board, as necessary. The BLM Authorized Officer may invite Metropolitan and Cadiz Inc. to participate in meetings of the TRP to present, explain or clarify the data and analyses collected in accordance with the Management Plan, however, neither Metropolitan or Cadiz will serve as members of the TRP or would otherwise serve in any advisory role.

Management Plan governance also includes provisions for public involvement and comment. Management Plan reports (described in Section 6 of the Management Plan, Final EIR/EIS, Volume IV) will be available to any interested party. This includes but is not limited to annual and five-year monitoring reports. Project information will be made available through an electronic network (e.g. web page) or other appropriate means to enable regular updates on Cadiz Project operation and management activities. In addition, the BLM, at its discretion, may conduct public meetings.

B10-3 The Cadiz Project is a conjunctive use storage and transfer project that will use raw water from the Colorado River and indigenous groundwater from the Cadiz area. Metropolitan will have a prior and 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, Metropolitan will exercise an appropriative right under California groundwater law, according to the provisions of the Management Plan (Final EIR/EIS Volume IV), subject to reasonable and beneficial overlying uses.

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 as a part of the "aquifer system" which is a critical resource protected by the provisions of the Management Plan. With implementation of the Management Plan, adverse impacts to critical resources will be avoided. To ensure that there will be no significant adverse impacts to wells owned by neighboring landowners, the Management Plan (Final EIR/EIS Volume IV) includes specific provisions as described in Section 7.2. If it were determined the Cadiz Project was impacting the wells of neighboring landowners, Section 7.2 of the Management Plan identifies several corrective measures that will be implemented to mitigate the impacts, including modification of project operations until adverse impacts were no longer present at the affected wells.

B10-4 See Response to Comment B10-3. With implementation of the Cadiz Project, existing and future agricultural irrigation water uses would be subject to all of the provisions and requirements of the Management Plan.

A specific discussion of the cumulative impacts of the Cadiz agricultural operations is contained in Section 7 of the Final EIR/EIS Volume I. All use of indigenous groundwater for current and potential future agricultural operations would be subject to the Management Plan. Therefore, the mitigation necessary to avoid significant impacts to water resources is provided and there will be no significant adverse cumulative impacts to critical resources from the project when combined with current and potential future agricultural operations. See Response to Comment R12-10.

- B10-5 See Response to Comments B10-2 and B10-3, above. Because adverse water quality impacts to neighboring wells will be avoided, and operation of the project will be in accordance with state water law, no taking will occur.
- B10-6 Section 5.5.4 of the Final EIR/EIS Volume I considers the potential water quality impacts to neighboring wells due to groundwater level fluctuation. Section 5.5.6 of the Final EIR/EIS concludes that the potential for such impacts is not significant. For additional information, see Section 7.2.2 of the Management Plan (Final EIR/EIS Volume IV). The comment concerning the potential for the commentor to suffering economic injury from the project does not state a concern or question under CEQA or NEPA.
- B10-7 Comment noted. The project will not adversely affect critical resources, including the quantity and quality of groundwater in neighboring wells.
- B10-8 Comment noted. No adverse impacts to Chambless Station resulting from the project have been identified.
- B10-9 Comment does not state a concern or question under CEQA or NEPA. A response is not required.
- B10-10 Comment noted. No response is required.

B11 RESPONSES TO COMMENTS FROM DECO FOODSERVICE DATED JANUARY 4, 2000.

B11-1 Comment noted. No response is required.

B12 RESPONSES TO COMMENTS FROM LATHAM & WATKINS ATTORNEYS AT LAW DATED JANUARY 5, 2001.

B12-1 Comments are noted.

B13 RESPONSES TO COMMENTS FROM CT ASSOCIATES DATED JANUARY 7, 2001.

- B13-1 Comment noted.
- B13-2 Comment noted. Results of water quality analyses of the indigenous groundwater are contained in the technical report, <u>Cadiz Groundwater Storage and Dry-Year Supply</u> <u>Program, Environmental Planning Technical Report, Groundwater Resources, Volume II.</u>
- B13-3 Comment noted. Potential water quality impacts of the project to the aquifer and to the Colorado River Aqueduct were are discussed in Section 5.5.4 of the Final EIR/EIS, Volume I. No adverse water quality impacts are anticipated as a result of the project
- B13-4 Comment noted. No on-site treatment is anticipated as part of the project.
- B13-5 Comment refers to the San Gabriel groundwater basin in Los Angeles County, not the Cadiz Project.
- B13-6 Comment noted.

B13-7 Comment noted.

G18 RESPONSES TO COMMENTS FROM ENVIRONMENTAL DEFENSE DATED SEPTEMBER 7, 2000.

G18-1 A copy of the Supplement was sent to the commentor as requested.

G19 RESPONSES TO COMMENTS FROM THE DESERT PROTECTIVE COUNCIL INC. DATED OCTOBER 19, 20000.

G19-1 Public review period for the Supplement was extended to a total of 80 days.

G20 RESPONSES TO COMMENTS FROM THE WESTERN ENVIRONMENTAL LAW CENTER DATED OCTOBER 20, 2000.

G20-1 The 45-day initial review period for the Supplement was authorized by the Department of the Interior's Office of Environmental Policy and Compliance on August 7, 2000. A 90-day review period was not required for the Supplement because it did not add any new information related to the amendment to the California Desert Conservation Area Plan that was not already covered in the Draft EIR/EIS. Ultimately, the public review period for the Supplement was extended to a total of 80 days.

G21 RESPONSES TO COMMENTS FROM THE WILDERNESS SOCIETY DATED NOVEMBER 1, 2000.

G21-1 Public review period for the Supplement was extended to a total of 80 days.

G22 RESPONSES TO COMMENTS FROM LOREY CACHORA QUECHAN TRIBAL CULTURAL COMMITTEE CONSULTANTS DATED NOVEMBER 23, 2000.

G22-1 Public review period for the Supplement was extended to a total of 80 days.

G23 RESPONSES TO COMMENTS FROM THE WESTERN ENVIRONMENTAL LAW CENTER DATED NOVEMBER 16, 2000.

- G23-1 See Response to Comment G20-1.
- G23-2 The question of the amount of total chromium and hexavalent chromium found in the indigenous groundwater in the project area has been addressed in the Final EIR/EIS. Please see Master Response "Water Quality" and Response to Comment F3-11.
- G23-3 Public review period for the Supplement was extended to a total of 80 days.

G24 RESPONSES TO COMMENTS FROM THE DESERT TORTOISE COUNCIL DATED DECEMBER 3, 2000.

G24-1 Mitigation Measures B-8 through B-31 provide substantial protection for desert tortoise and their preferred habitats. These measures were presented for public review and comment in the Draft EIR/EIS and are included in this Final EIR/EIS.

G25 RESPONSES TO COMMENTS FROM THE CALIFORNIA INDIAN ARTS DATED DECEMBER 28, 2000.

G25-1 Comments noted. The purpose and need for the Cadiz Project is set forth in Section 2 of the Final EIR/EIS, Volume I. Impacts of the project have been fully evaluated pursuant to CEQA and NEPA as presented in Section 5. For clarification, Metropolitan does not receive water from the Owens Valley.

G26 RESPONSES TO COMMENTS FROM THE CHEROKEE WATERSHED GROUP DATED JANUARY 3, 2001.

- G26-1 Comments noted. Extensive technical studies were conducted for the Cadiz Project and all project reports are available for public review at Metropolitan's office in Los Angeles and at BLM's office in Needles.
- G26-2 BLM and Metropolitan believe the Final EIR/EIS serves the purposes and meets the requirements of CEQA and NEPA. For a discussion of water resources issues, see Section 5.5 of the Final EIR/EIS, Volume I, the Management Plan (Volume IV), and the Master Response "Groundwater Monitoring and Management Plan."
- G26-3 For a discussion of air quality issues, see Section 5.6 of the Final EIR/EIS, Volume I and Master Response "Air Quality."
- G26-4 See Section 5.8 of the Final EIR/EIS, Volume I for a discussion of potential impacts to wildlife.
- G26-5 See Master Response "Groundwater Monitoring and Management Plan" and the Management Plan (Final EIR/EIS, Volume IV).
- G26-6 Mitigation measures are presented for each resource category throughout Section 5 of the Final EIR/EIS, Volume I followed by a discussion of residual impacts after mitigation. All project mitigation measures are summarized in the Executive Summary of the Final EIR/EIS, Volume I.
- G26-7 See Response to Comment G2-5.
- G26-8 See Master Response "Groundwater Monitoring and Management Plan" and the Management Plan (Final EIR/EIS, Volume IV).
- G26-9 See Response to Comment P1-6.
- G26-10 See Master Response "Formulation and Screening of Potential Projects." Also see Section 2.4.4 of the Final EIR/EIS, Volume I for a discussion of the conservation programs that are being implemented by Metropolitan and its member agencies. Also see Master Response "Water Conservation."
- G26-11 See Section 1.5 of the Final EIR/EIS, Volume I for a summary of public involvement process.
- G26-12 See Response to Comment G26-1.

- G26-13 The comment does not raise an issue under CEQA or NEPA and thus no response is required.
- G26-14 Comments noted. No response is required.

G27 RESPONSES TO COMMENTS FROM THE DESERT TORTOISE PRESERVE COMMITTEE, INC. DATED JANUARY 4, 2001.

- G27-1 Comment noted. See Response to Comments G27-2 through G27-7, below.
- G27-2 The Supplement to the Draft EIR/EIS provided further detail and discussion of monitoring activities that will be implemented upon project approval. Although described only generally, these activities were included in the Draft EIR/EIS as Mitigation Measure WR-1 and thus are not a new proposal. The analysis of impacts and mitigation measures presented for public review and comment in the Draft EIR/EIS fully apply to the project's monitoring facilities. The mitigation measures that specifically apply to the protection of desert tortoise and their habitats are presented as Mitigation Measures B-8 through B-31 of the Final EIR/EIS Volume I.

The monitoring facilities and activities are described in Section 4.7.4 of the Final EIR/EIS Volume I. The facilities that will be constructed in designated critical habitat are few in number and limited in scale. Furthermore, the monitoring facilities will be constructed and operated under carefully controlled conditions and are consistent with activities compatible with the recovery of the desert tortoise. Most of the facilities necessary for the monitoring system will be constructed in Category III tortoise habitat (USFWS unpublished maps, December 1989). The monitoring facilities will have little, if any, effect on desert tortoises due to their limited size and passive nature. Monitoring facilities will require limited construction and infrequent use.

The monitoring facilities will be located to avoid environmental impacts. The siting of the facilities will be coordinated with the Mojave National Preserve and Bureau of Land Management and constructed and operated pursuant to consultation with US Fish and Wildlife Service and the California Department of Fish and Game. Mitigation measures presented in the Final EIR/EIS which apply to the monitoring activities include measures B-1 through B-4 and B-7 through B-26 for construction activities and measures B-27 through B-31 for operations. The habitat compensation ratio for surface disturbance (measure B-33) will be greater for construction activities in designated habitat, for example (5:1), than that indicated for construction of project features in lower quality habitat, which is (1:1).

The new "federally-funded study" referenced in the comment is not identified or provided.

G27-3 On February 8, 1994, the US Fish and Wildlife Service published a final rule in the *Federal Register* (59 FR 5820) designating 6.4 million acres of critical habitat for the Mojave population of the desert tortoise. This designation includes primarily Federal lands in southwestern Utah, northwestern Arizona, southern Nevada, and southern California. In California, critical habitat designation totals 4,754,000 acres in Imperial, Kern, Los Angeles, Riverside and San Bernardino counties. Of this total, 3,327,400 acres are administered by the Bureau of Land Management, 242,000 acres are military lands, 132,900 acres are state lands and 1,051,500 acres are privately owned land.

The Desert Tortoise (Mojave Population) Recovery Plan (USFWS, 1994) anticipated activities would continue within desert tortoise habitat areas and desert wildlife management areas. Activities that are compatible with tortoise recovery are listed on page 57 of the recovery plan and include activities that enhance watershed protection.

- See Section 5.5.4 of the Final EIR/EIS Volume I under the sub-heading "Potential Impacts to the Desert Environment Due to Implementation of the Management Plan" for the description of the potential impacts to the desert environment due to the implementation of the monitoring facilities of the Management Plan.
- G27-4 The recovery units were created to ensure genetic diversity among the desert tortoise population by avoiding focusing recovery efforts in specific locations and therefore on specific groups within the population. The low intensity activities required by the provisions of the Management Plan will be disbursed over great distances and consequently will not create an undue burden on a single segment of the population.
- G27-5 The referenced "study plots" are approximately 30 to 40 miles from the project area, and will not be impacted by the Cadiz Project. The newspaper articles referred to attribute the decline in tortoise populations in the Fenner Valley to a disease of the animal's shells. The project and monitoring facilities are not expected to contribute to this problem. The project and monitoring facilities are expected to have less than significant impacts on tortoise populations (see Response to Comments G27-1 through G27-4 above). The project impacts to biological resources are summarized in the Final EIR/EIS Volume I for each alternative in Section 5.8.
- G27-6 This impact is discussed in Section 5.8 of the Final EIR/EIS. The conclusion that impacts are less than significant is not based upon the numbers of desert tortoises in the vicinity but upon several factors, one of which is simply that the availability of water is not the factor that limits raven populations in the east Mojave Desert.

Due to the ravens ability to travel long distances the proximity to any particular feature is largely irrelevant. In addition, a substantial farming operation (approximately 1,600 acres) has been operational in the vicinity the project area for approximately 15 years. This farming operation has provided a continuous source of water and fruit to the raven population.

While ravens as a species are known to prey on young tortoises it is not known how widespread the practice is among any particular group of ravens. In addition, not enough is known about raven populations to know what controls their numbers. Due to the mobility of these birds they can take advantage of food and water sources over a large area thereby reducing reliance on any single factor or resource.

The tortoise study plots near Goffs are closer to the Colorado River and the cities of Needles, Bullhead City and Laughlin, and the agricultural lands of the Colorado River Valley than they are to the proposed spreading basins and monitoring facilities. These urban and agricultural and water features are much more likely to affect raven numbers than an isolated seasonal source of water. Additional water availability at the spreading basins is unlikely to cause an increase in the regional raven population which in turn has an unknown probability of increased predation on desert tortoise.

- G27-7 BLM and Metropolitan believe the Final EIR/EIS serves the purposes of and complies with CEQA and NEPA.
- G27-8 Comment noted. No response is required.

G28 RESPONSES TO COMMENTS FROM THE LAW OFFICE OF GARRY L. HAYES DATED JANUARY 4, 2001.

- G28-1 Comment noted. No response is required.
- G28-2 See Section 7.1 of the Management Plan, Final EIR/EIS Volume IV, for a description of the specific provisions that will be established under the Management Plan to protect groundwater levels beneath the Mojave National Preserve and springs located both within the Preserve and on BLM managed lands in proximity to the project area. Figure 4 of the Management Plan shows the proposed locations of the S-Series observation wells as well as observation wells at Essex, Fenner and Goffs. These observation wells are located between the proposed project wellfield and the Mojave National Preserve and will be regularly monitored in order to provide early warning of potential impacts to groundwater levels beneath the Preserve. At this time, additional monitoring features beyond those described are not thought necessary to meet the Management Plan objective of assuring no adverse project-related impacts to critical resources. However, provisions have been included in the Management Plan to accommodate changes to the number or location of monitoring features based on the review and interpretation of information as it is collected. See Section 9.4 of the Management Plan.

With implementation of the Management Plan and its provisions for revisions and refinements as it is implemented, it is not anticipated that there will be a discernable impact to groundwater use on the properties described in the attachment to this comment letter.

G28-3 Comment noted. No response is required.

G29 RESPONSES TO COMMENTS FROM THE LEAGUE OF WOMEN VOTERS ENVIRONMENTAL ACTION COMMITTEE (ENACT) DATED JANUARY 5, 2001.

- G29-1 Comment noted. No response is required.
- G29-2 The TRT and BMG have been removed from the Management Plan. Instead, BLM will receive technical support and recommendations from other federal agencies and the County through a Technical Review Panel (TRP). See Master Response "Governance" and Section 9 of the Management Plan (Final EIR/EIS, Volume IV).

Management Plan governance includes provisions for public involvement and comment. Management Plan reports (described in Section 6 of the Management Plan) will be of public record and available to any interested party. This includes but is not limited to annual and five-year monitoring reports. Project information will be made available through an electronic network (e.g. web page) or other appropriate means to enable regular updates on Cadiz Project operation and management activities. In addition, the BLM, at its discretion, may conduct public meetings.

G29-3 See Master Response "Water Quality" and Response to Comment F3-11. The project is not anticipated to affect ability or costs to meet applicable drinking water standards.

- G29-4 Comment noted. See Master Response "Groundwater Monitoring and Management Plan." Because the project will be operated subject to the provisions of the Management Plan, it may or may not include water transfer.
- G29-5 See Response to Comment G2-5.
- G29-6 Potential impacts of the project including construction impacts have been addressed in Chapter 5 of the Final EIR/EIS Volume I. Mitigation measures identified in the Final EIR/EIS to reduce impacts of the project will become mandatory components of the project upon certification of the Final EIR/EIS. Wildlife and desert habitats are assessed in Section 5.8 of the Final EIR/EIS. Potential impacts of construction and operation of the project on desert tortoise have been reviewed with USFWS and CDFG. The mitigation measures have been developed through discussions with USFWS, CDFG and BLM biologists.

The role and responsibilities of the TRP are discussed in Sections 9 of the Management Plan. Metropolitan, as the Cadiz Project CEQA lead agency, is required to monitor and enforce compliance with all mitigation measures, including all measures to protect the desert tortoise.

- G29-7 See Master Response "Formulation and Screening of Potential Projects." With regard to other Colorado River supply projects, the Final EIR/EIS has been revised to clarify that Metropolitan is proceeding on several fronts to meet its target for dry-year needs on the Colorado River Aqueduct. See Section 2.6 and 2.7 of the Final EIR/EIS, Volume I. Metropolitan is proceeding with implementation of the Hayfield Valley Groundwater Project noted by the commentor. With the Cadiz Project and other projects which are already being implemented, including the Hayfield Project, Metropolitan will still need an additional 20,000 to 90,000 acre-feet of dry-year supply to meet its target. This remaining need may be met by one or a combination of other potential projects under various stages of study.
- G29-8 See Response to Comment G29-2, above.

G30 RESPONSES TO COMMENTS FROM THE LAW OFFICES MORISSET, SCHLOSSER, AYER & JOZWIAK DATED JANUARY 5, 2001.

- G30-1 The Cadiz Project will not affect Metropolitan's rights to water from the Colorado River and thus will not affect other parties' rights to water on the Colorado River, including those of the Quechan Indian Tribe.
- G30-2 Comment noted. The Draft and Final EIR/EIS correctly conclude that there would be no impacts to Indian trust assets or surface water resources. The Cadiz Project will enhance Metropolitan's management of Colorado River water.
- G30-3 The Cadiz Project does not change Metropolitan's entitlement to water from the Colorado River, nor does it affect other parties' rights to water on the Colorado River.
- G30-4 See Response to Comment G30-3, above.
- G30-5 The discussion of cumulative impacts as presented in the Draft EIR/EIS has been expanded in the Final EIR/EIS to include other water uses within the Bristol, Cadiz, Fenner, and Orange Blossom Wash watersheds and other projects within the BLM Northern and Eastern Colorado Desert Coordinated Management Plan area, as is the Cadiz Project. This

appropriately considers projects and activities that are related to the Cadiz Project through a physical element of the environment or a physical impact to the environment. It is not appropriate to consider in the cumulative impacts analysis for the Cadiz Project all other projects that directly or indirectly use water from the Lower Colorado River. As suggested by the comment, the only "cumulative impact" from such projects would be the combined use of Colorado River water. However, the Cadiz Project does not effect how much Colorado River water may be used by California or by Metropolitan. It is not the availability of surplus Colorado River water to the Cadiz Project that might cause potential impacts to the environment. Rather, the question for the cumulative impacts analysis for the Cadiz Project is, assuming the availability of such surplus water which the project would store and later transfer, what are the cumulative impacts of such activity when combined with other projects and water users which also cause environmental impacts in the general area. It is this analysis that is appropriately considered in the Final EIR/EIS. Commentor repeatedly states that "BOR" has failed to sufficiently consider the effects of certain programs listed in the comment. Such comments to the Bureau of Reclamation and/or the FEIS for Interim Surplus Criteria adopted by the Bureau, should be directed to the appropriate agency and project. It is not the place of the Cadiz Project to correct any perceived inadequacies in the FEIS for the Interim Surplus Criteria.

G30-6 Comment noted.

G31 RESPONSES TO COMMENTS FROM THE MORONGO BASIN CONSERVATION ASSOCIATION DATED JANUARY 5, 2001.

- G31-1 Comment noted. See Response to Comments G31-2 through G31-8, below.
- G31-2 The Final EIR/EIS concludes that all potential environmental impacts of the project on water resources will be reduced to below a level of significance. Moreover, the Management Plan will provide continuous monitoring and collection of data throughout the term of the project to further ensure that potential significant adverse effects are avoided. A pilot spreading basin test was performed to determine the feasibility of storing water in and retrieving water from in the aquifer system underlying the project area and to assess the potential environmental impacts of such an operation.
- G31-3 The TRT and BMG have been removed from the Management Plan. Instead, BLM will receive technical support and recommendations from other public agencies through a Technical Review Panel (TRP). See Master Response "Governance" and Section 9 of the Management Plan (Final EIR/EIS, Volume IV).

Management Plan governance includes provisions for public involvement and comment. Management Plan reports (described in Section 6 of the Management Plan) will be of public record and available to any interested party. This includes but is not limited to annual and five-year monitoring reports. Project information will be made available through an electronic network (e.g. web page) or other appropriate means to enable regular updates on Cadiz Project operation and management activities. In addition, the BLM, at its discretion, may conduct public meetings.

- G31-4 See Response to Comment G31-3.
- G31-5(a)See Response to Comment G31-3.

- G31-5(b)In most cases in the Draft EIR/EIS and Supplement to the Draft EIR/EIS, the word "would" was used to indicate that an action would be taken after project approval. As suggested by the commentor, language has been revised throughout the Final EIR/EIS with the use the term "will" or "shall" in place of "would" where appropriate.
- G31-6 Metropolitan regularly samples and tests its Colorado River water supply. Test results are of public record and are available upon request.
- G31-7 Authority over the Management Plan will be maintained by BLM. The project does not propose that any agency be granted emergency authority status over the project in event of an earthquake or other emergency.
- G31-8 As discussed in Section 2 of the Final EIR/EIS, Volume I, the Hayfield Groundwater Storage Project has been adopted by Metropolitan's Board of Directors and is being implemented. The Coachella Conjunctive Use Project and Entitlement Exchange is a project currently being developed by the Coachella Valley Water District with participation by Metropolitan. Metropolitan is also initiating feasibility studies of a groundwater storage and conjunctive use programs. Metropolitan's Board of Directors has not approved such programs at the date of this writing. These programs and the Cadiz Project are needed to meet Metropolitan's water supply reliability objectives. Information regarding these programs, including environmental and technical information is of public record and is available upon request to Metropolitan to any interested party.

G32 RESPONSES TO COMMENTS FROM THE DESERT TORTOISE COUNCIL DATED JANUARY 6, 2001.

G32-1 Comment noted. See Response to Comments G27-1 through G72-8.

G33 RESPONSES TO COMMENTS FROM DESERT SURVIVORS DATED JANUARY 10, 2001.

- G33-1 Comment noted. No response is required.
- G33-2 Comment noted. See Response to Comments G33-3 to G33-31, below.
- G33-3 Comment noted. BLM and Metropolitan believe the Final EIR/EIS serve the purposes of and complies with CEQA and NEPA. See Master Response "Formulation and Screening of Potential Projects."
- G33-4 Extensive studies of recharge to the aquifer system have been done in connection with the project. However, as discussed in Section 5.5 of the Final EIR/EIS, there is disagreement among experts as to the amount of natural recharge to the project area. Despite this disagreement, all of the agencies who participated in the preparation of the Final EIR/EIS agreed that the overriding objective is to ensure the protection of critical resources in the vicinity of the project area. The parties further agreed that this objective would best be accomplished through the development and implementation of the Management Plan (Final EIR/EIS Volume IV), which will protect these resources. See Master Response "Groundwater Monitoring and Management Plan."
- G33-5 See Response to Comment G33-4, above. Since the project will be operated in accordance with the Management Plan, the project will not adversely impact critical resources. Thus,

precise quantification of a recharge rate is not essential to the analysis of project impacts. BLM and Metropolitan believe the Final EIR/EIS serves the purposes of and complies with CEQA and NEPA.

- G33-6 The project will take advantage of Metropolitan's existing rights to water from the Colorado River and does not depend on "surplus" Colorado River water to which Metropolitan is not already entitled. See Section 2 of the Final EIR/EIS.
- G33-7 See Master Response "Formulation and Screening of Potential Projects."
- G33-8 Elimination of the power lines paralleling the pipeline or pipeline/canal alignments was considered by using a natural gas powered system is discussed in Section 5.9.4 of the Final EIR/EIS Volume I.
- G33-9 A generalized aquifer cross-section from Fenner Valley to Bristol Dry Lake is presented in Figure 5.5-10 of the Final EIR/EIS Volume I. The principal aquifer systems shown in this figure are described in Section 5.5.1 of the Final EIR/EIS. Existing agricultural production wells produce groundwater from both the upper and lower levels of the alluvial aquifer. No barriers to groundwater flow have been recognized between the two levels, and they are distinguished only by a general increase in fine-grained sediments with depth. Additional data regarding the aquifer system will be acquired, as outlined in the Management Plan, during construction and testing of monitoring wells and the project wellfield. The carbonate bedrock aquifer underlies the alluvial aquifer. The Cadiz Project will not drill production wells into this carbonate basement aquifer.
- G33-10 The environmentally preferred project alternative is identified in Section 11 of the Final EIR/EIS Volume I. The alternative suggested by commentor appears to be the result of a misconception of the project as proposed. The commentor's statement that "all pumping is from the lower aquifer, all storage is in the upper aquifer" is incorrect. The proposed project wellfield has been designed to efficiently extract the mound of stored water and indigenous groundwater that would form as a result of spreading operations. As described in Section 5.5.4 of the Final EIR/EIS Volume I, individual wells will be constructed to facilitate selective removal of stored water.
- G33-11 Studies completed for the project support the Final EIR/EIS's assessment of potential impacts and its conclusions. See Response to Comment G33-4 and G33-5.
- G33-12 Governance of the Management Plan as presented in the Draft EIR/EIS has been finalized in the Final EIR/EIS. The TRT and BMG have been removed from the Management Plan. Instead, BLM will receive technical support and recommendations from other federal agencies and the County through a Technical Review Panel (TRP). See Master Response "Governance" and Section 9 of the Management Plan (Final EIR/EIS, Volume IV).
- G33-13 Comments are noted. See Master Response "Air Quality." Under the Clean Air Act (CAA) Amendments of 1977, all existing national parks and national wilderness and wilderness areas greater than 5,000 acres in size were designated as Class I areas. Class I areas are afforded greater protection of air quality and air quality related values (e.g. visibility). All other areas in the U.S. were designated as Class II areas under these amendments. Procedures were also provided in the CAA for states and Indian Tribes to reclassify Class II areas to either Class I or Class III (areas that will be provided less protection than Class II) status. The Mojave National Preserve and the wilderness areas referenced by commentor

are Class II areas. It is the stated goal of the NPS in its draft General Management Plan for the Mojave National Preserve (NPS, July 2000) to seek re-designation of the preserve as a Class I area. However, as of this time, neither the NPS or the BLM have undertaken to change these classifications.

The possible effects of lowering of groundwater levels below the dry lake beds and any subsequent effects on the lake bed surface characteristics depend on many factors. If the brine layer below the lake beds is not connected to the alluvial aquifer system, a lowering of the groundwater level would not affect the lake bed surfaces. However, it has been conservatively assumed that a lowering of the groundwater level could increase the susceptibility of dust mobilization at the dry lake beds. Therefore, the Management Plan includes provisions to monitor and avoid the potential for increased susceptibility for dust mobilization that could be caused by lowering of the groundwater level as a result of project operations, thereby preventing increased dust mobilization from the lake beds.

See Final EIR/EIS, Volume I Section 5.6 for a description of air quality analysis related to mobilization of lakebed dust.

Action criteria, the decision-making process and corrective measures relating to air quality impacts are described in Section 7.4 of the Management Plan, Final EIR/EIS, Volume IV.

- G33-14 See Master Response "Water Quality."
- G33-15 The Management Plan governs all project operations, regardless of contractual relations between Metropolitan and Cadiz Inc.

The actual quantity of water to be transferred is not known at this time. The amount of indigenous groundwater that could be transferred is conditioned by the requirements of the Management Plan.

- G33-16 See Response to Comment G33-15.
- G33-17 See Response to Comment G33-15.
- G33-18 See Response to Comment G6-10.
- G33-19 See Response to Comment G6-11.
- G33-20 Regarding Cadiz Dunes see Response to Comment G6-12. Regarding the use of Class L lands see Response to Comment G6-14.
- G33-21 See Response to Comment G6-17.
- G33-22 See Response to Comment G6-18.
- G33-23 Due to a numbering error, there is no comment 'G33-23'.
- G33-24 See Response to Comment G6-19.
- G33-25 See Response to Comment G6-20.

- G33-26 See Response to Comment G6-6.
- G33-27 As discussed in Section 1 of the Final EIR/EIS, Volume I, the USGS became a cooperating agency pursuant to NEPA for purposes of providing scientific and technical support and advice to the BLM on the design of the Management Plan presented in the Supplement to the Draft EIR/EIS and as Volume IV of the Final EIR/EIS. However, USGS and NPS experts will be involved in the implementation of the Management Plan as discussed in Sections 9 and 10 of the Management Plan. See Master Response "Governance."
- G33-28 Regarding the Federal Land Policy and Management Act, this legislation is recognized and considered in the Final EIR/EIS in Volume I, Section 5.1. The remaining comments do not raise and issue under CEQA or NEPA and thus no response is required.
- G33-29 BLM has complied with NEPA requirements in the preparation of the Final EIR/EIS and will retain control over the enforcement of the Management Plan is through the terms and conditions of the right-of-way grant(s) it issues. See Master Response "Governance."
- G33-30 BLM and Metropolitan believe the Final EIR/EIS serves the purposes of and complies with CEQA and NEPA, including adequately informing the public and decision-makers of project effects.
- G33-31 Comment noted. No response is required.

G34 RESPONSES TO COMMENTS FROM THE SIERRA CLUB DATED JANUARY 8, 2001.

- G34-1 Comment noted
- G34-2 See Response to Comment G33-15.
- G34-3 See Response to Comment G33-15.
- G34-4 Due to a numbering error, there is no comment 'G34-4'.
- G34-5 See Response to Comment G33-15.
- G34-6 Comments noted. All information regarding estimates of recharge and the consultants preparing these estimates is contained in the Final EIR/EIS. See <u>Cadiz Groundwater Storage</u> and Dry-Year Supply Program Environmental Planning Technical Report Groundwater Resources Report (Report No. 1163), and Final EIR/EIS Volume I, Sections 14 and 15.
- G34-7 Water treatment is not required to comply with present water quality standards; therefore, speculative future treatment facilities are not identified. With regard to total chromium and hexavalent chromium found in the indigenous groundwater underlying the proposed project wellfield and spreading basins please see Master Response "Water Quality" and Response to Comment F3-11.
- G34-8 See Response to Comment F3-11 and Master Response "Water Quality."
- G34-9 The TRT and BMG have been removed from the Management Plan. Instead, BLM will receive technical support and recommendations from other public agencies through a

Technical Review Panel (TRP). See Master Response "Governance" and Section 9 of the Management Plan (Final EIR/EIS, Volume IV).

Management Plan governance includes provisions for public involvement and comment. Management Plan reports (described in Section 6 of the Management Plan) will be of public record and available to any interested party. This includes but is not limited to annual and five-year monitoring reports. Project information will be made available through an electronic network (e.g. web page) or other appropriate means to enable regular updates on Cadiz Project operation and management activities. In addition, the BLM, at its discretion, may conduct public meetings.

- G34-10 The Management Plan governs all project operations, regardless of contractual relations between Metropolitan and Cadiz Inc. The TRT and BMG have been removed from the Management Plan. Instead, BLM will receive technical support and recommendations from other public agencies through a Technical Review Panel (TRP). See Master Response "Governance" and Section 9 of the Management Plan (Final EIR/EIS, Volume IV). Members of the TRP do not have contractual interests in the project and would maintain a neutral and unbiased manner in reviewing compliance with the Management Plan.
- G34-11 BLM and Metropolitan believe the Final EIR/EIS serve the purposes of and comply with CEQA and NEPA.
- G34-12 Comment noted.

G35 RESPONSES TO COMMENTS FROM ENVIRONMENTAL DEFENSE DATED JANUARY 8, 2001.

- G35-1 Comment noted.
- G35-2 The financial aspects of the Cadiz Project are not an issue under CEQA or NEPA. Analysis of the finances of the program is reported to Metropolitan's Board of Directors and that public record is available upon request.
- G35-3 Section 1.8 of the Final EIR/EIS Volume I describes the decisions that BLM and Metropolitan will consider for project approval as well as the permits and other approvals that will be necessary to implement the project. Metropolitan has not applied for any State funding for the Cadiz Project.
- G35-4 Comment noted. The meeting to consider certification of the Final EIR/EIS by Metropolitan's Board will be open to the public.
- G35-5 This letter was submitted on the Draft EIR/EIS and is responded to in Response to Comments G16-1 through G16-6.

G36 RESPONSES TO COMMENTS FROM CLEAN WATER ACTION DATED JANUARY 8, 2001.

- G36-1 Comment noted. See Response to Comments G36-2 through G36-8, below.
- G36-2 This standard of not violating any drinking water standards or waste discharge requirements presented in Section 5.5.2 of the Final EIR/EIS Volume I is a widely accepted standard for

determining significance under CEQA. Even though no significant water quality impacts are anticipated, anticipated changes to water quality are fully discussed in the Final EIR/EIS. See Master Response "Water Quality."

- G36-3 See Master Response "Water Quality" for a further discussion of water quality of the indigenous groundwater. The project is not anticipated to affect the ability to meet applicable water quality regulations.
- G36-4 The commentor is correct that the referenced 18 µg/L level for perchlorate is an action level and not a maximum contaminant level. The text of the Final EIR/EIS reflects this revision.
- G36-5 Regarding the characteristics of the "deeper aquifer," See Response to Comment G33-9. Regarding the presence of chromium, see Response to Comment F3-11 and Master Response "Water Quality."
- G36-6 Section 5.5.4 of the Final EIR/EIS Volume I describes impacts to water quality. MTBE has not been detected in the groundwater underlying the project area or in the Colorado River Aqueduct supplies. Hexavalent chromium is present at levels below both state and federal drinking water standards. See Response to Comment F3-11 and Master Response "Water Quality."
- G36-7 Contrary to this comment, additional water treatment facilities are not anticipated to be required for the project.
- G36-8 As discussed in Section 2.6 and 2.7 of the Final EIR/EIS, Volume I, Metropolitan is proceeding on several fronts to meet its target for dry-year needs on the Colorado River Aqueduct. With the Cadiz Project and other projects which are already being pursued, Metropolitan will still need an additional 20,000 to 90,000 acre-feet of dry-year supply to meet its target.

G37 RESPONSES TO COMMENTS FROM THE MONO LAKE COMMITTEE DATED JANUARY 8, 2001.

- G37-1 Comment noted. See Response to Comments G37-2 through G37-7.
- G37-2 As discussed in Section 2 of the Final EIR/EIS Volume I, reliability of Metropolitan's Colorado River supply has been a basic strategy under the IRP. Implementation of programs such as the Cadiz Project will assist Metropolitan in fulfilling the policy of maintaining a full Colorado River Aqueduct. With regard to comments on the contract, these do not raise a comment under CEQA or NEPA and thus no response is required.
- G37-3 A number of programs are needed to meet the objectives of California's Colorado River Water Use Plan. See Response to Comment G36-8. Implementation of the Cadiz Project will not lessen the need to pursue local storage programs in Metropolitan's service area.
- G37-4 Metropolitan's IRP provides an optimum strategy to meet future water supply reliability needs for southern California and includes targeted amounts for locally-developed water reuse projects within southern California, as discussed in Section 2 of the Final EIR/EIS Volume I. Implementation of the Cadiz Project will not lessen the need to pursue local reuse programs in Metropolitan's service area.
- G 37-5 See Master Response "Water Conservation." Implementation of the Cadiz Project will not lessen the need to pursue local reuse programs in Metropolitan's service area.
- G37-6 The comment does not raise an issue under CEQA or NEPA and thus no response is required.
- G37-7 Comment noted. No response is required.

G38 RESPONSES TO COMMENTS FROM THE CALIFORNIA NATIVE PLANT SOCIETY DATED JANUARY 8, 2001.

- G38-1 Comment noted. No response is required.
- G38-2 See Response to Comment G10-5.
- G38-3 Springs, including the "28+" springs referenced by the commentor are to be monitored as described in Section 6.1 of the Management Plan, Final EIR/EIS, Volume IV. The inventory of the "28+" springs will be performed for the purpose of acquiring and documenting information about these important watershed features and to understand the connection, if any, between spring flow and the groundwater aquifer system. Provisions have been included in the Management Plan to accommodate changes to the number or location of monitoring features based on the review and interpretation of information as it is collected. See Section 9.4 of the Management Plan.
- G38-4 Section 7.1.1 of the Management Plan, Final EIR/EIS Volume IV, describes the action criteria, decision-making process and corrective measures relating to the protection of springs. S-Series observation wells, designed to ensure protection of the springs by measuring groundwater level impacts from project operations will be monitored continuously throughout the term of the Cadiz Project.

The action criteria referenced by the commentor (1 foot in any S-Series Observation well) has been recommended by NPS water resources experts as a conservative action level. Such a change in water level will likely occur as a result of naturally occurring fluctuation of groundwater levels. If it were determined that project operations triggered this action criterion, it would, in the worst case, represent an early warning precursor of a potential impact to a spring. If it were determined that such changes were attributable to project operations, on the basis of analysis of groundwater level distributions throughout the entire observation well network, corrective measures would be employed as outlined in the Management Plan.

Although no adverse impact to springs is anticipated with action criteria and corrective measures as proposed, provisions have been included in the Management Plan to accommodate changes to action criteria based on the review and interpretation of information as it is collected. See Section 9.4 of the Management Plan.

G38-5 Governance of the Management Plan as presented in the Draft EIR/EIS has been revised in the Final EIR/EIS. The TRT and BMG have been removed from the Management Plan. Instead, BLM will receive technical support and recommendations from other public agencies through a Technical Review Panel (TRP). Provisions have been made for public input. See Master Response "Governance" and Section 9 of the Management Plan (Final EIR/EIS, Volume IV).

- G38-6 BLM and Metropolitan believe that the environmental analysis for the project contained in the Final EIR/EIS serve the purposes of and complies with CEQA and NEPA. Regarding the suggested alternative, see Master Response "Alignment Alternatives."
- G38-7 See Response to Comment G10-4.
- G38-8 Comment noted. No response is required.

G39 RESPONSES TO COMMENTS FROM THE DESERT PROTECTIVE COUNCIL INC. DATED JANUARY 8, 2001.

- G39-1 Comments noted. The comment is too general to permit a response.
- G39-2 See Master Response "Formulation and Screening of Potential Projects" and Master Response "Water Conservation." Regarding use of Colorado River water, the Cadiz Project will take advantage of Metropolitan's existing rights to water from the Colorado River and is consistent with the California Colorado River Water Use Plan. See Section 2 of the Final EIR/EIS.
- G39-3 Comment noted. No response is required.
- G39-4 Metropolitan would enter into an agreement with Cadiz Inc. to implement the Cadiz Project should it be approved.
- G39-5 Metropolitan has no vested interest or commitment relative to NAWPA or Ralph M. Parsons.
- G39-6 It is assumed the commentor is referring to the Quantification Settlement Agreement, which remains in draft form, for the allocation of Colorado River water among Imperial Irrigation District, Coachella Valley Water District and Metropolitan. The most recent draft of the Quantification Settlement Agreement does not identify the Cadiz Program. If executed, the Quantification Settlement Agreement would govern the apportionment of Colorado River water to the signatories under Priorities 3a, 4, 5, and 6a of the California Seven-Party Agreement dated August 18, 1931 which is incorporated in the Secretary's water delivery contracts with the three agencies.
- G39-7 NPS and USGS became cooperating agencies pursuant to NEPA for purposes of assisting in the preparation of the Supplement to the Draft EIR/EIS and the Final EIR/EIS.
- G39-8 Metropolitan has approved the Hayfield Groundwater Storage Program. The water you observed at Hayfield Dry Lake was stored in the groundwater basin beneath Hayfield Dry Lake. Metropolitan expects to store up to 800,000 acre feet of Colorado River Aqueduct water in the Hayfield aquifer during the next few years. This project, the Cadiz Project, and other proposals will enable Metropolitan to assist California in meeting the terms and conditions of California's Colorado River Water Use Plan. See Section 2 of the Final EIR/EIS.
- G39-9 See Response to Comment F3-11 and Master Response "Water Quality."
- G39-10 Sections 9 and 10 of the Management Plan summarize the oversight and enforcement provisions of the Management Plan. The BLM is responsible for all final decisions related

to the enforcement of the terms and conditions of any right-of-way grant(s) it issues. See Master Response "Governance."

- G39-11 Comment noted.
- G39-12 Comment noted.
- G39-13 Comment noted.
- G39-14 See Master Response "Groundwater Monitoring and Management Plan."

G40 RESPONSES TO COMMENTS FROM PEOPLE AGAINST RADIOACTIVE DUMPING DATED JANUARY 8, 2001.

- G40-1 BLM and Metropolitan believe the Final EIR/EIS serves the purposes of and complies with CEQA and NEPA. Water quality impacts of the project are addressed in the Final EIR/EIS as summarized in Master Response "Water Quality." Regarding radioactive elements, none of the radiological constituents listed in Title 22 have been detected in Colorado River water at concentrations that exceed federal and/or state maximum contaminant levels for drinking water.
- G40-2 See Response to Comment G40-1.
- G40-3 USEPA has reviewed the Draft EIR/EIS and Supplement and have provided comments. See responses to letters F1 and F3. The Cadiz Project would store water by use of spreading basins, which is distinct from groundwater injection. The Cadiz Project will comply with all applicable water quality regulations. See Master Response "Water Quality."
- G40-4 Comment noted. The Cadiz Project is not associated with any nuclear materials or nuclear waste.

G41 RESPONSES TO COMMENTS FROM THE SIERRA CLUB CAL/NEV REGIONAL CONSERVATION COMMITTEE BLM LANDS COMMITTEE DATED JANUARY 4, 2001.

G41-1 The BLM is responsible for all final decisions related to the enforcement of the Management Plan through enforcement of the terms and conditions of any right-of-way grant(s) it issues in connection with the project. This is consistent with the description of the role and responsibility of the BLM as is described in Section 3.10.3 of the Supplement.

Management Plan governance has been revised in the Final EIR/EIS and includes provisions for public involvement and comment. Management Plan reports (described in Section 6 of the Management Plan, Final EIR/EIS Volume IV) will be of public record and available to any interested party. In addition, the BLM, at its discretion, may conduct public meetings. See Master Response "Governance."

G41-2 Governance of the Management Plan as presented in the Draft EIR/EIS has been revised in the Final EIR/EIS. The TRT and BMG have been removed from the Management Plan. Instead, BLM will receive technical support and recommendations from other public agencies through a Technical Review Panel (TRP). See Master Response "Governance" and Section 9 of the Management Plan (Final EIR/EIS, Volume IV).

- G41-3 The purpose and need for the project are addressed in Section 2 of the Final EIR/EIS Volume I. As discussed in that section, Metropolitan is proceeding on several fronts to meet its target for dry-year needs on the Colorado River Aqueduct. With the Cadiz Project and other projects which are already being pursued, Metropolitan will still need an additional 20,000 to 90,000 acre-feet of dry-year supply to meet its target. Thus, other projects currently under study are not alternatives to the Cadiz Project. Conservation is a basic element of Metropolitan's long-term water management strategy. The Cadiz Project is needed even with the aggressive conservation and reclamation that Metropolitan is implementing. See Master Response "Formulation and Screening of Potential Projects" and Master Response "Conservation."
- G41-4 See Response to Comment F3-11 and Master Response "Water Quality." Colorado River water must already be treated prior to domestic use. The project is not anticipated to require additional treatment or affect the ability to meet applicable water quality regulations.
- G41-5 Comment noted.

G42 RESPONSES TO COMMENTS FROM THE WESTERN ENVIRONMENTAL LAW CENTER DATED JANUARY 11, 2001.

- G42-1 Comment noted. Referenced comments and attachments are included as a part of the administrative record.
- G42-2 Comment noted. Extraction of indigenous groundwater will be subject to the provisions of the Management Plan. The amount of indigenous groundwater that may be extracted is not known at this time.
- G42-3 Comment noted.
- G42-4 Comment incorrectly characterizes the project effects and the amount of groundwater that could be extracted during the Cadiz Project. The withdrawal of water from the aquifer will be limited by the Management Plan to ensure avoidance of impacts to the dry lakes, springs, and other critical resources. See Master response "Groundwater Monitoring and Management Plan." The potential attraction of ravens to the spreading basins is discussed in Section 5.8.4 of the Final EIR/EIS Volume I; mitigation measures (B-21 and B-24) will be adopted to reduce the likelihood of this occurrence.
- G42-5 BLM and Metropolitan believe that the Final EIR/EIS serves the purposes of and complies with the requirements of CEQA and NEPA.
- G42-6 Comment noted.
- G42-7 Comment noted
- G42-8 BLM and Metropolitan believe that the assessment of project need and purpose in Section 2 of the Final EIR/EIS meets the requirements of CEQA and NEPA.
- G42-9 Section 2.3.4 of the Final EIR/EIS details Metropolitan's current and projected conservation programs. See also Master Response "Water Conservation."

- G42-10 As discussed in Section 2 of the Final EIR/EIS, Metropolitan is evaluating the Cadiz Project, and other groundwater storage projects, in accordance with its Integrated Resources Plan (IRP). The IRP places emphasis on both local and imported water resource development. Conservation is treated as a core local supply, on a par with recycling and other water resources. The IRP establishes targets for water conservation, additional dry year supply, water storage and transfers, and other available water resource development opportunities. The need for the Cadiz Project has been determined in light of existing and projected water conservation accomplishments.
- G42-11 Because operation of the project will be subject to the provisions of the Management Plan, the Cadiz Project will not result in overdraft of the groundwater basin. Adequate safeguards established by the Management Plan assure that the Cadiz basin will not be "overdrafted" as the result of the operation of this project. See Master Response "Groundwater Monitoring and Management Plan."

As discussed in Section 4.8.3 for the consequences of the No Action Alternative, groundwater overdrafting is a likely outcome within Metropolitan's service area if the Cadiz Project is not implemented. This is because 1) overdrafting in Metropolitan's service area is not prevented in the same way as overdrafting in the Cadiz basin is prevented by the project, and 2) the lack of other practicable alternatives to meet shortfalls in water supply. Metropolitan is already aggressively pursuing greatly increased conservation within its service area; however, this does not diminish the need for the Cadiz Project. See Master Response "Water Conservation."

G42-12 As noted in Section 2 of the Final EIR/EIS, Volume I, Metropolitan uses SCAG and SANDAG population projections in its water management planning. Metropolitan coordinates closely with both SCAG and SANDAG staff and has a representative assigned to all SCAG agency meetings. However, Metropolitan does not have the authority to regulate or control growth within its service area. Metropolitan's legal obligation is to provide supplemental water to its service area.

Regarding per capita water uses, it is noted in the Final EIR/EIS that per capita water use varies within Metropolitan's service area. The coastal areas, where per capita water use is lower, is colder and wetter; inland areas, where per capita water use is higher, are drier and hotter. See the report, referenced in Section 15 of the Final EIR/EIS Volume I, Regional Urban Water Management Plan for the Metropolitan Water District of Southern California (December 2000), for a detailed discussion of Metropolitan's water demand forecasting process.

Metropolitan uses a public process in planning to meet projected demands. The Integrated Resources Plan (IRP) was developed in an open and participatory process involving member agencies, water resource agencies, and the general public. Metropolitan's Regional Urban Management Plan was also adopted with full public review. Metropolitan's Board of Directors meetings are open to the public. The Cadiz project itself, is subject to full and open public review. Metropolitan is equally committed to both water conservation and dry year storage and transfer programs in accordance with its IRP.

G42-13 Contrary to the statements of the commentor, there is no contradiction between the statement that Metropolitan's total demand includes 10% for agricultural use (Section 2.4.5 of the Final EIR/EIS Volume I) and the statement that there is a 30% increase in summer irrigation use (Section 2.4.3) within its service area. The commentor confuses the discussion of seasonal

trends in total water use (Section 2.3.3) with the discussion of agricultural water use (Section 2.3.4).

G42-14 The Final EIR/EIS assess potentially adverse impacts resulting from the Cadiz Project, including a thorough discussion of the need for the Project. The establishment of disincentives to "discretionary" water use is not considered a feasible alternative to the Cadiz Project and thus is beyond the scope of this EIR/EIS. Although Metropolitan supports the elimination of wasteful water use by any of Metropolitan member agency customers, Metropolitan is not a retail water agency and does not set the rate at which water is sold to households.

Nonetheless, Metropolitan is currently revisiting the rates charged to member agencies as part of its strategic planning process. Metropolitan's water rates currently vary by classes of service. Metropolitan maintains its Local Projects Program, Groundwater Recovery Program, Conservation Credits Program and Seasonal Storage Program to encourage member agencies to maximize its use of local resources, to increase local storage of imported supplies, and to implement long term conservation programs. However, these activities do not diminish the need for the Cadiz Project.

- G42-15 Metropolitan's low-flow toilet and low-flow showerhead programs are only two of many water conservation BMP's to which Metropolitan and its member agencies are committed. See Master Response to Comment "Water Conservation." An expanded discussion of Metropolitan's commitment to water conservation is included in the report referenced in Section 15 of the Final EIR/EIS Volume I, <u>The Regional Urban Water Management Plan for the Metropolitan Water District of Southern California, December 2000</u>.
- G42-16 See Master Response to Comment "Water Conservation." An expanded discussion of Metropolitan's commitment to water conservation is included in the report referenced in Section 15 of the Final EIR/EIS Volume I, <u>The Regional Urban Water Management Plan for</u> the Metropolitan Water District of Southern California, December 2000.
- G42-17 See Master Response to Comment "Water Conservation." An expanded discussion of Metropolitan's commitment to water conservation is included in the report referenced in Section 15 of the Final EIR/EIS Volume I, <u>The Regional Urban Water Management Plan for the Metropolitan Water District of Southern California, December 2000</u>.
- G42-18 Metropolitan concurs that there is an opportunity to promote low-flow toilet installation to bring the entire region up to the standard set by Los Angeles. This opportunity currently exists through Metropolitan's Ultra-Low-Flush Toilet (ULFT) Program (BMP 1). As of January 2000, the region had achieved an estimated 32 percent overall saturation of ULFT's. More than half of this saturation has been achieved through agency-sponsored retrofit programs. More than 200,000 ULFT's are installed each year through programs sponsored by Metropolitan and its member agencies. This level of activity is expected to continue for at least the next five years, resulting in increased saturation of ULFT's within Metropolitan's service area. It is reasonable to anticipate additional water conservation throughout southern California as a result of Metropolitan's financial support for BMP 1. See Responses to Comments G37-1 through G37-7.
- G42-19 As with the ULFT program discussed in response to your previous comment, Metropolitan concurs that there are additional opportunities for increased saturation for low-flow showerheads within its service area. Metropolitan has distributed 2,856,836 low-flow

showerheads throughout its service area as of June 30, 2000. Metropolitan and its member agencies remain committed to this program (BMP 2) through its financial support. It is reasonable to anticipate additional water conservation throughout southern California as a result of Metropolitan's financial support for BMP 2.

G42-20 Metropolitan recognizes and considers potential water conservation from High Efficiency Clothes Washers (HECW) (BMP 6). The major incentive for this program has come from the energy utilities in the region. The Los Angeles Department of Water and Power, one of Metropolitan's member agencies, initiated a major HECW rebate program. The San Diego County Water Authority, another of Metropolitan's member agencies, has also sponsored rebates for HECW's installed within their service areas. Metropolitan has contributed \$640,000 toward implementing BMP 6.

Landscape Evapotranspiration Controllers (BMP 5) also show high promise for increasing the amount of water saved in southern California. Commercial, Industrial and Institutional Programs (BMP 9), also show high promise for additional water conservation savings in southern California. Metropolitan concurs that these BMP's should be financially supported. For example, Metropolitan has already contributed over \$3 million as of June 2000, toward implementing BMP 9 within its service area. See Responses to Comments G37-1 through G37-7.

- G42-21 See Master Response "Water Conservation." An expanded discussion of Metropolitan's commitment to water conservation is included in the report referenced in Section 15 of the Final EIR/EIS Volume I, <u>The Regional Urban Water Management Plan for the Metropolitan</u> Water District of Southern California, December 2000.
- G42-22 BMP 3 (Home Water Audits and Leak Detection Programs) and BMP 5 (Landscape Water Audits) to which referenced by the commentor are currently supported financially by Metropolitan. Research and development in this area of water conservation will continue to identify cost effective "programs" which will assist Metropolitan and its member agencies in achieving water conservation savings in the future. For a more detailed discussion of Metropolitan's support for the BMP's, see <u>The Regional Urban Water Management Plan for the Metropolitan Water District of Southern California, December 2000</u>.
- G42-23 See Response to Comment R42-22.
- G42-24 Metropolitan's Water Supply and Drought Management (WSDM) Plan, referenced in Section 15 of the Final EIR/EIS Volume I, has considered water supply shortages and has been adopted to allocate water resources during shortage conditions. The Cadiz Project and other groundwater storage and conjunctive use programs will enable southern California to avoid the economic consequences of severe water supply shortages. Metropolitan considers the limited form of 'rationing' as suggested by the commentor as a form of conservation that could be implemented at the retail level. However, Metropolitan does not have the authority to enforce specific water use prohibitions at the retail level.
- G42-25 Metropolitan's projections for water conservation savings are based on the adopted IRP. These projections were approved and adopted by Metropolitan and the majority of its member agencies. Metropolitan's planning efforts are ongoing and projected water conservation savings and other information will be reevaluated over time. Regarding the conservation numbers presented in the Draft EIR/EIS, Section 2.4.4 of the Final EIR/EIS Volume I has been revised to clarify that 500,000 acre-feet per year in new conservation is

anticipated from projected programs and that an additional 164,000 acre-feet of conservation is anticipated form programs yet to be developed.

- G42-26 As stated in Section 2.4.4 of the Final EIR/EIS Volume I, total savings from continuation of existing conservation programs and implementation of new conservation programs will result in a reduction in average daily per capita water use from 220 gpcd to 192 gpcd, a reduction of 13 percent in per capita use. An expanded discussion of Metropolitan's commitment to water conservation is included in the report referenced in Section 15 of the Final EIR/EIS Volume I, <u>The Regional Urban Water Management Plan for the Metropolitan Water District of Southern California, December 2000</u>.
- G42-27 There is no inconsistency in the discussion of the State Water Project supplies that may be available to Metropolitan.. The 1.14 maf cited is correctly described in Section 2.5.2 of the Final EIR/EIS Volume I as the current dependable SWP supply in an average year. The 450,000 acre-feet cited is correctly described as the current dependable SWP supply in a dry-year. This figure of 450,000 acre-feet per year was not used in the projection of need for the Cadiz Project. Rather, as discussed in Section 2.6.1 of the Final EIR/EIS, Metropolitan is planning programs that will increase the dry-year yield of the SWP supply by 200,000 acre-feet, thus to 650,000 acre-feet in a dry year.
- G42-28 The existing and potential yield from water recycling and groundwater recovery programs was considered in the analysis of project need. See Final EIR/EIS Section 2.6.1. This discussion reflects Metropolitan's support for such programs and the projection that they will yield 500,000 acre-feet of water annually by 2020. An expanded discussion of Metropolitan's commitment to water reuse is included in the report referenced in Section 15 of the Final EIR/EIS Volume I, <u>The Regional Urban Water Management Plan for the Metropolitan Water District of Southern California, December 2000</u>. This report includes a discussion of the Southern California Comprehensive Water Reclamation and Reuse Study which was considered and incorporated in Metropolitan's water supply planning. Metropolitan is one of seven local agencies that, along with the U.S. Bureau of Reclamation and California Department of Water Resources, are participating in the Southern California Comprehensive Water Reclamation and Reuse Study.
- G42-29 Section 2.5.4 of the Final EIR/EIS Volume I includes a discussion of the availability of local groundwater supplies to meet demand. Local groundwater basins are currently being used for 90 percent of the local water supply. The commentor confuses the availability of groundwater *storage* capacity, and the actual groundwater supply. The water to be stored in underground aquifers must come from local precipitation or be imported and percolated into the ground. Storage capacity, without the water to fill it, does not represent a reliable supply of water.

As discussed in the Final EIR/EIS, Metropolitan supports the efforts of local agencies to increase the use of local groundwater supplies through treatment of contaminated supplies and improved groundwater management. Metropolitan is also considering four projects to put water in storage within local basins for use during dry years. These projects were discussed and included in the analysis of the need for the Cadiz Project. See Table 2-7 of the Final EIR/EIS Volume I

G42-30 The discussion of groundwater storage projects is not inconsistent. The annual dry-year supply provided by each project is based on the delivery capacity of each project's facilities, not simply by taking one-third of the project's capacity. The delivery capacity of the

extraction wells and pipelines for the Cadiz and Hayfield projects is 150,000 acre-feet per year. The storage capacity of each basin is considerably larger that the capacity that can be extracted over the three-year period used for comparison purposes.

- G42-31 See Response to Comment G42-30.
- G42-32 See Response to Comment G42-30.
- G42-33 Mr. Safely did not state that the Cadiz Project would withdraw "300,000 acre-feet per year" as stated in this comment. A transcript of the public meeting held at Metropolitan's offices in Los Angeles, and comment referenced are included in this document. See page 9 of the December 18, 2000 transcript at lines 21 to 24 and page 10 at lines 4 to 7. BLM and Metropolitan believe that the purpose and need for the Cadiz Project as set forth in Section 2 of the Final EIR/EIS, Volume I serves the purposes of and meets the requirements of CEQA and NEPA.
- G42-34 Metropolitan's planning process is ongoing and reflects changes that have occurred since the 1996 IRP. These changes are reflected in the analysis presented in the Final EIR/EIS.
- G42-35 Metropolitan encourages its member agencies to provide cost-effective and reliable water supplies to its customers. Metropolitan has adopted a rate structure to encourage it member agencies to accomplish this goal. However, any new rate structure is not anticipated to diminish the need for Metropolitan to continue to pursue the core supply targets identified in its IRP and in its Regional Urban Water Management Plan. Thus, it is not premature for Metropolitan to implement groundwater storage and conjunctive use programs, such as the Cadiz project, or any other core supply projects as identified through Metropolitan's long-range planning process. The Cadiz Project is one of the projects identified as having the potential to both meet IRP storage and dry-year supply targets and assist in enabling California to implement the California Colorado River Water Use Plan. G42-36 Comment noted. No response is required.
- G42-37 Extensive studies of recharge to the aquifer system have been done in connection with the project. However, as discussed in Section 5.5 of the Final EIR/EIS, Volume I, there is disagreement among experts as to the amount of natural recharge to the project area. Despite this disagreement, all of the agencies who participated in the preparation of the Final EIR/EIS agreed that the overriding objective is to ensure the protection of critical resources in the vicinity of the project area. The parties further agreed that this objective would best be accomplished through the development and implementation of the Management Plan (Final EIR/EIS Volume IV), which will protect these resources. See Master Response "Groundwater Monitoring and Management Plan". Since the project will be operated in accordance with the Management Plan, the project will not adversely impact critical resources. Thus, precise quantification of a recharge rate is not essential to determine system performance or to perform an analysis of project impacts. BLM and Metropolitan believe the project description contained in the Final EIR/EIS serves the purposes of and complies with CEQA and NEPA.
- G42-38 See Response to Comment G42-37. Section 5.5 of the Final EIR/EIS Volume I states that average amount of water available to the project area ranges between 15,000 and 37,000 acre-feet per year. The County of San Bernardino hydrology manual is in fact a tool that may be used to develop estimates of groundwater recharge, as it yields results for both surface runoff and infiltration of water into the ground. However, this information was not

used in the Final EIR/EIS to describe the project, evaluate system performance, or assess project impacts.

- G42-39 See Response to Comment G42-37. The document prepared by Dr. Bredehoeft does not reflect the Cadiz Project as it would be operated under the Management Plan. See Response to Comments G42-127 to G24-206.
- G42-40 The Cadiz Project will be operated in accordance with the provisions of the Management Plan and thus quantification of recharge is not essential to determine system performance or to perform an analysis of project impacts for the Cadiz Project. See Response to Comment G42-37. However, for clarification, it is noted that the "1996 study by Boyle Engineering," which was commissioned by Rail-Cycle, L.P., alleged "that water levels in the vicinity of the project area were declining due to existing pumping for irrigation of Cadiz's agricultural operations." The court in *Cadiz Land Co. v. Rail Cycle*, 99 Cal Rptr 2nd 378 (2000) did not indicate that the system underlying the project area is already in a state of overdraft. Rather, the court noted that the Rail Cycle EIR's responses to comments said that increased irrigation "might result in overdraft of the basin" and that the County had concluded that the basin was in overdraft. Id. at 389, 392.
- G42-41 The comment is not correct in stating that the Management Plan will "control adverse impacts as they are observed." Rather, the Management Plan is designed to monitor groundwater levels in locations where any changes will be identified and, if certain indicators are reached, corrective actions will be taken before the occurrence of adverse impacts to critical resources. See Master Response, "Groundwater Monitoring and Mitigation Plan."
- G42-42 As discussed in Section 1 of the Final EIR/EIS, the project conveyance pipeline and electrical distribution system will cross federal lands administered by the BLM; thus, the BLM must consider whether to amend the California Desert Conservation Area Plan for an exception to the utility corridor requirement and right-of-way grant(s) to Metropolitan for construction and operation of the project. The environmental impacts of these actions have been addressed in the Final EIR/EIS. Accordingly, after all public comments have been considered by BLM and, if BLM determines to approve the above actions, BLM would publish Records of Decision, in accordance with applicable law. By law, the terms and conditions for right-of way grant(s) and language of the CDCA Plan amendment must be consistent with the project as described in the Final EIS and Record(s) of Decision. Thus, inclusion of terms and conditions and amendment language is not needed to characterize the project for CEQA and NEPA purposes.
- G42-43 As noted in <u>Planning and Conservation League v. Department of Water Resources</u>, "[a]n EIR must `[d]escribe a range of reasonable alternatives to the project . . . which would *feasibly* attain most of the basic objectives of the project." 83 Cal. App. 4th at 917 (quoting CEQA Guidelines § 15126.6(a)) (emphasis added). "An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially *feasible* alternatives." (CEQA Guidelines § 15126.6(a) (emphasis added). In addition, "[t]he sufficiency of the information contained in an EIR is reviewed in light of what is reasonably *feasible*." <u>Planning and Conservation League</u> (emphasis added). The alternatives analysis contained in the Final EIR/EIS complies with these mandates.

See Master Response "Formulation and Screening of Potential Projects." Section 3 of the Final EIR/EIS assesses the feasibility of the Cadiz Project.

- G42-44 Comment noted.
- G42-45 Comment noted.
- G42-46 Comment noted.
- G42-47 There is a difference in opinion among experts regarding the amount of natural recharge to the groundwater basin. Other experts than Dr. Bredehoeft estimated that the sustainable groundwater yield available to the project wellfield is 30,000 acre-feet per year. Draft EIR/EIS, Section 5.5, p. 5-80. Notwithstanding these differences of opinion, the project involves the transfer of only the amount of groundwater that may be extracted without causing adverse impacts to critical resources. This amount of groundwater will be limited through the Management Plan (Final EIR/EIS, Volume IV). In addition, it is feasible to store water in the basin for future use, and storage of Colorado River water is part of the project.
- G42-48 Comment noted. The Cadiz Project will not interfere with any water rights reserved for federal property.
- G42-49 Comment noted. BLM and NPS protected any federal water rights through development of the Management Plan as part of the Cadiz Project.
- G42-50 The Final EIR/EIS, Volume I, Section 7.2.4, identifies the water usage on federal lands surrounding the project area. In addition, the potential impacts to springs located on federal lands are identified and avoided through the provisions of Sections 6.1 and 7.1 of the Management Plan (Final EIR/EIS, Volume IV).
- G42-51 The Management Plan includes sufficient monitoring and management measures to protect groundwater-related resources located on federal lands from adverse impacts. Final EIR/EIS, Volume IV, Sections 6.1 and 7.1. 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. Final EIR/EIS, Volume IV, Section 10.
- G42-52 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA.
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- G42-56 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or

NEPA. It should be noted that additional costs resulting from the revised standards would apply to all water supplies that do not meet the standards, not just those from the Cadiz Project.

- G42-57 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA.
- G42-58 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 Federal law, also known as the "Law of the River." California's rights to water from the Colorado River are determined by the Law of the River, which includes an international treaty, interstate compacts, federal and state laws, court decrees, contracts and regulations. For a more detailed analysis of the Law of the River, please refer to the Final Environmental Impact Statement for the Colorado River Interim Surplus Guidelines (December 2000) prepared by the U.S. Bureau of Reclamation and the Record of Decision published in the Federal Register on January 25, 2001 (Vol. 66, pp. 7772-7782). The Secretary's authority as the Colorado River "watermaster" will continue beyond 2016, when the proposed Interim Surplus Guidelines terminate.

The commentor is incorrect in stating that surplus Colorado River water cannot be stored. On the contrary, the Interim Surplus Guidelines recognize Metropolitan's right to divert such water for underground storage and use in subsequent years. The Interim Surplus Guidelines are not a barrier to storage, but are intended to provide a more reliable source of water for storage during the interim period in which California reduces its use of Colorado River water.

- G42-59 The comment is not correct that State bond funds are necessary for the Cadiz Project. Furthermore, the operation of the project in accordance with the Management Plan (Final EIR/EIS, Volume IV) will comply with the referenced state law provisions.
- G42-60 The comment concerning the financial status of Cadiz Inc. does not state a concern or question regarding the environmental effects of the project; therefore, a response is not required under CEQA or NEPA.
- G42-61 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA.
- G42-62 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA.
- G42-63 See Master Response "Formulation and Screening of Potential Projects."
- G42-64 As explained in the Final EIR/EIS, Volume I, Section 3.5.3, Ward Valley was eliminated from detailed analysis as a potential project alternative due to operational and environmental reasons, not because the site was proposed for a waste disposal facility. Among the operational reasons why this alternative was eliminated were engineering difficulties with the alignment of the necessary pipelines through Danby Dry Lake. Environmental considerations included that the probable spreading basins would be located

within critical habitat for desert tortoise, would be adjacent to and visible from designated wilderness areas, and could interrupt wildlife movement. Accordingly, it was not "unreasonable" to eliminate this potential alternative from further review.

- G42-65 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA.
- G42-66 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA.
- G42-67 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA.
- G42-68 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA.
- G42-69 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA.
- G42-70 Comment mischaracterizes the Cadiz Project, the provisions of the Management Plan to protect critical resources and the analysis of potential impacts. See Responses to Comments G42-71 through G42-87.
- G42-71 The analysis of environmental impacts has not been deferred, but has been fully addressed. The Draft EIR/EIS, Supplement and Final EIR/EIS thoroughly discuss the potential impacts to springs, the aquifer system and Bristol and Cadiz dry lakes. (Draft EIR/EIS, Section 5.5; Supplement Section 6; Final EIR/EIS Section 5.5). The Management Plan described in Volume IV of the Final EIR/EIS provides a basis for operating the project in a manner that identifies when these impacts might occur so that corrective action can be taken in advance to ensure that adverse impacts are avoided.
- G42-72 See Response to Comment G42-71.
- G42-73 The formulation of mitigation programs has not been deferred. The Management Plan constitutes an extensive program of monitoring and adaptive management of project operations so that defined corrective actions can be undertaken prior to adverse impacts occurring.
- G42-74 See Response to Comment G42-71.
- G42-75 See Response to Comment G42-73.
- G42-76 The basis for the comment is incorrect. The "estimate" reflects one opinion and is based on an operating scenario in which no remedial actions are taken and the project is operated without stopping for 50 years (see comment G42-144). In fact, the project will be operated under the Management Plan that includes an extensive monitoring system and predictive

modeling to identify groundwater changes that may portend an adverse impact. Corrective actions are required to prevent adverse impacts to critical resources.

G42-77 See Response to Comment G42-76. See Master Response "Groundwater Monitoring and Management Plan. The referenced study does not analyze the Cadiz Project. The "proposed pumping" assumed by the commentor is not a part of the Cadiz Project, and is not a valid premise for concluding "the monitoring and management system will not work." The project will be operated for storage and for extraction of available groundwater. All project operations, including transfers of indigenous groundwater, will be subject to the provisions of the Management Plan (Final EIR/EIS, Volume IV). Although there are differences of opinion regarding natural recharge to the project area, the Management Plan incorporates specific monitoring, modeling, and management requirements to ensure that project operations will not result in any adverse impacts to critical resources in the vicinity of the project area, regardless of the amount of natural groundwater recharge.

To provide further protection of critical resources following the operational phase of the project, a Closure Plan will be developed to ensure that no residual effects of project operations would result in future adverse impacts. This Closure Plan is described in Section 8.1 of Volume IV of the Final EIR/EIS.

G42-78 Sections 6.1 and 7.1 of the Management Plan (Final EIR/EIS, Volume IV) describes specific provisions to provide early warning of any potential adverse impacts to springs in the vicinity of the project. As a result of such early warning, a selection of corrective measures will be implemented to prevent adverse impacts from occurring.

It should be noted that no springs have been mapped by the U.S. Geological Survey on its 7.5' topographic quadrangles (scale 1:24,000) covering the Marble Mountains. In the event that any springs are identified in the Marble Mountains, they will be added to the inventory of known springs as described in Section 5 of the Management Plan (Final EIR/EIS, Volume IV).

Section 5.5.4 of the Final EIR/EIS, Volume I, analyzes the potential impacts to water resources within the Mojave National Preserve, including spring flow within the Preserve; within designated BLM wilderness areas; and within other BLM-managed lands. 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 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 as critical resources in the Management Plan (Final EIR/EIS, Volume IV, Section 2.1).

- G42-79 With regard to potential impacts to springs please see Responses to Comments G42-76, G42-77, and G42-78. It should be noted that no springs have been mapped by the U.S. Geological Survey on its 7.5' topographic quadrangles (scale 1:24,000) covering the Cadiz Dunes Wilderness Area. In the event that any springs are identified in the Cadiz Dunes Wilderness Area, they will be added to the inventory of known springs as described in Section 5 of the Management Plan, Final EIR/EIS, Volume IV.
- G42-80 The Management Plan was developed to provide an extensive monitoring network in conjunction with predictive modeling to provide an early warning of potential project effects

on groundwater resources. The Plan does not rely solely on monitoring of project effects, but incorporates a number of models to approximate how operations will affect the groundwater, and to modify operations as necessary to avoid impacts. Monitoring data will be utilized to calibrate the groundwater models. Metropolitan will operate the project in accordance with the Management Plan pursuant to its obligations under CEQA. In addition, BLM will retain the authority to enforce the Management Plan through the terms and conditions of its right-of-way grant(s) for the project as described in Section 10, Final EIR/EIS, Volume IV.

- G42-81 The issue raised by this comment has been addressed by finalizing the Management Plan. The Basin Management Group has been removed, and the authority to require changes in project operations will be retained by the BLM. The BLM Authorized Officer may receive comments and recommendations from members of the TRP, whether or not they have reached a consensus. The BLM Authorized Officer is not required to delay action pending receipt of such comments and recommendations. These modifications remove the potential for delay without affecting the opportunity to have a factually accurate and scientificallybased decision-making process. See Master Response "Governance."
- G42-82 The issue raised by this comment has been addressed by finalizing the Management Plan. The BLM retains the authority to require changes in project operations. In making its decision, it will have the opportunity to consult with the TRP, consisting of experts from federal, State and local agencies, including the U.S. Geological Survey, National Park Service, Environmental Protection Agency, California Department of Water Resources, the California Regional Water Quality Control Board and the County of San Bernardino. Neither Metropolitan nor Cadiz Inc. will be members of the TRP. See Master Response "Governance."
- G42-83 Contrary to the comment, the corrective measures defined in Section 7 of the Management Plan, Final EIR/EIS, Volume IV, are responsive to the specific circumstances and purpose they address and are not "vague." For example a corrective measure such as "stoppage of groundwater extraction for a duration necessary to correct the predicted impact" could not be more explicit.
- G42-84 The commentor is not correct. The "moving of extraction wells" has not been proposed as a corrective measure "to alleviate the environmental impacts from depletion of the aquifer."
- G42-85 Contrary to this comment, the referenced corrective measure is not presented in the Management Plan as an "ultimate solution." Where it is included, it is one of several available corrective actions. In all cases, it is qualified as being contingent on the availability of Colorado River water.
- G42-86 Comment misstates the facts concerning the amount of indigenous groundwater that will be extracted, the provisions of the Management Plan that will protect critical resources and the facts concerning governance of the Management Plan. Metropolitan will operate the Cadiz Project in compliance with the provisions of the Management Plan in accordance with its obligations under CEQA. This will include the monitoring of a network of features that will detect changes in groundwater, refinement and calibration of predictive models, and modeling to determine potential future significance of any measured changes. For a complete description of the water resources models and predictive analyses see Section 3, the monitoring network see Section 5 of the Management Plan, Final EIR/EIS, Volume IV. For a description of Management Plan action criteria, decision-making process and corrective measures see Section 7. The BLM will retain control over the enforcement of the

Management Plan through the terms and conditions of any right-of-way grant(s) that it issues. All information collected and all Management Plan reports will be of public record and will be made available to any interested member of the public.

- G42-87 BLM and Metropolitan respectfully disagree with the commentor's characterization of the Management Plan.
- G42-88 For the reasons stated in the previous responses to this commentor, BLM and Metropolitan respectfully disagree with the commentor's characterization of the Draft EIR/EIS and Supplement.
- G42-89 Regarding referenced "review by Dr. John Gillies," see Responses to Comment G42-162 through G42-184. Regarding the potential increased mobilization of dust related to "drawdown of the brine layer," see Master Response "Air Quality." Regarding the potential for dust mobilization related to the spreading basins and "impacts to sand dunes," see the Final EIR/EIS Section 5.6.
- G42-90 See Master Response "Groundwater Monitoring and Management Plan." See Responses to Comments G42-162 through G42-184.
- G42-91 The issue of dust mobilization from Bristol and Cadiz dry lakes was identified and discussed in Section 6.3.2 of the Supplement, and is included in Sections 2.4, 4, and 7.4 of the Management Plan, Final EIR/EIS, Volume IV. Additional study of the surface characteristics and the brine water chemistry might lead to the conclusion that lowering of the groundwater below the lake beds would <u>not</u> lead to increased susceptibility to dust mobilization. However, it has been conservatively assumed that a lowering of the groundwater level <u>could</u> increase the susceptibility of the lakebeds to dust mobilization. Therefore, the Groundwater Monitoring and Management Plan was developed to detect and mitigate the potential for increased susceptibility of the lakebeds to dust mobilization caused by lowering of the groundwater level as a result of project operations, thereby preventing increased dust mobilization from the lake beds.

A comparison between the conditions at Owens Lake and the conditions at Bristol and Cadiz dry lakes is not appropriate. Bristol and Cadiz dry lakes have been intermittent dry lakes for thousands of years, while Owens Lake was a surface body of water that was drained (over a short period of years) by removal of surface water recharge. Dust mobilization from the surfaces of Bristol and Cadiz dry lakes already exists. The intent of the Management Plan is to prevent any increase in dust mobilization due to the operation of the Cadiz Project.

G42-92 Estimates of the dust emissions from the maintenance of the spreading basins to remove accumulated sediment have been made and are included in the Final EIR/EIS, Volume I, Section 5.6.

Sediments are anticipated to accumulate on the spreading basins while they contain water. Although traps remove sand from the water flowing through the Colorado River Aqueduct, deposition onto the spreading basins of particulate matter from the atmosphere is anticipated to occur. (see the <u>Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Groundwater Resources Report (Report No. 1163) Vol I., p.11)</u>. This deposited particulate matter will remain on the surface of the basins when they empty through percolation of the water. This accumulated sediment reduces the percolation rate, so it will be removed prior to refilling of the basins. In this process, sediments will be

removed by heavy equipment to a depth of approximately 0.5 inch just prior to refilling of a basin. The removed material will be loaded into haul trucks by a front-end loader for transport and spreading at the Cadiz agricultural holdings or disposed of at an appropriate landfill. PM_{10} emissions during these operations include:

- Scraper exhaust
- Fugitive emissions from the scraper operation
- Front-end loader exhaust
- Fugitive emissions from dumping material into the haul trucks
- Haul truck exhaust, brake and tire wear
- Fugitive emissions from entrained unpaved road dust during haul truck travel
- Fugitive emissions when the material is unloaded from the haul trucks

As distinguished from dust suppression techniques that will be used during the construction of the water conveyance facilities (dust suppression during construction will involve primarily using soil binders) watering will be used to reduce PM_{10} emissions by an estimated 50 percent of uncontrolled emissions during sediment removal by the scraper. Additionally, the unpaved roads used by the haul trucks will be watered once each hour during truck travel to reduce fugitive PM_{10} emissions by an estimated 73 percent from uncontrolled emissions. The haul trucks will be covered when they transport material, so emissions from loss of material are not anticipated to occur.

It is currently anticipated that sediment will not be removed from the spreading basins every year. A significant increase in PM_{10} emissions from current levels is not anticipated to occur through wind erosion of the spreading basins, because of the formation of the crust on the surface when the basins dry out after emptying. PM_{10} emissions from the sediment removal activities are estimated to be 4.8 tons per year, which is below the Mojave Desert Air Quality Management District's CEQA significance criterion of 15 tons per year listed in Section 5.6.2 of the Final EIR/EIS, Volume I.

- G42-93 The Cadiz Project pilot spreading basin tests have shown that the sediment forms a crust on the surface because of the presence of algae and other materials. This crust reduces the susceptibility of the spreading basin surfaces to mobilization by wind to levels comparable to or lower than that of the surrounding desert land. See the <u>Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report Groundwater Resources Report (Report No. 1163) Volume I, p.10.</u>
- G42-94 The project conveyance facilities will not "temporarily or permanently disturb significant areas within the Cadiz Dunes" as stated by commentor. The preferred alternative is located outside of the Cadiz Dunes Wilderness Area.

Section 5.8 of the Final EIR/EIS discloses the acreage impacts to dune habitat of the temporary construction right-of-way and the permanent operations access road. Mitigation measures are identified to control dust emissions during construction.

G42-95 Comment misstates the provisions of the Management Plan related to preventing an increase in the mobilization of dust due to the operation of the Cadiz Project. The air quality monitoring is not intended to measure particulate matter concentrations but to detect the occurrence of wind-raised particulate matter from the dry lakebeds. Such wind mobilization is anticipated to lead to high particulate matter concentrations, which will cause large increases in the light scattering coefficient measured by the open-air nephelometers. It is expected that the continuous nephelometer readings will be a better indicator of any project-related incremental increase to these emissions than a mass measurement would be.

- G42-96 Saltation may be one of the primary mechanisms for generating particulate matter mobilization from the dry lakebeds. However, the intent of the monitoring program is to detect increases in the susceptibility of the lake bed surfaces to wind-raised particulate matter mobilization that is attributable to project operations. The Management Plan, which was developed jointly by the BLM, USGS, NPS, Metropolitan, San Bernardino County and Cadiz, will be adequate to detect such increases. Although measurements of saltation activity might help distinguish locally generated particulate matter from transported particulate matter, the use of nephelometers on opposite sides of each dry lakebed will serve the same purpose.
- G42-97 Comment misstates and misrepresents the facts regarding the Management Plan and its provisions to monitor and protect air quality. The air quality provisions of the Management Plan will operate for the entire duration of the project. The five-year period described in Section 4.2 of the Management Plan, Final EIR/EIS, Volume IV, refers to the first stage of monitoring to evaluate the potential for transport of dust mobilized from Bristol or Cadiz dry lakes to the surrounding Mojave desert region. Wind speed and direction will be measured for at least five years using 10-meter meteorological towers at three locations. Five years is a reasonable period to identify existing meteorological and air quality conditions. Analyses of these data, along with the air quality measurements at the dry lakebeds, will be conducted to evaluate if this potential for transport from the dry lakebeds to the Mojave Desert region exists. This five-year period may be extended, should it be deemed warranted. If the potential for transport exists, then additional monitoring will be conducted once groundwater extraction commences to collect data for determination if the related air quality action criteria are met.

Commentor suggests that the El Nino Southern Oscillation is entering a wet phase, when in fact it appears that the dry phase is continuing. It is possible that natural effects of the dry phase will result in increased dust mobilization that is unrelated to the operation of the Cadiz Project.

G42-98 See Master Responses "Groundwater Monitoring and Management Plan" and "Air Quality" regarding the protection of air quality as it relates to the potential to increase dust mobilization from Bristol and Cadiz dry lakes. See also Responses to Comments G42-162 to G42-180.

Contrary to this comment, the corrective measures proposed in the Management Plan, Final EIR/EIS, Volume IV, are not intended to provide short-term intermittent responses to weather-driven processes. Instead, they are intended to prevent significant increases in wind-raised particulate matter emissions from the dry lakebeds caused by project operations.

The distribution of observation wells, as outlined in the Management Plan, is sufficient to provide early warning of potential project-related impacts to brine levels underlying Bristol and Cadiz dry lakes. Based on this early warning, appropriate corrective measures will be undertaken to ensure that the natural hydraulic gradient is restored. In this way, the Management Plan will avoid project-related impacts to air quality.

The commentor is incorrect in suggesting that the corrective measures are implausible due to demands for water. Metropolitan will operate the project in accordance with the Management Plan pursuant to its obligations under CEQA. The BLM will retain authority over the enforcement of the Management Plan through the terms and conditions of any right-of-way grant(s) it issues.

- G42-99 Information provided regarding "Owens Lake" is not applicable to the Cadiz Project. Owens Lake is unique in the respect that it was a surface body of water that was transformed into a dry lake through diversions of surface water. By contrast, Bristol and Cadiz dry lakes have been intermittent dry lakes for thousands of years. Dust mobilization from the surfaces of Bristol and Cadiz dry lakes already exist and the area is designated to be in nonattainment for PM₁₀. The Management Plan will prevent any increase in this potential for dust mobilization due to project operations.
- G42-100 The proposed Management Plan is designed to detect increases in dust mobilization related to project operations for the Mojave desert region. Based on topography, the potential transport corridor from the dry lake beds to Joshua Tree National Park is much more direct (down a valley) than that to the Mojave National Preserve (over a mountain range).
- G42-101 See Responses to Comments G42-95 through G42-100.
- G42-102 See Responses to Comments G27-1 through G27-7. The Endangered Species Act allows for the take of listed species incidental to lawful activities through consultation with USFWS pursuant to Section 7 and prohibits unauthorized take in Section 9. BLM initiated the Section 7 consultation process with USFWS on December 7, 1999.
- G42-103 See Responses to Comments G27-1 through G27-7.
- G42-104 The springs that occur within the region surrounding the proposed project wellfield and spreading basins are identified in the Final EIR/EIS, Volume IV, Section 2.1 and Figure 4, as critical resources. This designation is due primarily to the important value of these springs to wildlife and plant species. One of the species that depends upon these springs is the bighorn sheep. The first three feature types in the Management Plan are designed specifically to protect these resources. These features include the installation of observation well clusters between the project area and the springs in the nearby mountains. This monitoring will be used in conjunction with predictive modeling to detect adverse trends before they can cause an adverse impact to critical resources. Operation of the project in accordance with the Management Plan will avoid adverse impacts to the springs, and further avoid any indirect effects to bighorn sheep.
- G42-105 See Responses to Comments G42-127 through G42-161 regarding comments from John Wehausen. Regarding potential impacts to springs, see Master Response "Groundwater Monitoring and Management Plan" and Responses to Comments G42-78 and G38-4. Operation of the project in accordance with the Management Plan will avoid adverse impacts to the springs, and further avoid any indirect effects to bighorn sheep.
- G42-106 The environmental documents for the project meet the requirements of CEQA and NEPA. Analysis of the potential impacts to air quality due to dust mobilization from the surfaces of Bristol and Cadiz dry lakes are fully discussed, see Sections 6.4 and 7.4 of the Final EIR/EIS, Volume IV, and Sections 5.5.4 and 5.6.4 of the Final EIR/EIS, Volume I.

Commentor misstates the facts concerning the Management Plan and its provisions to protect water levels underlying Bristol and Cadiz dry lakes and thereby prevent the potential for an increase in the mobilization of dust due to the operation of the project. As stated in the Response to Comment G42-91, the Management Plan was developed to detect and mitigate the potential for lowering of the groundwater level as a result of project operations, thereby preventing increased dust mobilization from the dry lakebeds. The Management Plan's provision of additional data collection and analysis is not in place of such information and analysis in the Final EIR/EIS, but is in addition to it.

The monitoring network and predictive modeling are comprehensive and action criteria are conservative. These efforts include groundwater monitoring, data collection and analysis, as well as air quality and meteorological monitoring, data collection and analysis. See for example Final EIR/EIS, Volume IV, Section 7.4.1, "Potential Impacts to Air Quality due to Dust Mobilization from Water-Level Declines Beneath Bristol and Cadiz Dry Lakes." To monitor groundwater levels a network of "Cluster Type" observation wells will be established between the project wellfield and Bristol and Cadiz dry lakes. The groundwater levels of these wells will be monitored on a continuous basis throughout the term of the project. The action criterion is a change of 6 inches (from pre-operational static levels). If during project operations the predictive modeling determined that a corrective measure was needed to avoid potential significant impacts, such measure will be implemented in a timely manner. Section 3 of the Management Plan describes the modeling, Section 6 describes monitoring, testing and reporting procedures. Section 7 of the Management Plan describes action criteria, decision-making process and corrective measures.

See Master Response "Air Quality."

- G42-107 Operation of the project in accordance with the Management Plan will avoid significant adverse impacts to water resources in wilderness areas and park units. Regarding potential water resource impacts to "park units," see Master Response "Groundwater Monitoring and Management Plan" and Responses to Comments G42-78 and G38-4. Regarding impacts to "wilderness areas," see Response to Comment G33-20.
- G42-108 Neither the DEIR/EIS, the Supplement, nor the Final EIR/EIS state that mixing of indigenous groundwater and imported Colorado River water "will not occur." However, it is noted that the zone of mixing would be limited to the area of groundwater mounding resulting from the project spreading operations, and that this zone would not extend significantly outside the vicinity of the project wellfield (See Draft EIR/EIS, p. 5-94, Supplement, p. 6-3, and Final EIR/EIS, Volume I, Section 5.5.4).

The proposed project wellfield has been designed to efficiently extract the mound of stored water and indigenous groundwater that will form as a result of project spreading operations. As described in Section 5.5.4 of the Final EIR/EIS, Volume I, selected wells will be constructed to facilitate selective removal of stored water concentrated in the upper portion of the saturated section. For additional information, see Master Response "Water Quality."

G42-109 Metropolitan and BLM acknowledge that the Regional Water Quality Control Board has the authority to enforce the Porter-Cologne Water Quality Control Act to protect the quality of California's surface and groundwater. Compliance with applicable statutory and regulatory requirements governing water quality are an element of the Management Plan. See Final EIR/EIS, Volume IV, Section 7.2.1. Section 13 of the Final EIR/EIS, Volume I, has been revised to show this additional permit that may be required.

G42-110 See Response to Comment G42-109.

- G42-111 Comment noted.
- G42-112 Comment noted.
- G42-113 Comment noted.
- G42-114 The cumulative impacts analysis fully considers other water uses in the area, including water use in the Mojave National Preserve and other federal lands administered by the BLM in the vicinity of the Cadiz Project. See Final EIR/EIS, Volume I, Section 7. The documentation shows that such use is quite small, and that such use is not expected to increase substantially in the foreseeable future.
- G42-115 The Final EIR/EIS, Volume I, Section 7.2.4, includes a discussion of water uses on private land. See Response to Comment P1-3. Comment does not provide any evidence that the information, which was included in Section 7.1.3 in the Supplement, that approximately 20 people live in the community of Chambless and that such water use is unlikely to increase significantly in the future, is incorrect. Moreover, at the time of the preparation of the Draft EIR/EIS and the Supplement, there was no public information available regarding any plans of the owner of Chambless Station as represented by the commentor. Indeed, the comment letter from an attorney representing the owner of Chambless Station does not disclose any plans to "establish a local water company and residential complex" as asserted by the commentor. See Comment Letter B10. In fact, no land use application has been submitted or is being processed for this location (personal communication, Ms. Julie Rynerson, Division Chief, Current Planning Division, San Bernardino County Land Use Services Department, February 14, 2001). Accordingly, it was not possible to include information about such planned projects in the Final EIR/EIS. Regarding water rights in Chambless, please see responses to comment letter B10.
- G42-116 With regard to total chromium and hexavalent chromium in the indigenous groundwater underlying the proposed project area, see Master Response "Water Quality" and Response to Comment F3-11.
- G42-117 The comment period on the Draft EIR/EIS and Supplement were extended and substantially exceeded the review periods required by NEPA and CEQA. See Section 1.5 of the Final EIR/EIS Volume I for a summary of the public involvement process.
- G42-118 Table 3-3 in Section 3 of the Final EIR/EIS identifies 17 possible alignments that were evaluated and screened to arrive at the shortlist of alternative alignments that were evaluated in detail in the Final EIR/EIS. This effort provided an adequate review of possible alternative alignments. See also Master Response "Alignment Alternatives."
- G42-119 Comment noted.
- G42-120 Comment noted.
- G42-121 There are no existing utility corridors or rights-of-way that connect the Iron Mountain Pumping Plant with the project spreading basins and wellfield. The preferred alternative follows existing rights-of-way to the extent reasonably possible. See Master Response "Alignment Alternatives."

G42-122 Comment noted.

G42-123 Comment noted.

- G42-124 BLM and Metropolitan respectfully disagree. The Final EIR/EIS thoroughly analyzes the reasonable alternatives and potential environmental impacts in accordance with federal law and policy.
- G42-125 The wilderness areas in the vicinity of the project were considered. (See Final EIR/EIS, Volume I, Section 5.17, "Wilderness/Recreation"). Other relevant discussions are included in Section 5.2 "Land Use, Planning and Policies," Section 5.11 "Noise" and Section 5.14 "Aesthetics." The analysis considers wilderness values and provides mitigation for potential impacts to designated wilderness areas in accordance with federal law and policy.
- G42-126 See Responses to Comments G42-1 through G42-125. The Final EIR/EIS complies with CEQA and NEPA. Contrary to the commentor's assertion, there is no "clear weight" of expert opinion regarding recharge in the Cadiz Project area. As explained in the Final EIR/EIS, there is disagreement among the experts on this issue. Therefore, the Management Plan has been designed to prevent adverse impacts to critical resources, regardless of the amount of recharge, through project operations that include ongoing monitoring of effects. The Final EIR/EIS discusses and analyzes all potential adverse environmental impacts, including cumulative impacts. Finally, the Cadiz Project will comply with all applicable state and federal laws.

Please see Responses to Comments G42-127 through G42-161 and Master Response "Groundwater Monitoring and Management Plan."

- G42-127 See Response to Comment T2-46
- G42-128 The comment is based on an operating scenario that has never been considered. The project will be operated in accordance with the Management Plan and any groundwater use under the project must comply with the Management Plan provisions. See Master Response "Groundwater Monitoring and Management Plan."
- G42-129 Comments noted.
- G42-130 Comments noted. The Management Plan was developed as the basis for operating the project without causing adverse impacts to critical resources regardless of the amount of recharge to the basin.
- G42-131 Comment noted. As the project is located in California, the comparison to Nevada's groundwater law is irrelevant. A variety of methods have been used to model the groundwater recharge in the basin. BLM and Metropolitan acknowledge that there are different opinions among experts regarding the amount of recharge. Due to these conflicting opinions, the Management Plan was developed as the basis for operating the project without causing adverse impacts to critical resources. The Management Plan will provide a systematic, site-specific investigation of the natural recharge as suggested in the comment.
- G42-132 The Supplement to the Draft EIR/EIS, Section 1.1, acknowledged that there are differences in the opinions of experts with respect to natural recharge. This concern was addressed in the Supplement through the development of the Management Plan for purposes of governing

project operations to avoid adverse impacts to critical resources. See Master Response "Groundwater Monitoring and Management Plan."

- G42-133 See Response to G42-132. The County of San Bernardino Hydrology Manual is an appropriate tool to estimate recharge to the groundwater basin, as it yields values for both surface runoff and infiltration into the ground.
- G42-134 See Response to G42-132.
- G42-135 See Response to G42-132.
- G42-136 See Response to G42-132.
- G42-137 See Response to G42-132. The Management Plan (Section 6.1.1) provides for sampling and isotopic analysis of water samples from springs in the area to help determine the age and source of water.
- G42-138 See Response to Comment G42-132.
- G42-139 See Response to G42-132.
- G42-140 See Response to G42-128 and G42-132.
- G42-141 BLM and Metropolitan respectfully disagree with the assertion that the Management Plan is flawed. Potential adverse impacts to critical resources will be avoided by monitoring the response of the groundwater basin to project operations and implementing corrective measures as necessary.

The monitoring facilities are conservatively located to ensure that the response of the groundwater basin is identified prior to the effects on the basin becoming significant enough to adversely affect critical resources. See Master Response "Groundwater Monitoring and Management Plan."

- G42-142 See Response to Comment G42-128.
- G42-143 The comment is based on an operating scenario that has never been considered. Section 8 of the Management Plan, Final EIR/EIS, Volume IV requires project operations be limited to allow a decline of no more than an average of 100 feet in static groundwater levels in the vicinity of the project wellfield, or such a level as will not cause a predicted adverse impact to critical resources at any point in the future.
- G42-144 The comment is based on an operating scenario that has never been considered. The Management Plan generally defines four corrective measures that could be implemented, at any point in time of project operations, to address potential adverse impacts to critical resources. See Section 7 of the Management Plan, Final EIR/EIS, Volume IV.
- G42-145 See Response to Comment G42-132.
- G42-146 See Response to Comment G42-128.

- G42-147 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-148 See Responses to Comments G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-149 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-150 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-151 See Response to Comment G42-80.
- G42-152 See Responses to Comments G42-132 and G42-128.
- G42-153 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-154 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-155 See Response to Comment G42-132
- G42-156 See Responses to Comments G42-132 and G42-128.
- G42-157 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-158 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-159 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-160 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-161 See Response to Comment G42-128. The results of the simulation do not reflect the project as it will be implemented.
- G42-162 The Final EIR/EIS acknowledges the possibility that a lowering of the groundwater levels under the dry lake beds could potentially lead to an increase in wind-mobilized particulate matter from the lakebed surfaces. Therefore, Section 7.4.1 of the Management Plan (Final EIR/EIS, Volume IV) specifies an action criterion to initiate review of a six-inch change in groundwater levels from pre-operational static levels in the cluster wells on the dry lake beds. Corrective action would be taken to restore the natural hydraulic gradient and avoid any project-related impacts.
- G42-163 The Management Plan (Final EIR/EIS, Volume IV) requires monitoring of groundwater levels, surface soil moisture, and evapotranspiration at the dry lake beds. Additionally, data

will be collected on dust mobilization, wind speed and direction, and weather. Together this data will be used to identify and avoid significant adverse air quality impacts due to dust mobilization from the dry lake beds. Further analysis of the chemical composition of the surface crust and brine at the dry lake beds would not appreciably contribute to the assessment of potential impacts beyond the information provided by the data already designated for collection and measurement under the Management Plan.

- G42-164 See Response to Comment G42-163.
- G42-165 The Management Plan requires that monitoring of groundwater and air quality at the dry lake beds continue through the term of the project, with additional monitoring continuing during the post-operational phase. Final EIR/EIS, Volume IV, Sections 6.3 and 6.4. Additional monitoring of saltation activity on the dry lakebeds would not appreciably contribute to the measures required under the Management Plan.
- G42-166 See Response to Comment G42-165.
- G42-167 See Response to Comment G42-165.
- G42-168 The only potential effect the project may have on the dry lake beds is the raising and/or lowering of groundwater levels. The Final EIR/EIS addresses the issue of the potential for increased dust mobilization that could result from less moisture at the surface due to drops in the groundwater. The measures developed and incorporated in the Management Plan (Final EIR/EIS, Volume IV) will ensure that the groundwater levels below the dry lake beds are not lowered to levels that allow increased dust mobilization.
- G42-169 The measures required in the Management Plan (Final EIR/EIS, Volume IV) are not intended to provide short-term intermittent responses to weather-driven processes. Instead, they are intended to prevent possible increases in wind-raised particulate matter emissions from the dry lakebeds caused by project operations. An important aspect of the Management Plan is to detect and mitigate changes in groundwater levels beneath the dry lakebeds that are caused by project operations and that could lead to air quality impacts. The intent is not to reduce or prevent adverse impacts to air quality that already exist or are not caused by the project operations. The approach described in the comment suggests that project operations should be designed to reduce wind-raised particulate matter emissions below levels that are currently occurring.
- G42-170 See Response to Comment G42-168.
- G42-171 See Responses to Comments G42-172 and G42-173.
- G42-172 Use of nephelometers in conjunction with weather stations collecting wind speed and direction data is sufficient to identify the existing air quality conditions at the dry lake beds, and to identify any measurable changes that may occur during project operations. Further measurements of particulate matter concentrations and saltation will not appreciably contribute to the assessment of potential impacts beyond the information provided by the data already designated for collection and measurement under the Management Plan.
- G42-173 The Management Plan does not limit air quality monitoring at the dry lake beds to five years. Three meteorological towers to measure wind speed and direction will be operated for the five year period to assess regional wind patterns. In addition, there is ongoing

monitoring of particulate matter and meteorological conditions at the dry lakes throughout the operational and post-operational phases of the project. Management Plan, Final EIR/EIS, Volume IV, Section 6.4.1.

G42-174 As discussed in Response to Comment G42-92, estimates of the dust emissions from the maintenance of the spreading basins to remove accumulated sediment were made by the air quality technical experts retained by Metropolitan and are included in the Final EIR/EIS, Section 5.6 and Appendix C. These estimates were based on emission factors in the U.S. EPA's *Compilation of Air Pollutant Emission Factors* (AP-42). The statement in the Executive Summary of the Draft EIR/EIS stating that such emissions "would exceed standards" did not accurately summarize the analysis of such impacts. The text of the Final EIR/EIS has been revised to clarify that PM₁₀ emissions from spreading basin maintenance will not exceed the applicable yearly threshold.

Sediments are anticipated to accumulate on the spreading basins while they contain water. Although traps remove sand from the water flowing through the Colorado River Aqueduct, deposition onto the spreading basins of particulate matter from the atmosphere is anticipated to occur. See the Cadiz Groundwater Storage or Dry-Year Supply Program Environmental Planning Technical Report—Groundwater Resources Report (Report No. 1163) Volume I, p. 11. The deposited particulate matter would remain on the surface of the basins when they empty through percolation of the water. This accumulated sediment reduces the percolation rate, so it will be removed prior to refilling of the basins. In this process, sediments will be removed by heavy equipment to a depth of approximately 0.5 inch just prior to refilling of a basin. The haul trucks will be covered when they transport material, and the unpaved roads will be watered during these operations. The sediments will be applied and integrated into the cultivated Cadiz agricultural landholdings where it will be no more susceptible to wind entrainment than the existing agricultural land.

 PM_{10} emissions from the sediment removal activities are estimated to be 4.8 tons per year, which is below the Mojave Desert Air Quality Management District's CEQA significance criterion of 15 tons per year listed in Section 5.6.2 of the Final EIR/EIS. The calculation of emissions from these operations is set forth in Appendix C.

See Response to Comment G42-93 regarding emissions from the spreading basins when they are not being used for water recharge and are not undergoing maintenance.

- G42-175 See Responses to Comments G42-92 and G42-174.
- G42-176 See Responses to Comments G42-93 and G42-177.
- G42-177 The Final EIR/EIS, Volume I, Section 5.6 addresses these air quality comments. More specifically, Section 5.6.5 includes Mitigation Measures AQ-8 and AQ-9 that specifically address spreading basin maintenance and the protection of air resources.

The spreading basins are only a potential source of dust when they are not in use. After use, the basins will have a layer of algal material that forms in the water and settles on the basin bottom as the basin drains. (GeoScience 1999, Section 9.6.1 {Report No. 1163}). Together with vegetation that will grow in the spreading basins, this algal mat will reduce potential dust during periods when the basins are dry.

The vegetation, algal mat, and fine-grained sediment will be removed only when the basins are to be put to use. This will limit the period of time in which the basins are exposed to wind erosion and dust emissions. The Final EIR/EIS, Volume I, Section 5.6.4, has been revised to clarify that basin maintenance will be performed only as necessary prior to use of the basins.

G42-178 As stated in Response to Comment G42-94, the project conveyance facilities will not "temporarily or permanently" disturb significant areas within the Cadiz Dunes Wilderness Area as stated by commentor. The preferred alternative is located outside of the Cadiz Dunes Wilderness Area.

Section 5.8 of the Final EIR/EIS, Volume I, discloses the acreage impacts to dune habitat of the temporary construction right-of-way and the permanent operations access road. Mitigation measures are identified to control dust emissions during construction.

G42-179 Sand is not anticipated to become mobilized and blow onto the Cadiz and Danby dry lakebeds after completion of construction, because contouring, compaction and reestablishment will be used to stabilize any areas disturbed during construction.

Similarly, mitigation measures that will be used to control dust emissions during construction are anticipated to minimize any transport of sand from the construction area onto the Cadiz and Danby dry lakebeds.

- G42-180 See Responses to Comments G42-162 through G42-179.
- G42-181 See Responses to Comments G42-163 to G42-164.
- G42-182 See Responses to Comments G42-165 to G42-170.
- G42-183 See Responses to Comments G42-171 to G42-173.
- G42-184 See Responses to Comments G42-174 to G42-177.
- G42-185 Attached letter is included in this document as letter G27. See Response to Comment G27-1.
- G42-186 Attached letter is included in this document as letter G27. See Response to Comment G27-2.
- G42-187 Attached letter is included in this document as letter G27. See Response to Comment G27-3.
- G42-188 Attached letter is included in this document as letter G27. See Response to Comment G27-4.
- G42-189 Attached letter is included in this document as letter G27. See Response to Comment G27-5.
- G42-190 Attached letter is included in this document as letter G27. See Response to Comment G27-6.

- G42-191 Attached letter is included in this document as letter G27. See Response to Comment G27-7.
- G42-192 Attached letter is included in this document as letter G27. See Response to Comment G27-8.
- G42-193 Comment noted.
- G42-194 Comment noted.
- G42-195 The Management Plan (Final EIR/EIS, Volume IV) includes the monitoring of springs as well as groundwater levels at locations between the project wells and the springs. See Section 5, Figure 4, of the Management Plan. The data collected will ensure that corrective measures are implemented if necessary to avoid any significant adverse impacts to spring flows.
- G42-196 The comment concerning water costs does not state a concern or question regarding the environmental effects of the project, therefore, a response is not required under CEQA or NEPA. Commentor should note that the financial terms between Metropolitan and Cadiz Inc. are no longer those stated in the August 1998 Principles document relied on for the comments stated in this letter. Financial terms will be included in contracts to be executed only upon completion of the environmental review of the project.
- G42-197 See Response to Comment G42-196.
- G42-198 See Response to Comment G42-196.
- G42-199 See Response to Comment G42-196.
- G42-200 See Response to Comment G42-196.
- G42-201 See Response to Comment G42-196.
- G42-202 See Response to Comment G42-196.
- G42-203 See Response to Comment G42-196.
- G42-204 See Response to Comment G42-196.
- G42-205 See Response to Comment G42-196.
- G42-206 See Response to Comment G42-196.

G43 RESPONSES TO COMMENTS FROM THE SAN FERNANDO VALLEY SIERRA CLUB DATED JANUARY 2, 2001

G43-1 Comment misstates the facts concerning the Cadiz Project, the amount of indigenous groundwater, if any, that will be transferred and the provisions of the Management Plan to protect critical resources. See Master Responses "Groundwater Monitoring and Management Plan" and "Air Quality."

- G43-2 See Response to Comment G43-1.
- G43-3 See Response to Comment G43-1.
- G43-4 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- G43-5 Comment noted.

P18 RESPONSES TO COMMENTS FROM JOHN HILL DATED OCTOBER 30, 2000.

- P18-1 Comment noted.
- P18-2 See Section 7.1.1 of the Management Plan (Final EIR/EIS, Volume IV) for a description of explicit provisions to monitor and protect springs. Implementation of the Management Plan is a component of the Cadiz Project to ensure the project will not "make the water table disappear."
- P18-3 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.

P19 RESPONSES TO COMMENTS FROM CATHY DANZEISEN DATED NOVEMBER 2, 2000.

P19-1 The Management Plan (Final EIR/EIS, Volume IV) provides specific actions and corrective measures that address concerns raised in comments on the Draft EIR/EIS and Supplement, and ensures protection of critical resources, including groundwater related resources.

P20 RESPONSES TO COMMENTS FROM KATE BLAIR DATED NOVEMBER 21, 2000.

- P20-1 Section 8 of the Management Plan requires operation of the project in a manner that avoids projected impacts to groundwater resources, even after the project is ended. This plan ensures continued beneficial use of the basin. The project is not analogous to the use of water from the Mono Valley by the Los Angeles Department of Water and Power.
- P20-2 Metropolitan will operate the project in accordance with the Management Plan pursuant to its obligations under CEQA. BLM will retain authority to enforce the Management Plan through the terms and conditions of its right-of-way grant(s) for the project.
- P20-3 See Master Response "Water Conservation." See Response to Comment F3-11 regarding hexavalent chromium.

P21 RESPONSES TO COMMENTS FROM ROGER ARMSTRONG DATED NOVEMBER 29, 2000.

P21-1 The Cadiz Project does not propose to drain pristine water from the aquifers beneath the Mojave National Preserve. Section 7.1.1 of the Management Plan (Final EIR/EIS, Volume IV) provides for the monitoring and management of project operations to avoid causing groundwater level declines at the boundary of the Mojave National Preserve.

- P21-2 See Master Responses "Groundwater Management Plan" and "Air Quality." The Management Plan (Final EIR/EIS, Volume IV, Section 7.1) includes provisions to protect the springs, aquifer system, and other critical resources that support the desert ecosystem, including bighorn sheep and desert tortoise. The project would not create a "dustbowl effect". Section 7.4 of the Management Plan provides for protection of air quality related to potential dust mobilization from water level declines beneath Bristol and Cadiz dry lakes caused by project operations.
- P21-3 The USGS and NPS expressed concerns regarding some elements of the project as proposed in the Draft EIR/EIS. As a result, they became cooperating agencies pursuant to NEPA and participated in the preparation of the Supplement, the Final EIR/EIS, and the Management Plan.

Additionally, water conservation is an important component of Metropolitan's strategic planning. See Master Response "Water Conservation." The Cadiz Project, and other Colorado River groundwater storage programs, will enable the State of California to reduce its dependence on the Colorado River. See Section 2.5.3 of the Final EIR/EIS, Volume I, regarding existing Colorado River water allocations.

P21-4 The comment does not identify a new environmental effect that has not been addressed in the Final EIR/EIS. BLM and Metropolitan have provided a good faith effort at full disclosure in the Final EIR/EIS of potentially significant impacts, alternatives, and mitigation measures.

P22 RESPONSES TO COMMENTS FROM BARBARA PASCHKE CITIZEN OF THE WORLD DATED DECEMBER 4, 2000.

- P22-1 See Response to Comment F3-11 and Master Response "Water Quality" regarding hexavalent chromium.
- P22-2 The project will not affect the ability of Metropolitan to meet applicable water quality standards. There is no conclusive evidence that hexavalent chromium causes cancer when ingested in water. Further study is being done by the California Department of Health Services and the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment.
- P22-3 The Cadiz Project, and other Colorado River groundwater storage programs, will enable the State of California to reduce its dependence on the Colorado River, thereby conserving this resource. See Section 2.5.3 of the Final EIR/EIS, Volume 1, regarding existing Colorado River allocations. Also, see Master Response "Water Conservation."P22-4 See Responses to Comments P22-2 and P22-3.

P23 RESPONSES TO COMMENTS FROM JAMES BRYANT CURATOR OF NATURAL HISTORY RIVERSIDE MUNICIPAL MUSEUM DATED NOVEMBER 16, 2000.

P23-1 Comments noted. With regard to chromium in the groundwater at the project site, see Response to Comment F3-11. Water conservation is a basic element of Metropolitan's long-term water management strategy. See Master Response "Water Conservation."

Regarding water supply, see Master Response "Growth Inducement."

P24 RESPONSES TO COMMENTS FROM WILLIAM MCCARVILL DATED NOVEMBER 24, 2000.

- P24-1 The commentor misconstrues the facts concerning the Cadiz Project. The capacity of project facilities will be 150,000 acre-feet per year to allow extraction of that amount in any year of project operations, but not every year will be operated at full capacity for either storage or retrieval operations. All Cadiz Project operations, including transfer of indigenous groundwater (if any), will be governed by the provisions of the Management Plan, Final EIR/EIS, Volume IV.
- P24-2 See Master Responses "Growth Inducement" and "Water Conservation."
- P24-3 The project makes no change in the amount of water that Metropolitan receives from the Colorado River, nor in the operation of Metropolitan's diversion facilities at Lake Havasu.
- P24-4 Metropolitan will operate the project in accordance with the Management Plan pursuant to its obligations under CEQA. BLM will retain authority to enforce the Management Plan pursuant to the terms and conditions of its right-of-way grant(s) for the project.
- P24-5 See Master Response "Groundwater Monitoring and Management" and Response to Comment G42-37.
- P24-6 See Master Response "Governance."
- P24-7 Comment noted. See Master Response "Groundwater Monitoring and Management Plan."

P25 RESPONSES TO COMMENTS FROM AUBREY JOHNSON DATED DECEMBER 20, 2000.

- P25-1 See Response to Comment P21-4.
- P25-2 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P25-3 Metropolitan places emphasis on both water conservation and other water resource options in its strategic planning. Metropolitan's commitment to water conservation is further described in its recently adopted Regional Urban Water Management Plan for the Metropolitan Water District of Southern California. See Master Response "Water Conservation".

See Master Response "Growth Inducement."

- P25-4 See Master Response "Air Quality."
- P25-5 Analysis of the potential impacts of the Cadiz Project associated with wilderness values is provided in Section 5.17 (Wilderness/Recreation) in the Final EIR/EIS, Volume I. Analysis of potential impacts related to wildlife species and native habitats are provided in Section 5.8 (Biological Resources).

P26 RESPONSES TO COMMENTS FROM CAROL ARONOWSKY DATED DECEMBER 21, 2000.

P26-1 See Response to Comment P21-4. Analyses of potential impacts related to wildlife species and native habitats are provided in Section 5.8 (Biological Resources). See Master Responses "Groundwater Monitoring and Management Plan" and "Water Quality" regarding water quality issues. For additional information regarding existing water quality see the Final EIR/EIS Section 5.5 and see the <u>Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report – Groundwater Resources Report (Report No. 1163).</u> With respect to governance of proposed project operations, see Sections 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV).

P27 RESPONSES TO COMMENTS FROM KIRK D. MAYES DATED DECEMBER 26, 2000.

P27-1 Analysis of the potential impacts of the Cadiz Project associated with wilderness values is provided in Section 5.17 (Wilderness/Recreation) in the Draft EIR/EIS. Analysis of potential impacts related to wildlife species and native habitats are provided in Section 5.8 (Biological Resources). See Master Response "Master Response "Groundwater Monitoring and Management Plan."

Metropolitan places emphasis on both water conservation and other water resource options in its strategic planning. Metropolitan's commitment to water conservation is further described in its recently adopted Regional Urban Water Management Plan for the Metropolitan Water District of Southern California. See Master Response "Water Conservation."

- P27-2 Metropolitan will implement the project in accordance with the Management Plan pursuant to its obligations under CEQA. BLM will retain authority to enforce the Management Plan through the terms and conditions of its right-of-way grant(s) for the project.
- P27-3 Demand for new water supplies has been substantially reduced through implementation of water conservation in Southern California. See Master Response "Water Conservation."

Regarding alternatives to the project, see Master Response "Formulation and Screening of Potential Projects."

- P27-4 See Master Response "Air Quality."
- P27-5 Written responses to the comment letters are included in this Final EIR/EIS, Volumes II and III.

P28 RESPONSES TO COMMENTS FROM MARSHA WESTROPP DATED DECEMBER 27, 2000.

- P28-1 See response P21-1.
- P28-2 Regarding alternatives to the project, see Master Response "Formulation and Screening of Potential Projects."

Regarding conservation measures being implemented in Metropolitan's service area, see Master Response "Water Conservation."

- P28-3 The Cadiz Project will not result in "draining of aquifer." For additional information regarding water quality, see the Final EIR/EIS, Volume I, Section 5.5 and see the report Cadiz Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical Report Groundwater Resources Report. Also see Master Response "Water Quality" and Response to Comment F3-11.
- P28-4 The Cadiz Project will not result in "draining of aquifer." Implementation of the Management Plan will ensure that the project will not "endanger the health of the desert ecosystem". See Master Response "Groundwater Monitoring and Management Plan."
- P28-5 Comment noted.

P29 RESPONSES TO COMMENTS FROM SUSAN ZWINGER DATED DECEMBER 29, 2000.

P29-1 The Cadiz Project will not cause significant adverse impacts to the water resources of the Mojave National Preserve, the Joshua Tree National Park, or the Mojave desert environment. Potential impacts to wildlife and natural habitats are discussed in Section 5.8 of the Final EIR/EIS, Volume I. Regarding the water quality issues, see Section 5.5 of Volume I and Section 7 of Volume IV of the Final EIR/EIS.

Regarding alternatives, see Master Response "Formulation and Screening of Potential Projects."

P30 RESPONSES TO COMMENTS FROM MARY WESTLAKE DATED DECEMBER 25, 2000.

P30-1 See Response to Comment P21-4.

P31 RESPONSES TO COMMENTS FROM JEFFREY BLAKE DATED DECEMBER 28, 2000.

- P31-1 The Management Plan provides adequate baseline monitoring. The pre-operational phase of the project will be used to gather baseline data and is expected to last approximately 15-24 months during the period of construction of facilities necessary to store water. Other groundwater level data are available for wells located within and adjacent to the proposed project wellfield and spreading basins. These groundwater level data are available in numerous reports referenced in Section 15 of the Final EIR/EIS, Volume I. Examples include Shafer (1964), Moyle (1967), Freiwald (1984), GEOSCIENCE (1995), and Metropolitan (1999). As many as 15 years of groundwater pumping and water level data are available for the Cadiz Inc. agricultural wells.
- P31-2 Metropolitan will operate the project in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid adverse impacts to critical resources.

- P31-3 See Master Response "Groundwater Monitoring and Management Plan." The Management Plan ensures protection of critical resources regardless of whether water is first stored or extracted.
- P31-4 See Section 3 of the Management Plan for a description of the use of groundwater models. Under the Management Plan, a series of water resource models will be developed and calibrated using available data during the pre-operational and operational phases of the Cadiz Project. As the comment suggests, these models will be used to help guide decisions on project operations.

P32 RESPONSES TO COMMENTS FROM RICHARD KNOX DATED DECEMBER 28, 2000.

- P32-1 The project will be operated in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid adverse impacts to critical resources. See Master Response "Groundwater Monitoring and Management Plan."
- P32-2 The Management Plan includes specific measures to avoid adverse impacts to groundwaterrelated critical resources. See Section 7 of the Management Plan (Final EIR/EIS, Volume IV). 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.
- P32-3 See Response to Comment P32-2.
- P32-4 See Response to Comment P21-4.
- P32-5 The Cadiz Project would not involve "foisting contaminated water on innocent citizens." See Response to Comment F3-11.
- P32-6 The Cadiz Project does not involve the delivery of water for agricultural use, nor does it involve federal tax dollars. Regarding conservation as an alternative, see Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P32-7 Comment noted.

P33 RESPONSES TO COMMENTS FROM LAURIE BATTIN DATED DECEMBER 28, 2000.

- P33-1 Comment noted
- P33-2 The project does not involve "draining a desert ecosystem of its water supply." The project will be operated in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid impacts to groundwater related critical resources. Regarding alternatives, see Master Response "Formulation and Screening of Potential Projects."
- P33-3 See Response to Comment P32-1.

P34 RESPONSES TO COMMENTS FROM LILLIAN HANNHAN DATED DECEMBER 28, 2000.

P34-1 See Response to Comment P32-1.

- P34-2 BLM will retain authority to enforce the Management Plan (Final EIR/EIS, Volume IV) through the terms and conditions of the right-of-way grant(s) for the project.
- P34-3 Conservation is a basic element of Metropolitan's long-term water management strategy. See Master Response "Water Conservation." Regarding alternatives, see Master Response "Formulation and Screening of Potential Projects."
- P34-4 See Master Response "Air Quality."
- P34-5 Comment noted.

P35 RESPONSES TO COMMENTS FROM KRISTINA GOLDEN DATED DECEMBER 29, 2000.

- P35-1 The project will be operated in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid groundwater related impacts to critical resources, including those within the Mojave National Preserve and BLM wilderness areas.
- P35-2 See Master Response "Groundwater Monitoring and Management Plan". Additionally, see Sections 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV) which provide for independent oversight and enforcement of the provisions of the Management Plan.
- P35-3 Contrary to the comment, southern California has been a leader in water conservation both statewide and nationally. Conservation is a basic element of Metropolitan's long-term water management strategy. See Master Response "Water Conservation." Also, contrary to this comment, no federal funds have been allocated for the Cadiz Project.

The need for the Cadiz Project is discussed in the Final EIR/EIS, Volume I, Section 2.

P35-4 Comment noted.

P36 RESPONSES TO COMMENTS FROM JOSEPH OLSON DATED DECEMBER 29, 2000.

- P36-1 See Response to Comment P29-1.
- P36-2 See Response to Comment P32-1.
- P36-3 See Master Response "Air Quality."
- P36-4 Sections 9 and 10 of the Management Plan discuss independent review and enforcement of the provisions of the Management Plan.
- P36-5 See Response to Comment P21-4.

P37 RESPONSES TO COMMENTS FROM MARCUS LIBKIND DATED DECEMBER 29, 2000.

P37-1 Comment noted.

- P37-2 See Response to Comment P21-4.
- P37-3 Regarding "(1) the effects on plant and animal life," Section 5.8 of the Final EIR/EIS, Volume I, evaluates the impacts of construction and operation activities on biological resources.

Regarding groundwater quality, Section 5.5 of Volume I and Sections 6.2 and 7.2.1 of Volume IV of the Final EIR/EIS, discusses the potential project impacts and the measures that will be implemented to avoid those impacts. See also, Master Response "Water Quality."

Regarding monitoring and mitigation for impacts to groundwater related resources, see Management Plan, Final EIR/EIS, Volume IV, and Master Response "Groundwater Monitoring and Management Plan."

P37-4 Section 7 of the Management Plan provides measures to suspend or modify operations if necessary. Sections 9 and 10 of the Management Plan provide oversight of operations and enforcement of such provisions by the BLM.

P38 RESPONSES TO COMMENTS FROM ANDREW ROTH DATED DECEMBER 31, 2000.

- P38-1 Comment noted.
- P38-2 The Final EIR/EIS provides full public disclosure of potentially significant environmental impacts and identifies means to avoid or minimize these impacts. Such documents are not meant to address financial considerations.
- P38-3 Cadiz Project will not result in significant adverse impacts to the National Parks, wilderness areas in the region or the Mojave National Preserve. Significant impacts will be avoided through implementation of the Management Plan. The Cadiz Project will not significantly impact wildlife in the region. Sections 6.1 and 7.1 of the Management Plan, Final EIR/EIS, Volume IV, includes provisions to protect the springs in such areas.
- P38-4 See Response to Comment P32-3.
- P38-5 Comment noted.

P39 RESPONSES TO COMMENTS FROM ANDREW ROTH AND ELIZABETH BOYD DATED DECEMBER 31, 2000.

- P39-1 Comment noted.
- P39-2 Water conservation is an important component of Metropolitan's strategic planning. See Master Response "Water Conservation."
- P39-3 See Response to Comment F3-11.
- P39-4 See Master Response "Air Quality."
- P39-5 Comment noted.
P40 RESPONSES TO COMMENTS FROM TONY DE BELLIS DATED DECEMBER 31, 2000.

- P40-1 Comment noted.
- P40-2 See Response to Comment P21-4.
- P40-3 See Master Response "Water Quality."
- P40-4 See Response to Comment P21-4.
- P40-5 See Master Response "Groundwater Monitoring and Management Plan."
- P40-6 Conservation is a basic element of Metropolitan's long-term water management strategy. See Master Response "Water Conservation."
- P40-7 California law recognizes that surplus groundwater may be appropriated for non-overlying uses, including exportation for use outside the groundwater basin.

P41 RESPONSES TO COMMENTS FROM DR. THOMAS MCNICHOLS DATED DECEMBER 30, 2000.

- P41-1 See Response to Comment P28-4.
- P41-2 In compliance with CEQA and NEPA, the Final EIR/EIS adequately evaluates the potential adverse impacts to the environment that could result from the Cadiz Project. The project incorporates the Management Plan set out in Volume IV to ensure the avoidance of adverse impacts to groundwater related resources.

See Master Responses "Formulation and Screening of Potential Projects."

P41-3 Comment noted.

P42 RESPONSES TO COMMENTS FROM SETH SHTEIR DATED DECEMBER 30, 2000.

P42-1 The project will be operated in accordance with the Management Plan to avoid impacts to springs that are used by wildlife. See Final EIR/EIS, Volume 4, Sections 6.1 and 7.1.

Regarding the need for water treatment of indigenous groundwater, see Master Response "Water Quality" and Response to Comment F3-11.

Regarding sustainable alternatives and water conservation, see Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."

The Cadiz Project would not cause significant adverse impacts to Joshua Tree National Park, wilderness areas in the region or the Mojave National Preserve. See Master Response "Groundwater Monitoring and Management Plan."

P42-2 See Response to Comment P21-4.

P43 RESPONSES TO COMMENTS FROM STEPHEN BROWN DATED JANUARY 1, 2001.

- P43-1 See Response to Comment P21-4.
- P43-2 The project involves both storage of Colorado River water and extraction of indigenous groundwater. All project operations will be implemented in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid adverse impacts to critical resources.
- P43-3 The project will be implemented by Metropolitan, a public agency, in accordance with its obligations under CEQA. BLM will retain authority to enforce the Management Plan through the terms and conditions of its right-of-way grant(s) for the project.
- P43-4 BLM will perform its responsibilities in accordance with the Federal Land Policy and Management Act (FLPMA) and National Environmental Policy Act (NEPA).

P44 RESPONSES TO COMMENTS FROM WILL CONNELL DATED JANUARY 1, 2001.

- P44-1 Comment noted.
- P44-2 The comment is correct that southern California has achieved significant water savings through conservation programs. See Section 2.4.4, Final EIR/EIS, Volume I. The comment is also correct that storage in groundwater basins avoids the significant evaporation losses that occur in surface reservoirs. See Section 5.5.4, Final EIR/EIS, Volume I.
- P44-3 Comment noted.
- P44-4 In response to the differences of opinion regarding the scientific support for groundwaterrelated issues, BLM and Metropolitan developed the Management Plan that is incorporated in the Final EIR/EIS, Volume IV. This Management Plan includes monitoring and modeling that will provide a sound scientific basis for operating the project to avoid adverse impacts to critical resources.
- P44-5 Comment noted.
- P44-6 The monitoring and modeling that are required under the Management Plan (Final EIR/EIS, Volume IV) are based on operating the project in accordance with sound science.
- P44-7 Comment noted.

P45 RESPONSES TO COMMENTS FROM JACK ROBBINS DATED JANUARY 1, 2001.

- P45-1 See Response to Comment P21-1.
- P45-2 Construction and operation of the Cadiz Project will not result in significant adverse impacts to the ecosystem, as discussed in Section 5 of the Final EIR/EIS, Volume I.
- P45-3 All Colorado River water to be stored in the basin will be routinely tested to ensure that it meets the Basin Plan adopted by the California Regional Water Quality Control Board,

Colorado River Basin Region. Section 7.9, Final EIR/EIS, Volume IV. The project will not affect the ability of Metropolitan to meet applicable water quality standards. See Master Response "Water Quality" and Response to Comment F3-11.

- P45-4 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P45-5 The Cadiz Project will not cause significant adverse impacts to Joshua Tree National Park, and wilderness areas in the region or the Mojave National Preserve. Adverse impacts would be avoided through implementation of the Management Plan. See Master Response "Groundwater Monitoring and Management Plan."

P46 RESPONSES TO COMMENTS FROM ORSON MORGAN DATED JANUARY 1, 2001.

- P46-1 See Response to Comment P37-3.
- P47 RESPONSES TO COMMENTS FROM BRUCE WEEKLEY DATED JANUARY 2, 2001.
- P47-1 Comment noted.
- P47-2 Comment noted.

P48 RESPONSES TO COMMENTS FROM MICHAEL CRANDALL DATED JANUARY 2, 2001.

- P48-1 Comment noted.
- P48-2 Comment noted.
- P48-3 See Response to Comment P44-4.
- P48-4 Comment noted.

P49 RESPONSES TO COMMENTS FROM RALPH LANDERS DATED JANUARY 2, 2001.

- P49-1 Comment noted.
- P49-2 See Master Response "Water Quality" and Response to Comment F3-11. For additional information, see the Final EIR/EIS, Volume I, Section 5.5 and see the report <u>Cadiz</u> <u>Groundwater Storage and Dry-Year Supply Program Environmental Planning Technical</u> <u>Report – Groundwater Resources Report</u>.
- P49-3 Metropolitan will operate the project in accordance with its obligations under CEQA. The Cadiz Project will not have significant effects on rare plants, or endangered animals, as discussed in Section 5.8 of the Final EIR/EIS, Volume I.
- P49-4 See Master Response "Formulation and Screening of Potential Projects."

P50 RESPONSES TO COMMENTS FROM EVE WATSON DATED JANUARY 3, 2001.

- P50-1 The referenced statement from National Park Lines was not included with comment letter. The comments do not identify a new significant effect that has not already been addressed in the Final EIR/EIS. No further response is required.
- P50-2 See Master Response "Water Conservation".
- P51 RESPONSES TO COMMENTS FROM PAUL LAWISON DATED JANUARY 3, 2001.
- P51-1 Comment noted.
- P51-2 Comment noted.
- P51-3 Comment noted.

P52 RESPONSES TO COMMENTS FROM MARYANN LOCKHART DATED JANUARY 3, 2001.

- P52-1 See Section 2 of the Final EIR/EIS, Volume I, regarding the purpose and need for the Cadiz Project. Also see Master Response "Formulation and Screening of Potential Projects." Comment is apparently referring to the Hayfield Program. The Final EIR/EIS describes this project, and notes that it is being implemented. Section 2.6.2, Final EIR/EIS, Volume I.
- P52-2 See Master Response "Water Conservation."
- P52-3 See Master Response "Water Quality."
- P52-4 Metropolitan, a public agency, will operate the project in accordance with its obligations under CEQA. BLM will retain authority to enforce the Management Plan (Final EIR/EIS, Volume IV) through the terms and conditions of the right-of-way grant(s) for the project.
- P52-5 Comment noted.

P53 RESPONSES TO COMMENTS FROM BOB BRISTER DATED JANUARY 3, 2001.

- P53-1 See Response to Comment P28-4.
- P53-2 Construction and operation of the Cadiz Project would not result in a significant adverse impact to the ecosystem of the region. The Management Plan (Final EIR/EIS, Volume IV) will monitor groundwater levels to ensure that springs and wildlife dependent on the spring water will not be impacted. See Master Response "Groundwater Monitoring and Management Plan" and see Response to Comment F2-40. Section 5.8.5 of the Final EIR/EIS, Volume I, details mitigation measures to reduce impacts to biological resources from construction and operation activities to less than significant levels.
- P53-3 See Response to Comment P32-1.

P54 RESPONSES TO COMMENTS FROM STEPHEN TURNBULL DATED JANUARY 3, 2001.

- P54-1 Comment noted.
- P54-2 Comment noted.
- P54-3 Comment noted.
- P54-4 Comment noted.
- P54-5 See Section 5.5.1 of the Final EIR/EIS, Volume I, which discusses the potential for faults to act as barriers to groundwater flow.
- P54-6 Comment noted.
- P54-7 A description of the models that will be available for use in monitoring and managing project operations is set forth in Section 3, Final EIR/EIS, Volume IV.
- P54-8 Comment noted.
- P54-9 Comment noted.

P55 RESPONSES TO COMMENTS FROM LISANNE FREESE AND JOHN HINKLE DATED JANUARY 3, 2001.

- P55-1 Comment noted.
- P55-2 The Cadiz Project will not cause significant adverse impacts to the Mojave National Preserve or wilderness areas in the region. See Response to Comment P21-4.
- P55-3 See Master Response "Groundwater Monitoring and Management Plan."
- P55-4 Metropolitan, a public agency, will operate the project in accordance with its obligations under CEQA.
- P55-5 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P55-6 See Master Response "Water Conservation." The Management Plan will be implemented for the purpose of protecting critical resources and avoiding adverse impacts to parks and natural areas.
- P55-7 Conservation is a basic element of Metropolitan's long-term water management strategy. See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P55-8 See Master Response "Air Quality."
- P55-9 The Cadiz Project will not cause significant adverse impacts to the Joshua Tree National Park, the Mojave National Preserve, or wilderness areas in the region. See Response to Comment P21-4.

P55-10 Comment noted.

P56 RESPONSES TO COMMENTS FROM RUSSELL BLALACK DATED JANUARY 3, 2001.

- P56-1 This comment misrepresents the Cadiz Project. The actual quantity of water to be transferred is not specified and will be limited to an amount that will not result in adverse impacts to critical resources. The amount of indigenous groundwater that would be transferred is conditioned by the requirements of the Management Plan (Final EIR/EIS, Volume IV), and therefore would be quantified during its implementation.
- P56-2 Construction and operation of the Cadiz Project will not result in a significant adverse impact to rare plants and animals of the region. The Management Plan (Final EIR/EIS, Volume IV) includes monitoring of groundwater levels to ensure that springs and wildlife dependent on the spring water, including bighorn sheep, will not be impacted. See Master Response "Groundwater Monitoring and Management Plan."
- P56-3 Metropolitan, a public agency, will operate the project in accordance with the Management Plan pursuant to its obligations under CEQA. The Management Plan, Section 7, incorporates the criteria for identifying and avoiding potential adverse impacts.
- P56-4 BLM will retain authority to enforce the Management Plan through the terms and conditions of the right-of-way grant(s) for the project. See Section 10 of the Management Plan, Final EIR/EIS, Volume IV.
- P56-5 The discussion of the need for the Cadiz Project is set forth in Section 2 of the Final EIR/EIS, Volume I. Also see Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P56-6 See Response to Comment P55-9.
- P56-7 See Response to Comment F3-11 and Master Response "Water Quality."
- P56-8 See Response to Comment P21-4.

P57 RESPONSES TO COMMENTS FROM KATHERINE RODGERS DATED JANUARY 4, 2001.

- P57-1 Comment noted
- P57-2 Comment noted
- P57-3 Comment noted.
- P57-4 Comment noted.

P58 RESPONSES TO COMMENTS FROM STEVEN GABEL DATED JANUARY 4, 2001.

P58-1 The Cadiz Project will not cause significant adverse impacts to wilderness areas in the region or the Mojave National Preserve. Adverse impacts will be avoided through

implementation of the Management Plan. See Master Response "Groundwater Monitoring and Management Plan."

- P58-2 Construction and operation of the Cadiz Project will not result in a significant adverse impact to the existing ecosystem of the region, nor to endangered plants and animals. The Management Plan (Final EIR/EIS, Volume IV) includes monitoring of groundwater levels to ensure that springs and wildlife dependent on the spring water will not be impacted. Section 5.8.5 of the Final EIR/EIS, Volume I, includes mitigation measures to reduce impacts to biological resources from construction and operation activities to less than significant levels.
- P58-3 See Master Response "Water Conservation."

P59 RESPONSES TO COMMENTS FROM KENTON BENTLEY DATED JANUARY 4, 2001.

- P59-1 Comment noted.
- P59-2 Comment noted.
- P59-3 Comment noted.
- P59-4 Comment noted.
- P59-5 Comment noted.

P60 RESPONSES TO COMMENTS FROM CLIFFORD ANDERSON DATED JANUARY 4, 2001.

- P60-1 See Response to Comment P28-4.
- P60-2 The discussion of the need for the Cadiz Project is set forth in Section 2 of the Final EIR/EIS, Volume I. See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P60-3 Comment noted.

P61 RESPONSES TO COMMENTS FROM CATHERINE BEAUCHAMP DATED JANUARY 4, 2001.

P61-1 See Response to Comment P28-4.

P62 RESPONSES TO COMMENTS FROM PHIL BEYMAN DATED JANUARY 4, 2001.

- P62-1 See Response to Comment P28-4.
- P62-2 See Master Response "Water Conservation." Regarding the need for the project in addition to conservation measures, see Section 2 of the Final EIR/EIS, Volume I.
- P62-3 Comment noted.

P62-4 Comment noted.

P63 RESPONSES TO COMMENTS FROM LARRY AND LORETTA BODIFORD DATED JANUARY 4, 2001.

- P63-1 See Response to Comment P28-4. Regarding water rights see Response to Comment G2-4.
- P63-2 The Cadiz Project will not cause adverse impacts to water resources in Joshua Tree National Park and wilderness areas in the region or the Mojave National Preserve. Adverse impacts will be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."

P64 RESPONSES TO COMMENTS FROM TERY BING DATED JANUARY 4, 2001.

- P64-1 Comment noted.
- P64-2 See Master Response "Water Quality."
- P64-3 See Master Response "Air Quality."
- P64-4 The Cadiz Project does not change the amount of water that Metropolitan receives from the Colorado River. A discussion of California's Colorado River entitlement and proposed measures to reduce usage to the amount of the entitlement is set forth in Section 2.5.3 of the Final EIR/EIS, Volume I.
- P64-5 Metropolitan, a public agency, will operate the project in accordance with its obligations under CEQA. Potential impacts on plants and animals in the project area are discussed in Section 5.8.4 of the Final EIR/EIS, Volume I. Measures to ensure that there are no adverse impacts following the completion of project operations are set forth in Section 8 of the Management Plan, Final EIR/EIS, Volume IV.
- P64-6 See Master Response "Water Conservation."
- P64-7 The Cadiz and Fenner groundwater basins are not connected to the Mojave River watershed.
- P64-8 Comment noted.

P65 RESPONSES TO COMMENTS FROM LYNN PLAMBECK DATED JANUARY 5, 2001.

- P65-1 See Response to Comment P21-4.
- P65-2 The Final EIR/EIS acknowledges that there are disagreements among scientists regarding the amount of natural recharge to the project area. As a result, the Management Plan was developed by Metropolitan with technical experts from the BLM, USGS, NPS and the County of San Bernardino. The Management Plan establishes a field monitoring network and modeling program to provide data and predictive management capability for the groundwater basin. Storage and extraction of Colorado River water as well as transfer of native groundwater will be subject to ongoing monitoring, modeling and management restrictions imposed by the Management Plan. As a result, the actual quantity of water to be transferred is not known at this time. The amount of indigenous groundwater that will be

transferred is conditioned by the requirements of the Management Plan, and therefore will be quantified during its implementation.

All Cadiz Project operations, including extraction of groundwater, will be governed by the provisions of the Management Plan presented in Volume IV of the Final EIR/EIS for the purpose of ensuring there will be no significant adverse impacts resulting from project operations. Potential adverse impacts to critical resources due to the transfer of indigenous groundwater will be avoided by governing (limiting) the amounts of transfer (if any) to such amounts that comply with the requirements of the Management Plan.

The Management Plan ensures that adverse impacts to the ecosystem are not caused by the proposed project groundwater operations.

- P65-3 The proposed project will utilize spreading basins to allow Colorado River water to percolate into the ground. No other filtration facilities are proposed. No water treatment is required for the Cadiz Project to comply with applicable state and federal water quality requirements. The project will not affect the ability of Metropolitan to meet applicable water quality standards. See Master Response "Water Quality."
- P65-4 Comment noted.

P66 RESPONSES TO COMMENTS FROM NANCY HALL DATED JANUARY 5, 2001.

- P66-1 Comment noted.
- P66-2 See Response to Comment P28-4. The Cadiz Project will not cause significant impacts to Joshua Tree National Park and wilderness areas in the region or the Mojave National Preserve. Adverse impacts will be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."
- P66-3 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P66-4 See Master Response "Air Quality."

P67 RESPONSES TO COMMENTS FROM EDWARD LUBIN DATED JANUARY 6, 2001.

- P67-1 See Response to Comment P28-4.
- P67-2 The Cadiz Project will not cause adverse impacts to Joshua Tree National Park and wilderness areas in the region or the Mojave National Preserve. Adverse impacts will be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."
- P67-3 Regarding "1) draining a desert ecosystem," see Response to Comment P28-4. Regarding "2) endangerment of unique plants and animals," see Response to Comment P64-5. Regarding "3) monitoring of pumping," see Section 6 of the Management Plan, Final EIR/EIS, Volume IV. Regarding "4) using Colorado River Water," see Response to

Comment G2-4. Regarding "5) water quality," see Master Response "Water Quality" and Response to Comment F3-11.

P68 RESPONSES TO COMMENTS FROM STANLEY JAMES DATED JANUARY 6, 2001.

P68-1 The Cadiz Project will not cause significant adverse impacts to wilderness areas in the region or the Mojave National Preserve. Impacts would be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan." Regarding water rights, see Response to Comment G2-4.

P69 RESPONSES TO COMMENTS FROM ALAN CARLSON DATED JANUARY 6, 2001.

- P69-1 With respect to water quality, see Master Response "Water Quality" and Response to Comment F3-11. With respect to effects on wildlife, see Response to Comment P58-2. With respect to the monitoring plan, see Master Response "Groundwater Monitoring and Management Plan." With respect to "industry dominated," see Master Response "Governance." Regarding alternatives, see Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation." Commentor does not state in what manner the Supplement fails to meet the required legal standards.
- P69-2 The Cadiz Project will not cause adverse impacts to Joshua Tree National Park and wilderness areas in the region or the Mojave National Preserve. Adverse impacts would be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."
- P69-3 See Master Response "Formulation and Screening of Potential Projects."

P70 RESPONSES TO COMMENTS FROM CAROLYN JENNINGS DATED JANUARY 6, 2001.

P70-1 See Response to Comment P21-4.

P71 RESPONSES TO COMMENTS FROM JOHN HIATT DATED JANUARY 6, 2001.

- P71-1 Section 5.5.1 of the Final EIR/EIS, Volume I, discusses the disagreement among experts regarding the amount of natural recharge to the aquifer. In lieu of continuing the debate regarding recharge, the experts developed the Management Plan (Final EIR/EIS, Volume IV) to ensure that project operations will not result in adverse impacts to critical resources. See Master Response "Groundwater Monitoring and Management Plan."
- P71-2 No impacts to springs are anticipated to occur as result of the operation of the Cadiz Project. See Section 7.1 of the Management Plan, Final EIR/EIS, Volume IV. Corrective actions include "stoppage of groundwater extraction for a duration necessary to correct the predicted impact." Metropolitan will operate the project in accordance with its obligations under CEQA. See Master Response "Groundwater Monitoring and Management Plan."
- P71-3 In response to the difference of opinion referenced in the comment, BLM and Metropolitan have developed the Management Plan to avoid adverse impacts to critical resources. The

Management Plan (Final EIR/EIS, Volume IV) will be implemented by Metropolitan pursuant to its obligations under CEQA.

P72 RESPONSES TO COMMENTS FROM ALICE TSENG DATED JANUARY 6, 2001.

- P72-1 The Cadiz Project is not a "groundwater grab." See Response to Comment G2-4 regarding California groundwater law.
- P72-2 Cadiz Project operations will not cause significant adverse water resources or air quality impacts to Joshua Tree National Park and wilderness areas in the region or the Mojave National Preserve. Adverse impacts will be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."
- P72-3 Construction and operation of the Cadiz Project will not result in a significant adverse impact to the ecosystem of the region. The Management Plan (Final EIR/EIS, Volume IV) will include monitoring of groundwater levels to ensure that springs and wildlife dependent on the spring water would not be impacted. Section 5.8.5 of the Final EIR/EIS, Volume I, includes mitigation measures to reduce impacts to biological resources from construction and operation activities to less than significant levels. See Master Response "Groundwater Monitoring and Management Plan."
- P72-4 See Response to Comment P72-3.
- P72-5 See Response to Comment F3-11 and Master Response "Water Quality."
- P72-6 Water quality is addressed in the Final EIR/EIS, Volume I, Section 5.5.4, and Volume IV, Section 7.2.1. BLM will retain authority to enforce the Management Plan (Final EIR/EIS, Volume IV) through the terms and conditions of its right-of-way grant(s) for the project.
- P72-7 Metropolitan, a public agency, will operate the project in accordance with its obligations under CEQA.
- P72-8 Conservation is a basic element of Metropolitan's long-term water management strategy. See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P72-9 See Response to Comment P21-4.

P73 RESPONSES TO COMMENTS FROM JIM BLOMQUIST DATED JANUARY 7, 2001.

- P73-1 The Cadiz Project will not cause significant adverse impacts to Joshua Tree National Park, wilderness areas, or the Mojave National Preserve. Adverse impacts to springs and groundwater levels will be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."
- P73-2 See Master Response "Water Quality." Section 5.5.4 of the Final EIR/EIS, Volume I, discusses surface water impacts in the region.

P74 RESPONSES TO COMMENTS FROM GLENN TORBETT DATED JANUARY 7, 2001.

P74-1 The Cadiz Project will not cause significant adverse impacts to Joshua Tree National Park and wilderness areas in the region or the Mojave National Preserve. Adverse impacts to regional springs and groundwater levels will be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."

P75 RESPONSES TO COMMENTS FROM JEFFREY YAUN DATED JANUARY 7, 2001.

P75-1 See Master Responses "Groundwater Monitoring and Management Plan" and "Formulation and Screening of Potential Projects." Also, see Response to Comment P21-4.

P76 RESPONSES TO COMMENTS FROM JOAN HALTZ DATED JANUARY 7, 2001.

P76-1 See Master Response "Air Quality" and Response to Comment P74-1.

P77 RESPONSES TO COMMENTS FROM LORRAINE ONGER DATED JANUARY 7, 2001.

P77-1 See Master Response "Air Quality" and Response to Comment P74-1.

P78 RESPONSES TO COMMENTS FROM RUTH MUSSER-LOPEZ DATED JANUARY 15, 2001.

- P78-1 The cultural resources issues associated with the Cadiz Project have been managed by the BLM Desert District Office due to staffing considerations. The BLM Needles archaeologist has since reviewed the Cultural Resources Technical Report. The report is adequate, comprehensive, and demonstrates an understanding of the prehistoric resources known to exist within the project area.
- P78-2 There is no evidence for "Pleistocene Early Man" archaeological sites within the study area; therefore, there is no need to address potential project impacts to paleo-archaeology sites in the study area.
- P78-3 Commentor mentions plenary studies of the Cadiz Valley by Davis et al. and Gallegos et al., however, no references are cited. E. L. Davis' seminal work in the Mojave Desert (as best exemplified in her 1978 monograph *The Ancient Californians, Rancholabrean Hunters of the Mojave Lakes Country*) was focused at Lake China, not Cadiz. Davis' methods and findings may be germane to Cadiz, if and when Pleistocene archaeological manifestations are discovered. If commentor refers to the *Cultural Resources Inventory of the Central Mojave and Colorado Desert Regions* (Gallegos et al. 1980); that report states the following for Cadiz Valley as a whole:

"Prehistoric archaeology that was noted in the study appears to have been restricted to a Pinto period of hunting/gathering. (\pm 4000 years BP?) and to a faint and uncertain manifestation of much earlier use. This *paleo episode is questionable* and should be carefully investigated for proof or disproof. Cultural "clues (such as they are) consist of

broken and excessively weathered pieces of fine-quality exotic rock (chalcedony and jasper) that show some (nearly obliterated) flake scars."

(Gallegos et al. 1980: 112; italics added for emphasis)

No temporal data was available to ascertain whether these "broken and excessively weathered pieces of fine-quality rock that show some flakes scars" date to the early Holocene or latest Pleistocene periods. As well, the current archaeological investigations were confined to areas of potential project impact. No visible shorelines of Pleistocene Lake Cadiz were encountered during the field surveys, and analyses of these shorelines or dating of these shorelines outside the project boundaries was not within the project scope. Furthermore, within the project impact areas, surveyors looked for, but did not find exotic rock with flake scars (weathered or otherwise), outside of the two recorded prehistoric sites and two isolated tools reported.

- P78-4 The Cadiz Project will have no impact on cultural resources within the larger Lake Cadiz basin; no direct impacts are planned and the project will have no effect on surface water conditions. The existing groundwater levels in the vicinity of the proposed project spreading basins is approximately 275 feet below the ground surface (see Figure 5.5-11 of the Final EIR/EIS, Volume I). The most shallow groundwater levels anticipated during project storage operations would be approximately 80 feet below ground surface, and a criteria for evaluating potential impacts is triggered if the level reaches 50 feet below ground surface. See Final EIR/EIS, Volume IV, Section 7.2.4. As a result, the project would not contribute to any surfacing of groundwater in the area of any Pleistocene Lake Cadiz shorelines.
- P78-5 See Response to Comment P78-4, above.
- P78-6 "[A]n archaeological literature and records search was performed by the San Bernardino Archaeological Information Center prior to the project's archaeological field studies. The objective was to determine if the Project Area of Potential Effect (APE) had previously been surveyed for cultural resources and to identify any previously recorded cultural properties within a *one-mile radius* of the Project area." (Cultural Resources Technical Report (Report No. 1165) at page 31; italics added for emphasis). A list of all sites previously recorded within a one-mile radius is provided on page 32. A listing of all archaeological sites within the larger Lake Cadiz basin is beyond the scope of this Project. The results of the archaeological literature and records search are provided in Appendix A.
- P78-7 The BLM addresses its requirements under Section 106 of the National Historic Preservation Act as stipulated in the *State Protocol Agreement between the California State Director of the Bureau of Land Management and the California State Historic Preservation Officer....* Under that *Agreement*, many standard SHPO functions are assumed by the BLM, including determinations of NRHP eligibility and findings of effect. BLM requested that procedures set forth in the *California Archaeological Resource Identification and Data Acquisition Program : Sparse Lithic Scatters* (CARIDAP, 1988) be applied to prehistoric sparse lithic scatters. In doing so, subsurface test excavations were completed at CA-SBR-9852 to verify the absence of subsurface cultural deposits and all formed tools and obsidian debitage were collected from the site surface. The BLM reviewed the significance findings for CA-SBR-9852 and determined that the site is not eligible for inclusion on the NRHP. The BLM concluded that there will be no historic properties (a term that includes sites of prehistoric and historic age) adversely affected by the project; under the State Protocol Agreement, no consultation with SHPO is required.

Also, following provisions and stipulations in the *State Protocol Agreement*, the BLM notified potentially interested Native Americans after the archaeological surveys were completed and during the Notice of Preparation and Draft EIR process. No concerns regarding cultural resources were voiced or registered.

- P78-8 A Curation Agreement with the San Bernardino County Museum was issued by Dr. Adella Schroth on 8 July 1999, for the CA-SBR-9852 collection. See Response to Comment P78-7.
- P78-9 Site CA-SBR-9848 is a small, isolated chipping station composed of 10 pieces of debitage from the same parent material; subsurface cultural materials are unlikely and BLM determined that subsurface testing was not necessary. The debitage was not collected; data from the site were recorded during the field assessment and the artifacts left in place. "Formed tools" is a widely accepted term for lithic materials that have been purposefully shaped by flaking.
- P78-10 The BLM Needles Archaeologist has verified that no additional archaeological data are available at the BLM Office in Needles. All archaeological data available for the study area are on file at the San Bernardino County Archaeological Information Center. In regards to Davis et al. and Gallegos et al., see Response to Comment P78-3 above.
- P78-11 Paleosols, "witness stands," or caliche shoreline deposits were not observed in the Project APE; therefore, there is no need to discuss them in the Final EIR/EIS. There is no evidence of archaeological sites within the study area that can be firmly or relatively dated to 12,000 years B.P.
- P78-12 Applied EarthWorks, Inc. is a highly respected and competent cultural resources management firm; the three senior archaeologists who directed the Cadiz studies are certified by the Register of Professional Archaeologists. A Class III archaeological survey of the Project APE has been completed; a Class III archaeological survey of the entire Cadiz basin is beyond the scope of this project.
- P78-13 A copy of the GLO Plat map showing the road to the Old Woman Mountains is provided on page 17 in the Cultural Resources Technical Report (Report No. 1165) (the map was produced by M.P. Greene in 1856). GLO Plat Map information is available on microfiche at the BLM Office in Riverside. A listing of identifiable fossils of animals that occupied the study area is set forth in Section 5.16.1 of the Final EIR/EIS, Volume I.
- P78-14 Section 3.4 of the Final EIR/EIS, Volume I, discusses the other desert groundwater basins that were initially reviewed for potential storage and/or transfer projects.

P79 RESPONSES TO COMMENTS FROM ADA BAHINE DATED JANUARY 7, 2001.

- P79-1 The Cadiz Project will not cause significant adverse impacts to Joshua Tree National Park and wilderness areas in the region or the Mojave National Preserve. Adverse impacts to regional springs and groundwater levels would be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV).
- P79-2 Comment noted.

P80 RESPONSES TO COMMENTS FROM GEORGE HAGUE DATED JANUARY 8, 2001.

- P80-1 The Cadiz Project will not cause significant adverse impacts to Joshua Tree National Park and wilderness areas in the region or the Mojave National Preserve. Adverse impacts to regional springs and groundwater levels will be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV).
- P80-2 See Response to Comment G13-13.
- P80-3 The Final EIR/EIS analyzes construction impacts of the project in Section 5 of Volume I, including placing the pipeline underground. Impacts are identified and mitigation measures are developed to reduce these impacts to less than significant levels where possible. Volume IV of the Final EIR/EIS describes the Management Plan which is incorporated in the project to avoid impacts to groundwater-related critical resources.
- P80-4 The commentor has been added to the mailing list for this project.

P81 RESPONSES TO COMMENTS FROM RUTH LOPEZ DATED JANUARY 8, 2001.

- P81-1 See Response to Comment P21-4.
- P81-2 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 need for storage in the Colorado River resource area is discussed in Section 2.6.2 of the Final EIR/EIS, Volume I.
- P81-3 Project spreading basins are located approximately 35, not 60, miles north of the Colorado River Aqueduct, Iron Mountain Pumping Plant. The need for the Cadiz Project in addition to the existing Diamond Valley Lake reservoir is discussed in Section 2 of the Final EIR/EIS, Volume I. The Cadiz Project does not change the amount of water from the Colorado River received by Metropolitan.
- P81-4 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- P81-5 The reasons for the siting of the project wellfield are discussed in Section 3.6 of the Final EIR/EIS, Volume I.
- P81-6 See Response to Comment G13-3.
- P81-7 See Response to Comment G13-5.
- P81-8 The need for the Cadiz Project in addition to the conservation measures is discussed in Section 2 of the Final EIR/EIS, Volume I. The incidental use of Diamond Valley Lake for recreation does not diminish its primary use for water supply.
- P81-9 See Response to Comment G13-7.
- P81-10 The siphons on the Colorado River Aqueduct are pressurized sections of pipe. They do not divert surface or groundwater flows.

- P81-11 See Response to Comment G13-10
- P81-12 See Response to Comment G13-9.
- P81-13 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- P81-14 No state or federal funding is anticipated for the Cadiz Project.
- P81-15 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- P81-16 See Response to Comment G13-10.
- P81-17 See Response to Comment G13-10.
- P81-18 See Response to Comment G13-10.
- P81-19 See Response to Comment G13-11.
- P81-20 See Response to Comment G13-11.
- P81-21 See Response to Comment G13-12.
- P81-22 See Response to Comment G13-13.
- P81-23 See Response to Comment G13-14.
- P81-24 See Response to Comment G13-14.
- P81-25 See Response to Comment G13-15.
- P81-26 See Responses to Comments P81-27 through P81-31.
- P81-27 A copy of the referenced report was provided to commentor, together with additional time to provide comments, which are set forth in comment letter P78.
- P81-28 Comment noted.
- P81-29 See Response to Comment P81-27.
- P81-30 See Response to Comment P81-27.
- P81-31 See Response to Comment P81-27.
- P81-32 See Responses to Comment G13-13 and G14-1.
- P81-33 See Responses to Comments G12-1 and G12-2.
- P81-34 See Response to Comment G14-2.

P81-35 Comment noted.

P82 RESPONSES TO COMMENTS FROM LAWRENCE LIVERMORE NATIONAL LABORATORY DATED JANUARY 8, 2001.

- P82-1 Comment noted.
- P82-2 Comment noted.
- P82-3 Comment noted.
- P82-4 Comment noted.
- P82-5 Comment noted.
- P82-6 Comment noted.
- P82-7 Comment noted.
- P82-8 Comment noted.
- P82-9 Comment noted.
- P82-10 Comment noted.
- P82-11 Comment noted.
- P82-12 Comment noted.
- P82-13 Comment noted.
- P82-14 Comment noted.
- P82-15 Comment noted.
- P82-16 Comment noted.
- P82-17 Comment noted.
- P82-18 Comment noted.
- P82-19 Comment noted.
- P82-20 Comment noted.
- P82-21 Comment noted.
- P82-22 Comment noted.
- P82-23 Comment noted.

- P82-24 Comment noted.
- P82-25 Comment noted.
- P82-26 Since publication of the Draft EIR/EIS, the project has been revised to include operation of the project under the Management Plan. The Management Plan will allow groundwater withdrawal to the extent that critical resources will not be significantly impacted, regardless of the amount of natural recharge to the area.
- P82-27 Comment noted.
- P82-28 Comment noted.
- P82-29 Comment noted.
- P82-30 Comment noted.
- P82-31 Comment noted.
- P82-32 Comment noted.
- P82-33 Comment noted.
- P82-34 Comment noted.
- P82-35 Comment noted.
- P82-36 Comment noted.
- P82-37 Comment noted.
- P82-38 Comment noted.
- P82-39 Comment noted.
- P82-40 Comment noted.
- P82-41 Comment noted.
- P82-42 Comment noted.
- P82-43 Comment noted.
- P82-44 Comment noted.
- P82-45 Comment noted.
- P82-46 Comment noted.
- P82-47 Comment noted.

- P82-48 Comment noted.
- P82-49 Comment noted.
- P82-50 Comment noted.
- P82-51 Comment noted.
- P82-52 Comment noted.
- P82-53 Comment noted.
- P82-54 Comment noted.
- P82-55 Comment noted.
- P82-56 Comment noted.
- P82-57 Comment noted.
- P82-58 Comment noted.
- P82-59 Comment noted.
- P82-60 Comment noted.
- P82-61 Comment noted.
- P82-62 Comment noted.
- P82-63 Comment noted.
- P82-64 Comment noted.
- P82-65 Comment noted.
- P82-66 Comment noted.
- P82-67 Comment noted.
- P82-68 Comment noted.
- P82-69 Comment noted.
- P82-70 Comment noted.
- P82-71 Comment noted.
- P82-72 Comment noted.

- P82-73 Comment noted.
- P82-74 Comment noted.
- P82-75 Comment noted.
- P82-76 Comment noted.
- P82-77 Comment noted.
- P82-78 Comment noted.
- P82-79 Comment noted.
- P82-80 Comment noted.
- P82-81 Comment noted.
- P82-82 Comment noted.
- P82-83 Comment noted.
- P82-84 Comment noted.
- P82-85 Comment noted.
- P82-86 Comment noted.
- P82-87 Comment noted.

P83 RESPONSES TO COMMENTS FROM PEGGY LAUER DATED JANUARY 8, 2001.

- P83-1 The comment does not identify any potential health problems that may be caused by the project. No potential health effects have been identified. The comment does not identify how the project will cause the "decimation of public lands." The uses of public lands and the effects of the project on such lands is discussed in Section 5.2 of the Final EIR/EIS, Volume I. The comment does not indicate how the project is in violation of the California public trust doctrine. This doctrine provides some protection for the public interest in such natural resources as tidelands, navigable waters, and fish and wildlife. The project does not affect tidelands or navigable waters. The potential effects of the project on wildlife, and the mitigation measures that will be implemented to minimize or avoid the potential effects, are identified and discussed in Section 5.8 of the Final EIR/EIS, Volume I.
- P83-2 See Master Response "Groundwater Monitoring and Management Plan." Regarding the potential for subsidence see Response to Comment F2-28. Regarding potential impacts to air quality, see the Master Response "Air Quality."
- P83-3 The Cadiz Project will not cause significant adverse impacts to Joshua Tree National Park, wilderness areas, or the Mojave National Preserve. Section 5.17 of the Final EIR/EIS, Volume I, identifies potential impacts to wilderness areas in the vicinity of the project. Implementation of the identified mitigation measures will minimize potential impacts.

Adverse impacts to regional springs and groundwater levels will be avoided through implementation of the Management Plan. See Master Response "Groundwater Monitoring and Management Plan."

P84 RESPONSES TO COMMENTS FROM ROBERT E. CRISS, WASHINGTON UNIVERSITY DEPARTMENT OF EARTH AND PLANETARY SCIENCES DATED JANUARY 8, 2001.

- P84-1 Comment noted.
- P84-2 Comment noted.
- P84-3 Comment noted.
- P84-4 Comment noted.
- P84-5 Comment noted.
- P84-6 Comment noted.
- P84-7 Comment noted.
- P84-8 Comment noted.
- P84-9 Comment noted.

P85 RESPONSES TO COMMENTS FROM JOE FRIEDMAN DATED JANUARY 4, 2001.

P85-1 See Response to Comment P28-4.

P86 RESPONSES TO COMMENTS FROM RICHARD SLOAN DATED JANUARY 3, 2001.

- P86-1 Comment noted.
- P86-2 Comment noted.
- P86-3 Metropolitan, a public agency, will operate the project in accordance with its obligations under CEQA. BLM will retain authority to enforce mitigation measures through the right-of-way grant(s) for the project.
- P86-4 Groundwater storage is an important component of the water supply for southern California, as discussed in Section 2.3.2 of the Final EIR/EIS, Volume I.

P87 RESPONSES TO COMMENTS FROM LAURA SHERROD DATED JANUARY 3, 2001.

P87-1 The Cadiz Project would not affect Morongo Valley water resources.

- P87-2 Comment noted.
- P87-3 The Cadiz Project will not promote growth in the desert. See Section 5.3 of the Final EIR/EIS, Volume I.

P88 RESPONSES TO COMMENTS FROM SETH SHTEIR DATED JANUARY 3, 2001.

P88-1 Regarding the potential impacts to water resources, see Master Response "Groundwater Monitoring and Management Plan." Regarding water quality, see Master Response "Water Quality" and Response to Comment F3-11. Regarding alternatives, see Master Response "Formulation and Screening of Potential Projects." Regarding water conservation, see Master Response "Water Conservation."

The Cadiz Project will not cause significant adverse impacts to Joshua Tree National Park, wilderness areas, or the Mojave National Preserve. Section 5.17 of the Final EIR/EIS, Volume I, identifies potential impacts to wilderness areas in the vicinity of the project. Implementation of the identified mitigation measures will minimize potential impacts. Adverse impacts to springs and groundwater will be avoided through implementation of the Management Plan.

P88-2 See Final EIR/EIS, Volume I, Section 2 for a discussion of project purpose and need.

P89 RESPONSES TO COMMENTS FROM BARRY MELIUS DATED JANUARY 4, 2001.

- P89-1 Comment noted.
- P89-2 Regarding springs, there are 28 locations that will be documented one time, to establish baseline conditions. Six locations will be monitored semi-annually and two will have continuous monitoring. Metropolitan will select the springs to be monitored with input from the technical experts from BLM, USGS, NPS, the County of San Bernardino.
- P89-3 It is not anticipated that the Cadiz Project will impact springs. While the springs will be monitored, the Management Plan will monitor groundwater levels at locations between the project site and the springs to allow ample time to make adjustments to project operations if necessary to avoid impacts to springs. See Master Response "Groundwater Monitoring and Management Plan."
- P89-4 Metropolitan, a public agency, will operate the Cadiz Project in accordance with its obligations under CEQA.
- P89-5 The annual and five-year reports, including electronic data files, on project operations will be made available to the public. Section 6.8.1, Final EIR/EIS, Volume IV.
- P89-6 Please see Response to Comment R3-52.
- P89-7 Metropolitan, a public agency, will operate the program, including the monitoring required in the Final EIR/EIS, in accordance with its obligations under CEQA.
- P89-8 Comment noted.

P90 RESPONSES TO COMMENTS FROM ALISON SWEETSER DATED JANUARY 5, 2001.

- P90-1 The Cadiz Project will not cause significant adverse impacts to wildlife, water and air in Joshua Tree National Park, wilderness areas, or the Mojave National Preserve. Section 5.17 of the Final EIR/EIS, Volume I, identifies potential impacts to wilderness areas in the vicinity of the project. Implementation of the identified mitigation measures will minimize or avoid potential impacts. Adverse impacts to springs and groundwater will be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."
- P90-2 See Response to Comment P89-4.
- P90-3 The "subsequent environmental problems" referred to in the comment are not described. The Closure Plan (Section 8 of the Final EIR/EIS, Volume IV) will remain in effect for a minimum of 10 years following the termination of the 50-year term of the operational-phase of the Cadiz Project. BLM's enforcement role is described in Section 10 of the Management Plan.
- P90-4 See Master Response "Water Quality" and Response to Comment F3-11.
- P90-5 See Master Response "Water Conservation."
- P90-6 Section 7 of the Management Plan (Final EIR/EIS, Volume IV) includes conservative criteria for identifying and avoiding potential adverse impacts. Metropolitan will operate the project in accordance with the Management Plan pursuant to its obligations under CEQA.

P91 RESPONSES TO COMMENTS FROM MICHAEL JARVIS DATED JANUARY 1, 2001.

- P91-1 Comment noted. Commentor's name and mailing address have been added to project mailing list.
- P91-2 Comment noted.
- P91-3 The Cadiz Project will not "suck the aquifer dry." Project operations will be performed in accordance with the Management Plan (Final EIR/EIS, Volume IV) to avoid impacts to critical resources.
- P91-4 The Management Plan requires that the potential impacts of the project be continuously monitored and assessed. Adjustments will be made to project operations, as needed, to avoid adverse impacts to critical resources. See Master Response "Groundwater Monitoring and Management Plan." The Management Plan has been prepared as the result of a coordinated effort of BLM, NPS, USGS, the County of San Bernardino, Metropolitan and Cadiz Inc. Commentor states that Management Plan is "totally insufficient" but does not state a basis for this assertion.
- P91-5 Comment noted.

P92 RESPONSES TO COMMENTS FROM DONALD HOLTZ DATED JANUARY 7, 2001.

P92-1 See Response to Comment G2-4.

P93 RESPONSES TO COMMENTS FROM JERI ANDREWS DATED JANUARY 10, 2001.

P93-1 The Cadiz Project will not cause significant adverse impacts to the aquifer under the Mojave National Preserve. Adverse impacts to springs and groundwater levels would be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."

P94 RESPONSES TO COMMENTS FROM CONNIE GARICA DATED JANUARY 10, 2001.

- P94-1 The Cadiz Project will not cause significant adverse impacts to resources in Joshua Tree National Park, wilderness areas, or the Mojave National Preserve. Section 5.17 of the Final EIR/EIS, Volume I, identifies potential impacts to wilderness areas in the vicinity of the project. Implementation of the identified mitigation measures will mitigate or avoid potential impacts. Adverse impacts to springs and groundwater will be avoided through implementation of the Management Plan (Final EIR/EIS, Volume IV). See Master Response "Groundwater Monitoring and Management Plan."
- P94-2 Comment noted.

P95 RESPONSES TO COMMENTS FROM LANE LABBE DATED JANUARY 10, 2001.

- P95-1 See Response to Comment P28-4.
- P95-2 See Response to Comment P58-2.
- P95-3 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P95-4 BLM's authority is outlined in Section 10 of the Management Plan.
- P95-5 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P95-6 See Response to Comment P58-2.
- P95-7 See Master Response "Water Quality."
- P95-8 Comment noted.

P96 RESPONSES TO COMMENTS FROM MICHAEL RIFKIND DATED JANUARY 9, 2001.

P96-1 See Response to Comment P21-4.

- P96-2 See Response to Comment P28-4.
- P96-3 The project will be operated by Metropolitan for both storage of Colorado River water and extraction of indigenous groundwater. See Master Responses "Water Quality" and "Air Quality."
- P96-4 See Response to Comment P58-2.
- P96-5 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P96-6 See Response to Comment P95-4.
- P96-7 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P96-8 See Response to Comment P58-2.
- P96-9 See Master Response "Water Quality."
- P96-10 Comment noted.

P97 RESPONSES TO COMMENTS FROM DR. THOMAS MCNICHOLAS DATED JANUARY 4, 2001.

- P97-1 See Response to Comment P28-4.
- P97-2 See Master Responses "Groundwater Monitoring and Management Plan" and "Formulation and Screening of Potential Projects."
- P97-3 Comment noted.

P98 RESPONSES TO COMMENTS FROM EVE LAGER DATED JANUARY 7,2001.

P98-1 See Response to Comment P28-4.

P99 RESPONSES TO COMMENTS FROM DEREK SOWERS DATED JANUARY 7, 2001.

- P99-1 See Response to Comment P21-4.
- P99-2 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P99-3 See Master Response "Air Quality."
- P99-4 Comment noted.

P100 RESPONSES TO COMMENTS FROM CHERYL REIFF DATED JANUARY 7, 2001.

P100-1 Regarding water quality concerns, see Master Responses "Water Quality" and Response to Comment F3-11. Regarding impacts to national parks, wilderness areas, and sensitive lands and species, see Response to Comment P58-2. With respect to alternatives, see Master Response "Formulation and Screening of Potential Projects."

P101 RESPONSES TO COMMENTS FROM A. B. AMSTER DATED FEBRUARY 2, 2001.

P101-1 See response letter following comment letter.

P102 RESPONSES TO COMMENTS FROM MATTHIAS REESE DATED DECEMBER 29, 2000.

- P102-1 Comment noted.
- P102-2 See Response to Comment P100-1.
- P102-3 Commentor has been added to the mailing list.

P103 RESPONSES TO COMMENTS FROM BONNIE MILLER DATED FEBRUARY 9, 2000.

- P103-1 See Response to Comment P58-2.
- P103-2 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P103-3 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P103-4 See Master Response "Air Quality."
- P103-5 Comment noted.
- P104 RESPONSES TO COMMENTS FROM MARANNA CHERRY DATED JANUARY 4, 2001.
- P104-1 See Response to Comment P21-4.
- P104-2 See Master Response "Water Quality."
- P104-3 The Final EIR/EIS, Volume I, Section 5.8 assesses potential impacts to biological resources and identifies mitigation measures to reduce impacts to less than significant levels.
- P104-4 See Response to Comment P58-2.
- P104-5 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P104-6 Section 7 of the Management Plan (Final EIR/EIS, Volume IV) sets forth corrective measures to mitigate and avoid adverse impacts, including water quality impacts. See

Master Responses "Groundwater Monitoring and Management Plan" and "Water Quality." See Response to Comment P95-4.

- P104-7 See d Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P104-8 Comment noted.

P105 RESPONSES TO COMMENTS FROM CAROL PRAGER DATED JANUARY 2, 2001.

- P105-1 See Response to Comment P28-4.
- P105-2 See Response to Comment F3-11 and Master Response "Water Quality."
- P105-3 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P105-4 See Response to Comment P104-6.
- P105-5 See Response to Comment P58-2.
- P105-6 See Master Response "Formulation and Screening of Potential Projects."

P106 RESPONSES TO COMMENTS FROM KELLY COHEN DATED DECEMBER 22, 2000.

- P106-1 See Responses to Comments P28-4 and P58-2.
- P106-2 See Response to Comment P28-4.
- P106-3 See Responses to Comments F3-11 and Master Response "Water Quality."
- P106-4 See Response to Comment P58-2.
- P106-5 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P106-6 See Response to Comment P104-6.
- P106-7 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P106-8 See Response to Comment P58-2.
- P106-9 Comment noted.

P107 RESPONSES TO COMMENTS FROM CELESTE MOORE DATED DECEMBER 26, 2000.

P107-1 See Responses to Comments P28-4 and P58-2.

- P107-2 See Response to Comment P28-4.
- P107-3 See Responses to Comments F3-11 and Master Response "Water Quality."
- P107-4 See Response to Comment P58-2.
- P107-5 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P107-6 See Response to Comment P104-6.
- P107-7 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P107-8 See Response to Comment P58-2.

P108 RESPONSES TO COMMENTS FROM TOM CAMARA DATED JANUARY 9, 2001.

- P108-1 See Responses to Comments P28-4 and P58-2.
- P108-2 See Response to Comment P58-2.
- P108-3 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P108-4 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P108-5 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P108-6 See Response to Comment P58-2.
- P108-7 See Response to Comment F3-11 and Master Response "Water Quality."
- P108-8 See Response to Comment P21-4.

P109 RESPONSES TO COMMENTS FROM JASON HASHMI DATED FEBRUARY 9, 2001.

- P109-1 See Response to Comment P28-4.
- P109-2 See Response to Comment P28-4.
- P109-3 See Response to Comment P58-2.
- P109-4 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P109-5 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."

P110 RESPONSES TO COMMENTS FROM IRIS EDINGER DATED JANUARY 3, 2001.

- P110-1 Comment noted.
- P110-2 See Response to Comment P28-4.
- P110-3 See Response to Comment F3-11 and Master Response "Water Quality."
- P110-4 See Response to Comment P58-2.
- P110-5 Metropolitan, a public agency, will carry out the project, including monitoring, in accordance with its obligations under CEQA.
- P110-6 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P110-7 See Response to Comment F3-11 and Master Response "Water Quality."
- P110-8 Comment noted.

P111 RESPONSES TO COMMENTS FROM ANNICK WOLF DATED JANUARY 5, 2001.

- P111-1 See Response to Comment P28-4.
- P111-2 See Response to Comment F3-11 and Master Response "Water Quality."
- P111-3 No additional treatment is anticipated to be required due to project operations.
- P111-4 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P111-5 See Response to Comment P58-2.
- P111-6 Comment noted.

P112 RESPONSES TO COMMENTS FROM MARK WEAVER DATED FEBRUARY 9, 2001.

- P112-1 The purpose and need for the project are discussed in Section 2 of the Final EIR/EIS, Volume I. Regarding conservation measures, see Master Response "Water Conservation." Metropolitan does not have the authority to regulate or control growth. The project includes mitigation measures that will be implemented to mitigate or avoid significant environmental impacts.
- P112-2 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P112-3 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."

- P112-4 See Master Response "Air Quality."
- P112-5 Comment noted.

P113 RESPONSES TO COMMENTS FROM PAM McMICHAEL DATED JANUARY 4, 2001.

- P113-1 See Response to Comment P21-4.
- P113-2 See Response to Comment P58-2.
- P113-3 See Response to Comment P21-4.
- P114 RESPONSES TO COMMENTS FROM SUSAN STUART DATED JANUARY 8, 2001.
- P114-1 See Response to Comment P28-4.
- P114-2 See Responses to Comments F3-11 and Master Response "Water Quality."
- P114-3 See Response to Comment P58-2.
- P114-4 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P114-5 See Response to Comment P104-6.
- P114-6 See Response to Comment P104-6.
- P114-7 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P114-8 See Response to Comment P58-2.

P115 RESPONSES TO COMMENTS FROM SUE BUCKLEY AND WALLY ELTON DATED JANUARY 16, 2001.

- P115-1 See Response to Comment P58-2.
- P115-2 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P115-3 See Master Response "Air Quality."
- P115-4 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P115-5 Comment noted.

P116 RESPONSES TO COMMENTS FROM GLENN STEWART DATED JANUARY 24, 2000.

- P116-1 See Response to Comment P21-4.
- P116-2 See Response to Comment P58-2.
- P116-3 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P116-4 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P116-5 See Response to Comment P58-2.
- P116-6 See Responses to Comments P116-1 and P116-2.
- P116-7 See Response to Comment P116-3.
- P116-8 See Response to Comment P116-4.
- P116-9 See Master Response "Air Quality."

P117 RESPONSES TO COMMENTS FROM DAVID AND MARSHA LOW DATED DECEMBER 31, 2000.

- P117-1 See Response to Comment P21-4.
- P117-2 See Master Response "Water Quality" and Master Response "Groundwater Monitoring and Management Plan."
- P117-3 Comment noted.
- P117-4 See Response to Comment P117-1.
- P117-5 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P117-6 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P117-7 See Master Response "Air Quality."

P118 RESPONSES TO COMMENTS FROM VIVIAN NEWMAN DATED DECEMBER 31, 2000.

- P118-1 See Response to Comment P58-2.
- P118-2 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."

- P118-3 See Master Responses "Formulation and Screening of Potential Projects" and "Water Conservation."
- P118-4 See Response to Comment P118-1.
- P118-5 See Response to Comment P118-2.
- P118-6 See Response to Comment P118-3.
- P118-7 See Master Response "Air Quality."
- P118-8 Comment noted.
- P119 RESPONSES TO COMMENTS FROM MELISSA BUHLER DATED DECEMBER 25, 2000.
- P119-1 See Response to Comment P28-4.
- P119-2 See Section 2, Final EIR/EIS, Volume I, regarding the need for the project to meet water demand in southern California.
- P119-3 See Master Responses "Water Quality" and "Groundwater Monitoring and Management Plan."
- P119-4 See Master Responses "Groundwater Monitoring and Management Plan" and "Air Quality."

P120 RESPONSES TO COMMENTS FROM JOAN GAMBILL DATED DECEMBER 21, 2000.

- P120-1 See Response to Comment P58-2.
- P120-2 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- P120-3 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P120-4 See Master Response "Air Quality."
- P120-5 Comment noted.
- P121 RESPONSES TO COMMENTS FROM BARBARA TIDBALL DATED JANUARY 5, 2001.
- P121-1 Comment noted.
- P121-2 See Response to Comment P58-2.
- P121-3 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."

- P121-4 See Master Responses "Water Conservation" and "Formulation and Screening of Potential Projects."
- P121-5 See Master Response "Air Quality."
- P121-6 Comment noted.
- P121-7 See Responses to Comments P121-2 through P121-6.

P122 RESPONSES TO COMMENTS FROM RICHARD KNOX DATED JANUARY 3, 2001.

P122-1 See Master Responses "Groundwater Monitoring and Management Plan," "Water Quality" and "Formulation and Screening of Potential Projects."

T1 RESPONSES TO COMMENTS FROM REPORTER'S TRANSCRIPT OF PROCEEDINGS AT TWENTYNINE PALMS DATED NOVEMBER 29, 2000.

- T1-1 Regarding the request for a Supplement, see Master Response to Comment "Need for Supplement/Recirculation." Analysis of potential impacts related to land use and the California Desert Conservation Area Plan are presented in Section 5.5.4 of the Final EIR/EIS Volume I. None of the alternatives considered in the EIR/EIS encroaches within the boundaries of a wilderness area. The preferred alternative would cross Class L lands for approximately five miles of its total approximate 35 mile length.
- T1-2 See Response to Comment R12-2 and Master Response "Governance."
- T1-3 For a discussion of management activities related to groundwater levels, see Section 7 of the Management Plan (Final EIR/EIS Volume IV) which describes action criteria, decision-making process and corrective measures. With regard to the 100 foot drop referenced in the comment, the commentor is correct that the Closure Plan contained in Section 8 of the Management Plan states that the average drawdown in the area underlying the project wellfield cannot exceed 100 feet, or a level that will cause adverse impacts to critical resources at the end of the project operations.
- T1-4 Comment noted.
- T1-5 Comment noted.
- T1-6 Comment noted. No members of the public are proposed to be included on the TRP. The TRP shall consist of experts in various fields from the NPS, USGS and the County of San Bernardino. Additionally, staff from any other federal agency deemed to have relevant expertise, the California Department of Water Resources and/or the Regional Water Quality Control Board may be consulted, as necessary. BLM will provide for public participation as it deems appropriate. See Sections 9 and 10 of the Management Plan (Final EIR/EIS Volume IV).
- T1-7 Comment noted.
- T1-8 Comment noted.

- T1-9 Comment noted.
- T1-10 The Cadiz Project will not impact springs or bighorn sheep as suggested in this comment. See Section 7.1 of the Management Plan (Final EIR/EIS Volume IV) which describes the action criteria, decision-making process and corrective measures related to protection of springs throughout the area.
- T1-11 As identified in Section 2 of the Final EIR/EIS Volume I, the project is needed even with the aggressive water conservation that is being implemented in Metropolitan's service area. For more information on Metropolitan's conservation efforts, see Master Response "Water Conservation."
- T1-12 Comment noted.
- T1-13 See Master Response "Growth Inducement" regarding references to Metropolitan's service area. The amount of indigenous groundwater that could be transferred under the Cadiz Project is not quantified and will be governed by the provisions of the Management Plan in order to avoid adverse impacts to critical resources. See Response to Comment T1-3 regarding groundwater levels.
- T1-14 The amount of indigenous groundwater that could be transferred under the Cadiz Project is not quantified and will be governed by the provisions of the Management Plan in order to avoid adverse impacts to critical resources.
- T1-15 Detailed records of the amounts of Colorado River water stored and indigenous groundwater pumped will be kept under the Management Plan and will be available for public review. Metropolitan does not anticipate continuous pumping during periods between storing of Colorado River water.
- T1-16 Section 2 of the Final EIR/EIS Volume I discusses Metropolitan's Colorado River supplies. Historically, Metropolitan has diverted 1.2 million acre-feet of Colorado River water. Metropolitan anticipates a reduction in the amount of Colorado River water available for use in California, which contributes to the need to maximize the efficiency of the Colorado River Aqueduct and use of Colorado River water.
- T1-17 The Technical Review Panel is intended to provide technical expertise, and it would be inappropriate and unnecessary to include members of the public. The BLM may consult with the California Department of Water Resources and other agencies, as necessary. See Section 9.1 of the Management Plan, Final EIR/EIS, Volume IV. Metropolitan will operate the project in accordance with the Management Plan as required by CEQA, and BLM will retain authority to enforce the Management Plan through the terms and conditions of the right-of-way grant(s) for the project.
- T1-18 See Master Response "Governance."
- T1-19 The 50-year project term is not considered short-term. It is not known at this time what potential projects could fill the need met by the Cadiz Project at the end of its 50-year term.
- T1-20 Section 7 of the Management Plan describes the corrective actions to be considered for each potential impact of the groundwater extraction. If measured declines in the elevation of

groundwater indicated that adverse impacts could occur, one of the following actions would be taken:

- a) Reduction in pumping from project wells,
- b) Revisions 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.

Regarding hexavalent chromium in the groundwater, see Response to Comment F3-11.

- T1-21 Comment noted. The referenced safeguards taken to avoid impacts to neighboring wells are discussed in Section 7.2.2 of the Management Plan, Final EIR/EIS, Volume IV.
- T1-22 Comment noted.
- T1-23 Regarding the provision of water service to "local communities" outside of Metropolitan service area, Metropolitan can not provide water outside of its service area as described by commentor. See Response to Comment F2-27 regarding "earthquakes."
- T1-24 See Response to Comment F3-11.
- T1-25 See Response to Comment F2-27.
- T1-26 Measures to mitigate for disturbance of the ground during construction are described in Section 5.8.5. Comment noted.
- T1-27 For information documenting precipitation for the project area and surrounding vicinity see Section 5.5 of the Final EIR/EIS, Volume I. Regarding "population growth" see Master Response "Growth Inducement." The discussion of the need for the Cadiz Project is clarified in the Final EIR/EIS, Section 2.
- T1-28 See Responses to Comments G42-39 and G42-86. Also see Master Response "Groundwater Management and Monitoring Plan." See Sections 9 and 10 of the Management Plan, Final EIR/EIS, Volume IV, which summarize the oversight and enforcement provisions of the Management Plan. See Master Response "Governance."
- T1-29 See Master Response "Growth Inducement."
- T1-30 The interconnection between California's water supply, referenced in the comment, is reflected in the discussion of Metropolitan's water supply set forth in Section 2.5, Final EIR/EIS, Volume I.
- T1-31 See Master Response "Water Quality."
- T1-32 Comment noted.
- T1-33 The Draft EIR/EIS contained public comments received at the scoping meetings. All comments on the Draft EIR/EIS and Supplement to the Draft EIR/EIS and responses to those comments are included in the Final EIR/EIS, Volumes II and III.

- T1-34 See Response to Comment T1-17.
- T1-35 The Cadiz, Coachella and Hayfield programs will be coordinated to ensure efficient management of Metropolitan's Colorado River supply. As a public agency, Metropolitan's records are subject to public disclosure in accordance with California law.
- T1-36 See Response to Comment T1-17.
- T1-37 See Master Response "Governance."
- T1-38 The project wells will be drilled in the alluvial aquifer. See the Final EIR/EIS, Volume I, Section 4.6.2 and Figure 4-22.
- T1-39 See Response to Comment F2-36 for clarification of the "wet" and "dry" years.
- T1-40 The Hayfield Groundwater Storage Project has been approved by Metropolitan's Board of Directors and is being implemented. Colorado River water has already been stored and is located within the Hayfield basin.
- T1-41 BLM will perform its obligations in accordance with the Federal Land Policy and Management Act (FLPMA) and National Environmental Policy Act (NEPA).
- T1-42 See Master Response "Governance."
- T1-43 BLM and Metropolitan have complied with the requirements of CEQA and NEPA in providing public notice of the environmental review process. See Section 1.5 of the Final EIR/EIS, Volume I. Regarding potential impacts to wells of neighboring landowners, see Final EIR/EIS, Volume I, Section 5.5.4, and Volume IV, Sections 7.2.2.
- T1-44 Several landowners, including the commentor, have participated in the public review and comment process and have submitted formal comments. See Response to Comment T1-43.
- T1-45 For information regarding historical groundwater use, see the Final EIR/EIS, Volume I, Section 5.5.1.
- T1-46 See Section 4.6.2 of the Final EIR/EIS, Volume I. The project will include construction of approximately 30 extraction wells.
- T1-47 Section 4.0 of the Final EIR/EIS, Volume I, describes the capacity of the project to deliver up to approximately 150,000 acre-feet per year (at a rate of approximately 200 –250 cfs) during dry years.
- T1-48 Comment noted.
- T1-49 See Response to Comment F2-34. Cadiz Inc. prepares and submits an annual groundwater monitoring plan to the County of San Bernardino. Please contact the County regarding the availability of this report.
- T1-50 As originally proposed in Section 3.9.1 of the Supplement to the Draft EIR/EIS, the Technical Review Team included Metropolitan, Cadiz Inc., County of San Bernardino, and the U. S. Department of the Interior. The Technical Review Panel that has been
incorporated into the final Management Plan includes representatives of the National Park Service, U. S. Geological Survey, and County of San Bernardino. See section 9 of the Management Plan (Final EIR/EIS, Volume IV).

- T1-51 See Response to Comment T1-50.
- T1-52 Section 9.1 of the Management Plan (Final EIR/EIS, Volume IV) provides that the BLM may consult with the Regional Water Quality Control Board and other agencies, as necessary.
- T1-53 All recommendations and actions will be available to the public in the annual and five year reports required under Section 6.8 of the Management Plan (Final EIR/EIS, Volume IV).
- T1-54 See Section 9.3 of the Management Plan (Final EIR/EIS, Volume IV). Data will be available through an electronic network or other appropriate means.
- T1-55 See Sections 6.1 and 7.1 of the Management Plan (Final EIR/EIS, Volume IV) for monitoring and management activities related to springs.
- T1-56 See Section 7.1.1 of the Management Plan (Final EIR/EIS, Volume IV) for a description of corrective measures that will be implemented as appropriate to avoid adverse impacts to springs.
- T1-57 See Response to Comment T1-55. The monitoring system will provide the data to calibrate the groundwater models described in Section 3 of the Management Plan (Final EIR/EIS, Volume IV). The models will identify potential impacts sufficiently early to avoid impacts to the springs and other critical resources. Monitoring and modeling will provide an "early warning" years in advance of a potential impact to a spring. Modifications to project operations would be initiated to avoid occurrence of the impacts.
- T1-58 The closest identified spring is Bonanza Spring, located in the Clipper Mountains approximately 12 miles north of the proposed spreading basins and wellfield.
- T1-59 The investigations for the project did not identify any spring closer than Bonanza Spring.
- T1-60 See Section 5.5 of the Final EIR/EIS, Volume I, for a detailed description of the groundwater aquifer system and groundwater flow.
- T1-61 Section 8 of the Management Plan (Final EIR/EIS, Volume IV) establishes an objective of the Closure Plan to ensure that any decline in static groundwater levels not exceed an average of 100 feet beneath the project wellfield at the end of project operations, or lead to a projected adverse impact to critical resources during or after the project.
- T1-62 Section 5.5.4 of the Final EIR/EIS, Volume I, discusses movement of the saline groundwater interface and migration of water from other areas.
- T1-63 See Response to Comment T1-61.
- T1-64 See Response to Comment T1-61.

- T1-65 The average 100-foot drawdown criterion at the end of project operations would be measured in the vicinity of the project wellfield. See Section 8.1 of the Management Plan, footnote 7, Final EIR/EIS, Volume IV.
- T1-66 See Response to Comments T1-61 and T1-65.
- T1-67 See Response to Comments T1-61 and T1-65.
- T1-68 Comment noted.
- T1-69 Figure 5.5-10 in the Final EIR/EIS, Volume I, illustrates a cross section of the aquifer from Fenner Valley to Bristol Dry Lake. The Management Plan requires that the drawdown in the vicinity of the production wells not exceed an average of 100 feet beneath the project wellfield (or a lesser level if there is a projection of adverse impacts to critical resources). The drawdown will become increasingly less with distance from the wellfield, until there is no effect on groundwater levels.
- T1-70 There remains a disagreement among experts regarding the amount of natural recharge to the project area. The Management Plan requires the operation of the project in a manner that will monitor and manage the effects on the groundwater basin to avoid adverse impacts regardless of the amount of natural recharge. See Master Response "Groundwater Management and Monitoring Plan."
- T1-71 See Response to Comment T1-70.
- T1-72 See Response to Comment T1-70.
- T1-73 Section 7.1.1 of the Management Plan describes the action criteria, decision-making process and corrective measures relating to the protection of springs. S-Series observation wells will ensure protection of the springs by measuring groundwater level impacts from project operations. For example, the action criteria for S-Series observation wells (1 foot change in any S-Series Observation well) has been established as a conservative, "hair-trigger" action level. If it were determined that project operations triggered this action criterion, it would be evaluated to determine whether the change was caused by the project and whether it reflected a potential impact to a spring. If the drop was determined to be project related and could lead to an adverse impact to a critical resource, appropriate corrective measures would be implemented to avoid the impact.
- T1-74 The amount of allowable drawdown is based on avoiding significant adverse impacts to critical resources, not necessarily the amount of natural recharge to the project area.
- T1-75 Comment noted.
- T1-76 See Responses to Comments T1-61 and T1-74.
- T1-77 Section 7.1.1 of the Management Plan ensures there will not be adverse impacts to springs, and therefore, that there will be no impact to any bighorn sheep that are dependent on those springs.
- T1-78 See Response to Comments T1-73.

- T1-79 Comment noted.
- T1-80 Comment noted.
- T1-81 See Responses to Comments T1-65 and T1-69.
- T1-82 Potential impacts to neighboring wells will be monitored as defined in Section 7.2.2 of the Management Plan. Neighboring wells will not be immediately impacted.
- T1-83 See Response to Comment T1-82.
- T1-84 Section 7.2.2 of the Management Plan (Final EIR/EIS, Volume IV) requires that Metropolitan arrange for an interim supply of water to any impacted well owner pending a determination of whether the impact is project related. Metropolitan is not responsible for impacts that are not related to the project.
- T1-85 Metropolitan will operate the project in accordance with the Management Plan pursuant to its obligations under CEQA. BLM will retain authority to enforce the Management Plan through the terms and conditions of its right-of-way grant(s) for the project.
- T1-86 See Section 10 of the Management Plan (Final EIR/EIS, Volume IV) which include the BLM decision-making process.
- T1-87 See Response to Comment T1-86.
- T1-88 See sections 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV), which sets forth the roles and responsibilities of the Technical Review Panel (TRP) and BLM.
- T1-89 An appeal of the BLM Authorized Officer's decision does not require payment of a fee.
- T1-90 See Response to Comment T1-89.
- T1-91 The comment is too general to permit a response.
- T1-92 The provisions incorporated in the Management Plan, Section 7.2.2 provides specific measures to avoid potential adverse impacts to wells owned by neighboring landowners. The Final EIR/EIS serves the purposes and complies with the requirements of CEQA and NEPA.
- T1-93 Comment noted.
- T1-94 The project includes both storage of Colorado River water and extraction of indigenous groundwater in accordance with the Management Plan. See Section 3.5.4 of the Final EIR/EIS, Volume I.
- T1-95 The amount of indigenous groundwater that may be extracted by the project will be determined in accordance with the Management Plan so that project operations will not cause adverse impacts to critical resources. See Sections 1.2 and 1.4 of the Management Plan, Final EIR/EIS, Volume IV.
- T1-96 See Response to Comment T1-95.

- T1-97 The aquifer system receives natural recharge from the surrounding watershed and will receive artificial recharge from spreading Colorado River water.
- T1-98 See Response to Comments T1-94 and T1-95.
- T1-99 See Response to Comments T1-94 and T1-95.
- T1-100 The Management Plan does not prohibit lowering of groundwater levels at the beginning of project operations. However, it does require monitoring and management of the project operations to avoid adverse impacts. Corrective measures identified in Section 7 of the Management Plan (Final EIR/EIS, Volume IV) include modifications to project operations where appropriate to avoid impacts.
- T1-101 Comment noted.
- T1-102 Comment noted.
- T1-103 Comment noted.
- T1-104 Section 1.3 of the Management Plan states that the Management Plan ensures that project operations and future irrigation under the Cadiz agricultural operation will be conducted without adverse impacts to critical resources.
- T1-105 The Management Plan ensures that withdrawal of water for both the project and agricultural uses by Cadiz Inc. will be conducted without adverse impacts to critical resources. See Response to Comment R3-52.
- T1-106 The monitoring features required in the Management Plan are set forth in Sections 5 and 6 (Final EIR/EIS, Volume IV).
- T1-107 See Response to Comment T1-106.
- T1-108 Metropolitan anticipates that it will extract stored Colorado River water and indigenous groundwater during dry years when surplus water is not available from the Colorado River. However, any use of indigenous groundwater will be subject to provisions of the Management Plan (Final EIR/EIS, Volume IV).
- T1-109 Metropolitan estimates it will have a high probability of declared surplus from the Colorado River until 2016 under the Record of Decision for Colorado River Interim Surplus Guidelines.
- T1-110 See Response to Comment T1-108.
- T1-111 Comment noted.
- T1-112 See Section 5.5 of the Final EIR/EIS, Volume I, for a detailed discussion of the natural recharge and groundwater flow in the basin. The primary sources of replenishment to the groundwater system in the project area include direct infiltration of precipitation (both rainfall and snowfall) in fractured bedrock exposed in mountainous terrain and infiltration of ephemeral stream flow in sandy-bottomed washes, particularly in the higher elevations of the watershed. The source of much of the groundwater recharge within the regional watershed occurs in the higher elevations.

- T1-113 See Response to Comment T1-112.
- T1-114 Comment noted.

T2 RESPONSES TO COMMENTS FROM REPORTER'S TRANSCRIPT OF PROCEEDINGS AT LOS ANGELES DATED DECEMBER 18, 2000.

- T2-1 See Master Response "Water Quality."
- T2-2 Comment noted.
- T2-3 See Response to Comment F3-11.
- T2-4 See Response to Comment F3-11. A proposal to remove hexavalent chromium from the aquifer is not being considered.
- T2-5 Chromium has been detected in groundwater in Metropolitan's Semitropic and Arvin-Edison programs in the San Joaquin Valley, and the Cadiz and Hayfield programs in the Mojave Desert, at levels below state and federal drinking water standards. Metropolitan will receive water from these groundwater basins during dry years. Please contact the cities of Burbank and Glendale for information regarding analyses of their water supplies.
- T2-6 See Response to Comment F3-11.
- T2-7 There is no conclusive evidence that hexavalent chromium causes cancer when ingested in water. Further study is being done by the California Department of Health Services and the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment.
- T2-8 Chromium is a common element found all over the world.
- T2-9 The U. S. Environmental Protection Agency has concluded that there is no evidence that chromium in drinking water has the potential to cause cancer from lifetime exposures in drinking water.
- T2-10 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- T2-11 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- T2-12 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required. See Response to Comment G6-15.
- T2-13 See Section 2.3.2 of the Final EIR/EIS, Volume 1, for a description of the role of storage in a water delivery system.
- T2-14 See Response to Comment T2-13.
- T2-15 Drinking water supplies, including those in underground aquifers, are required to be tested for hexavalent chromium and other chemicals.

- T2-16 Metropolitan and the BLM are jointly evaluating the implementation of the Cadiz Project through the public environmental review process required pursuant to CEQA and NEPA.
- T2-17 The comment does not raise an issue under CEQA or NEPA and, therefore, a response is not required.
- T2-18 Potential impacts to the desert environment and the water table are contained in Section 5 of the Final EIR/EIS, Volume I.
- T2-19 Potential environmental impacts will not be exaggerated in wet or dry years. Project operations will be governed by the Management Plan and will be limited, as necessary, to avoid adverse impacts to critical resources.
- T2-20 See Response to Comment T2-19.
- T2-21 Water quality testing under the Management Plan will include testing for hexavalent chromium.
- T2-22 Water quality testing under the Management Plan must be performed by a State of California certified laboratory. See Appendix D to the Management Plan, Final EIR/EIS, Volume IV.
- T2-23 The Department of Water Resources (DWR) has a map of groundwater basins in California available to the public. Also see DWR Bulletin # 118.
- T2-24 Please contact the State Water Resources Control Board for information regarding the quality of water in groundwater basins throughout California.
- T2-25 See Sections 3.4 and 3.5 of the Final EIR/EIS, Volume I, for an evaluation of other groundwater basins considered.
- T2-26 The comment does not raise an issue under CEQA or NEPA and, therefore, a response is not required.
- T2-27 The comment does not raise an issue under CEQA or NEPA and, therefore, a response is not required.
- T2-28 Comment noted.
- T2-29 Comment noted.
- T2-30 Comment noted.
- T2-31 Comment noted.
- T2-32 Comment noted.
- T2-33 Comment noted.
- T2-34 Comment noted.

- T2-35 Comment noted.
- T2-36 Comment noted.
- T2-37 Comment noted.
- T2-38 The Draft EIR/EIS, Supplement to the Draft EIR/EIS and Final EIR/EIS meet the requirements of CEQA and NEPA. The project is proposed as both a storage and transfer program. See Master Response "Groundwater Monitoring and Management Plan."
- T2-39 The Cadiz Project is both a storage and transfer program.
- T2-40 The project would not impact the amount of natural recharge to the groundwater basin. The U. S. Geological Survey and National Park Service are cooperating agencies under NEPA, and have assisted in the preparation of the Management Plan that is incorporated into the Final EIR/EIS.
- T2-41 The Management Plan ensures protection of air quality related to the mobilization of dust on Bristol and Cadiz dry lakes. See Master Response "Air Quality."
- T2-42 See Response to Comment T1-10.
- T2-43 Metropolitan will operate the project in accordance with the Management Plan pursuant to its obligations under CEQA. The BLM will retain authority to enforce the Management Plan through the terms and conditions of the right-of-way grant(s) for the project.
- T2-44 Comment noted.
- T2-45 Section 5.5.1 of the Draft EIR/EIS stated that the range of natural recharge available to the project area was between 15,000 and 37,000 acre-feet per year. The Supplement to the Draft EIR/EIS, Section 1.1, acknowledged that there are differences in the opinions of experts with respect to natural recharge. The concerns were addressed in the Supplement and Final EIR/EIS through the development of the Management Plan for purposes of governing project operations to avoid adverse impacts. See Master Response "Groundwater Management and Monitoring Plan."
- T2-46 Section 5 of the Final EIR/EIS states that the six operational scenarios presented in the Draft EIR/EIS are no longer being used to evaluate the potential impacts of the proposed project. Instead, the project will be operated in accordance with the Management Plan and any groundwater use under the project must comply with the Management Plan provisions.
- T2-47 The comment is based on an operating scenario that has been removed from the Final EIR/EIS. Section 8 of the Management Plan requires project operations be limited to allow a decline of no more than an average of 100 feet in static groundwater levels in the vicinity of the project wellfield, or such level as will not cause a predicted adverse impact.
- T2-48 The comment does not raise a CEQA or NEPA question or issue. See Section 8 of the Management Plan.
- T2-49 See Response to Comment T2-47.

- T2-50 See Response to Comment T2-47.
- T2-51 See Response to Comment T2-47.
- T2-52 See Response to Comment T2-47.
- T2-53 See Response to Comment T2-47. Section 7.2.6 of the Management Plan (Final EIR/EIS, Volume IV), requires project operations be limited to avoid impairment of beneficial uses of groundwater due to project-induced migration of lower quality water from Bristol and Cadiz Dry Lakes.
- T2-54 The Management Plan incorporates modeling of the groundwater basin to identify the potential future impacts of planned project operations. See Section 3 of the Management Plan, Final EIR/EIS, Volume IV.
- T2-55 Comment noted.
- T2-56 Comment noted. See Master Response "Air Quality."
- T2-57 See Responses to Comments G42-91, G42-97 and G42-99.
- T2-58 See Response to Comment G42-98.
- T2-59 See Responses to Comments G42-95 and -96.
- T2-60 See Responses to Comments G42-92 and G42-93.
- T2-61 An estimate of the PM₁₀ emissions from removing the accumulated sediment is provided in Table 5.6-4 of the Final EIR/EIS, Volume I. These figures are based on the use of watering during maintenance activities to reduce emissions, and are calculated in accordance with emissions factors provided by the U. S. Environmental Protection Agency (USEPA), South Coast Air Quality Management District (SCAQMD), Mojave Desert Air Quality Management District (MDAQMD), and California Air Resources Board (CARB). See Final EIR/EIS, Volume I, Sections 5.6.3 and5.6.4.
- T2-62 See Response to Comment T2-61. Section 5.6.4 of the Final EIR/EIS, Volume I, also discusses the potential impacts from emissions from the spreading basins when they are dry. Due to the growth of algae during spreading operations, a crust will be formed over the basins that prevents emissions when the basins are dry. However, mitigation measure AQ-9 provides for the application of soil binders to the spreading basins if necessary to control dust.
- T2-63 Comment noted.
- T2-64 The potential impacts to air quality have been adequately evaluated in Section 5.6.4 of the Final EIR/EIS, Volume I. The amounts of regulated air pollutants that will be generated by construction and operation of the project are set forth in Tables 5.6-3 and 5.6-4. The construction impacts to air quality were found to be significant. See Section 8.2, Final EIR/EIS, Volume I. Mitigation measures to minimize and avoid air quality impacts are set forth in Section 5.6.5 in Volume I.

With regard to dust mobilization from Bristol and Cadiz dry lakes, this is addressed in the Management Plan in Section 7.4.1 in Volume IV, of the Final EIR/EIS. It has been conservatively assumed that a lowering of the groundwater level could increase the susceptibility of the lakebeds to dust mobilization. Therefore, the Management Plan was developed to detect and mitigate the potential for increased susceptibility of the lakebeds to dust mobilization caused by lowering of the groundwater level as a result of project operations. See Master Response "Air Quality."

- T2-65 See Response to Comment T2-64.
- T2-66 See Response to Comment T2-47.
- T2-67 The analysis of potential impacts to groundwater related resources is set forth in Section 5.5.4 of Volume I, and Section 2 of Volume IV, of the Final EIR/EIS. The Management Plan includes measures to monitor and manage project operations to avoid the potential impacts, as described in Sections 6 and 7, Final EIR/EIS, Volume IV.
- T2-68 The Management Plan adequately describes the monitoring system that will be implemented, and the management measures that will apply to project operations to avoid adverse impacts to critical resources. See Sections 6 and 7 of the Final EIR/EIS, Volume IV. Metropolitan has the legal obligation to implement the Management Plan pursuant to CEQA. BLM will retain authority to enforce the Management Plan through the terms and conditions of the right-of-way grant(s) for the project.
- T2-69 The Management Plan establishes a monitoring network that will track every aspect of groundwater related resources that may be affected by project operations. See Sections 5 and 6 of the Final EIR/EIS, Volume IV. Groundwater models, calibrated in accordance with collected data, will be used to evaluate and predict the potential impacts of project operations and limit those operations to avoid adverse impacts. See Sections 3 and 7 of the Final EIR/EIS, Volume IV.
- T2-70 Financial aspects of the program are not CEQA or NEPA issues related to assessment of environmental impacts, and are considered separately from the environmental documents.
- T2-71 See Response to Comment T2-70.
- T2-72 BLM and Metropolitan believe that the Final EIR/EIS serves the purposes of and complies with the requirements of CEQA and NEPA.
- T2-73 See Response to Comment T2-72.
- T2-74 The Cadiz Project complies with all applicable federal and state water quality requirements. Section 7.2.1 of the Final EIR/EIS, Volume IV, requires that the project be operated to ensure compliance with the Basin Plan adopted by the Regional Water Quality Control Board, Colorado River Region.
- T2-75 The project has no impact on any reserved water rights.
- T2-76 Potential impacts to wildlife are addressed in Section 5.8.4 of the Final EIR/EIS, Volume I.
- T2-77 Comment noted.

- T2-78 Comment noted.
- T2-79 See Master Response "Air Quality."
- T2-80 See Section 5.8 of the Final EIR/EIS for a complete discussion of the potential impacts to desert life and Sections 9 and 10 of the Management Plan which summarize the oversight and enforcement provisions of the Management Plan.
- T2-81 The Final EIR/EIS serves the purposes and meets the requirements of CEQA and NEPA.
- T2-82 The project does not interfere with the rights of landowners overlying the basin to make reasonable, beneficial use of the groundwater.
- T2-83 The potential impacts to wells operated by neighboring landowners have been addressed in Section 7.2.2 of the Final EIR/EIS, Volume IV. Neighboring owners have had the opportunity to comment on the project through the public environmental review process required under CEQA and NEPA.
- T2-84 The measures set forth in Section 7.2.2 of the Final EIR/EIS, Volume IV, will prevent the project from causing wells operated by neighboring landowners to be adversely impacted. Corrective measures are set forth to remedy any adverse impacts that occur, including deepening wells, providing alternative water supply, or constructing a replacement well.
- T2-85 Metropolitan will operate the project in accordance with the Management Plan pursuant to its legal obligations under CEQA. BLM will retain authority to enforce the Management Plan through the terms and conditions of its right-of-way grant(s) for the project.
- T2-86 Section 7.2.2 of the Final EIR/EIS, Volume IV, requires Metropolitan to provide an interim supply of water pending determination if any impact to a neighboring property owner's well is caused by the project. This obligation is initiated upon receipt of a written complaint.
- T2-87 See Response to Comment T2-86. Costs to third parties of enforcing legal obligations is not an issue under CEQA or NEPA.
- T2-88 The Management Plan will be implemented by Metropolitan in accordance with its obligations under CEQA. BLM will retain authority to enforce the Management Plan through the terms and conditions of its right-of-way grant(s) for the project. Costs to third parties of enforcing legal obligations is not an issue under CEQA or NEPA.
- T2-89 See Response to Comment T2-88.
- T2-90 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- T2-91 Comment noted.
- T2-92 Comment noted.
- T2-93 Comment noted.

- T2-94 Comment noted.
- T2-95 Comment noted.
- T2-96 Figure 5.2-2 in Volume I of the Final EIR/EIS shows BLM Multiple Use Classes and utility corridors designated in the California Desert Conservation Area (CDCA) Plan.

The Final EIR/EIS indicates the area around Iron Mountain is designated as "Multiple-Use Class L". To quote the CDCA Plan:

"Multiple-Use Class L (Limited Use) protects sensitive, natural, scenic, ecological, and cultural resource values. Public lands designated as Class L are managed to provide for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished." Within Class L areas, "New gas, electric, and water transmission and trans-desert telecommunications facilities may be allowed only within designated corridors....New distribution systems may be allowed and would be placed underground where feasible except where this would have a more detrimental effect on the environment than a surface alignment. In addition, new distribution facilities shall be placed within existing rights-of-way where they are reasonably available."

Of the approximate 35-mile length of the preferred alternative alignment, less than five miles of the alignment would cross lands designated as "Multiple-Use Class L." The balance of the alignment would cross lands designated as "Multiple-Use Class M."

"Multiple-Use Class M (Moderate Use) is based upon a controlled balance between higher intensity use and protection of public lands. This class provides for a wide variety of present and future uses such as mining, livestock grazing, recreation, energy, and utility development. Class M management is also designed to conserve desert resources and to mitigate damage to those resources that permitted uses may cause."

As shown in Figure 5.2-2 a relatively short segment of a CDCA Plan designated utility corridor crosses the Cadiz Project area north of the Iron Mountain Pumping Plant. This utility corridor accommodates the aboveground utility lines (two 230 kV power lines and telephone lines) that connect the Iron Mountain Pumping Plant with Hoover Dam. This utility corridor line also crosses Class L lands.

- T2-97 The establishment of a utility corridor is not being considered. Because the project conveyance pipeline and electrical distribution system will cross federal lands administered by the BLM, the BLM must consider whether to amend the California Desert Conservation Area Plan for an exception to the utility corridor requirement and grant rights-of-way to Metropolitan for construction and operation of the project. The environmental impacts of these actions are addressed in the Final EIR/EIS. The preferred alternative is a buried pipeline. Undergrounding the electric power line that parallels the pipeline or pipeline/canal options is fatally flawed on a technical basis.
- T2-98 Comment noted.
- T2-99 Comment noted.
- T2-100 Comment noted.

- T2-101 Comment noted.
- T2-102 Comment noted.
- T2-103 Comment noted.
- T2-104 See Response to Comment F3-11. Current technology allows for detection of hexavalent chromium in water.
- T2-105 The project does not propose to mix "clean water" with reclaimed water to expand the drinking water supply or distribution system. There is no causal relationship between production of groundwater and droughts. Droughts are caused by lack of precipitation.
- T2-106 See Final EIR/EIS, Volumes II and III, regarding public notices related to the environmental review process. See Master Response "Alternatives" regarding the alternatives considered as a part of this environmental review process. See Master Response "Growth Inducement" regarding statement concerning growth. The project would not provide water to Twentynine Palms.
- T2-107 See Master Response "Water Conservation."
- T2-108 Comment noted.
- T2-109 Comment noted.
- T2-110 Comment noted.
- T2-111 Comment noted.
- T2-112 Comment noted.
- T2-113 Comment noted. See sections 9 and 10 of the Management Plan which summarize the oversight and enforcement provisions of the Management Plan.
- T2-114 The project will be operated by Metropolitan, a public agency. Its operations are subject to public oversight in accordance with California law.
- T2-115 Comment noted.
- T2-116 Comment noted.
- T2-117 Comment noted. Also see comment letter P82.
- T2-118 Comment noted. Also see comment letter P82.
- T2-119 Comment noted. Also see comment letter P82.
- T2-120 Comment noted. Also see comment letter P82.
- T2-121 Comment noted. Also see comment letter P82.

- T2-122 Comment noted. Also see comment letter P82.
- T2-123 Comment is correct that Colorado River water would be stored in wet years and pumped in dry years.
- T2-124 The Cadiz Project includes the transfer of available groundwater subject to the provisions of the Management Plan (Final EIR/EIS, Volume IV).
- T2-125 Comment noted.
- T2-126 See Master Response "Formulation and Screening of Potential Projects." Table III-18 of the Regional Urban Water Management Plan (RUWMP) delineates projects for management of Colorado River water supplies. These projects provide a total of 3,000,000 acre-feet of storage. Accompanying text from the RUWMP states "Once the proposed programs are instituted, Metropolitan will potentially have enough storage and withdrawal capacity to assure full aqueduct for a number of decades. However, without implementation of the proposed programs, sufficient supplies would not be available to keep the aqueduct full when surplus water is not available" (p. III-60).
- T2-127 As noted in response T2-126, 3,000,000 acre-feet of storage is required to manage Colorado River water supplies for dry year demand.
- T2-128 As noted in the RUWMP, all the projects are required to meet Metropolitan's needs.
- T2-129 The Hayfield Program has been approved for implementation and delivery of 800,000 acrefeet of Colorado River water to the basin for storage. Metropolitan is currently in negotiations with Coachella Valley Water District regarding the Coachella Program, and with the Arizona Water Banking Authority regarding usage of the Arizona water bank.
- T2-130 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- T2-131 The Cadiz Program is subject to the same environmental review and permitting process as each of the potential Colorado River storage projects.
- T2-132 Metropolitan is adequately evaluating all feasible potential programs.
- T2-133 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- T2-134 Metropolitan will operate the project in accordance with the Management Plan pursuant to its obligations under CEQA. See Sections 9 and 10 of the Management Plan which summarize the oversight and enforcement provisions of the Management Plan.
- T2-135 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.
- T2-136 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.

T2-137 The comment does not raise an issue under CEQA or NEPA and, therefore, no response is required.

T3 RESPONSES TO COMMENTS FROM TRANSCRIPT OF PROCCEDINGS OF BLM NATIONAL OFF-HIGHWAY VEHICLE MANAGEMENT STRATEGY IN BARSTOW DATED OCTOBER 21, 2000.

- T3-1 Comment noted. See Master Response "Groundwater Monitoring and Management Plan."
- T3-2 See Response to Comment T3-1. The preferred alternative proposes to construct nearly 35 miles of pipeline and no canal.
- T3-3 The project does not affect the use of the Arizona California Railroad.
- T3-4 See Section 5.14.4 of the Final EIR/EIS, Volume I, for a complete evaluation of aesthetic impacts.
- T3-5 See Response to Comment T3-4.
- T3-6 See Response to Comment T3-4.
- T3-7 It is anticipated that Colorado River water will periodically be available for storage under the Cadiz Project even after the expiration of the Interim Surplus Guidelines for the Colorado River.
- T3-8 Comment noted.
- T3-9 See Section 7.2.2 of the Final EIR/EIS, Volume IV, regarding the monitoring and management measures that will be implemented to avoid or mitigate impacts to wells operated by neighboring owners.
- T3-10 Landowners with property overlying a groundwater basin have the right to pump groundwater for reasonable, beneficial use on their property. The landowner's right is superior to Metropolitan's use of surplus groundwater.
- T3-11 The public review period for the Supplement was extended to a total of 80 days.
- T3-12 The public review period for the Supplement was extended to a total of 80 days.
- T3-13 Comment noted.
- T3-14 See Master Response "Groundwater Monitoring and Management Plan." See Sections 9 and 10 of the Management Plan (Final EIR/EIS, Volume IV) which summarize the oversight and enforcement provisions of the Management Plan.
- T3-15 See Response to Comment T3-14.
- T3-16 See Response to Comment T3-14. See Section 7.2.2 of the Final EIR/EIS, Volume IV, regarding the monitoring and management measures that will be implemented to avoid or mitigate impacts to wells operated by neighboring owners.

- T3-17 The BLM has determined that a right-of-way for groundwater storage is not legally required for the Cadiz Project.
- T3-18 See Response to Comment T3-14.
- T3-19 The BMG has been removed from the Management Plan. There remains a Technical Review Panel which provides technical support and recommendations to the BLM. See Sections 9 and 10 of the Management Plan, Final EIR/EIS, Volume IV.
- T3-20 Comment noted.
- T3-21 Public comment from the desert area has been taken at three scoping meetings, three public meetings on the Draft EIR/EIS and three public meetings on the Supplement to the Draft EIR/EIS.
- T3-22 See Master Response "Water Conservation."
- T3-23 See Master Responses "Governance" and "Groundwater Monitoring and Management Plan."
- T4 RESPONSES TO COMMENTS FROM THE ASSOCIATION OF CALIFORNIA WATER AGENCIES ON THE SUPPLEMENT TO THE DRAFT ENVIRONMENTAL REPORT/ENVIORNMENTAL IMPACT STATEMENT FOR THE PROPOSED CADIZ GROUNDWATER STORAGE AND DRY-YEAR SUPPLY PROGRAM
- T4-1 See Response to Comment T1-19.
- T4-2 See Master Responses "Groundwater Monitoring and Management Plan" and "Water Quality."
- T4-3 See Sections 9 and 10 of the Management Plan which summarize the oversight and enforcement provisions of the Management Plan.
- T4-4 Regarding the provision of water service to "local communities" outside of Metropolitan service area, Metropolitan cannot provide water outside of its service area as referenced by commentor.
- T4-5 See Master Response "Water Quality."
- T4-6 The project includes both storage of Colorado River water and transfer of available indigenous groundwater. All project operations will be in compliance with the Management Plan to avoid adverse impacts to critical resources.
- T4-7 Comment noted.
- T4-8 See Master Response "Water Quality" and Response to Comment F3-11, regarding hexavalent chromium. Other comments noted.
- T4-9 Comment noted.

- T4-10 This letter is responded to at Responses to Comments P82-21 through P82-24.
- T4-11 Comment noted.
- T4-12 Comment noted.