

## 14.0 OTHER FEDERAL IMPACT CONSIDERATIONS

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### 14.1 RELATIONSHIP BETWEEN SHORT TERM USES OF RESOURCES AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The Lower Owens River Project (LORP) is designed to enhance the aquatic, wetland, and riparian habitats along the river, at Blackrock Habitat Area, in the Delta Habitat Area, and in LADWP grazing leases in the LORP project area. The primary objective of the LORP is to establish healthy, fully-functioning habitats that will be self-sustaining. Implementation of the LORP would require short-term uses of resources that would result in short-term environmental impacts, as summarized below from the analyses in Chapters 4 through 10.

- Degradation of water quality in the Lower Owens River during the establishment of baseflows and seasonal habitat flows
- Fish kills in the river due to water quality degradation during the initial re-watering years
- Disturbance to river channel bed and banks, and riparian habitat due to modification of the River Intake; clearing of the river channel near the Intake; installation of stream gauges; and infrequent removal of beaver dams and dense obstructive tule stands
- Disturbance to upland and wetland habitats during the construction of berms, ditches, and new spillgates in the Blackrock Habitat Area
- Temporary and permanent disturbances to riparian and upland habitats due to the construction of the diversion and pump station
- Emissions of gaseous pollutants and fugitive dust during the construction of the pump station and the berms and ditches at the Blackrock Waterfowl Habitat Area
- Short-term habitat conversions due to flooding along the river, periodic flooding and drying cycles at Blackrock, and varying flows to the Delta

The LORP may result in the following long-term uses of resources or impacts to resources:

- Conversion of upland habitats to wetlands due to the rewatering of the river
- Permanent loss of upland and riparian habitats due to pump station facilities
- Disturbance to native habitats due to increased recreational uses of the Lower Owens River which result in destructive activities or access
- Degradation of habitats along the river due to proliferation of noxious weeds (including perennial pepperweed, Russian knapweed, and saltcedar) (without mitigation)

### 14.2 IRRETRIEVABLE OR IRREVERSIBLE COMMITMENT OF RESOURCES

The LORP would involve the following irretrievable and irreversible commitment of resources: the capital, labor, fuel, and construction materials required to modify the River Intake and to construct the diversion, pump station, power line, stream gauges, lease fences and enclosures, and berms and ditches in the Blackrock Waterfowl Habitat Area. All other actions under the LORP involve alterations of land and water flow patterns that are reversible over time.

### **14.3 ENVIRONMENTAL JUSTICE**

Environmental justice is defined by the Environmental Protection Agency (EPA) as “(t)he fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” Executive Order 12898, entitled “General Actions to Address Environmental Justice in Minority and Low-Income Populations” requires all federal agencies to determine if their operations and major federal actions affect minority and low-income populations in an adverse manner. A significant impact to environmental justice would be if there was a significant adverse environmental impact on minority or low-income population or children that appreciably exceeded those on the general population.

The LORP would result in the following direct adverse impacts to the public: (1) nuisance odors associated with establishment of baseflows in which organic sediments are disturbed and hydrogen sulfide released; (2) fish kills that affect game fish and recreational experience; and (3) increased nuisance and public health risk due to potential increase in mosquitoes. These impacts would not directly or indirectly affect minority or low-income populations, and as such, would not cause environmental justice impacts.

### **14.4 FLOODPLAIN MANAGEMENT**

Executive Order 11988, Floodplain Management, states “(e)ach agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities... If an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains.”

The LORP would be a compatible development in the Lower Owens River floodplain. It would not increase general flooding hazards to structures and the public, although there could be localized minor flooding problems at road culverts during the seasonal habitat flows (see Section 4.3.2). The project would not involve any permanent alteration of the floodplain except for the diversion and pump station. The latter would create an obstruction to river flow and alteration of floodplain limits; however, no roads or structures would be inundated or adversely affected by the forebay. The proposed project would restore many of the floodplain functions along the Lower Owens River that have been altered or impaired due to diversions to the Los Angeles Aqueduct. The primary functions that would be re-established include creation and expansion of floodplain riparian habitats; groundwater recharge; deposition of sediments, seeds, and organic material on floodplain terraces during seasonal habitat flows to enhance ecosystem processes; and conveyance of sediments along the river channel and floodplain for deposition in the Delta.

### **14.5 WETLANDS PROTECTION**

Executive Order 11990, Protection of Wetlands, states that “(e)ach agency shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities.” Federal agencies are required to avoid undertaking or providing assistance for new construction located in wetlands unless there is no practicable alternative. The short- and long-term impacts of the project on wetlands, as defined under Section 404 of the Clean Water Act, are summarized below in Table 14-1. The LORP would result in an overall increase in wetlands, as intended, even with the potential wetland

losses in the Delta Habitat Area as described in Section 6.3.2. Hence, the project is consistent with Executive Order 11990.

**TABLE 14-1  
SUMMARY OF IMPACTS TO WETLANDS**

Project Element	Impact	Temporary	Permanent
<b><i>River Rewatering</i></b>			
Marsh/wet alkali meadow	Increased in areal extent and productivity due to additional flows		+882
Riparian forest			+854
Alkali meadow			+1,190
Freshwater marsh	Channel clearing prior to initial releases	-3.7	
<b><i>Pump Station</i></b>			
Transmontane alkali meadow	Temporary construction disturbance	-0.8	
Mojave riparian forest		-0.4	
Transmontane freshwater marsh		-0.4	
Transmontane alkali meadow	Permanent losses due to facilities		-1.85
Mojave riparian forest			-1.36
Transmontane freshwater marsh			-0.37
Transmontane alkali meadow	Conversion to open water in the forebay		-4.1
Mojave riparian forest			-5.3
Transmontane freshwater marsh			-7.5
<b><i>Delta Habitat Area</i></b>			
	Possible long-term loss of wetlands due to reduction in flows, including brine pool transition		Loss cannot be quantified*
<b><i>Blackrock Waterfowl Habitat Area</i></b>			
Alkali meadow, freshwater marsh	Construction of berms, ditches, and new spillgates	<1	
Open water	Net increase due to flooding about 500 acres each year (long term average)		290
Emergent wetlands	Net change in emergent wetlands due to flooding of upland habitats (long-term average)		-83
Total =		6.3	+3,113*

\* The potential losses in wetlands in the Delta Habitat Area (see Section 6.3.2), if any, are not included. However, the total wetlands in the Delta Habitat Area are less than 900 acres, and as such, any reduction would not significantly alter the overall wetland gains by the LORP.

## 14.6 ENDANGERED SPECIES ACT AND MIGRATORY BIRD TREATY ACT

### 14.6.1 Endangered Species Act

Section 7 of the federal Endangered Species Act requires that federal agencies consult with the U.S. Fish and Wildlife Service (USFWS) when a federal agency determines that a proposed action may affect a species listed as threatened or endangered by the USFWS, or its designated critical habitat. This same consultation requirement applies for actions that may affect a species proposed for listing, or proposed critical habitat. Section 7 requires that federal agencies take necessary steps to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of threatened and endangered species, nor result in the adverse modification of critical habitat.

In a letter dated February 5, 2003, EPA requested USFWS to provide information identifying all listed and proposed species, as well as designated or proposed critical habitat, that may be present within the

project area. In response, in a letter dated February 11, 2003, USFWS provided a list of endangered, threatened, proposed, and candidate species that may occur in or around the project area:

- Owens pupfish (endangered species; discussed below)
- Owens tui chub (endangered species; discussed in Section 4.6)
- Bald eagle (threatened species; proposed for delisting)
- Southwestern willow flycatcher (endangered species; discussed below)
- Yellow billed cuckoo (candidate species)
- Mountain plover (proposed for threatened status, but proposal withdrawn)
- Least Bell's vireo (endangered species; no known population in the Owens Valley)
- Western snowy plover (federal status applies only to coastal populations)

### **Owens Pupfish**

The only known occurrence of this species in the LORP project area is the area near Well 368 in the Blackrock lease, which supports a population of Owens pupfish. In the past, protective fencing was installed around the area where the pupfish population was originally located. However, as the local vegetation and hydrologic conditions of the area near Well 368 changed through natural processes over time, the pupfish population migrated to a location outside of the fenced area. Based on a field visit to this site conducted in May 2003, CDFG and USFWS concluded that this pupfish population and its habitat are doing well without fencing and that modifications are not needed (S. Parmenter, CDFG, and D. Threlof, USFWS, pers. comm., 2003). Therefore, LADWP does not propose any management action with regard to the existing pupfish population.

### **Southwestern Willow Flycatcher**

The willow flycatcher (*Empidonax traillii*) is a state endangered species. The southwestern willow flycatcher (*Empidonax traillii* ssp. *extimus*) is a federally endangered subspecies of the willow flycatcher. The state listed species occurs in the Owens Valley as a rare spring and fall migrant, summer resident, and/or possible spring/summer breeder. It occurs in dense willow thickets near water. Sightings of the flycatcher in and near the LORP area in the past 10 years include between Big Pine and Baker Creek, Owens River between Steward Lane and Tinemaha Reservoir, and the Owens River between Bishop and Pleasant Valley Reservoir. Only the latter sighting included documented breeding birds, but it is located outside the LORP project area.

The southwestern willow flycatcher historically occurred in the Owens Valley; its historic northern limit represented by specimens from Independence (Riparian Bird Conservation Plan 2000). The draft southwestern willow flycatcher Recovery Plan prepared by USFWS indicates that the federally endangered subspecies occurs at five locations along the Lower Owens River.

The restoration of riparian habitats, specifically riparian willow forest along the Owens River, could provide new habitat and improve existing habitat suitable for this species. As described in Section 4.5.2, the acreage of riparian forest along the river is predicted to increase from 744 acres to 1,598 acres due to the rewatering the river. An increase in suitable habitat would provide more opportunity for foraging and nesting by this seasonal breeder and migrant, which in turn, could increase reproduction and survival.

No known suitable habitat for this species would be affected by construction activities at the pump station or at Blackrock Waterfowl Habitat Area.

EPA has preliminarily concluded that the LORP would have “no adverse effect” on the flycatcher. The LORP would result in indirect beneficial impacts to the flycatcher species due to long-term habitat creation and enhancement. The LORP would have “no effect” on the pupfish. Based on these preliminary findings, EPA has initiated a Section 7 endangered species consultation with USFWS.

#### **14.6.2 Migratory Bird Treaty Act**

The original Migratory Bird Treaty Act (MBTA) of 1918 implemented the 1916 Convention between the United States and Great Britain (for Canada) for the protection of migratory birds. Specific provisions of the statute include the establishment of a Federal prohibition, unless permitted, to “pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of the Convention ... for the protection of migratory birds ... or any part, nest, or egg of any such bird.” Bird species protected under the provisions of the Migratory Bird Treaty Act are identified in the List of Migratory Birds provided by USFWS (2004b).

As with the federal Endangered Species Act, the MBTA authorizes the Secretary of the Interior to issue permits for incidental take. The proposed project area contains suitable habitat for birds subject to MBTA and therefore, nesting birds and the contents of the nest within the project area are protected pursuant to the MBTA. As part of the conditions of the CDFG Streambed Alteration Agreement for the LORP, pre-construction surveys may be conducted as relevant to avoid nests of birds protected by the MBTA if construction would take place during nesting season.

### **14.7 CLEAN WATER ACT**

#### **14.7.1 Waters of the U.S. and Wetlands**

The primary purpose of the Clean Water Act is to “maintain and restore the chemical, physical, and biological integrity of waters of the United States.” Section 404 of the Clean Water Act regulates the discharge of fill or dredged material into “waters of the United States,” including wetlands. A 404 permit from the U.S. Army Corps of Engineers (Corps) is required for projects that result in a regulated discharge. LADWP will obtain a Section 404 permit from the Corps for the following LORP actions that affect jurisdictional “waters of the United States,” including open water and vegetated wetlands:

- Temporary earthmoving and stream diversion activities associated with construction of the diversion on the Lower Owens River
- Construction of the diversion structure and establishment of a forebay on the river
- Maintenance dredging of the forebay
- Installation of stream gauges along the river
- Channel clearing downstream of the River Intake

A summary table of all anticipated temporary and permanent wetland impacts under the LORP is provided in Section 14.4.

If an individual 404 permit is required for the above activities, LADWP must demonstrate to the Corps that (1) the Project’s potential impacts to “waters” have been avoided to the maximum extent possible; (2) remaining, unavoidable impacts have been minimized, to the extent feasible; and (3) there is mitigation to compensate for those unavoidable impacts. Compensatory mitigation is meant to offset the loss of

acreage, values and functions of the aquatic resource caused by the activities. LADWP must also demonstrate that least environmentally damaging alternative to accomplish the above actions have been selected. The Corps will make the final determination of the least environmentally damaging alternative (as required under Section 404 of the Clean Water Act), relying upon EPA's determination of the environmentally preferred alternative made under the requirements of NEPA.

#### **14.7.2 Water Quality**

The primary responsibility for the protection of water quality in California under the Clean Water Act resides with the State Water Resources Control Board and its nine Regional Water Quality Control Boards. The State Board sets statewide policy for the implementation of state and federal laws and regulations. The Regional Boards adopt and implement Water Quality Control Plans (Basin Plans).

The LORP occurs in jurisdiction of the California Regional Water Quality Control Board, Lahontan Region. The Basin Plan for the region sets forth water quality standards for surface and ground waters of the region, which include: (1) designated beneficial uses of water; and (2) narrative and quantitative water quality objectives to protect those beneficial uses. The Regional Board seeks to maintain the water quality objectives through its planning and permitting authorities to protect designated beneficial uses. A description of beneficial uses and water quality objectives for the Lower Owens River is presented in Section 4.4.1.

The proposed baseflow and seasonal habitat flows could cause short-term water quality degradation along the Lower Owens River from Mazourka Canyon Road to the pump station site. The poor water quality conditions would adversely affect the following beneficial uses designated for this part of the river: Cold Freshwater Habitat, Warm Freshwater Habitat, Commercial and Sportfishing, Non-Contact Water Recreation, and Wildlife Habitat. Water quality conditions could result in fish kills and create a nuisance due to odors from off-gassing sediments. The following water quality objectives may not be met during this period: 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. There is potential for toxic substances to be released to the water in deleterious amounts – in particular, naturally-occurring hydrogen sulfide and ammonia.

Eventually, water quality along the river is expected to improve with time under the LORP. The time required to stabilize water quality under the baseflows and seasonal habitat flows is unknown. There are no additional data or analytic tools to provide reliable estimates. Based on the analysis presented herein, it is speculated that the impacts would diminish with time and continual flows in the river. Eventually, water quality conditions in the river are expected to improve over current conditions.

Because the proposed project would exceed water quality objectives and adversely affect beneficial uses when water quality conditions are degraded during the initial flows, the project would be inconsistent with the Lahontan Basin Plan for an unknown period of time. Water quality conditions, once equilibrium has been achieved in the river, cannot be predicted at this time. Once equilibrium has been reached in the river and water quality conditions are stabilized, the Regional Board will need to consider possible changes in beneficial use designations for the Lower Owens River.

Implementation of the LORP may require Regional Board approval through the issuance of Waste Discharge Requirements for dewatering operations at the pump station during construction.

Section 401 of the Clean Water Act requires that the discharge of dredged or fill material into "waters" does not violate water quality standards. The Corps may not issue Section 404 permits (see above) unless

the state has been notified, through the Regional Board, and a certification of compliance or a waiver of state water quality standards has been obtained. Implementation of the LORP will require a 401 water quality certification from the Lahontan Regional Water Quality Control Board.

## 14.8 CLEAN AIR ACT

Under the Clean Air Act, states must prepare a State Implementation Plan (SIP) to ensure that areas within the state are in attainment with the National Ambient Air Quality Standards established by the EPA. Air quality standards have been set for the following pollutants: particulate matter less than 10 microns in diameter (PM10), carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide, and lead. The Clean Air Act also requires that federal actions conform to the most recent federally approved SIP. Conformity consists of the following:

- A project must be consistent with the SIP's purpose of reducing the severity and frequency of air quality violations
- A project must not cause or contribute to new violations of the air quality standards, nor delay attainment of standards

EPA has established regulations that specify how federal agencies determine if their actions will conform with the SIP, promulgated at 40 CFR 51. Determining conformity requires two steps: an applicability analysis and a conformity determination. The applicability analysis is used to determine if the project will exceed *de minimus* emission thresholds based on the region's non-attainment status. A conformity determination is not required for projects where the annual and daily emissions caused by the federal action are less than the applicable threshold.

All LORP implementation activities would occur in the southern Owens Valley, which has been designated by EPA as a non-attainment area for the federal 24-hour average PM10 standards. Wind-blown dust from the dry lakebed of Owens Lake is the primary cause of the PM10 violations. The area has been designated as attainment (or unclassified) for all other ambient air quality standards.

Implementation of the LORP will result in short-term emissions of gaseous pollutants and fugitive dust due to construction activities, as described in Section 5.4. The *de minimus* threshold for PM10 for the conformity applicability analysis is 100 tons per year. As described in Section 5.3, the total annual PM10 emissions for construction would be 1.2 tons, well below the conformity threshold. As such, further conformity analysis is not required and the project-related construction emissions are presumed to conform to the most recent federally approved SIP, as required under the Clean Air Act.

## 14.9 NATIONAL HISTORIC PRESERVATION ACT

Section 106 of the National Historic Preservation Act (NHPA) requires that federal agencies take into account the effects of their actions on historic properties. Pursuant to these requirements, a cultural resources inventory (Far Western, 2001) was conducted in 2000 to determine if implementation of the LORP could affect historic properties, which includes archaeological sites, ethnographic resources, and historic structures. The results of the 2000 inventory are summarized in Section 4.8.3.2. The inventory identified one previously documented prehistoric archaeological site, four newly recorded historic sites, five newly recorded prehistoric sites, three isolated finds, and five historic structures. The four historic sites are not considered eligible for inclusion on the National Register of Historic Places (NRHP) as they consist of insignificant historic can scatters (see Section 5.4.2). Four of the six prehistoric sites (including the one previously documented site) are considered ineligible, consisting of very disturbed, ephemeral

artifact scatters with little potential for intact subsurface deposits (see Section 5.4.2). The two remaining prehistoric sites are unevaluated with regard to their NRHP status, but would not be affected by the project (see Section 7.3.1). The three isolated finds are not eligible for the NRHP. Five historic architectural structures, all water conveyance or control features, were identified during the field survey. Only one structure, the Lower Owens River Intake, is recommended eligible to the NRHP (see Sections 4.8.4.1 and 7.3.2). JRP (2001) assessed the significance of the proposed modifications to River Intake using the criteria under the NHPA and concluded that the proposed modifications would not alter the characteristics of the structure that qualify it for inclusion on the NRHP (see Section 4.8.4.1).

To complete the requirements under Section 106 of the NHPA, on November 9, 2001, EPA forwarded the cultural resource studies and a Finding of No Adverse Effect for the Intake Modifications to OHP along with a request that OHP concur with the conclusions. No objection to the request for concurrence was received from OHP.

After the completion of the 2000 cultural resources inventory, LADWP identified a need to clear sediment out of a 2.2-mile stretch of the Owens River channel immediately below the River Intake (see Section 2.3.6). This specific undertaking, which will include construction of temporary access roads in the area, was not considered as part of the 2000 cultural resources inventory for the LORP conducted by Far Western. EPA, therefore, considered this effort a “new undertaking” with respect to the Section 106 process under NHPA and, in a September 10, 2002 letter, reinitiated consultation with OHP for this new activity. Far Western conducted a second cultural resource analysis for this channel clearing activity in 2003. The results of this second inventory are summarized in Section 4.8.3.3. During the field survey conducted as part of the inventory, five new isolates, three new prehistoric sites, and five historic sites (three new sites and two previously recorded sites) were identified. Two of the prehistoric sites and two of the historic sites are considered ineligible for inclusion in the NRHP. With respect to the two prehistoric sites and three historic sites that are either unevaluated or previously recommended eligible for the NRHP status, Mitigation Measure CRR-1 (see Section 4.8.5) will be implemented to protect these sites. On July 29, 2003, EPA forwarded the 2003 cultural resource inventory along with a request that OHP concur with the conclusions.

A third cultural resources evaluation was conducted in 2004 to evaluate the historic significance of 16 manmade structures that are located in or adjacent to the river channel and were identified by LADWP and Ecosystem Sciences (2003) for potential removal or modification prior to initial flow releases (see Section 2.3.6). The evaluation included: reviews of available literature and records, a field survey of the structures, and NRHP site evaluations. The results of the evaluation are presented in a report completed by JRP (2004) and summarized in Section 4.8.3.4. The report concluded that none of the 16 resources is considered eligible for inclusion on the NRHP. To complete the requirements under Section 106 of the NHPA, EPA will forward the report to OHP along with a request that OHP concur with the conclusions.

In addition to the cultural resources studies, LADWP and EPA sought input from the following Indian Tribes to determine their interests and concerns about the project in general and their specific concerns about the channel clearing work (see Section 4.8.2): Big Pine Tribe; Bishop Indian Tribal Council; Bishop Paiute Tribe; Fort Independence Indian Reservation; Fort Independence Tribal Office; Independence Paiute Tribe; Lone Pine Paiute Tribe; Utu Utu Gwaitu Paiute Tribe, Benton. Written responses to the Notice of Preparation and Notice of Intent were received February 22, 2000, from Vernon J. Miller, Tribal Chairman for the Fort Independence Indian Reservation, and Mel O. Joseph, Environmental Coordinator for the Lone Pine Paiute-Shoshone Reservation. Following the publication of the Draft EIR/EIS in November, 2002, written comments were received from the following Tribes and Tribal representatives: Big Pine Paiute Tribe of the Owens Valley, Fort Independence Indian Reservation, Lone Pine Paiute-Shoshone Reservation, Lone Pine Paiute-Shoshone Reservation, and Owens Valley Indian Water Commission. Oral comments from the Tribes were received from representatives of the



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Lone Pine Paiute-Shoshone Tribe and the Owens Valley Indian Water Commission. EPA has considered their concerns during the project environmental review process.

Where there is federal nexus, any future project actions (i.e., adaptive management measures) that rise to the level of a potential significant impact to historic properties (including archaeological sites, ethnographic resources, and historic structures) will be treated as a “new undertaking” subject to Section 106 review of the NHPA. As required by NHPA regulations, these new undertakings may necessitate a new round of Tribal consultations. This will ensure continued Tribal input with regard to possible future project impacts on cultural resources.