

## **ATTACHMENT H – REGIONAL WATER BOARD CEQA FINDINGS**

The Discharger, acting as California Environmental Quality Act (CEQA, Public Resources Code Section 21000, et seq.) Lead Agency prepared a Draft Environmental Impact Report (EIR) for the LORP and circulated the Draft EIR for a public review and comment period from November 1, 2002 to January 14, 2003. The Final EIR for the LORP was completed and certified by the Discharger on June 22, 2004. In the record of the EIR approval, the Discharger made a statement of overriding considerations, including the potential occurrence of significant effects on water quality that are identified in the Final EIR but are not avoided or substantially lessened.

The Final EIR provides a detailed record concerning project effects. The Final EIR includes alternatives analyzed, legal, economic and technical considerations, operational descriptions, and other information crucial to understanding the LORP proposal, and sets forth the basis for including or excluding mitigation measures for various identified impacts.

When an EIR has been prepared for a project, a Responsible Agency shall not approve the project as proposed, pursuant to CEQA Guidelines, Section 15096(g)(2), if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment. The Regional Water Board, acting as a CEQA Responsible Agency, has evaluated the significant and potentially significant impacts to water quality identified in the LORP Final EIR in order to comply with Section 15096(g)(2). A detailed summary of findings concerning these impacts is reproduced below from the Final EIR (Table S-1), which classifies the impacts into Class I, Significant and Unavoidable; and Class II, Significant but Mitigable. References to “Sections” indicate the location in the Final EIR where additional details can be found concerning the impact.

The Final EIR comments on whether feasible mitigation measures were identified and required, and the residual level of impact considering any feasible mitigation measures required. In each case, the Discharger’s text is quoted, followed by Findings of the Regional Water Board concerning the adequacy of mitigation measures, and the level of residual impact.

### **I. Class I Impacts: Significant and Unavoidable**

#### **1. Description of Impact, by Impact Area; Water Quality**

“The proposed 40-cfs base flow and seasonal habitat flows could degrade water quality due to the depletion of oxygen, and the possible increase in hydrogen sulfide and ammonia levels. These impacts are only expected to occur along the wetted reach of the river, from Mazourka Canyon Road to the pump station site, where the [largest] organic sediment deposits are present, affecting about 37 channel miles of the 62-mile length of the river. It is anticipated that water quality conditions will improve under the 40 cfs base flows over time, but may be subject to periodic disturbance by the seasonal habitat flows of up to 200 cfs. The time required to stabilize water quality under the base flows and seasonal habitat flow is unknown. (Section 4.4.3.1)”

The Discharger has submitted the following additional information concerning the flow-release regime.

“The proposed flow regime is designed to meet the project goals for establishing and sustaining a warm water fishery and native riparian

vegetation. The flows are not designed to recreate pre-1913 riverine conditions [i.e., proposed volumetric flows are less than 10% of historic annual flows]. The proposed flow release regime is described below:

- **Base flow:** A continuous release to establish a flow of 40 cfs year-round from the River Intake to the proposed Pump Station. (See Final EIR Section 2.3.5.2, pages 2-16 and 2-17.) The purpose of the baseflow is to provide optimum habitat for a variety of game, native, and forage fish. [Initial] Phase 1 releases will establish a continuous flow from the Intake to the Delta (with no or minimal increase in flows in the wetted reach), and [subsequent] Phase 2 releases will establish the 40-cfs baseflow from the Intake to the Pump Station.
- **200-cfs Peak Flow in the First Winter following Pump Station Completion:** In the winter immediately following the completion of the Pump Station construction, a flow with a peak magnitude of 200 cfs will be released at the River Intake (to be ramped up from 40 cfs to 200 cfs in 7 days then ramped back down to 40 cfs over an additional 7 days). (See Final EIR Section 2.3.5.3, page 2-18.)
- **Seasonal habitat flows:** In subsequent years, seasonal habitat flows will be released in May or early June to coincide with seed production by willows and cottonwoods in the floodplain. (See Final EIR Section 2.3.5.3, pages 2-18 to 2-22.) The purpose of the seasonal habitat flows is to deposit sediments and seeds of riparian woody species onto the floodplain and to facilitate recharge of groundwater in the floodplain.

The seasonal habitat flow will be ramped up and down from the 40 cfs baseflow to the peak flow, the magnitude of which will vary (up to 200 cfs) each year based on forecasted runoff conditions. The magnitude of the seasonal habitat flow is in general proportion to the forecasted runoff so that it is in line with the natural weather patterns and emulates the runoff pattern experienced by the River above the River Intake. The ramping of the seasonal habitat flow is generally designed to emulate the characteristics of natural flood events, which include a gradual rise and decline in flow. The gradual rise and fall is also designed to prevent entrapment of fish and to allow water to spread outside of the channel then gradually recede to allow time for sediments and seeds of riparian woody species to be deposited onto the floodplain and groundwater to be recharged.

#### **Measures to Reduce Impacts that were incorporated into the Project.**

The following describes measures that were incorporated into the project to reduce potential water quality impacts associated with the proposed flow releases.

**Release of First 200-cfs Flow in the Winter.** During preparation of the Final EIR, the proposed flow release regime was modified to reduce the potential for water quality impacts by releasing the first 200-cfs flow in the winter, when lower temperatures will reduce the potential for substantial decreases in dissolved oxygen and adverse effects on fish health.

**Water Quality Monitoring and Spillgate Releases to Create Fish Refuge.** As described in Final EIR Section 2.3.5.2 (pages 2-17 to 2-18 and 2-22 to 2-23),

the proposed project includes water quality monitoring in the River during baseflow and seasonal habitat flow releases. (See Final EIR Table 2-7, page 2-17, for monitoring locations and Table 2-8, page 2-18, for monitoring frequencies.) If it is determined that a water quality or fish condition threshold identified in Table 2-9 (Final EIR page 2-18) has been exceeded at one or more of the three monitoring stations, water will be released to the river from the Aqueduct through the spillgate linked to the monitoring station to create a refuge for fish in the spillgate channel and at the confluence with the river below the spillgate channel. [Note, the spillgate releases are not intended or expected to improve water quality in the river channel except in localized areas around the confluence with the spillgate channel.]

Fish Restocking. Under Mitigation Measure F-1 (Final EIR Section 4.6.3, page 4-42), the LADWP has committed to implementing a fish stocking program if substantial fish kills occur and natural re-colonization does not occur, or appears to be occurring at a very slow rate (within 5 years after water quality conditions have improved). (Related information is provided below under the heading “Anticipated Recovery of Game Fish Population.”)

### **Regional Water Board Analysis and Findings**

The Lead Agency considered three alternative flow-release regimes to reduce or minimize adverse water quality effects (Final EIR Table S-2). “Release Regime 1 – Gradual Baseflows and Deferred Seasonal Habitat Flows; Release Regime 2 – Begin with Seasonal Habitat Flows to Flush the System (in July [2007] following the completion of the Pump Station); Release Regime 3 – Delay Releases for Base Flow Until Winter.” All of these alternatives were rejected for various reasons as infeasible by the Lead Agency, which instead adopted the proposed release regime with the modification described above under “Release of First 200-cfs Flow in the Winter.”

The Regional Water Board has considered the proposed flow-release regime and the alternatives evaluated and concurs that the regime selected is environmentally superior to the other evaluated alternatives, however, an additional mitigation measure is required to further lessen significant water quality impacts (see below). The initial 200 cfs flow from the River Intake is expected to act as a partial flushing flow, clear out the disturbed and/or mobilized earthen materials from the upper reaches of the channel to some degree, and scour and harden the streambed against erosion for subsequent seasonal habitat flows. However, the proposed 24-hour, 200 cfs release at the River Intake will be attenuated by water losses within the channel and floodplain from percolation, evaporation and evapotranspiration within the 62-mile reach, such that the volumetric rate of water flow through the downstream portions of the river during the flow event will be generally decreasing and will be significantly less than 200 cfs, especially during the initial high-flow event when the alluvial aquifer will refill. At the Pump Station, the remaining fraction of the initial 200-cfs flow will be reduced by up to 50 cfs, which will reduce stream energy and sediment transport capacity. The initial winter 200 cfs flow release is also expected to deposit additional sediment and organic materials from the upper reaches to the lower reaches of the river, above the Pump Station, where these materials may continue to exert water quality effects as described in the Final EIR. Reducing flows at the Pump Station will result in loss of stream energy and sediment transport capacity, and induce deposition of sediment and organic materials within the Delta. The initial and subsequent peak flows associated with water releases for habitat are of insufficient magnitude and duration to fully flush the lower reaches of the River (in

particular, in the lowest 17.5-mile reach, where the heaviest deposits of organic sediments currently exist). Significant water quality impacts as described in the Final EIR are expected during a protracted period following the initial habitat releases under this scenario. As discussed in the EIR, water quality is expected to improve with time under the proposed flow regime, but the duration of expected impacts is not known.

The Regional Water Board has considered other feasible alternatives or feasible mitigation measures within its powers, including alternative flow-release regimes, which would substantially lessen or avoid any significant effect the project would have on the environment. Based on that evaluation, a mitigation measure was identified that would shorten the duration of significant adverse effects on water quality due to flow releases. The mitigation measure is described below.

During the first 200 cfs winter flow release, a supplemental partial flushing flow release shall occur from the Alabama Spillgate (hereinafter "Alabama Release"). The Alabama Spillgate is located approximately 17.5 river miles upstream from the Pump Station site and is used to discharge water directly from the Los Angeles Aqueduct to the Lower Owens River. The Alabama Release shall increase flow rates during and following the time when the peak flow from upriver releases passes the Alabama Spillgate, to provide and maintain a 200 cfs flow rate in the Lower Owens River immediately below the Alabama Spillgate for a minimum period of 96 hours (four days). This period of time is sufficient to ensure that the lower portions of the River (below the Alabama Spillgate) will be flushed by flows of a mass magnitude not likely to be otherwise exceeded due to operation of the LORP. High-flow releases bypassing the Pump Station will flow to the Delta and/or Owens Lake.

During the Alabama Release (and other releases proposed under the LORP), Pump Station discharges to the Los Angeles Aqueduct may be limited by water quality conditions and the need to prevent pollution or nuisance. However, Pump Station discharges to the Discharger's Dust Control Project will not unreasonably reduce the flow to the Delta for flushing purposes, and will reduce or prevent discharges of diverted river water that could impair water quality or beneficial uses of water associated with the Los Angeles Aqueduct and Haiwee Reservoir (waters that support other beneficial uses).

The Alabama Release is needed to hasten restoration in the Lower Owens River areas above and below the Pump Station and minimize the duration of adverse water quality effects from ceasing to divert a portion of the existing flow to the Los Angeles Aqueduct and reintroducing flow to the Lower Owens River channel. To a much greater degree than under the flow regime approved by the Discharger in the Final EIR, water contaminants and organic deposits delivered to the lower portions of the River by the initial 200-cfs release at the River Intake will be flushed to the Delta and/or Owens Lake where water quality conditions are such that the discharges are not anticipated to adversely affect the waters for beneficial uses. The Alabama Release will not adversely affect the restoration and enhancement of the Delta (wetlands and uplands). The Alabama Release will benefit the Delta by distributing water and organic sediments that will enrich the shallow flooding zones in the Delta.

The Alabama release is described conceptually as follows. The Discharger will initiate and conduct the first winter habitat release from the River Intake as described in the Final EIR. The 200-cfs peak release rate will be maintained for 24 hours, and this flow will travel downriver as a pulse. It will take several days for the peak flows to reach the Alabama Spillgate, depending on average flow velocities in the Lower Owens River. At any time after the peak flow is detected at an existing flow monitoring location established just upriver from the Alabama Spillgate, the Discharger shall begin supplementing the river flow by releasing

water from the Alabama Spillgate. During the first 24 hours, the releases will be relatively small, as needed to make up for losses due to infiltration and evaporation below the River Intake. Flows from the Alabama Spillgate will need to be increased in subsequent days to make up for losses, as above, and because the release at the River Intake will be decreasing at a pre-established rate each 24 hours. The Discharger will need to monitor the flows above the Alabama Spillgate to determine the necessary release rates from the Alabama Spillgate to fulfill requirements to cause a combined flow of at least 200 cfs to occur for four consecutive days in the Lower Owens River immediately below the Alabama Spillgate.

A four-day period of peak flow was chosen, in part, because the river below the Alabama Spillgate enters an area known as “the islands.” In the “islands” area, the river channel is broader and less defined and water velocities will tend to slow, reducing sediment transport capacity to some degree. It may take four days or more for the water from the Alabama Release to transport the suspended sediment load from upriver areas through the “islands” to where the channel is better defined, past the Pump Station, and through the Delta. Water losses due to infiltration below the Alabama Spillgate are expected to be minimal, as the lower river is generally gaining water (due to ground water effluent conditions) in the winter. Sediment transport capacities are greater at higher flows. Therefore, the Alabama Release will aid in maintaining high flow conditions long enough to move suspended sediment and poor-quality water through the “islands” and downriver past the Pump Station and Delta. Regional Water Board staff has conservatively estimated the amount of water that will not be recoverable by the Discharger as a result of the four-day requirement at approximately 700 acre-feet, based on channel losses of up to 50 cfs upriver from the Alabama Spillgate. Though actual losses may be much less, 700 acre-feet is approximately half of the 1400 acre-feet not recoverable by the Discharger during a 200-cfs seasonal habitat flow as described in the Final EIR, estimated by similar methods. The Alabama Release is therefore feasible and reasonable to require for the purposes of water quality improvement.

This Order requires that a partial flushing flow of 200 cfs from the Alabama Spillgate be initiated during the first 200 cfs winter habitat flow. Augmenting the initial winter 200 cfs release with a partial flushing flow of the lower river reaches from the Alabama Spillgate will minimize the expected duration of adverse impacts to water quality. Releasing the flow at the Alabama Spillgate will focus the flow energy and mass on the lower reaches of the river channel where most of the organic sediment and muck has accumulated and will be concentrated. The Alabama Release will ensure that, to a much greater degree, contaminants and poor-quality water are mobilized and flushed to the Delta and Owens Lake, where they can be absorbed and attenuated without causing significant adverse effects on water quality for beneficial uses. Use of high flows to redistribute water and sediment in these areas is considered a beneficial effect and goal of the LORP.

The Regional Water Board has required the Discharger to implement the Alabama Release as a condition for granting an exception to waste discharge prohibitions (see Order Section VI.C.8.), and to report to the Regional Water Board on it when it has been completed (see Monitoring and Reporting Program, Section IX.D.2.). The Regional Water Board will monitor the implementation of this mitigation measure, including water quality monitoring in the Lower Owens River. For river flows diverted by the Pump Station, pre-discharge and ongoing water quality monitoring will be required in the Los Angeles Aqueduct to determine whether Pump Station discharges may unreasonably affect the water quality in the Los Angeles Aqueduct and Haiwee Reservoir for beneficial uses. Since water may be diverted at the Pump Station to the Los Angeles Aqueduct only if water quality standards will be maintained, discharges of river water during both the initial partial flushing flow and the Alabama Release to the Dust Control Project and/or Owens Lake (by way of the Delta and transition zone to the brine pool) will minimize impacts to water quality. Mobilized organic

sediments and muck in the diverted waters will be discharged to the Delta or the Dust Control Project, instead of the Los Angeles Aqueduct and Haiwee Reservoir, a municipal drinking water supply. Diversions for dust control will reduce pollutant loading within the river by more than 25 percent (50 cfs of a maximum 200 cfs), and will also reduce the amount of water that will reach the brine pool of Owens Lake such that significant adverse effects on the existing mining operation on the bed of Owens Lake will not occur.

The Alabama Release flow regime was selected to ensure the lower portions of the River and Delta receive a thorough flushing. The Alabama Release is similar to the winter habitat flow regime as described and charted in the LORP Final EIR for the River Intake releases (p. 2-21, Chart 2-2), which includes a one-day 200 cfs release. The principal difference is adding supplemental water to maintain this flow below the Alabama Spillgate for four days rather than one day. Supplemental spillgate releases during the habitat flows were considered in the Final EIR. The Alabama Release is expected to produce mitigable effects very similar to those identified and analyzed in the Final EIR for the winter habitat flow, but on a much shorter reach of the Lower Owens River (17.5 miles rather than 62 miles).

The Alabama Release is technically feasible (see Final EIR, Table 4-1) and will result in conditions lessening the significance and duration of the adverse water quality effects of the LORP identified in the Final EIR. A Statement of Overriding Considerations from the Regional Water Board is still necessary to permit the LORP with these potentially significant effects.

## **B. Game and Native Fish**

“The temporary adverse water quality conditions during the initial releases to the river could adversely affect fish due to the depletion of oxygen, and possible increase in hydrogen sulfide and ammonia. The poor water quality could cause fish kills along the river downstream of Mazourka Canyon Road. Both the 40-cfs base flow and the 200 cfs seasonal habitat flow are expected to recover once water quality conditions improve.

F-1. In the event that the natural re-colonization of the game fishery does not occur within 5 years after water quality conditions have improved, or appears to be occurring at a very slow rate, LADWP shall implement and fund a one-time fish-stocking program (depending on availability of fish stock from state fish hatcheries) in coordination with sources within the Owens Valley be used preferentially. Fish stocks from outside the valley will be used if in-valley stocks are not available. The program will be designed to initiate re-colonization and to stimulate population growth to establish game fish populations within 10 years after water quality conditions have improved.”

## **Regional Water Board Analysis and Findings**

The Regional Water Board concurs that these impacts may be an unavoidable consequence of reintroducing water to the Lower Owens River (despite the inclusion of feasible mitigation measures regarding flow releases as discussed in No. A., above). The Regional Water Board concurs that the mitigation measures described are adequate should adverse effects occur to established fish and wildlife populations, and identifies the California Department of Fish and Game as the CEQA Responsible Agency for ensuring compliance with this mitigation requirement.

### **C. Regional Water Board Statement of Overriding Considerations with Regard to Significant Water Quality and Fisheries Effects**

Despite the implementation of all feasible mitigation measures, including additional measures (e.g., the Alabama Release) identified and required by the Regional Water Board, the residual level of impact from reintroducing flow to the Lower Owens River cannot be reduced to a level of insignificance with any certainty. A Statement of Overriding Considerations was prepared and certified by the Lead Agency. The Regional Water Board concurs with the Statement of Overriding Considerations, and finds that the anticipated long-term beneficial effects of the LORP outweigh the short-term, unavoidable impacts to water quality and established aquatic life populations associated with reestablishing flow.

## **II. Class II Impacts: Significant, but Mitigable**

### **A. Hydrology**

“There is a potential for localized overbank flooding that could affect public roads and lease roads that cross the river (e.g. Mazourka Canyon Road, Manzanar-Reward Road, and Keeler Road). This impact could occur if floating debris potential for localized overbank flood clogs the culverts and bridges at these crossings, primarily under the seasonal habitat flows [including the ‘Alabama Release’]. (Section 4.3.2)

H-1. During seasonal habitat flows, Inyo County shall monitor culverts and bridges on County roads along the river and LADWP shall monitor culverts on other roads to determine the potential for debris plugs to form at road crossings. Obstructive debris will be removed as necessary to minimize flooding the roads.”

### **Regional Water Board Analysis and Findings**

The Regional Water Board concurs with the impact assessment above, and finds that additional water quality impacts could occur from erosion of roads and road shoulders, culverts or bridge approaches associated with debris blockages from localized overbank flooding. The Regional Water Board concurs that the mitigation measures described are adequate should adverse effects occur, and identifies the Discharger as the CEQA Lead Agency, and Inyo County as CEQA Responsible Agency, for ensuring compliance with this mitigation requirement. With inclusion of this mitigation measure the potentially significant hydraulic impacts of the LORP will be reduced to insignificant levels.

### **B. Wetlands, Riparian Habitat, and Upland Habitats**

“Prior to the initial releases, LADWP will mechanically remove sediments and marsh vegetation from 10,800 feet of the river downstream of the River Intake. A temporary 20-foot wide haul road will be established on the top of the west bank for the excavator and trucks. It will be created by driving over the existing vegetation in flat areas, and by minor grading where the terrain is uneven. Several temporary roads will be created perpendicular to the main haul road to provide access to an existing dirt road along the Aqueduct. Establishment of these roads would result in the short-term disturbance of about 8 acres of desert sink scrub.

R-1. Temporary access roads used to clear the river channel shall be seeded with native or naturalized grasses and shrubs common to the valley, as available, after completion of the desilting operation to facilitate restoration of vegetative cover and species compatible with the surrounding vegetation. The colonization by non-native aggressive or noxious weeds shall be inhibited by weed control for 3 years after construction.”

### **Regional Water Board Analysis and Findings**

The described impacts are associated with impacts to water quality within the jurisdiction of the Regional Water Board, to the extent that storm water discharges containing erosion products and other construction wastes may be discharged to surface waters. The Regional Water Board will ensure the Discharger implements the SWPPP and restoration plan submitted with the LORP description, such that these impacts will be reduced to insignificant levels.

### **C. Upland Vegetation**

“The construction of the pump station would cause general disturbance to upland vegetation from equipment staging, overland travel between work areas, and construction of the service roads. About 21.5 acres of desert greasewood scrub would be temporarily disturbed. (Section 5.1.2)”

### **Regional Water Board Analysis and Findings**

The described impacts are associated with impacts to water quality within the jurisdiction of the Regional Water Board, to the extent that storm water discharges containing erosion products and other construction wastes may be discharged to surface waters. The Regional Water Board will ensure the Discharger implements the SWPPP and restoration plan submitted with the LORP description and contained in the EIR, such that these impacts will be reduced to insignificant levels.

### **D. Blackrock Waterfowl Habitat Area**

“Construction work in the Blackrock Waterfowl Habitat Area would disturb about 20 acres for berms and 11 acres for ditches, consisting primarily of desert sink scrub. The berms would be allowed to revegetate naturally, although the tops of the berms would be used for vehicular access. Ditches would be used for conveying water, and as such would be converted to open water or wetland habitat. The construction-related disturbance zone around the margins of berms and ditches would be allowed to revegetate naturally. The success of natural revegetation of new berms and construction related disturbances zones are uncertain. There is a potential for invasion of non-native exotics in dry areas, and saltcedar in moist area. (Section 7.1.3)”

“Temporarily disturbed upland habitats in the Blackrock Waterfowl Habitat Area shall be seeded with native or naturalized grasses and shrubs common to the valley, as available, after construction of berms and ditches to facilitate restoration of vegetative cover and species compatible with the surrounding vegetation. The colonization by non-native weeds shall be inhibited by weed control for three years after construction.”

### **Regional Water Board Analysis and Findings**

The described impacts are associated with impacts to water quality within the jurisdiction of the Regional Water Board, to the extent that storm water discharges containing erosion products and other construction wastes may be discharged to surface waters. The Regional Water Board will ensure the Discharger implements the SWPPP and restoration plan submitted with the LORP description and contained in the EIR, such that these impacts will be reduced to insignificant levels.

### **SUMMARY**

The Regional Water Board hereby finds the anticipated long-term benefits of the LORP outweigh the short-term unavoidable impacts and will file a Statement of Overriding Considerations for water quality and aquatic life uses identified A., and B., above. The remaining Class II impacts include acceptable mitigation and mitigation monitoring requirements.

The Regional Water Board has reviewed the Final EIR for those project activities which are within the agency’s area of expertise, are required to be carried out or approved by the agency or will be subject to the exercise of powers by the agency. The EIR identifies other potentially significant impacts and significant impacts that are not related to water quality. The Board is not responsible for implementing the mitigation measures identified in the EIR or additional mitigation measures other parties have deemed necessary.

The Regional Water Board, as a Responsible Agency, will file a Notice of Determination and Statement of Overriding Considerations, in the same manner as a Lead Agency under Section 15075 or 15094, indicating that in permitting the LORP the Regional Water Board considered the Final EIR as prepared by the Lead Agency.