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ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

Discharger	Los Angeles Department of Water and Power
Name of Facility	Lower Owens River Project
Facility Contact Address	300 Mandich Street Bishop, CA 93514 Inyo County
Facility Contact and Phone	Brian Tillemans, (760) 873-0214
Mailing Address	Same as above
Type of Facility	Habitat Restoration Project

A. The Los Angeles Department of Water and Power (hereinafter Discharger) is the landowner and project proponent of the Lower Owens River Project (hereinafter Facility), a habitat restoration project.

B. The Discharger proposes to discharge wastewater to the Lower Owens River, Owens Lake, and Haiwee Reservoir by way of the Los Angeles Aqueduct.

C. The City of Los Angeles Department of Water and Power (hereinafter Discharger) submitted an application for Clean Water Act (CWA) Section 401 Water Quality Certification (WQC), dated July 30, 2004, and provided additional requested project information on November 29, 2004, and January 14, 2005. The WQC application was deemed complete on February 13, 2005. The U.S. Army Corps of Engineers granted an extension of the due date for Section 401 certification or denial by the Regional Water Board to July 30, 2005.

In a letter to the Discharger dated December 29, 2004, the Regional Water Board Executive Officer requested that the Discharger submit a report of waste discharge and application for an individual combined WDR and NPDES permit for the various discharges associated with the LORP. The letter indicated the Regional Water Board would exercise its discretion to issue an individual WDR/NPDES permit for the LORP, rather than allowing coverage under various General WDRs and/or General NPDES Permits.

The Discharger informed the Regional Water Board in a letter dated January 14, 2005, that a Report of Waste Discharge and individual NPDES permit application would not be submitted as requested. Instead, only applications for general permits would be provided.

The Discharger submitted a Notice of Intent (NOI) application, dated January 19, 2005, for *Statewide General Waste Discharge Requirements (WDRs) for Discharges to Land with a Low Threat to Water Quality* (Water Quality Order No. 2003-0003-DWQ) for

disposal of waste earthen materials and dredged spoils. This NOI is the basis for authorizing Discharges 006 and 007.

The Discharger submitted a NOI application, dated January 31, 2005, for coverage under the *Regionwide General National Pollutant Discharge Elimination System (NPDES) Permit for Low Threat Discharges to Surface Water* (Order No. R6T-2003-0034) for several specific discharges associated with dewatering excavated areas of construction sites, and for stream diversion activities associated with construction of a gauging station weir. This NOI is the basis for authorizing Discharges 001A, 001R, 002, and 003.

On February 4, 2005, the State Water Resources Control Board (hereinafter State Board) received from the Discharger, a Notice of Intent application for permit coverage under the *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated With Construction Activity* (Water Quality Order 99-08-DWQ). The Discharger obtained coverage under this General Permit pursuant to State Board action on February 9, 2005. This NOI is the basis for authorizing storm water discharges and authorized non-storm water discharges throughout the LORP site.

To date, the Discharger has not submitted a Report of Waste Discharge or NPDES permit application for an individual permit for the LORP as requested in the Regional Water Board's December 29, 2004 letter to the Discharger. In addition, the Discharger has not sought authorization for two actions integral to the LORP because the Discharger asserts these actions are not subject to Regional Water Board authority. These actions are: reintroducing Owens River water from the modified River Intake structure; and discharging river water from the 50 cfs Pump Station to be sited near the lower end of the LORP to the Los Angeles Aqueduct and Haiwee Reservoir. Reintroducing river water to the highly disturbed and modified channel of the Lower Owens River is expected to mobilize and concentrate organic and earthen materials accumulated within the riverbed for decades, and those disturbed during LORP construction, that will temporarily degrade water quality and impair beneficial uses in the Lower Owens River. The Pump Station discharge (Discharge Point 005) would convey the degraded waters described above either to land areas being managed by the Discharger on the former bed of Owens Lake as part of the Discharger's Owens Lake Dust Control Project, or to the Los Angeles Aqueduct and Haiwee Reservoir.

The use of degraded river water for dust control is not considered to be a threat to water quality. (Water for the Dust Control Project is currently supplied by the Los Angeles Aqueduct and by pumping poor-quality ground water. The Dust Control Project is regulated under separate WDRs.) However, pumping lower quality water from the Lower Owens River to the Los Angeles Aqueduct could potentially lower water quality and impair beneficial uses in the Los Angeles Aqueduct and its downstream receiving waters such as Haiwee Reservoir. In the absence of a complete NPDES permit application or other discharge report or application for waste discharge requirements, the Regional Water Board may regulate these discharges pursuant to CWC authorities, or require monitoring pursuant to CWC Section 13267 which states, in part,

> "(a) A regional board, in establishing . . . waste discharge requirements, or in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the state within its region. (b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, . . . shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. . . ."

This Order includes CWC Section 13267 monitoring and reporting requirements to determine whether wastes have been discharged that could result in violations of applicable water quality standards, or for which WDRs should be prescribed.

The Regional Water Board has decided that the project discharges for which authorization was sought under general NPDES permits, general WDRs, and the Section 401 WQC, and LORP actions for which permit authorization was not sought, are more appropriately regulated under a single Order that serves as an individual WDR/NPDES permit that also incorporates WQC conditions and other requirements. Accordingly, the Regional Water Board accepts the discharge reports, WQC application, General NPDES Permit or General WDR applications provided by the Discharger as the basis for issuing this Order, as explained in the letter dated April 22, 2005 from the Regional Water Board Executive Officer (Attachment P), except that discharges 004 and 005 are herein excluded as discharges subject to CWA Section 401.

The U.S. Army Corps of Engineers has not yet issued a CWA Section 404 Permit for the LORP, and so there is uncertainty as to whether discharges 004 and 005 will be regulated under Section 404, and therefore subject to Section 401. The Regional Water Board nevertheless finds it necessary to prescribe conditions for discharge 004, which is granted a conditional 10-year exemption to prohibitions against the discharge of waste that would violate water quality standards in the Lower Owens River, and for the pumping of degraded river water to the Los Angeles Aqueduct during the initial years following construction and re-watering of the Lower Owens River; namely, that the discharges shall not cause pollution or nuisance as defined in CWC Section 13050. (See Order Section V., paragraph 1.) This is because water pumped from the river to the Los Angeles Aqueduct may contain high concentrations of pollutants mobilized by construction and re-watering activities. This discharge may cause violations of water quality objectives in the Los Angeles Aqueduct or downstream waters for an unknown period of time, though water quality monitoring is needed to ascertain this. Whether pollution occurs is, in part, contingent on management actions by the Discharger. When the LORP flow regime has become established and the Discharger demonstrates the discharges associated with the LORP no longer pose a threat to water quality, it will no longer be necessary to monitor Pump Station discharges to the Los Angeles Aqueduct or the discharge in the Lower Owens River.

Under CWA Section 401 and CWC Section 13267 authority, the monitoring and reporting program (Attachment E) requires the evaluation of "No Net Loss" of wetland functions and values at specified intervals. This monitoring information is required and reasonably necessary to demonstrate compliance with the Basin Plan "No Net Loss" policy and other conditions of this Order. When the Discharger has demonstrated that there has been "no net loss" of wetland functions and values due to the implementation of the LORP, it will no longer be necessary to regulate wetland impacts or require further wetland monitoring pursuant to CWA Section 401.

Storm water and limited threat discharges to waters of the U.S. associated with construction activities are regulated under CWA Section 402 (NPDES) authority. Permit authority for these discharges expires July 14, 2010, unless construction activity and stabilization from erosion is incomplete, in which case the Discharger shall reapply for continued NPDES permit coverage for authorization for discharges subject to the NPDES.

Disposal of dredged spoils and waste earthen materials to land is an authorized discharge regulated under CWC waste discharge requirements. Permit authority for these discharges does not expire until rescinded, but may be reviewed and updated at the discretion of the Regional Water Board.

II. FACILITY DESCRIPTION

A. **Five major components of the LORP**.

1. **Riverine-Riparian System:** This component involves modifying the River Intake structure to control water releases below the intake to the Los Angeles Aqueduct to enhance native and game fisheries and riparian habitats along 62 miles of the Lower Owens River. Base flow will be a continuous flow of 40 cfs year-round from the River Intake to the proposed Pump Station. Initial flow releases will establish a continuous flow from the Intake to the Delta at the confluence of the Lower Owens River and Owens Lake, and subsequent flow releases will establish the 40-cfs base flow from the Intake to the Pump Station. Seasonal habitat flows will be annual flows of up to 200 cfs, as determined each year based on runoff conditions. The first seasonal habitat flow will be 200 cfs at peak flow, regardless of runoff conditions, and will be released in the winter. Subsequent seasonal flows will be released in May or June to coincide with seed production by willows and cottonwoods in the floodplain.

2. **Delta Habitat Area including Pump Station:** This component involves constructing a 50 cfs-capacity Pump Station in the Lower Owens River upstream of the Delta to capture and divert some of the flows from the river to the Owens Lake dust control project and/or the Los Angeles Aqueduct. Water not captured by the Pump Station will be bypassed to the Delta as follows:

   - Base flow with an average annual flow of 6 to 9 cfs, including four pulse flows of 20 to 30 cfs per year
   - Higher flows may bypass the Pump Station to the Delta during the annual seasonal habitat flows of up to 200 cfs released from the River Intake.

3. **Blackrock Waterfowl Habitat Area:** This component involves releasing water from the various Los Angeles Aqueduct spillgates and flooding an annual average of 500 acres within a 1,500-acre off-river area to enhance wetlands and waterfowl habitat.

4. **Off-River Lakes and Ponds:** This component involves maintaining the existing supply of water to the off-river lakes and ponds near the Blackrock Waterfowl Habitat Area for fisheries, waterfowl, shorebirds, and other animals.

5. **Land Management Plan:** This component involves installing fences and modifying livestock grazing practices on leases within the LORP area to enhance native habitat diversity while allowing for substantial grazing.

B. **Waste Discharges and Other Regulated Actions**

The various project activities and discharges are tabulated below. For purposes of the following table and this Order, WQC means regulations established pursuant to the CWA Section 401, NPDES means regulations adopted pursuant to CWA Section 402, and WDR means regulations established pursuant to the CWC Division 7.

The following table includes: (1) the action of reintroducing flows from the modified River Intake structure to the Lower Owens River channel, and (2) discharges from the 50 cfs Pump Station to ground or surface waters of the Lower Owens Hydrologic Unit, including Haiwee Reservoir. These flow release and pumping activities are operational aspects of the LORP that will occur as a result of project implementation. The effects due to a combination of reintroducing water, construction activity, and historic sediment deposits within the 62-mile LORP area, will be regulated under CWC Section 13267 provisions of this Order. Regulatory authority for the other discharges are as listed in the table.

The project includes operations that may generate earthen wastes. These operations include, but are not limited to: 1) dredging and filling operations during initial construction of facilities and on-going maintenance dredging, 2) construction dewatering and releases of stormwater from construction sites, and 3) stream flow diversions.

The reintroduction of flows to the River under the proposed project is expected to disturb existing bottom sediments in the River channel, especially in the existing wetted reach (lower 38 miles) where existing flows are not sufficient for sediment transport and redistribution. As a result, the wetted reach contains substantial deposits of organic sediments (estimated at 123,100 cubic yards in the LORP FEIR, p. 4-19). Particularly during the initial stages of flow restoration, the organic sediments in the wetted reach are expected to become suspended, resulting in adverse impacts to water quality, including increased turbidity and oxygen consumption (i.e., lower DO) and release of hydrogen sulfide and ammonia. Suspension of organic sediments in the wetted reach may result in pollutants in excess of Basin Plan water quality standards for: biostimulatory substances, chemical constituents, dissolved oxygen, floating materials, non-degradation of aquatic communities and populations, sediment, settleable materials, suspended materials, taste and odor, temperature, and turbidity. In addition, possible poor water quality conditions may result in adverse effects to the existing non-native game fish populations in the wetted reach, including potential fish kills.

ID No.	Construction Project Component or Operational Component	Discharge Types and Authority to Regulate							
		Flow Restoration and Pump Station	Dredged or Fill Material Discharged to Waters	Maintenance Dredging	Construction Stormwater	Inert Solid Waste Disposal to Land	Pipeline and Tank Hydrostatic Testing	Diverted Stream Flows	Excavation Dewatering
		13267	WQC	WDR	NPDES	WDR	NPDES	NPDES	NPDES
1	Modification of River Intake		X		X	X			X
2	Construct Temporary Flow Measuring Stations		X		X				
3	Keeler Bridge Measuring Station During Upgrade Construction		X		X			X	
4	Initial Channel Clearing		X		X				X
5	Structural Obstacles to be Removed / Modified		X		X				
6	Beaver Dam Removal			X		X			
7	Intake and Pump Station Forebay Dredging			X		X			
8	Pump Station Site During Construction		X		X	X	X	X	X
9	Temporary Stream Gages in Delta		X		X				
10	Blackrock – Culverts and Spillgates				X				
11	Thibaut Ponds Staff Gages Construction				X				
12	Fence Installation				X				
13	Power Line				X				

ID No.	Construction Project Component or Operational Component	Discharge Types and Authority to Regulate							
		Flow Restoration and Pump Station	Dredged or Fill Material Discharged to Waters	Maintenance Dredging	Construction Stormwater	Inert Solid Waste Disposal to Land	Pipeline and Tank Hydrostatic Testing	Diverted Stream Flows	Excavation Dewatering
		13267	WQC	WDR	NPDES	WDR	NPDES	NPDES	NPDES
14	Effect of pumped diversions into the Los Angeles Aqueduct	X							
15	Effect of rewatering the Lower Owens River (62 miles)	X							

The estimated total discharge quantities by types of materials are:

- Concrete – Approx. 2,165 cubic yards
- Soil, sand, and gravel (onsite or imported) – Approx. 17,220 cubic yards
- Sheet pile – Approx. 12,000 square feet (temporary)
- Maintenance dredging, as needed at River Intake forebay (approx. 2000 cubic yards) every 2-3 years (estimated discharge to land)
- Maintenance dredging, as needed at Pump Station Intake forebay (approx. 2000 cubic yards) every 2-3 years (estimated discharge to land)

The quantities, in cubic yards, and types of materials associated with discharge of dredged or fill material and other disturbances to wetlands and waters are tabulated below.

ID No.	Project Component	Discharge of Dredged or Fill Material to Waters		Excavation and Other Disturbances in Waters	
		Approx. Quantity (cu. yds.)	Type	Approx. Quantity (cu. yds.)	Type
1	**River Intake Modification**				
	Temporary coffer dam in forebay	400	Compacted soil or sheet pile	---	---
	Concrete lining of tailbay and channel	350	Concrete	4,000	Clearing and grubbing prior to concrete lining
	Bridge replacement	150	Concrete	---	---
	Aqueduct bridge repair	40	Concrete	---	---

ID No.	Project Component	Discharge of Dredged or Fill Material to Waters		Excavation and Other Disturbances in Waters	
		Approx. Quantity (cu. yds.)	Type	Approx. Quantity (cu. yds.)	Type
2	**Temporary Flow Measuring Stations**	400	Wooden boxes	~	Minor clearing of vegetation and debris
3	**Keeler Bridge Metering Station Upgrade**	~	Concrete repair of existing metering station	100	Excavation of the temporary bypass trench
4	**Initial Channel Clearing**	~	Scraping of sediments and vegetation*	7,800	Removal of sediment and vegetation
5	**Structural Obstacles to be Removed / Modified**				
	Five Culverts Replacement	3,000	Up to five 60-inch diameter (HDP, corrugated metal, or steel) (up to 30-foot long)	---	---
	Other Structures to be Removed / Modified	---	---	TBD	Removal of in-channel rock dams, bridges, and dikes
6	**Beaver Dam Removal**	---	Removal via grabber jaws and helicopter	---	---
7,8	**Pump Station Site**				
	Pump Station and Diversion Structure	1,625 2,820 12,000 12,000	Concrete Gravel/cobble/riprap Soils Sheet pile (steel), in square feet	15,000 1,315	Bank Excavation Channel Excavation
	West Access Road (the portion within wetland vegetation type)	2,000	Onsite/offsite soils and gravel	---	---
	Sediment Basin Initial construction Maintenance	 --- ---	 --- ---	 9,000 TBD	 Sediment and vegetation Sediment and vegetation
9	**Temporary Stream Gages in Delta**	<2	Wooden boxes	---	---
10	**Blackrock – Culverts, Spillgates, Berms and Ditches**	Minor, unquan-tified	Replacement of spillgates and culverts in man-made ditches	---	---
11	**Thibaut Ponds Staff Gages**	~	Staff gages (to be installed by hand)	---	---

ID No.	Project Component	Discharge of Dredged or Fill Material to Waters		Excavation and Other Disturbances in Waters	
		Approx. Quantity (cu. yds.)	Type	Approx. Quantity (cu. yds.)	Type
12	**Fence Installation**	~	Fence posts on the banks at locations where the fences cross the River (estimated to be less than 30 locations)	---	---

~ Negligible; less than 0.01 acre
--- None
HDP: High-density polyethylene
cy: cubic yards
sf: square feet
* Equipment to include in-channel dozer, which will scrape earthen materials prior to removal.

The effects on waters associated with the discharge of dredged or fill materials and other land disturbances are tabulated below, by acreage of disturbance.

ID No	Project Component	Temporary Disturbance (acres)		Permanent Fill Disturbance (acres)	
		Wetlands	Open Water	Wetlands	Open Water
1	**River Intake Modification**	0.1	1.1	Up to 1	Up to 0.1
2	**Temporary Flow Measuring Stations***	Up to 0.1	Up to 0.1	Up to 0.1	Up to 0.1
3	**Keeler Bridge Metering Station Upgrade**	Up to 0.1	0.2	---	---
4	**Initial Channel Clearing**	Up to 5	---	---	---
5	**Structural Obstacles to be Removed / Modified**				
	Five Culverts Replacement	Up to 0.5	---	---	---
	Others	Up to 1		---	---
6	**Beaver Dam Removal**	~	~	---	---
7	**Pump Station Site**	3***	Up to 0.1	Up to 0.8	---
8	**Maintenance Dredging**	---	~	---	~
9	**Temporary Stream Gages in Delta**	Up to 0.01	Up to 0.01	---	---
10	**Blackrock – Culverts, Spillgates, Berms and Ditches**	Up to 1**		---	Up to 0.5**
11	**Thibaut Ponds Staff Gages**	---	---	~	~

ID No	Project Component	Temporary Disturbance (acres)		Permanent Fill Disturbance (acres)	
		Wetlands	Open Water	Wetlands	Open Water
12	**Fence Installation**	~	---	~	---

~ Negligible; less than 0.01 acres

--- None

* One or more of the temporary measuring stations will be converted to a permanent station.

** Replacement and modification of and new construction of culverts and spillgates in man-made ditches.

*** There are approximately 10 acres of wetlands within the 23-acre construction zone. Of these 10 acres, approximately 3 acres will be temporarily disturbed during Pump Station construction.

The total extent of waters affected during construction is up to 11 acres of wetlands and 3.5 acres of open water. The majority of these areas will be restored. The total extent of waters permanently affected by development of new facilities is approximately 2 acres of wetlands and 0.7 acres of open water. The permanent impacts to 2 acres of wetlands and 0.7 acres of open water will be mitigated fully because the LORP is expected to increase wetlands by 751 acres and open water by 159 acres over the year 2000 conditions and enhance impaired wetland functions and values in adjacent areas.

The total extent of jurisdictional waters (subject to regulation under CWA Section 404) in the project area is 3,794 acres (based on the year 2000 conditions); this includes 200 acres of open water and 3,594 acres of wetlands. The project area also includes jurisdictional wetlands and surface waters as well as man-made lakes, ponds, and wetlands that have been created by releases from Los Angeles Aqueduct spillgates and ditches to maintain wetlands and beneficial uses of water in certain areas between the Aqueduct and the Lower Owens River.

Based on expected hydrologic conditions under the proposed flow regime, the Discharger has estimated the future extent of waters (including wetlands) in the project area. The predicted short-term (one to five years) extent of jurisdictional waters in the project area due to the proposed flows is 4,704 acres (359 acres of open water and 4,345 acres of wetlands). The predicted conditions represent an increase of 159 acres of open water and 751 acres of wetlands over the year 2000 conditions.

The Discharger has submitted results of wetland hydrogeomorphic (HGM) functional assessments conducted for existing conditions and predicted future conditions. For the project area, the average functional units are predicted to increase by approximately 253 hydrologic units, 393 biogeochemical units, and 423 habitat units. The table below shows the existing and predicted changes for specific project areas. The existing conditions represent a baseline for future analysis of the functions and values of jurisdictional waters.

HGM AVERAGE FUNCTIONAL UNIT SUMMARY			
PROJECT AREA	FUNCTION UNIT CATEGORY		
	Habitat	**Hydrologic**	**Biogeochemical**
LORP Riparian Area			
existing	1212	2542	1300
predicted	1693	2889	1817
change	481	347	517
Delta Habitat Area			
existing	396	737	359
predicted	396	737	359
change	0	0	0
Blackrock Waterfowl Management Area			
existing	1709	4255	1837
predicted	1651	4161	1713
change	-58	-94	-124
ALL AREAS			
existing	3317	7534	3496
predicted	3740	7787	3889
change	423	253	393

Estimated changes in the acreages of waters due to proposed flows are tabulated below.

Vegetation / Water Body Type	**Estimated Change (acres)**			
	Riverine-Riparian[2]	Delta[3]	Blackrock Waterfowl Area	**Total**
Open Water	164	0	-5	**159**
Wetlands	868	0	-117 [4]	**751**
Other[1]	0	0	0	**0**
Upland	-1,032	0	122 [4]	**-910**
Total	--	--	--	--

1 Intermittently-flooded playa areas that have the hydrologic and soil characteristics of wetlands, but have no or sparse vegetation and therefore cannot be classified as wetlands or open water

2 Post-project values for the Riverine-Riparian are for short-term (1 to 5 years) conditions

3 Note, Delta acreages reflect 2000 conditions. Proposed flow management under LORP will be designed to maintain actual acreages present at the time of project implementation.

4 Predictions do not consider wetland acreage created immediately adjacent to the flooded units (potentially jurisdictional wetland habitats that are expected to develop on the edges).

Modification of the flow regime to the Delta (located downstream of the Pump Station) due to the construction and operation of the Pump Station is not expected to result in impacts to jurisdictional wetlands (see table above). However, a condition of the WQC is that the applicant demonstrates that "No Net Loss" of wetland functions and values has occurred following LORP implementation. The applicant is required as a condition of this WQC to re-delineate wetlands and provide an assessment of functions and values at specified intervals for up to 22 years after the reintroduction of flow to the Lower Owens River begins.

C. Description of Wastewater Treatment or Controls

1. Sediment basins are included in the forebays of the River Intake and the Pump Station. Accumulated sediment will be periodically removed and disposed of at Discharge Points 006 and 007, respectively.

2. Best Management Practices will be utilized as provided in information submitted by the Discharger, and as part of the Storm Water Pollution Prevention Plan required under the terms of this Order.

3. The initial 200 cfs partial flushing flows will be conducted in winter when temperatures are lower and DO capacity will be higher.

D. Discharge Points and Receiving Waters

The receiving waters are the Lower Owens River, Owens Lake, and Haiwee Reservoir via the Los Angeles Aqueduct. All receiving waters are in the Lower Owens Hydrologic Area. Owens Lake is a dry lakebed. The Discharge points are:

Discharge Point	Monitoring Locations	Discharge Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
Discharges 001A 001R	M-001U M-001A M-001R	Dewatering wastes from intake structure construction	36 º, 58', 33" N	118 º, 12', 33" W	LA Aqueduct (A) or Lower Owens River (R)
Discharge 002	M-002U M-002	Diverted stream flow with earthen wastes from Keeler weir construction	36 º, 34', 35" N	118 º, 01', 00" W	Lower Owens River
Discharge 003	M-003U M-003	Dewatering wastes from Pump Station construction	36 º, 32', 59" N	117 º, 58', 57" W	Lower Owens River, Owens Lake
Discharge 004	M-001U R-004A R-004B R-004C R-004D	Reintroduced flows to Lower Owens River from River Intake structure	36 º, 58', 33" N	118 º, 12', 33" W	Lower Owens River, Owens Lake
Discharge 005	R-005U R-005	Diverted stream flow with wastes pumped to Los Angeles Aqueduct and/or dust control	36 º, 32', 32" N	118 º, 03', 01" W	Haiwee Reservoir via LA Aqueduct and/or Owens Valley Ground Water Basin
Discharge 006	L-001	Dredged spoils and/or waste earthen material at River Intake	36 º, 58', 33" N	118 º, 12', 33" W	Owens Valley Ground Water Basin
Discharge 007	L-002	Dredged Spoils and/or waste earthen material at Pump Station	36 º, 32', 59" N	117 º, 58', 57" W	Owens Valley Ground Water Basin

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters that are waters of the U.S. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402. Compliance monitoring is required pursuant to CWC Section 13383 and/or CWC Section 13267.

Section 401 of the CWA (33 U.S.C., paragraph 1341) requires that any applicant for a CWA Section 404 permit, who plans to conduct any activity that may result in discharge of dredged or fill materials to waters of the United States, shall provide to the permitting agency a certification that the discharge will be in compliance with applicable water quality standards of the state in which the discharge will originate. No Section 404 permit may be granted (or valid) until such certification is obtained. The Discharger has submitted a complete application and full fee deposit required for Water Quality Certification under Section 401 for the LORP. The U.S. Army Corps of Engineers (ACOE) will regulate the project with an Individual Permit under the provisions of Section 404.

California Code of Regulations (CCR) Title 23, Section 3831(e) grants the Regional Water Board and the Regional Water Board Executive Officer the authority to grant or deny water quality certification for projects in accordance with Section 401 of the CWA.

B. California Environmental Quality Act (CEQA)

Detailed analysis of Regional Water Board CEQA compliance is provided in Attachment H.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan for the Lahontan Region* (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the receiving waters are as follows:

Discharge Points	Receiving Water Name	Beneficial Use(s)
Discharge 001R Discharge 002 Discharge 003 Discharge 004	Lower Owens River (Below Intake Structure)	Municipal and domestic water supply (MUN), Agricultural Supply (AGR), Ground water recharge (GWR), Freshwater replenishment (FRSH), Water contact recreation (REC-1), Non-contact water recreation (REC-2), Commercial and sport fishing (COMM), Warm freshwater habitat (WARM), Cold freshwater habitat (COLD), Wildlife habitat (WILD), Preservation of biological habitats of special significance (BIOL), Rare, threatened or endangered species (RARE), Spawning, reproduction, and Development (SPWN)
Discharge 003 Discharge 004	Owens Lake	MUN*, REC-1, REC-2, COMM, WARM, COLD, Inland Saline Water Habitat (SAL), WILD
Discharge 001A Discharge 005	Los Angeles Aqueduct and Haiwee Reservoir	MUN, AGR, Industrial Supply (IND), GWR, REC-1, REC-2, COMM, COLD, WILD, RARE, and SPWN

* Proposed for removal in July, 2005. Effective date pending state and federal approvals

2. **Thermal Plan.** Not applicable to intrastate waters.

3. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge. Monitoring data to complete a reasonable potential analysis for toxic "priority pollutants" is a required part of this Order.

4. **State Implementation Policy.** On March 2, 2000, State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for and calculating water quality-based effluent limitations (WQBELs), and requires Dischargers to submit data sufficient to do so.

5. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution 68-16 requires that existing water quality is maintained unless degradation is justified based on specific findings. The permitted

discharge is consistent with the antidegradation provision of 40 CFR §131.12 and State Water Board Resolution 68-16, as follows:

a. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.

   The Discharger has demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies. The potential temporary changes to water quality are consistent with maximum benefit to the people of the State because the restoration of the waters for beneficial uses will outweigh potential adverse effects on water quality.

c. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

   The Lower Owens River cannot be considered existing high quality waters because of severe degradation and losses of beneficial uses associated with historic water diversions by the Discharger. Under the terms of this Order, restoration activities conducted by the Discharger must use Best Management Practices to achieve the best practicable treatment or control of the discharge necessary to assure that (a) pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

c. In implementing this policy, the Secretary of the Interior [USEPA] will be kept advised and will be provided with such information as he/she will need to discharge his/her responsibilities under the Federal Water Pollution Control Act.

   The draft Order will be provided to the USEPA for review and comment. This Order will not become final if USEPA formally objects. Information concerning the LORP and compliance with this Order is required to be made available to the USEPA upon request.

6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR § 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Anti-Backsliding provisions do not apply to this permit because it is a new Order for proposed discharges.

7. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

D. Impaired Water Bodies on CWA 303(d) List

Under Section 303(d) of the Clean Water Act, states are required to develop a list of water quality limited segments. These waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish priority rankings for water on the lists and develop action plans, called as Total Maximum Daily Loads (TMDL), to improve water quality. On July 25, 2003 USEPA gave final approval to California's 2002 Section 303(d) List of Water Quality Limited Segments.

The Lower Owens River is listed as impaired on the Clean Water Act Section 303(d) list approved for California in 2003. The listing is for impairments due to the pollutant/stressor "Habitat Alterations" on a 53-mile water body segment. The potential sources of impairment are listed as "Agriculture," and "Hydromodification." The Lower Owens River may be removed from the list of impaired waters because it is not impaired by a pollutant, pursuant to new 303(d) listing policy of the State Water Resources Control Board, and is rated "low" on the list of priorities for TMDL development. Additionally, the LORP is a large-scale habitat restoration project designed, in part, to address the impairments to beneficial uses within this segment by changing the current hydrologic flow regime, and includes improved rangeland management as a project element to reduce agriculture-related contributions to impairments. The LORP effectiveness in reducing and/or eliminating beneficial use impairments will be evaluated in future (biennial) updates to the 303(d) list.

The Haiwee Reservoir and its upstream tributary, Tinemaha Reservoir, are listed as impaired on the Clean Water Act Section 303(d) list approved for California in 2003. The Haiwee Reservoir listing is for impairments due to the pollutant/stressor "Copper." The Tinemaha Reservoir, located approximately five miles upstream of the River Intake (point of diversion) to the Los Angeles Aqueduct is listed as impaired due the pollutant/stressor "Metals." The potential sources of impairment in these reservoirs are listed as "Other" and are related to use of copper algaecides applied by the Discharger to prevent taste/odor problems in drinking water supplied from the reservoirs. Copper is a potent toxin with regard to aquatic life forms, and is a CTR "priority pollutant"; hardness-dependent fresh water aquatic life criteria for dissolved copper are specified in Table (b)(1) of the CTR. Recent sampling has indicated that Tinemaha Reservoir meets water quality standards, and the Regional Water Board has recommended that the State Water Resources Control Board remove this water body from the 303(d) list. Recent sampling at Haiwee Reservoir indicates that it may meet water quality standards, but additional sampling is needed to confirm the status of Haiwee Reservoir.

The discharge of algaecide containing copper is not authorized or regulated under the provisions of this Order. However, waters released from Tinemaha Reservoir to the Lower Owens River may carry a residual copper load from the Discharger's algaecide applications. There is also potential for residual copper from the upstream copper applications to be present at elevated levels in the sediments of the Lower Owens River, particularly organic sediments in the lower "wetted reach," that could be mobilized and entrained in the water column by the increased flow rates associated with the LORP. The Discharger, in implementing the LORP, will not add additional copper to the flow other than copper that may be naturally or otherwise present in the riverbed sediments. The recreated wetlands

associated with the LORP may sequester residual copper and other metals from Tinemaha Reservoir, as wetlands generally function in this way with regard to metals of various types. The Discharger has not proposed the use of copper-based algaecides associated with the LORP, but such use is not precluded (subject to applicable NPDES requirements as implemented in California). This Order includes water quality monitoring requirements for copper. Results of copper testing will be compared against receiving water objectives to determine whether beneficial uses may be adversely affected.

Waters diverted from the Lower Owens River to the Los Angeles Aqueduct via the LORP Pump Station will eventually reach Haiwee Reservoir. If this diverted water contains significant nutrients, it could also potentially affect water quality by increasing the concentrations of plant nutrients such as nitrogen and phosphorus in Haiwee Reservoir. These nutrients could further stimulate algae growth in Haiwee Reservoir that could affect the taste and odor of the water (with potential implications for increased applications of algaecide by the Discharger).

E. Other Plans, Polices and Regulations

Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations; and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR §122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, three options exist to protect water quality: 1) 40 CFR §122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); 2) proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established.

A. Discharge Prohibitions

Basin Plan Prohibitions

The Basin Plan contains the following waste discharge prohibitions that apply to all surface and ground waters in the Lahontan Region:

1. The discharge of waste that causes violation of any narrative water quality objective contained in the Basin Plan, including the Nondegradation Objective, is prohibited.

2. The discharge of waste that causes violation of any numeric water quality objective contained in the Basin Plan is prohibited.

3. Where any numeric or narrative water quality objective contained in the Basin Plan is already being violated, the discharge of waste that causes further degradation or pollution (as defined in CWC Section 13050) is prohibited.

Exemption Criteria for Restoration Projects

The Regional Water Board encourages restoration projects that are intended to reduce or mitigate existing sources of soil erosion, water pollution, or impairment of beneficial uses. For waste earthen materials discharged as a result of restoration projects, exemptions to the above prohibitions, and all other prohibitions contained in this Basin Plan, may be granted by the Regional Water Board whenever it finds that a specific project meets all of the following criteria:

1. The project will eliminate, reduce or mitigate existing sources of soil erosion, water pollution, and/or impairment of beneficial uses of water, and

2. There is no feasible alternative to the project that would comply with provisions of this Basin Plan, precluding the need for an exemption, and

3. Land disturbance will be limited to the absolute minimum necessary to correct or mitigate existing sources of soil erosion, water pollution, and/or impairment of beneficial uses of water, and

4. All applicable Best Management Practices (BMPs) and mitigation measures have been incorporated into the project to minimize soil erosion, surface runoff, and other potential adverse environmental impacts, and

5. The project complies with all applicable laws, regulations, plans, and policies.

The following paragraphs explain how the above criteria are met.

Criteria 1: The Discharger has demonstrated the LORP meets the criteria for a restoration project because beneficial uses will be enhanced and restored by reintroducing flow into 62 miles of the Lower Owens River. By restoring flow in the Lower Owens River below the River Intake, the project will restore the beneficial uses of the River which have been impaired due to the absence of flows in the dry reach and the minimal amount of flows in the wet reach. Under the LORP, a portion of the flow currently being diverted to the Los Angeles Aqueduct will be restored to the River by allowing flow through the River Intake structure. The project will establish a continuous baseflow of 40 cfs from the River Intake to upstream of the Delta. In addition, higher flows of up to 200 cfs will be released annually to facilitate the establishment of riparian trees. The project overall is expected to result in the conversion of over 900 acres of upland habitat to riparian/ wetland habitat. In addition, the LORP includes rangeland management actions that will complement and facilitate the habitat restoration by modifying grazing practices, especially in the riparian areas. Therefore, over time, the project will result in the restoration of designated beneficial uses.

Criteria 2: There are no feasible alternatives to the LORP identified that would not have the possibility of potentially significant water quality impacts. Therefore, no feasible alternative would comply with all provisions of the Basin Plan in the absence of an exemption. There is no reasonable alternative to the project that would achieve the restoration goals of the LORP that would preclude the need for an exemption.

Criteria 3: The proposed facilities would cover an area of up to approximately three acres. Land disturbance associated with the project will be limited to the absolute minimum necessary to correct the existing impairment of beneficial uses, i.e., riverine-riparian and wetland habitat restoration through water releases. Project-related land disturbances are associated with construction and modification of facilities for releasing, regulating or monitoring the flows necessary for habitat restoration. These facilities include: the River Intake; flow measuring stations; and spillgates, culverts, berms and ditches in the Blackrock area. Other project-related land disturbances include removal of in-channel sediments and

other obstructions to flow prior to flow releases, which is necessary to ensure a continuous baseflow in the River. The Pump Station and associated facilities are integral to the project. According to the Discharger, it would not be cost-effective to enter into the water commitments necessary to implement the project without the ability to recover some of the water. The proposed facilities are designed to have the smallest footprint possible while meeting operational and maintenance needs, and their locations have been selected to maximize the use of existing access roads and minimize the need for construction of new access roads to the extent feasible.

Criteria 4: The Discharger has provided an information package dated November 2004 that includes a conceptual BMP plan to avoid potential adverse impacts to water quality associated with the LORP. Under the terms of this Order, the Discharger must provide the project-specific BMP details in a Storm Water Pollution Prevention Plan at least 180 days prior to construction. (See Permit Section VI.C.2.) The information provided, together with compliance with this Order, demonstrates that all applicable BMPs and mitigation measures (see CEQA Attachment H) have been incorporated into the project to minimize soil erosion, surface runoff, and other potential adverse environmental impacts.

Criteria 5: The Discharger has committed to comply with all applicable laws, regulations plans and policies, and is in the process of obtaining additional permits and approvals required to implement the LORP.

The Regional Water Board finds that it is not against the public interest to grant a short-term exemption to waste discharge prohibitions applicable to the Lower Owens River due to implementation of the LORP, as described below.

1. The exemption shall not apply during the construction period prior to reintroducing water to establish base flow as described for the LORP. To do so would be inconsistent with statewide requirements for dischargers of construction storm water. There is no basis to lower water quality requirements during construction, as BMPs are required to maintain compliance with standards.

2. The exemption to the prohibitions is not granted for several specific constituents whose discharge is not authorized as a part of the LORP project. These constituents are: chlorine; oil and grease; and pesticides. Receiving water objectives must be met for these constituents.

3. The exemption is for a limited time. It is not appropriate to grant an exemption for an indefinite period because the Regional Water Board expects water quality standards to be met when the river system adapts to the changed flow regime. If necessary, the Discharger may request the Regional Water Board to renew the exemption based on monitoring information obtained during the LORP implementation. The exemption to Waste Discharge Prohibitions shall expire on **July 14, 2015** unless the Discharger requests an extension and the Regional Water Board renews the exemption.

4. The exemption is not applicable to the Los Angeles Aqueduct or Haiwee Reservoir, receiving waters for discharges from the Pump Station. Receiving water limitations in Haiwee Reservoir and its tributary, the Los Angeles Aqueduct, shall not be violated as a result of the granting of the exemption to waste discharge prohibitions for the LORP.

B. **Technology-Based Effluent Limitations**

It is not feasible to establish numerical effluent limitations for the LORP at this time. This project is not within a listed industry for which technology-based effluent limitations have been developed and promulgated. Instead, the provisions of this Order require

implementation of Best Management Practices (BMPs) and a Pollution Prevention Plan to control and abate the discharge of pollutants to surface waters and to achieve compliance with Best Available Technology Economically Achievable (BAT)/Best Conventional Pollutant Control Technology (BCT) requirements and with applicable water quality standards.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

As specified in 40 CFR §122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or water quality criteria contained in the CTR and NTR.

It is not feasible to develop WQBELs at this time because there is not pre-project water quality data available for the discharges. There are not similar projects to draw upon for similar data. Water quality is expected to change and improve over time.

Additional information and water quality monitoring data will be obtained during the term of this Order, and used to assess whether water quality-based effluent limitations (WQBELs) may be needed. If necessary this permit may be re-opened and modified to include effluent limitations. The procedure for conducting a reasonable potential analysis and calculating WQBELs, if needed, is provided in the following section.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Section III.C. of this Fact Sheet identifies the beneficial uses contained in the Basin Plan that are applicable to surface waters that may be affected by the project. Narrative and numerical water quality objectives for the applicable surface waters are listed in Section V.

The LORP is a habitat restoration project that qualifies for an exemption from waste discharge prohibitions for the discharges authorized by this Order. It is expected that water quality standards may not be met in the early phases of the project due to rewatering channel reaches that have experienced little or no flow for a long period of time. The impacts to water quality are expected to be the worst-case in the initial phases of the project and attenuate over time as the new higher flow regime becomes established.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Regional Water Board will conduct a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the Order. The Regional Water Board will analyze effluent and receiving water data to determine if a pollutant in a discharge has the reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have the reasonable potential to cause or contribute to an excursion above a water quality standard, numeric WQBELs are required. The RPA considers water quality objectives outlined in the CTR, NTR, and Basin Plan. To conduct the RPA, the Regional Water Board will identify the maximum

observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

1. Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limit is needed.

2. Trigger 2 – If MEC<C and background water quality (B) > C, a limit is needed.

3. Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and ambient data are needed to conduct a complete RPA. The Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

4. **WQBEL Calculations**

Should the concentrations of non-priority pollutants in base flows and seasonal habitat flows not attenuate or stabilize at levels meeting all applicable water quality standards within the term of this Order (i.e., five years), this Order may need to be revised to include WQBELs for non-priority pollutants following similar calculations as described for priority pollutants. The five-year term of this Order should provide ample time for trends in water quality to become established or evident.

5. **Whole Effluent Toxicity (WET)**

Whole effluent toxicity (WET) monitoring may be required for any NPDES discharge, and for other discharges, as necessary. All test species, procedures, and quality assurance criteria used shall be in accordance with the methods prescribed for definitive testing in Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, USEPA, October 2002. (Reference: EPA-821-R-02-013.) Whole effluent toxicity (WET) testing shall be performed with an effluent sample obtained from the Pump Station outfall to the Los Angeles Aqueduct (R-004D). Dilution and control waters shall be obtained from an area in the receiving waters that is unaffected by the discharge (R-005U). WET monitoring shall be performed within 6 months of initiating the 40 cfs base flow in the Lower Owens River. If toxicity is identified in the sample, the WET test shall be repeated within 120 days. Data obtained from the WET monitoring will be used in conjunction with CTR testing data to determine whether toxicity is violating conditions of this Order, or indicates an effluent limitation should be developed for chronic toxicity. As required by this Order, if toxicity as a result of a waste discharge is identified as a problem with repeated testing, a toxicity reduction evaluation is required from the Discharger in accordance with toxicity control provisions of the SIP, Section 4.

D. **Final Effluent Limitations**

Not Applicable

E. Interim Effluent Limitations

Not Applicable

F. Land Discharge Specifications

Land discharge specifications are established to prevent dredge and excavation spoils from being discharged to surface waters.

G. Reclamation Specifications

Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The receiving water limitations specified in this Order are the water quality objectives applicable to all surface waters in the Lahontan Region (Basin Plan Page 3-3) and water quality objectives for Haiwee Reservoir (Basin Plan Page 3-47).

B. Groundwater

Receiving water limitations for ground water are those that are applicable to all ground waters in the Lahontan Region.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the California Water Code authorize the Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program for this facility.

A. Influent Monitoring

Influent is considered the background or ambient water quality for monitoring the effects of a particular action or waste discharge on water quality, and is required upstream of construction and stream diversion activities to establish ambient water quality conditions prior to the discharges.

B. Effluent Monitoring

Effluent monitoring is required for all specified discharges to determine the level of pollutants in the discharges. Because no numerical effluent limits are prescribed, this Order requires monitoring in the receiving waters to determine the effects of effluents on receiving water quality. This monitoring is necessary to conduct reasonable potential analyses for the presence of conventional, non-conventional, and toxic pollutants.

C. Whole Effluent Toxicity Testing Requirements

WET testing is required to determine whether discharges to surface waters comply with Basin Plan requirements for toxicity control and substantive requirements of the SIP, should toxicity be identified. If toxicity is identified in the sample, the WET test shall be repeated within 120 days to determine whether toxic conditions are persisting.

D. Receiving Water Monitoring

1. Surface Water

Monitoring of surface receiving waters is required to determine whether or not the discharges are in compliance with this Order and to determine whether or not the discharges pose a threat to water quality.

2. Groundwater

Groundwater monitoring is not required for this project because the discharges are not expected to pose a threat to ground water quality.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

The Discharger shall comply with all Standard Provisions included in Attachment D of this Order. The Standard Provisions shall apply to all discharges and activities regulated under this Order, regardless of the basis for regulation, and shall not expire with expiration of the NPDES provisions of this Order. The Standard Provisions cover a number of codified administrative requirements applicable to all NPDES discharges as required by 40 CFR Section 122. The Regional Water Board is carrying forward these requirements, as applicable to all other non-NPDES discharges authorized under this Order, pursuant to state waste discharge requirements authorized by CWC Section 13263 and CWA Section 401.

B. Special Provisions

1. Reopener Provisions

NPDES Permit modification or revocation will be conducted according to 40 CFR §122.62, §122.63, §122.64 and §124.5. The State Water Resources Control Board is currently updating the statewide NPDES Permit for Discharges of Storm Water Associated with Construction Activity. The Regional Water Board may revise or modify this NPDES Permit for reasons including, but not limited to, ensuring consistency with changes made to the statewide permit or incorporation of the Discharger's SWPPP or amendments to the SWPPP. This provision is necessary to ensure that stormwater discharges associated with construction activity are at least as stringent as for other dischargers throughout the state. In addition, permit revisions may arise due to a variety of circumstances such as completion of a TMDL or water quality/ beneficial use study. The permit, if reopened, may be revised in whole or part after compliance with applicable public review requirements. The Regional Water Board may review and revise waste discharge requirements in accordance with California Water Code §13263, (e) and (f).

2. **Special Studies and Additional Monitoring Requirements**

The Discharger shall conduct whole effluent toxicity monitoring as described in Attachment E, Section V. If toxicity is identified in the sample, the WET test shall be repeated within 120 days. In accordance with the SIP, Section 4:

a. If toxicity as a result of a waste discharge is identified with repeated WET tests, the Discharger shall conduct a toxicity reduction evaluation as directed by the Regional Water Board Executive Officer. The toxicity determined by WET tests does not identify specific sources of toxicity. Additional testing for specific toxicants, or other methods of assessing toxicity, may be employed by the Discharger to determine the specific source(s) of toxicity in conducting toxicity reduction evaluation.

b. The Discharger shall take all reasonable steps to control toxicity once a source of toxicity is identified.

c. Failure to conduct a toxicity reduction evaluation within a designated period as directed by the Regional Water Board Executive Officer shall result in the establishment of effluent limitations for chronic toxicity in a permit or appropriate enforcement action.

These special provisions are necessary to comply with the SIP and to determine the toxic effects, if any, from reintroducing flow into the Lower Owens River and diverting that water to the Los Angeles Aqueduct. The WET test specifically identifies toxicity effects on aquatic organisms. This information may be used in conjunction with CTR reasonable potential analysis to determine the sources of toxicity, if toxicity is present. The WET and CTR test results will provide information on the toxicity effects on waters as a result of LORP implementation.

3. **Best Management Practices and Pollution Prevention**

a. The Discharger is required to develop an acceptable Storm Water Pollution Prevention Plan (SWPPP) that identifies all project-specific BMPs necessary to meet the requirements of BAT/BCT. The SWPPP is needed to control pollutant discharges. Project schedules of activities, prohibitions of practices, maintenance procedures, and other management practices are needed to prevent or reduce the pollution of the waters of the U.S. and the State. BMPs are required to control site runoff, spillage or leaks, waste disposal, or drainage from raw material storage. SWPPP requirements in this Order are consistent with statewide requirements for dischargers of storm water, and other authorized non-storm water waste discharge requirements.

b. The Discharger shall submit the SWPPP to the Regional Water Board at least 180 days prior to construction activity so that the Regional Board may consider incorporating the SWPPP into this Order at a public meeting. This requirement is necessary because details of the SWPPP must undergo public and agency review because the conceptual plan provided by the Discharger is not adequate to ensure that all applicable requirements to meet BAT/BCT through the implementation of BMPs will be met.

c. The Discharger shall retain a copy of the SWPPP at the construction site. If the site is inspected by a Regional Water Board, SWRCB, U.S. EPA, or municipal storm water management agency inspector, the Discharger shall provide the SWPPP immediately for review if requested. Upon written request by a representative of the Regional Water Board, SWRCB, U.S. EPA, or municipal storm water management agency, the Discharger shall provide a copy of the SWPPP within five working days

from the date a request is received. This fulfills requirements to ensure the SWPPP is a public document, as required by federal regulations, and ensures the SWPPP will be available to guide construction site personnel.

d. The Regional Water Board Executive Officer may provide information to the Discharger on the development and implementation of SWPPPs and monitoring programs and may require revisions to SWPPPs and monitoring programs. This requirement is consistent with statewide provisions for NPDES construction storm water discharges.

e. The Discharger shall comply with construction site inspection and other monitoring program and reporting requirements in Attachment M. These requirements are consistent with statewide provisions for NPDES construction storm water discharges.

4. **Compliance Schedules**

Not Applicable

5. **Construction, Operation, and Maintenance Specifications**

a. Active construction sites and maintenance dredging sites shall be isolated from flowing waters by physical barriers such as sand bag dikes, silt fences, or other effective controls to prevent uncontrolled discharge to surface waters. This provision is needed to ensure that discharges of pollutants from dredging and excavation in waters are prevented and/or minimized.

b. The Discharger shall notify Regional Water Board staff in writing **15 days prior to initiating base flow and any subsequent habitat flow**, including the initial winter habitat flow and Alabama Release. This provision is needed so that Regional Water Board staff will have the opportunity to inspect the LORP implementation and determine the status of compliance with the terms of this Order.

6. **Special Provisions for Construction Activity**

Federal regulations for controlling pollutants in storm water runoff discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990 (40 CFR Parts 122, 123, 124). The regulations require dischargers of storm water to surface waters associated with construction activity, including clearing, grading, and excavation activities, to obtain an NPDES permit and to implement Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate storm water pollution. This Order includes NPDES requirements for storm water that are consistent with statewide requirements. The special provisions for construction activity contained in this Order are based on similar conditions included in the statewide construction storm water permit (SWRCB Order No. 99-08-DWQ).

7. **Water Quality Certification Conditions and Enforcement Provisions**

The water quality certification is predicated on compliance with all applicable water quality standards, compliance with the CWA and other state requirements, such that the waters will be protected for beneficial uses (i.e., pollution or nuisance will not occur). The provisions for compliance with WQC are required pursuant to federal CWA Section 401 and state regulatory requirements.

The standard conditions required for the LORP are identical to those required for all CWA Section 401 WQCs granted on a statewide basis. The rationale for additional conditions for the LORP WQC are justified below:

a. Heavy equipment shall be steam cleaned before starting work in waters of the U.S and routinely monitored for equipment leaks. If leaks from equipment can not be readily controlled, that equipment must be removed from service until repaired to prevent threatened or actual discharges of wastes that could adversely affect water quality. This condition is required to prevent and minimize potential water quality impacts due to equipment leaks.

b. An emergency spill kit shall be maintained at the project site at all times. This condition is required to prevent and minimize potential water quality impacts due to equipment leaks and other unanticipated releases of solid or liquid pollutants.

c. Regional Water Board staff shall be notified 48 hours prior to commencement of ground disturbance. This condition is necessary to inform Regional Water Board staff that project construction is imminent and provide an opportunity for inspections to assess compliance with this Order.

d. The Discharger shall implement a partial flushing flow from the Alabama spillgates to augment the first winter habitat flow. The Alabama spillgate flow release shall provide and maintain a flow of 200 cfs in the Lower Owens River for at least four days to increase the flushing effects of the winter habitat release by increasing the mass of water released. This condition is necessary to partially flush the organic sediments that have built up for decades in the lower reaches and the sediments that will likely be mobilized and/or deposited in the lower reaches as a result of the channel clearing in the upper reaches and the first winter habitat flow. The Alabama Release will partially flush the river channel and harden the channel for future habitat flows that will be less than or equal to 200 cfs.

e. The Discharger shall demonstrate that "no net loss" of wetland functions and values has occurred following LORP implementation. The Discharger is required as a condition of this WQC to delineate wetlands and provide a delineation and assessment of functions and values in year seven following re-watering discharge 004, and shall repeat this delineation/assessment at five-year intervals thereafter if "no net loss" requirements of this Order are not demonstrably met. If any assessment shows the "no net loss" requirements are met, subsequent assessments are not required. If losses occur to functions and values, the Discharger shall provide a corrective action plan and/or compensatory mitigation plan for acceptance by the Executive Officer, and implement the plan(s) under the terms of this WQC Order. This condition is necessary to ensure that the Regional Water Board policy for "no net loss" has been achieved.

f. The prohibition exemption granted in Permit Section III.B. for the Lower Owens River shall remain valid on the condition that the Discharger at all times strictly adheres to Basin Plan criteria necessary to grant an exemption (as discussed in the Fact Sheet, Section IV.A.), as determined by the Regional Water Board. The rationale for the exemption is explained above in Fact Sheet Section IV.A.

g. The LORP qualifies as a restoration project for purposes of water quality certification fees, in accordance with regulations in CCR 23 §2200, which requires a nominal fee of $500. The Discharger submitted this amount with the application for certification.

8. **Prohibition Exemption and California Environmental Quality Act Requirements**

   a. Regional Water Board CEQA compliance and the basis for requiring the Alabama Release are discussed in detail in Attachment H.

   b. The Regional Board has determined that if the Discharger fails to comply with the CEQA mitigation measure identified as the Alabama Release, then the conditions necessary for granting a prohibition exemption will not have been met, and the exemption is therefore rescinded (revoked).

   c. Similar to 8.b., above, all conditions necessary to grant an exemption must be met on an ongoing basis, or the Regional Water Board may take discretionary action to rescind the prohibition exemption. Otherwise, the prohibition exemption will expire on June 14, 2015, for the reasons stated in Fact Sheet Section IV.A.3.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Lahontan Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve, in part, as a National Pollutant Discharge Elimination System (NPDES) permit for the LORP. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification of the public hearing and intent to adopt the proposed Order will be provided to the public through the following:

- Newspaper announcements
- Regional Water Board website announcement
- Direct mail to interested parties

B. Written Comments

Written comments were received from the Discharger, the USEPA, and other interested persons. A written response to written comments received was provided in advance of the public hearing.

C. Public Hearing

The Regional Water Board will hold a public hearing on the proposed WDRs during its regular Board meeting on the following date and time and at the following location:

Date:	**July 14, 2005**
Time:	**8:30 a.m.**
Location:	**City Council Chambers** **377 West Line Street** **Bishop, California**

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and the proposed Order. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

The Discharger must submit a SWPPP 180 days prior to initiating construction activity, for the Regional Water Board to consideration incorporating the SWPPP into the Order at a public meeting. Adequate public notice for the meeting at which the SWPPP will be considered will be provided at a later date.

Please be aware that dates and venues may change. Our web address is http://www.waterboards.ca.gov where you can access the current agenda for changes in dates and locations.

D. **Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. **Information and Copying**

The Report of Waste Discharge (RWD), related documents, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (530) 542-5400.

F. **Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. **Additional Information**

Requests for additional information or questions regarding this Order should be directed to Alan Miller, Senior Water Resource Control Engineer, at (530) 542-5430, or the Regional Water Board office at (530) 542-5400.