Initial Study Ad Hoc Yellow-billed Cuckoo Habitat Enhancement Plan



Los Angeles Department of Water and Power Environmental Services 111 North Hope Street, Room 1044 Los Angeles, CA 90012

October 2009

CITY OF LOS ANGELES OFFICE OF THE CITY CLERK ROOM 395 CITY HALL LOS ANGELES, CALIFORNIA 90012

CALIFORNIA ENVIRONMENTAL QUALITY ACT INITIAL STUDY AND CHECKLIST

(ARTICLE IV – CITY CEQA GUIDELINES)

LEAD CITY AGENCY: City of Los Angeles Department of Water and Power 111 North Hope Street Los Angeles, CA 90012	COUNCIL DISTRICT(S): N/A	DATE: October 21, 2009
PROJECT TITLE/NUMBER: Ad Hoc Yellow-Billed Cuckoo Habita	t Enhancement Plan / Number: N/A	CASE NUMBER:
PREVIOUS ACTIONS CASE NUMBER: SCH 2005102126		
Department of Water and Power (LAI California Department of Fish and Scheidlinger (the MOU Parties) outlin at Baker and Hogback Creeks. Base Ecosystem Sciences, the Yellow-bill improve conditions for YBC at Bake environmental impacts on downstrear completed on the plan were not dee initiated to re-define the project with i habitat conditions would be maintaine such as planting of native riparian valtered trails.	997 Memorandum of Understanding (NOWP), Inyo County, the Owens Valley (Game (CDFG), the California State I does the requirement for an evaluation of ed on the evaluation of riparian woodled Cuckoo Habitat Enhancement Plater and Hogback Creeks. The initially m water users and grazing operations) amed satisfactory by the MOU Parties input from all Parties. Under the resulting and/or improved at each site through regetation, alteration of grazing practice.	Committee (OVC), the Sierra Club, the Lands Commission (SLC), and Carla f Yellow-billed Cuckoo (YBC) habitat and areas conducted by LADWP and n was developed to maintain and/or proposed plan (as modified to reduce and an Environmental Impact Report. An Ad Hoc process was therefore ng plan, which is the proposed Project, the implementation of project actions ces, amended recreation policies, and
located on the Big Pine 7.5 minute U Big Pine. Located on the Manzana	ect sites are within Inyo County, Califo f. S. Geological Survey (USGS) quadra ar 7.5-minute USGS quadrangle, the F g, west of U.S. Highway 395 and betwee	ngle, approximately 1.5 miles west of Hogback Creek habitat area is at the
PLANNING DISTRICT: N/A	STATUS: PRELIMINARY PROPOSED ADOPTED (Date):	
EXISTING ZONING: Open Space 40 acre minimum (Inyo County)	MAX. DENSITY ZONING: N/A	PLAN DOES CONFORM TO
PLANNED LAND USE AND ZONE: Natural Resources (Inyo County)	MAX. DENSITY PLAN: N/A	DOES NOT CONFORM TO PLAN
SURROUNDING LAND USES: Open Space, Recreation, and Ranching at both sites; Educational Facilities at Baker Creek site only	PROJECT DESNITY: N/A	NO DISTRICT PLAN

CEQA Initial Study

Ad Hoc Yellow-Billed Cuckoo Habitat Enhancement Plan

October 2009

Chief Executive Officer and General Manager S. David Freeman

Senior Assistant General Manager – Water System *James B. McDaniel*

Manager, Aqueduct Business Group *Gene Coufal*

Director of Environmental Services *Mark J. Sedlacek*

Prepared by:

Los Angeles Department of Water and Power 111 North Hope Street, Room 1044 Los Angeles, CA 90012

Technical Assistance Provided by:

MWH Americas, Inc. 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007



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1.1 PROJECT TITLE AND LEAD AGENCY

Project Title:	Ad Hoc Yellow-Billed Cuckoo Habitat Enhancement Plan		
Lead Agency Name:	Los Angeles Department of Water and Power		
T 1 A A 11	111 North Hope Street, Room 1044		
Lead Agency Address:	Los Angeles, California 90012		
Contact Person:	Ms. Irene Paul		
Contact Phone Number:	(213) 367-3509		
Project Sponsor: Los Angeles Department of Water and Power			

1.2 PROJECT BACKGROUND AND OBJECTIVES

The City of Los Angeles Department of Water and Power (LADWP) has prepared this Initial Environmental Study (IES) to address the impacts of construction and operation of the Ad Hoc Yellow-billed Cuckoo Habitat Enhancement Plan (proposed Project). The IES serves to identify the site-specific impacts, evaluate their potential significance, and determine the appropriate document needed to comply with the California Environmental Quality Act (CEQA). Based upon this IES, a Mitigated Negative Declaration (MND) is the appropriate CEQA document. Staff recommends that the Los Angeles Department of Water and Power Board of Commissioners adopt this IES/MND for the proposed Project.

Project Background

The Yellow-billed Cuckoo (*Coccyzus americanus*) is listed as a California Endangered Species and a U.S. Forest Service Region 5 Sensitive Species. The 1997 Memorandum of Understanding (MOU) among LADWP, Inyo County, the Owens Valley Committee (OVC), the Sierra Club, the California Department of Fish and Game (CDFG), the California State Lands Commission (SLC), and Carla Scheidlinger outlines the requirement for an evaluation of Yellow-billed Cuckoo (YBC) habitat at Baker and Hogback Creeks. Based on the evaluation of riparian woodland areas conducted by LADWP and Ecosystem Sciences, the Yellow-billed Cuckoo Habitat Enhancement Plan was developed to maintain and/or improve conditions for YBC at Hogback and Baker Creeks. Under the proposed Project, habitat conditions would be maintained and/or improved at each site through the implementation of project actions such as planting of native riparian vegetation, alteration of grazing practices, amended recreation policies, and altered trails.

Previous CEQA Documentation. Previous plans for habitat enhancement at the two project locations included recommendations for fencing, grazing management, irrigation, recreation management, and planting of willows and cottonwoods. The CEQA analysis completed on this previous plan determined that significant environmental effects would occur to downstream

water uses and the grazing operations associated with the Baker Creek area. As a consequence, a project alternative was developed by LADWP to reduce the significant impacts. This alternative was included in the Draft Environmental Impact Report (DEIR) prepared for the project.

The DEIR was circulated for public comment, but never finalized. The MOU Parties were not satisfied with the DEIR. The MOU Parties and the LADWP grazing lessees began working together as an Ad Hoc Group to formulate a new plan. Earthworks Restoration, Inc. (Earthworks) was hired as a consultant to the MOU Parties and worked with the MOU Parties to develop an alternative that would meet the requirements of the MOU while sustaining agricultural uses of the areas and while providing for downstream water uses. This alternative, which is the current Ad Hoc YBC Habitat Enhancement Plan, provides the details for a planting plan and black locust control plan for Baker Creek. In addition, it details grazing management plans, recreation plans, and fire management plans for both Baker and Hogback Creeks.

Project Objectives

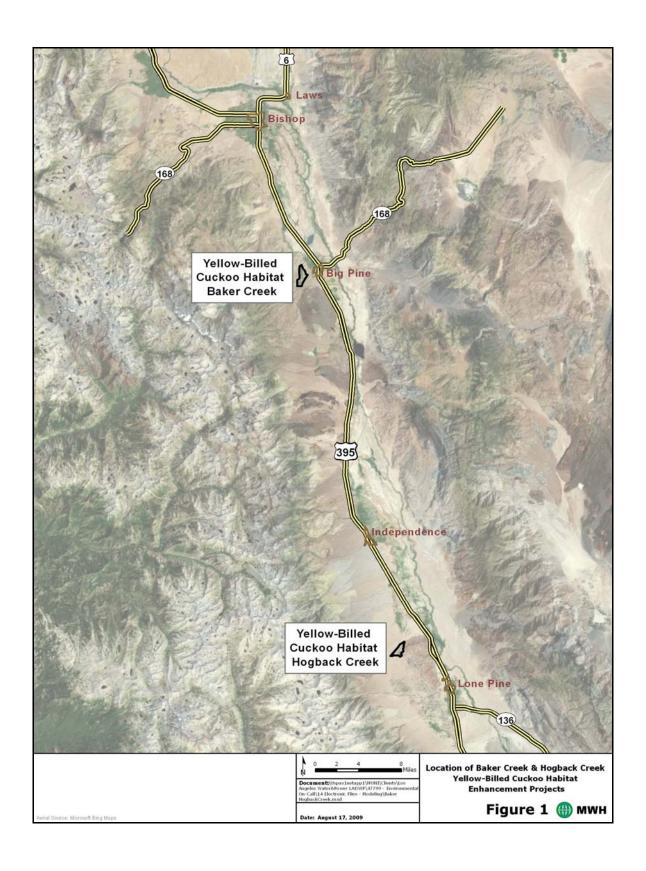
LADWP prepared, and proposes to implement, the Ad Hoc YBC Habitat Enhancement Plan at Baker and Hogback Creeks in compliance with the MOU and the 2004 Stipulation and Order related to the MOU. The goal of implementing the Ad Hoc YBC Habitat Enhancement Plan is to maintain and/or improve habitat conditions at Baker and Hogback Creeks to potentially increase the population of YBC in California.

1.3 PROJECT LOCATION AND ENVIRONMENTAL SETTING

The proposed Ad Hoc YBC Habitat Enhancement Plan covers the areas of Hogback Creek and Baker Creek in Inyo County, California (**Figure 1**).

The Baker Creek habitat area is located on the Big Pine 7.5 minute U. S. Geological Survey (USGS) quadrangle, and the latitude/longitude of the approximate center of the habitat area is latitude N 37.163 / longitude W -118.320 Township 9S Range 33E. The 1,411-acre project area is leased to the 4-J Cattle Company from LADWP for cattle grazing. The habitat area is located along Baker Creek and Giroux Ditch approximately 1.5 miles west of Big Pine. The lease is bordered on the west by lands administered by the U.S. Bureau of Land Management (BLM). Project areas include the Brown Pasture and the Brown Exclosure, the Apple Orchard and Apple Orchard Exclosure, and Baker Pasture. In 2007, a wildfire burned riparian habitat in the Apple Orchard Exclosure and the Apple Orchard. Habitat has begun to recover with the return of understory species and sprouting of willows (*Salix spp.*) and cottonwoods (*Populus spp.*) from the bases of their trunks.

The Hogback Creek habitat area is located at the northwest corner of the Alabama Hills, west of U.S. Highway 395 and between the towns of Independence and Lone Pine. Hogback Creek is located on the Manzanar 7.5-minute USGS quadrangle, and the latitude/longitude of the approximate center of the habitat area is latitude N 36.657 / longitude W -118.146 Township 15S, Range 35E. The Project area at Hogback Creek includes 111 acres of riparian vegetation with a dense canopy of native willows and cottonwoods, 50 acres of mesic meadow, and approximately 2 acres of wet meadow.



1.4 PROJECT DESCRIPTION

1.4.1 Baker Creek

Planting Plan. Eight planting areas (A through H) are located at Baker Creek (Figures 2A and 2B, Table 1). Plantings of cottonwood (Fremont and black) and willow (red, Gooding's, and arroyo) species will be implemented using pole cuttings. Cottonwoods and willows will be planted in areas of suitable depth to groundwater (generally 4-6 feet below ground surface) in existing willow areas and patches of meadow vegetation. The cuttings are intended to sprout and take root, resulting in an increase in forested area. The cuttings will be collected in the Big Pine area within 25 miles of Baker Creek. Pole plantings will be straight, poorly branched large diameter (generally 2-3 inches) cuttings that are relatively long, 4 to 10 feet in length. Plantings will be approximately 12 feet apart and a few feet deep (approximately 1 foot below water table) using an auger. Specific planting locations will be determined in the field based on site characteristics; pole plantings will not be irrigated. In patches of coyote willow, to allow sunlight to reach the new plantings, the willow patch will be trimmed to ground level within a 4ft diameter circle. In pastures, cages will be placed around plantings to protect the plants. Temporary fencing (potentially including electric fencing) may also be used during the plant establishment period. Cage and fence protections will be removed once the plants are no longer vulnerable to herbivores.

Planting Schedule. Plantings will begin in the first planting season after plan approval, and will continue until each area is planted, likely within three to five seasons depending on the availability of pole cuttings. Additional planting will be done as the black locust control plan is implemented within specific planting areas, over the next 8 to 10 year period. Replacement of dead cuttings will be conducted when mortality within individual planting areas in the first season is greater than 50 percent for cottonwoods, or greater than 20 percent for willows. LADWP will also replace (one time) planted willows and cottonwoods irreparably damaged or destroyed by catastrophic events beyond LADWP's control if irreparable damage or destruction (e.g., fire) occurs within 18 months of initial planting and over 60 percent of the total acreage of planting at the mitigation site is irreparably damaged or destroyed.

Black Locust Control. Black locust will be removed from four of the planting areas (E, F, G and H) in areas that can support native trees (areas with suitable soils and depth to groundwater). Areas 22, 8, 18, 14 (eastern portion), 3, 4 (eastern portion), 6, 7, and 11 (eastern portion) (**Figure 3**) are the priority areas for black locust removal. Black locust removal will also be done in locations outside the planting areas if willows also occur, and native riparian species can replace the exotic tree (see locations 5, 14, 15, and 21 on **Figure 3**). Black locust will be removed in three ways: 1) cutting down the trees and treating the stumps with an herbicide; 2) herbicide injection to standing trees which will be left in place to provide wildlife habitat; and, 3) foliar herbicide treatment to locust saplings and seedlings. Herbicide use may include Garlon 4® Herbicide with triclopyr (as butoxyethylester; BEE) as the active ingredient (62 percent) and vegetable oil as one of the inert ingredients. Tree cutting and stump application will be conducted in the winter to decrease impacts to surrounding vegetation. Foliar treatments and herbicide injections will be conducted during the growing season; several treatments per season may be required to prevent re-sprouting.

Performance Criteria for Planting Plan. The goal of the planting plan is to increase canopy cover in areas of Baker Creek currently designated as non-use (Area C), low YBC suitability (Areas A, E, F), low to medium suitability (Areas B, D, H) or medium suitability (Area G). The desired condition 6 to 10 years after implementation of the Project is medium suitability in Areas A through F and high suitability in Areas G and H. The performance criteria to be met in Year 6 following initial planting will be:

- Planting Areas A, B, C, D, E, and F Cover of target upper and mid canopy species is at least 50 percent.
- Planting Areas G and H Cover of target upper and mid canopy species is equal to 65 percent.
- Native species understory cover will be at least 50 percent in all planting areas.
- Black locust cover will be no more than 5 percent in all the planting areas.
- Cover of other non-native species in the understory will be less than 25 percent in all planting areas.

The performance criteria for non-native species to be met in Year 3 following the removal of black locust in areas dominated by willows where no planting of target willow trees has been specified, or following fire within these areas will be:

- Black locust cover will be no more than 5 percent.
- Cover of other non-native species in the understory will be less than 25 percent.

Table 1
Summary of Planting Plan for Baker Creek

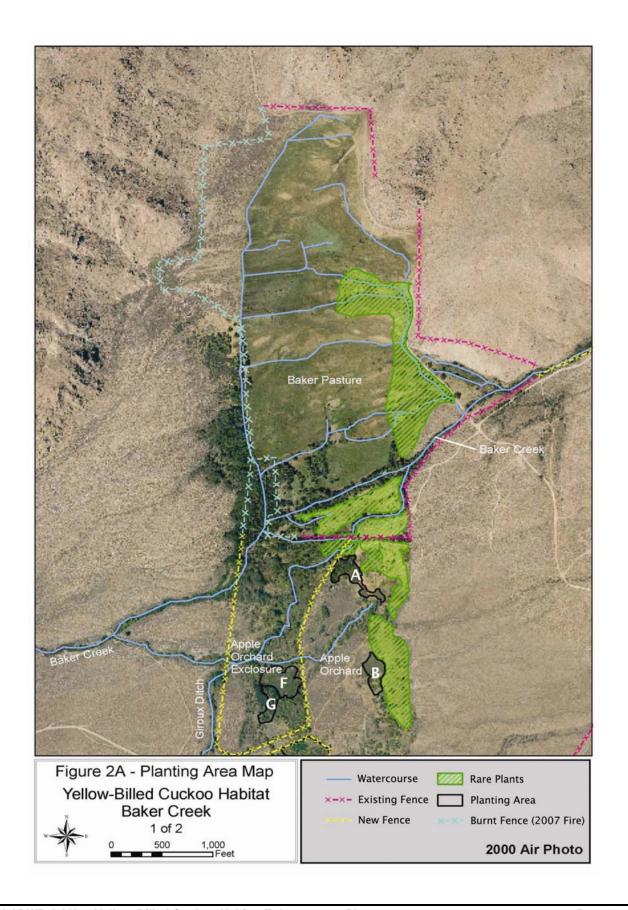
Planting Area Designation	Location	Size (acres)	Planting Plan (estimated number of cuttings)
-	A O	,	`
Α	Apple Orchard	1.7	Pole plantings (593) in coyote willow patches
			and meadows
В	Apple Orchard	1.3	Pole plantings (397)
С	Brown Pasture	0.7	Pole plantings (244) in two meadow patches
	Exclosure		
D	Brown Pasture	2.9	Pole plantings (768) in willow patches
	Exclosure		
Е	Brown Pasture	8.7	Pole plantings (3,036) in meadow areas
	and Brown		between existing trees; removal of black
	Exclosure		locust in areas that can support native riparian
			trees
F	Apple Orchard	2.1	Pole plantings (733) in areas that were
	Exclosure		dominated by coyote willow prior to the July
			2007 fire; removal of black locust in areas that
			can support native riparian trees
G	Apple Orchard	1.0	Pole plantings (348) in areas between existing
	Exclosure		trees; removal of black locust in areas that
			can support native riparian trees
Н	Apple Orchard	3.3	Pole plantings (903) in areas between existing
			trees; removal of black locust in areas that
			can support native riparian trees

Monitoring and Adaptive Management for Plantings. Pole plantings without cage or fence protection will be monitored for herbivory (monthly throughout the first growing season) and cages/fences will be checked as part of routine monitoring activities. Quantitative monitoring (percent canopy, natural recruitment) will begin in the late summer after the second growing season and continue through Year 6 or until the success criteria are met.

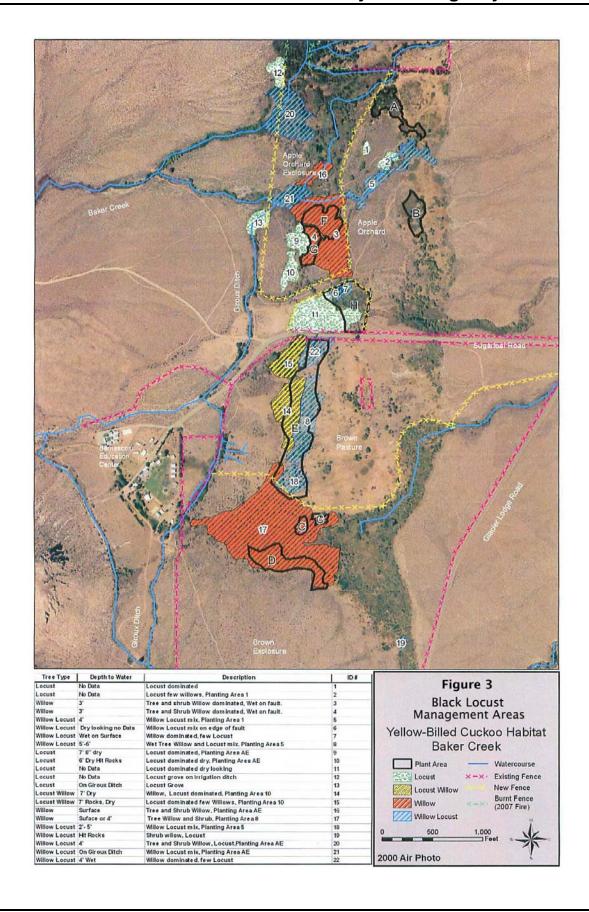
Monitoring results will guide management of the habitat using an adaptive management approach. As outlined in Section 2.1.9.1 of the Ad Hoc Yellow-Billed Cuckoo Habitat Enhancement Plan (LADWP, 2009a), planting areas will be reevaluated, new methods may be used, planting areas may be expanded, black locust control may be altered or discontinued, and noxious weed controls may be implemented.

As is LADWP's on-going practice, beaver and beaver dams will be removed if the dams are causing excessive flooding, significantly restricting flow or damaging or inhibiting the development of riparian habitat.

In addition to the planting plan, the Ad Hoc Habitat Enhancement Project for Baker Creek includes management of grazing, public access, and fire controls.







Grazing Management. LADWP has developed grazing management plans for each of the leases in Inyo County. The Baker Creek grazing management plan was developed in cooperation with the MOU parties and the 4-J Cattle Company, the lessee for the area, who runs a commercial cow/calf operation. Almost all of the available forage on the Baker Creek lease is produced in the Baker, Apple Orchard, and Brown Pastures. The lessee will have 1 to 3 years from the implementation of the grazing management plan to phase in the new requirements. In summary, the grazing management plan for Baker Creek includes:

- Two grazing exclosures will be installed to contain the majority of the riparian acreage located in the Brown (181.9 acres) and Apple Orchard (52.7 acres) Pastures (Figures 2A and 2B). No grazing will take place between June 1 and September 1 of any year because of potential YBC breeding activity. Minimal grazing will be allowed in the exclosures from September 2 to May 31 (outside of the YBC breeding period) to control herbaceous vegetation in order to promote woody species recruitment and to reduce fire hazard. To create the exclosures, approximately 2 miles of existing fence will be repaired and 2.3 miles of new fence will be installed. Vegetation may be mowed (approximately 6 ft swath) in the immediate line of the fence prior to installation. Fencing would then be installed on the inside of the mowed area, leaving the mowed area available for vehicle staging and worker access. Fencing Specifications for the project are included as Appendix V of the Plan (LADWP, 2009a). In general, 54-inch high five-strand barbwire fences with metal T-posts every 10 feet are proposed. The fences will allow livestock to water in Baker Creek when using the Apple Orchard Pasture and to water in Bell Canyon and the Giroux Ditch when using the Brown Pasture.
- Livestock will be removed from the lease when monitoring determines that average utilization of herbaceous forage on riparian sites has reached 40 percent. [Monitoring includes placement of utilization cages in select pastures prior to the arrival of livestock. Key forage species are then documented using locally developed height-weight curves.] Maximum average herbaceous forage utilization allowed in upland areas will be 50 percent if grazing occurs during the active plant growth period. The grazing utilization rate will be 65 percent if no grazing occurs during this active period, or if the pasture is completely not used for a minimum of 60 continuous days during the latter part of this active period. For riparian pastures that also contain upland vegetation, livestock will be removed when either the riparian or upland grazing utilization standard is met. Grazing periods and number of cow/calf pairs are summarized in **Table 2**.

Table 2
Existing and Future Grazing Periods and Numbers of Cow/Calf Pairs

Pasture	Existing Grazing Period	Future Grazing Period	Existing Number of Cow/Calf Pairs	Future Number of Cow/Calf Pairs
Baker	May 1 to Nov 1	April 1 to	150 to 175	140 to 165
	Sept 15 to Dec 31	Dec 31	30 to 40	
Apple Orchard	March 1 to	March 1 to	75 to 100	50 to 75
	Dec 31	Dec 31		
Brown	April 1 to	April 1 to	30 to 40	35 to 50
	Dec 31	Dec 31		
Big Pine	Green Up	Green Up	Grazed in conju	nction with BLM
North	Green Up	Green Up	permits outside the LADWP lease	

- Livestock will be fed supplements (mix of molasses solids, proteins, fats, vitamins and trace minerals) in areas away from water, riparian vegetation, and known sensitive plant and animal habitats to help meet forage utilization standards. Supplemental feeding locations will be rotated from year to year.
- As is the current practice, the lessee will perform weed control annually via chemical and/or mechanical methods in coordination with LADWP.
- Under an adaptive management approach, fencing, forage utilization, livestock water sources, timing, and duration of grazing will be adjusted if necessary to achieve grazing management goals.

Construction Equipment. The following equipment is anticipated to be required in order to implement the habitat enhancements at the Baker Creek site:

Habitat Enhancement Project (Years 1, 2, 3+)

Planting Plan - Harvesting

- Light Duty Trucks (3)
- Quad-all Terrain Vehicles (3)
- Cherry Picker on Large Truck (1)
- Chainsaws (3)
- Polesaws (3)
- Man Lift (1)
- Refrigerated Storage Unit (1)
- Transport Vehicles (3)

Planting Plan - Planting

- Power Augers (1)
- Backhoe (2)
- Light Duty Trucks (3)
- Dump Trailer pulled by Light Truck (1)

- Quad-all Terrain Vehicles (3)
- Transport Vehicles (3)
- Dandy Digger (1)

Black Locust Removal (Multi-year Project)

- Backhoe (2)
- Chainsaws (5)
- Quad-all Terrain Vehicles (4)
- Herbicide sprayers/ Injectors (2)
- Light Duty Trucks (4)
- Water Truck (1)
- Dump Truck (3)
- Burn Slash

Grazing Management Plan

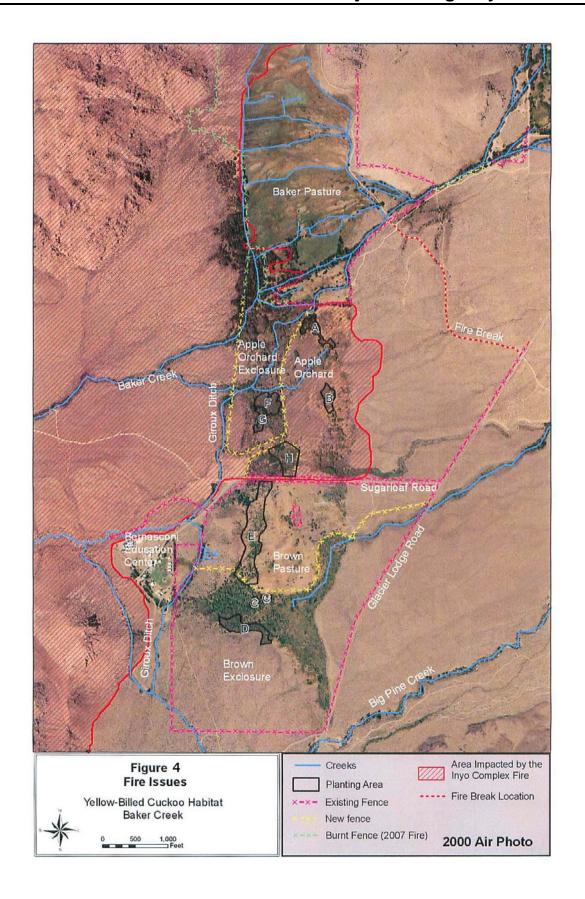
Fence Building (Year 1)

- Light Duty Trucks (5)
- Quad-all Terrain Vehicles (4)
- Chainsaws (3)
- Dandy Digger (1)
- Backhoe (2)
- ASV (Tracked Bobcat used for moving and T-Post pounding) (2)
- Air Compressor (1)
- Generator (1)
- Transport Vehicles (3)

Recreation Management. Unless increased demand or conflicts require increased management, recreational management of the Baker Creek lease will not change as part of the Project except that off-highway vehicle (OHV) use will not be allowed within the habitat exclosures. Existing trails will be available for foot traffic. A short length (approximately 600 feet) of new OHV trail will be constructed along the eastern edge of the Apple Orchard Exclosure to maintain OHV access between the east and west sides of the exclosure. Mowing/vegetation removal along this 600 ft length to reconfigure the OHV trail is anticipated to be adequate; grading is not expected to be necessary.

Fire Control. A fire break will be created by LADWP and the California Department of Forestry (CDF) between the project area and Big Pine (**Figure 4**) by hand clearing 15 feet on either side of the power line road that runs between Baker Creek Pasture and Glacier Lodge Road. Native grasses and forbs will be left as groundcover. Tree branches will be trimmed to a height of 10 feet.

Managed burns, if any, will be done in coordination with LADWP. Unintentional fires in riparian habitats will be given high priority for fire suppression. LADWP will then determine if a grazing rest period is needed to allow vegetation recovery.

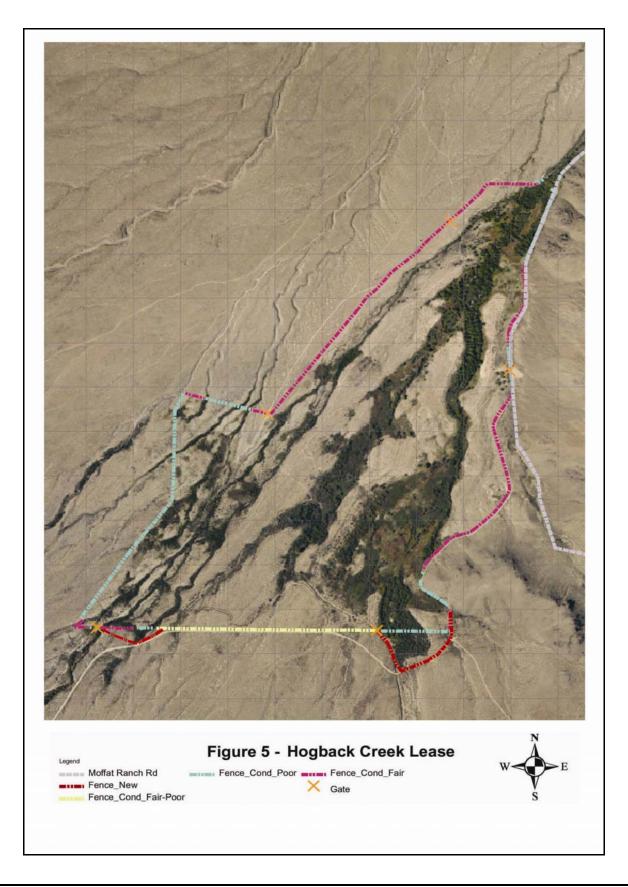


1.4.2 Hogback Creek

The Habitat Enhancement Plan for Hogback Creek includes management of grazing, public access, and fire controls (**Figure 5**).

Grazing Management. The Hogback Creek area is leased by LADWP to Red's Meadow Pack Station – a horse and mule packer operation. The lessee will have 1 to 3 years from the implementation of the grazing management plan to phase in the new requirements. In summary, the grazing management plan for Hogback Creek includes:

- Existing fencing will be repaired to eliminate cattle trespass. The 1.7 miles of poor condition fence will be rebuilt, the 0.6 miles of fair to poor condition fence will be repaired/rebuilt, and 2.1 miles of fair conditions fence will be repaired. Gates will be repaired/rebuilt as needed. Approximately 0.3 miles of new fence will be installed at the southeast corner of the site, on the north side of the existing road.
- The lessee can continue to graze 40 to 50 head of livestock from January 1 to April 30 of each year. Future grazing may be modified based on grazing utilization rates. Livestock will be removed from the lease when monitoring determines that average utilization of herbaceous forage on riparian sites has reached 40 percent. Maximum average herbaceous forage utilization allowed in upland areas will be 50 percent if grazing occurs during the active plant growth period. This grazing utilization rate will be 65 percent if no grazing occurs during this active period, or if the pasture is completely not used for a minimum of 60 continuous days during the latter part of this active period. For riparian pastures that also contain upland vegetation, livestock will be removed when either the riparian or upland grazing utilization standard is met.
- Currently, the lessee does not feed supplements to livestock. If livestock are fed supplements (mix of molasses solids, proteins, fats, vitamins and trace minerals), it will be in areas away from water, riparian vegetation, and known sensitive plant and animal habitats to help meet forage utilization standards. Supplement feeding locations will be rotated from year to year.
- As is the current practice, the lessee will perform weed control annually via chemical and/or mechanical methods in coordination with LADWP.
- Under an adaptive management approach, fencing, forage utilization, livestock water sources, timing, and duration of grazing will be adjusted if necessary to achieve grazing management goals.



Construction Equipment. The following equipment is anticipated to be required in order to implement the grazing management plan at the Hogback Creek site:

Fence Building/Repairing (Year 1)

- Light Duty Trucks (5)
- Quads (4)
- Chainsaws (3)
- Dandy Digger (1)
- Backhoe (2)
- ASV (Tracked Bobcat used for mowing and T-Post pounding) (2)
- Air Compressor (1)
- Generator (1)

Recreation Management. Unless increased demand or conflicts require increased management, recreational management of the Hogback Creek lease will not change as part of the Project. Existing LADWP guidelines for recreational use will apply.

Fire Control. Managed burns, if any, will be done in coordination with LADWP. Prior to managed burns on adjacent leases, fire breaks will be installed to protect the Hogback Creek area. Unintentional fires in riparian habitats will be given high priority for fire suppression. LADWP will then determine if a grazing rest period is needed to allow vegetation recovery.

1.5 APPLICABLE PLANS AND POLICIES

The Project is located on LADWP-owned land within Inyo County. The Inyo County General Plan designates the area as a Natural Resources planning area. The zoning overlay is Open Space; 40-acre minimum lot size.

1.6 PROJECT APPROVALS

The proposed Project has been defined in cooperation with the MOU parties and the relevant lessees. The Project is also consistent with LADWP policies regarding land management, grazing, recreation, and fire control. Future surveys for YBCs at Baker and Hogback Creeks would be done in compliance with a CDFG memorandum of understanding, as applicable. Additionally, project implementation includes installation of fencing across waterways (Baker Creek, Giroux Ditch, and Hogback Creek). Alterations to waters of the state are subject to CDFG Code Section 1602 (streambed alteration agreements) and placement of fill materials into waters of the U.S. is subject to permitting by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act and the Regional Water Quality Control Board under Section 401. Installation of the fences under the proposed Project may be deemed consistent with existing LADWP agreements with CDFG. Permits or approvals from other agencies are not anticipated.

Section 2 Environmental Analysis

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

	Elita Comment	E I AO I O I O I E I	THALL M	120125
				ted by this project, involving at least e checklist on the following pages.
	Aesthetics	Geology and Soils		Noise
	Agricultural Resources	Hazards and Hazardo	us Materials	Population and Housing
	Air Quality	Hydrology and Water	Quality	Public Services
	Biological Resources	Land Use and Plannin	ıg	Recreation
	Cultural Resources	Mineral Resources		Transportation and Traffic
				Utilities and Service Systems
2.2	AGENCY DETER	MINATION		
On t	ne basis of this initial eval	uation:		
	I find that the project CO DECLARATION will be pre		cant effect on	the environment, and a NEGATIVE
\boxtimes	I find that although the p significant effect in this ca applicant. A MITIGATED N	ase because revisions in the	he project have	the environment, there will not be a been made by or agreed to by the
	I find that the project MAY REPORT is required.	have a significant effect on	the environmen	t, and an ENVIRONMENTAL IMPACT
	impact on the environment pursuant to applicable lega	, but at least one effect 1) la al standards, and 2) has b ed on attached sheets. An	has been adequ een addressed l ENVIRONMENT	ootentially significant unless mitigated" ately analyzed in an earlier document by mitigation measures based on the AL IMPACT REPORT is required, but
	significant effects (a) have pursuant to applicable star	e been analyzed adequatendards, and (b) have been	ely in an earlier avoided or miti	e environment, because all potentially EIR or NEGATIVE DECLARATION igated pursuant to that earlier EIR or es that are imposed upon the project,
			100	7
Signa	ature: Momas C.	Vaila for	A	lanager, Environmental Planning and ssessment
Printe	CHARLES C. HO	DLLOWAY	Date:	October 21, 2009

2.3 ENVIRONMENTAL CHECKLIST

2.3.1 Aesthetics

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wc	uld the project:				
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

Discussion:

a) and c) Less Than Significant Impact. The Baker Creek site can be viewed from Glacier Lodge Road and from Sugarloaf Road (and the Bernasconi Education Center). Views are of Great Basin scrub, groves of black locust, riparian vegetation, and scattered boulders. From Moffat Ranch Road, views of the Hogback Creek site include Great Basin sagebrush, riparian and wetland vegetation, with the Sierra Nevada Mountains in the background. Views from the Hogback Creek site to the south and east are of the Alabama Hills (BLM Local Special Recreation Management Area) with their characteristic rock outcroppings.

Construction of the proposed Project will include mowing of linear areas to allow fence installation/repair, construction of a short reach (600 ft) of OHV trail, use of power augers to prepare the planting sites for pole cuttings, and removal of black locust trees. Within the context of the 1,411-acre (Baker) and 163-acre (Hogback) habitat areas, these minor alterations in the vegetation of the area will have a less than significant impact on the visual character of the Project site. Planting of native vegetation (and eventual establishment of a contiguous riparian corridor) and implementation of grazing management to protect vegetation resources are part of the proposed Project. The impact on aesthetics from these Project elements will be beneficial.

b) Less Than Significant Impact. Scenic roadways are designated by BLM, Inyo National Forest, California Department of Transportation (Caltrans), and the Federal Highway Administration. The closest designated scenic roadway is State Highway 395, located over 1 mile east of each site (Caltrans, 2009). Based on the limited extent of the Project-related changes to aesthetics and the distance to Highway 395, the impact on scenic roadways will be less than significant.

d) **No Impact.** The proposed Project does not include use or installation of new sources of lighting or reflective material. There will be no impacts on light or glare that could affect day or nighttime views of the area.

2.3.2 Agricultural Resources

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				

Discussion:

- a) **No Impact.** The Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency is administered by the California Department of Conservation (CDOC). The FMMP does not include Inyo County, therefore the proposed Project would have no impact on conversion of FMMP designated Farmland.
- b) **No Impact.** Existing zoning by Inyo County of the Baker Creek and Hogback Creek sites is OS-40 (Open Space, 40 acre minimum lot size) with a land use designation of NR (Natural Resources). The Baker Creek and Hogback Creek sites are not entered into Williamson Act contracts Inyo County does not offer a Williamson Act program. Therefore the proposed Project would have no impact on agricultural zoning or Williamson Act contracts.
- c) Less Than Significant Impact. Cattle ranching (Baker Creek) and a pack animal operation (Hogback Creek) are currently present on the project sites. At Baker Creek, cattle will be excluded from 235 acres (16 percent) of the lease (the Brown and Apple Exclosures) a majority of the time. Cattle will be removed from other areas of the lease when vegetation utilization rates are reached. As noted in **Table 2**, the total maximum grazing period has not been reduced; it has been extended by 1 month for the Baker Pasture. However, the future number of cow/calf pairs will be reduced over existing conditions by 10 25 in the Baker and Apple Orchard pastures. There will be an increase of 5 10 pairs in the Brown pasture. At Hogback Creek, the same number of pack animals (40 to 50) will be allowed to graze the site for the same maximum period (January 1 to April 30), however, new fencing will exclude cattle which occasionally trespass on the site. Mules and horses will be removed from the lease when vegetation utilization rates are reached.

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These changes would have no impact on conversion of designated Farmland to non-agricultural use, since none is present on the Project site. The proposed Project would have an impact on local agriculture by restricting the operations of two lessees on LADWP-owned lands and restricting a portion of the Baker Creek site to non-agricultural use a majority of the time (within the exclosures). While these restrictions include construction of limited fencing, they do not represent irrevocable conversion of land use. Since these restrictions do not eliminate grazing on the lease and are management actions necessary to meet the multipurpose uses of the parcels (agriculture, wildlife habitat, and recreation), the impact will be less than significant.

2.3.3 Air Quality

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	uld the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d)	Expose sensitive receptors to substantial pollutant concentrations?				
e)	Create objectionable odors affecting a substantial number of people?				

Discussion:

The southern Owens Valley is located in the Great Basin Unified Air Pollution Control District (GBUAPCD). The valley has been designated by the State and EPA as a non-attainment area for the state and federal 24-hour average PM10 standards. Wind-blown dust from the dry bed of Owens Lake is the primary cause of the PM10 violations. The area has been designated as unclassified for the 1-hour ozone standard and unclassified or in attainment for all other ambient air quality standards (CARB, 2009). Large industrial sources are absent from Owens Valley. The major sources of criteria pollutants, other than wind-blown dust, are woodstoves, fireplaces, vehicle tailpipe emissions, fugitive dust from travel on unpaved roads, prescribed burning, and gravel mining.

- a) **No Impact.** The relevant air quality plan for the project area is the Final 2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan (SIP) (GBUAPCD, 2008). The focus of this planning document is implementation of dust control measures at Owens Dry Lake, the major particulate matter source in the valley. Since the proposed Project is not located at the lake and would not substantially increase particulate matter, there is no impact on the applicable air quality plan.
- b) Less Than Significant Impact. The GBUAPCD has not established specific quantitative thresholds of significance for air emissions from construction. However, emissions thresholds for permitting new stationary sources (GBUAPCD Rule 209-A) can be used as screening criteria to evaluate the potential significance of Project emissions during construction. [Since the carbon monoxide threshold in Rule 209-A is not a numeric standard, the South Coast Air Quality Management District threshold was used for this analysis.] Emissions during project construction would result from the operation of the equipment listed in Section 1, including: light duty trucks, all terrain vehicles, backhoes, and transport

trucks. Maximum daily emissions are predicted to be created during fence building in Year 1 at both project sites. Based on the assumption that fence work at both sites is done concurrently, **Table 3** summarizes worst-case peak day emissions estimates. Since emissions are estimated to be substantially below significance thresholds, the impact on air quality from project construction is less than significant. Project operation would include periodic vehicle trips to the project sites, with corresponding emissions much less than for project construction. The impact on air quality from project operation will therefore be less than significant.

- c) Less Than Significant Impact. The Project area is a non-attainment area for PM10. Construction and operation of the proposed Project would result in dust emissions from earth disturbance (fence installation, preparation for pole plantings, and OHV track creation). LADWP must meet GBUAPCD Rule 401, which requires that fugitive dust emission control measures be implemented to adequately prevent visible dust from the leaving the property and to maintain compliance with the PM10 standard. With planned use of a water truck as needed during black locust removal (as noted in Section 1), dust emissions related to Project construction and operation would not be anticipated to be visible off the Project site. Project-related impacts on PM10 will therefore be less than significant.
- d) Less Than Significant Impact. Sensitive receptors include schools, day-care facilities, nursing homes, and residences. The closest sensitive receptors to the Baker Creek site is the Bernasconi Education Center and Palisade Glacier Alternative High School located adjacent to the Project site on the southwest. The closest sensitive receptor to the Hogback Creek site is an elementary school (Lo-Inyo Elementary) located approximately 6.7 miles to the southeast. Construction and on-going operation of the proposed Project (i.e., fence installation and tree removal and planting) will include operation of the mechanical equipment noted in Section 1. Due to the limited air pollutant emissions from the small number of equipment, the short period of equipment use, and the distance to the receptors, the impact on sensitive receptors will be less than significant.
- e) Less Than Significant Impact. Project construction and operation will result in minor localized odors associated with fuel use for equipment and vehicles. These odors are common, not normally considered offensive, and would not be experienced by any residences since none are immediately adjacent to the project sites. Odor impacts to potential recreation visitors at the sites during construction activities will therefore be temporary and less than significant.

Climate Change. Although anticipated in 2010, there are no currently adopted IES Thresholds of Significance in the CEQA Guidelines for analyzing the impacts of a project on climate change.

The proposed Project is a habitat enhancement plan which includes grazing, vegetation, recreation, and fire management elements. Operation of the project will not substantially increase air pollutant emissions over existing conditions and therefore would have no significant impact on climate change. Any increase in vegetated area resulting from the Project would have a beneficial impact. As described above, construction of the Project will result in less than

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significant combustion emissions from vehicles and equipment. The greenhouse gases and therefore climate change will be less than significant	impact on emissions of nt.

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Summary of Estimated Worst-Case Peak Day Construction Emissions for Concurrent Fence Installation at Both Project Sites Table 3

					 	Emission Factor (lbs/mi)	or (lbs/mi)			Estim	ated Pe	ak Day E	Emissio	Estimated Peak Day Emissions (lbs/day)	<u>S</u>
Emissions Source (on-road vehicles and ATVs)	Vehicle Type	No.	Estimated Maximum miles per day	00	oox	NOx	SOx	PM10	PM2.5	00	VOC	NOX	SOx	PM10	PM2.5
Light Duty Truck	PV	10	20	0.008263	0.000914	0.000918	0.000011	0.000087	0.000055	1.653	0.183	0.184	0.002	0.017	0.011
ATV	PV	8	20	0.008263	0.000914	0.000918	0.000011	0.000087	0.000055	1.322	0.146	0.147	0.002	0.014	0.009
Transport Vehicles	HHDT	3	40	0.011955	0.003042	0.038221	0.000041	0.001831	0.001601	1.435	0.365	4.587	0.005	0.220	0.192
					Em	Emissions Factor (lbs/hr) ²	tor (lbs/hr)	2		Estim	ated Pe	ak Day E	Emissio	Estimated Peak Day Emissions (Ibs/day)	ıy)
Emissions Source (construction equipment)	No.		Estimated Maximum hrs of use per day	00	voc	NOx	SOx	PM10	PM 2.5 ³	00	VOC	NOx	SOx	PM10	PM 2.5
Backhoe/Bobcat	8		4	0.393	0.1021	0.6747	0.0008	0.0521	0.0464	12.576	3.267	21.590	0.026	1.667	1.484
Air compressor	2		8	0.3613	0.112	0.732	0.0007	0.0526	0.0468	5.781	1.792	11.712	0.011	0.842	0.749
generator	2		8	0.3293	0.0961	0.644	0.0007	0.0396	0.0352	5.269	1.538	10.304	0.011	0.634	0.564
Dandy Digger (other construction equip)	2		4	0.4108	0.1056	1.0117	0.0013	0.0442	0.0393	3.286	0.845	8.094	0.010	0.354	0.315
Total	4									31.3		56.6	0.1	3.7	e. ¦
Significance Thresholds	. spi									550	250	250	250	80	55 -

Notes: PV: passenger vehicles, HHDT: heavy-heavy-duty trucks

Sources:

¹ SCAQMD, 2007a. EMFAC2007 version 2.3 Emission Factors for On-Road Passenger Vehicles & Delivery Trucks. Scenario Year 2010.
2 SCAQMD 2007b. SCAB Fleet Average Emission Factors (Diesel). Scenario year 2010.
3 SCAQMD. 2006. Final –Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance.
4 GBUAPCD. 1993. Rule 209-A Standards for Authorities to Construct.
5 SCAQMD. 1993. CEQA Air Quality Handbook.

2.3.4 Biological Resources

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	uld the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

Discussion: Vegetation communities present at the Baker Creek site include red willow riparian forest, riparian scrubland, black locust riparian forest, emergent marsh/bog, mesic meadow and upland. The Brown Exclosure encompasses 181.9 acres and the Apple Orchard Exclosure encompasses 52.7 acres. **Table 4** summarizes vegetation types within the exclosures (LADWP, 2009a).

Table 4
Vegetation Communities in the Baker Creek Exclosures

Brown Exclosure		Apple Orchard Exclosure	
Vegetation Community	Size (acres)	Vegetation Community	Size (acres)
Blackbrush scrub	61.7	Blackbrush scrub	1.2
Great Basin mixed scrub	31.2	Rabbitbrush scrub	5.7
Rabbitbrush scrub	23.5	Big Sagebrush scrub	4.9
Big Sagebrush scrub	3.2	Rush/sedge meadow	0.5
Modoc/Great Basin riparian scrub	62.3	Modoc/Great Basin riparian scrub	39.3
Modoc/Great Basiii fipafiafi scrub	02.3	Irrigated Agriculture	1.1
Total	181.9		52.7

Source: LADWP, 2009a

The Hogback Creek habitat area includes riparian forest, riparian scrubland, emergent marsh/bog, wet meadow and upland. Based on assessments conducted in 2004, the Hogback Creek project site includes 111 acres of riparian vegetation, 50 acres of mesic meadow, and approximately 2 acres of wet meadow (Ecosystem Sciences, 2004). Riparian habitat appears to be primarily supported by springs and seeps.

The vegetation types found at the Project sites support a wide variety of birds, including Spotted Towhee, House Wren, Bewick's Wren, Mourning Dove, and California Quail. Mammal species expected to use the sites include mule deer, black bear, mountain lion, coyote, deer mice, black-tailed jackrabbit, desert cottontail, raccoon, and bobcat.

The objective of the proposed Project is to maintain and improve habitat conditions at Baker and Hogback creeks to potentially increase the population of YBC in California. YBC are seasonal migrants to Inyo County, nesting in riparian habitat between late June to August, and wintering in South America. The species is known for both Baker Creek and Hogback Creek project sites but nesting is limited by the fragmentation of suitable habitat at the sites. Each pair of cuckoos is estimated to need 50 to 100 acres of nearly contiguous suitable habitat to nest successfully.

- a) Less Than Significant Impact With Mitigation Incorporated. Based on observations by LADWP staff and others, the following special status species are known for the Baker and Hogback Creek project sites:
 - Owens Valley checkerbloom (*Sidalcea covillei*) (state endangered)
 - Inyo County star-tulip (*Calochortus excavates*) (California species of special concern (CSC))
 - Western Yellow-Billed Cuckoo (*Coccyzus americanus occidentalis*) (state endangered)

Additionally, the following California species of special concern are known to nest/occur in the Baker creek area:

- Northern Harrier (Circus cyaneus) (CSC)
- Yellow-Breasted Chat (*Icteria virens*) (CSC)
- Yellow Warbler (Dendroica petechia) (CSC)

- Long-Eared Owl (Asio otus) (CSC)
- Owens Valley vole (*Microtus californicus vallicola*) (CSC)

Based on California Natural Diversity Data Base (CNDDB) listings for the Big Pine and Manzanar USGS quadrangles and other published records, the following additional sensitive species are known or have the potential to occur on the Project sites:

- Inyo phacelia (*Phacelia inyoensis*) (California Native Plant Society (CNPS) 1B)
- Parish's popcorn-flower (*Plagiobothrys parishii*) (CNPS 1B)
- scalloped moonwort (*Botrychium crenulatum*) (CNPS 2)
- sagebrush loeflingia (Loeflingia squarrosa) (CNPS 2)
- intermontane lupine (*Lupinus pusillus*) (CNPS 2)
- Nevada oryctes (*Oryctes nevadensis*) (CNPS 2)
- Robbins' pondweed (*Potamogeton robbinsii*) (CNPS 2)
- Shockley's milk-vetch (Astragalus serenoi var. shockleyi) (CNPS 2)
- Swainson's Hawk (*Buteo swainsoni*) (state threatened)
- Willow Flycatcher (*Empidonax traillii*) (state threatened, U.S. Forest Service Sensitive) and Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (federal endangered, state endangered)
- Cooper's Hawk (Accipiter cooperii) (CSC)
- Loggerhead Shrike (*Lanius ludovicianus*) (CSC)
- Brown Crested Flycatcher (*Myiarchus tyrannulus*)(CSC)
- Summer Tanager (*Piranga rubra*) (CSC)
- pallid bat (Antrozous pallidus) (CSC; U.S. Forest Service Sensitive)
- Townsend's big-eared bat (Corynorhinus townsendii) (CSC; U.S. Forest Service Sensitive)
- spotted bat (Euderma maculatum) (CSC)
- long-eared myotis (*Myotis evotis*) (CSC)
- Sierra Nevada bighorn sheep (Ovis canadensis sierrae) (federal endangered, state endangered)
- northern leopard frog (*Lithobates pipiens*) (CSC)
- Owens tui chub (*Gila bicolor snyderi*) (federal endangered, state endangered)
- Owens pupfish (*Cyprinodon radiosus*) (federal endangered, state endangered)

Sensitive Avian Species. The Project sites contain habitat potentially suitable for foraging, nesting, and wintering of sensitive avian species. Some of the species noted above are known for the sites; for example, Cooper's Hawk, Northern Harrier, and Loggerhead Shrike occur at the Hogback Creek site as transients/migrants/dispersers (Heath, 2004). The Yellow Warbler is a probable breeder, and Yellow-Breasted Chat is at known breeder, at the Hogback Creek site (Heath, 2004).

Noise and general disturbance during installation of project fences has the potential to disrupt nesting of area birds, including sensitive bird species. Fence construction is proposed to begin early in the spring of 2010 (March through May); the overlap with nesting season (May through July for most species) will be limited. However, Cooper's Hawks, Northern Harriers, Long-eared Owls and Loggerhead Shrikes often begin nesting in April if not earlier.

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Surveys will be conducted by LADWP biologists for nesting activities by these species prior to fence construction and if nesting is present, work will be suspended in the area. Fencing construction will resume in the fall if not completed in the spring of 2010. Subsequent disturbance for plantings and black locust removal will be conducted under the supervision of LADWP biologists; cut stump control of black locust will be conducted during the winter months but the other work will be directed around active nests as deemed necessary based on conditions observed in the field. Black locust trees containing active raptor nests or cavity nests will be left in place.

Owens Valley Vole. Owens Valley vole, a subspecies of California vole, are known from wetlands, grasslands, and other grass-dominated sites. Suitable habitat is present at the Project sites. If present on the Project sites, impacts could include burrow collapse from vehicle travel outside established roadways, fence post installation, and black locust tree stump removal. However, since work at the project sites will be conducted under the supervision of LADWP biologists, surface disturbances will be directed around active vole burrows if any are observed.

Sensitive Bat Species. The sensitive bat species known for the general Project area may forage at the Baker or Hogback Creek sites and may potentially roost in available rock crevices or hollow trees. Bat foraging would not be expected to be impacted since construction activity will occur in the daytime. If a bat roost is identified and expected to be impacted, the situation will be evaluated and appropriate action taken to avoid impacts such as exclusion measures or providing an alternative roost site.

Construction of the proposed exclosures, planting of willows and cottonwoods, and the management of livestock based on forage utilization rates will improve riparian habitat for sensitive bat species on the leases, especially those associated with these habitat types.

Fishes/Amphibians. The two endangered fish species listed on the CNDDB for the Big Pine quad are not known for the Project sites. Also listed on the CNDDB for the Big Pine quad, the northern leopard frog is not known for the Project sites. However, fence installation, plantings, and grazing management proposed under the Project would not be expected to adversely affect these species, if present.

Summary of Impacts to Sensitive Animal Species. With the proposed supervision by LADWP biologists, temporary impacts on sensitive animal species during Project construction will be less than significant. With the improvements to riparian habitat from construction of the proposed exclosures, planting of willows and cottonwoods, and the management of livestock based on forage utilization rates, Project operation will have a beneficial impact on sensitive animal species.

Sensitive Plant Species. Rare plants are known for Baker Creek (Baker Pasture, Apple Orchard, and Brown Pasture; Figures 2A and 2B) and for Hogback Creek (east side of the habitat area). New fencing proposed for the Apple Orchard Exclosure and Brown Pasture overlaps with these areas. Disturbance of sensitive plant species, if any are present in the specific locations to be disturbed for project implementation, would be a significant impact.

However, installation of fencing, plantings, and exotics removal will be done under the supervision of LADWP biologists. Areas of Owens Valley checkerbloom, Inyo County startulip, or other sensitive plant species will be flagged and access restricted during earth disturbing activities (vehicle travel, mowing, fence post installation, planting, herbicide use and/or tree removal) to prevent impacts to rare plant species. Work within areas known for sensitive plants will be done by hand, including pounding fence posts by hand. With the proposed installation methods which will limit vehicles and larger construction equipment in areas containing rare plant populations, impacts on sensitive plants will be less than significant with mitigation incorporated.

To reduce impacts to biological resources to less than significant, the following mitigation measure shall be implemented:

BIO-1

- Areas of Owens Valley checkerbloom, Inyo County star-tulip, or other sensitive plant species will be flagged and access restricted during earth disturbing activities (vehicle travel, mowing, fence post installation, planting, herbicide use and/or tree removal) to prevent impacts to rare plant species.
- Work within areas known for sensitive plants will be done by hand, including pounding fence posts by hand. Vehicles and larger construction equipment will be excluded from areas containing rare plant populations.
- b) Less Than Significant Impact With Mitigation Incorporated. Project construction will include disturbance to sensitive riparian plant communities related to vehicle travel outside of established roads, fence installation, pole plantings, and non-native tree removal. However, these activities will be done under the supervision of LADWP biologists. The overall impact of the Project from implementation of grazing utilization rates, pole plantings, and creation of exclosures will be to maintain and enhance riparian habitat. The temporary adverse impacts on riparian plant communities from Project implementation is less than significant with mitigation incorporated. The overall Project impact on riparian resources is beneficial.

Small areas of upland scrub habitat will be disturbed for creation of the OHV trail segment (estimated at 0.2 acres) at Baker Creek and for installation of new fencing at both sites. However, implementation of grazing utilization rates will protect existing upland vegetation by preventing overgrazing. Since this vegetation type is common throughout the region and is not designated for protection by resource agencies, the minor adverse impact is less than significant.

To reduce impacts to biological resources to a less than significant level, the following mitigation measure shall be implemented:

BIO-2

- Installation of fencing, plantings, and exotics removal will be done under the supervision of LADWP biologists.
- c) Less Than Significant Impact. Wetlands under federal jurisdiction (Clean Water Act Section 404 administered by the U.S. Army Corps of Engineers) include those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support wetland vegetation. Fencing across waterways is proposed at both Project sites; posts will be installed at the top of the banks above the high water mark. Therefore, construction impacts to federally protected wetlands will be less than significant. Project construction also includes planting within areas of wetland vegetation; a beneficial impact.
- d) Less Than Significant Impact. Since wildlife movements are often concentrated along riparian corridors, the Project sites are likely used by wildlife populations such as mule deer on a regular basis, and by migratory birds on a semi-annual basis. Noise and disturbance during construction of the proposed Project may temporarily impact wildlife movement on the site; the impact is less than significant. Installation of new fences and repair of existing fences at Baker Creek and Hogback Creek may provide new barriers to larger animals. "Elk crossings" will be installed at both Baker and Hogback Creeks during fence construction at known and logical locations to allow for deer and elk passage (see Appendix V of the Plan (LADWP, 2009a)). In addition, since an area between the southern boundary of the Apple Orchard Exclosure and planting area H (Figure 2B) will remain unfenced, the impact on wildlife movements will be less than significant.
- e) **Less Than Significant Impact.** No tree ordinances apply to the proposed Project sites. The Inyo County General Plan Goals and Policies (2001) cite the preservation and protection of riparian and wetland areas and the restoration of degraded biological communities as Biological Resources Goals (Policies BIO-1.2 and BIO-1.3). Since the proposed Project is consistent with this goal and since the only tree removal planned is of exotic black locust, the impact on local policies or ordinances protecting biological resources is less than significant.
- f) **No Impact.** There is no designated critical habitat that includes the Hogback Creek or Baker Creek sites (USFWS, 2005). There are no Significant Natural Areas (SNAs) as determined by CDFG at the Hogback Creek or Baker Creek sites, and there are no adopted habitat conservation plans or natural community conservation plans for these sites. LADWP is currently preparing a Habitat Conservation Plan (HCP) for LADWP-owned lands in Inyo County; this plan is not yet finalized. The proposed Project is a habitat plan that will be adopted by LADWP. There is no impact on any other adopted habitat plan.

2.3.5 Cultural Resources

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				_
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				\boxtimes
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d)	Disturb any human remains, including those interred outside of formal cemeteries?				

Discussion: Review of the Project sites for cultural resources was originally conducted in 2006 (Bevill and Nilsson). Pedestrian survey of the Baker Creek area for that study resulted in the discovery and recordation of 22 archeological sites (11 prehistoric, four historic, and seven multiple component) including one previously recorded site. Survey of the Hogback Creek area resulted in the recordation of 10 sites (one prehistoric, seven historic, and two multiple component).

Based on the updated description for the habitat enhancement project, additional record searches and field surveys for cultural resources were conducted in June 2009 by Garcia and Associates (GANDA). The Cultural Resources Inventory and Paleontological Resources Inventory reports completed for the project are on file with LADWP. To protect resources, site records are not appended to the Initial Environmental Study.

- a) **No Impact.** The record search included review of the National Register of Historic Places (NRHP) Index of Listed Properties, California Register of Historical Resources (CRHR), Office of Historic Preservation Historic Property Data File for Inyo County, California Historical Landmarks, and California Points of Historical Interest. No resources within the search radius were listed or eligible for listing on the NRHP or CRHR, or any other historic designation. However, although not noted in the inventories, the Giroux Ditch is a known historic resource. Since no alterations to Giroux Ditch are proposed as part of the Project and since no other significant resources are present, project implementation will have no impact on historical resources.
- b) Less Than Significant Impact With Mitigation Incorporated. In addition to review of the 2006 cultural resources report for the project, a records search was performed on June 22, 2009 at the Eastern Information Center at the University of California Riverside for a 0.5 mile radius of the project sites. Three previous studies were found in the vicinity of the project sites but no identified resources intersect with the proposed Project fence lines.

Pedestrian survey of the proposed new fence lines and planting areas at the habitat areas was conducted on June 10, 2009. Transects were traversed on both sides of the proposed fence line with visibility ranging from very good (90 percent) in the recently burned areas of Baker Creek and in most areas of Hogback Creek to very poor (0 percent) in the well watered highly vegetated areas of both sites. Seven new sites (five archaeological sites and two isolates) were identified at Baker Creek including historic trash scatter/burn pits, large can scatter, and an abandoned section of Glacier Lodge Road. Three new archaeological sites and five new isolates were identified at Hogback Creek including historic trash scatter and lithic scatter.

Installation of the proposed fences, brush mowing, planting, and tree removal have the potential to disturb surface and subsurface archaeological materials at the project sites. None of the sites recorded in the project areas have been formally evaluated to determine their significance under CEQA, therefore disturbance to the sites is a potentially significant impact.

Therefore, the following mitigation measure shall be implemented to reduce impacts to below a level of significance:

CUL-1

- If ground disturbances are proposed within the boundaries of, or in close proximity to, any of the previously recorded archaeological sites (BC-1 through BC-22 and HB-1 through HB-11; as described in Bevill and Nilsson, 2006), or newly recorded archaeological sites (BC-09-01 through BC -09-05 and HB 09-01 through HB-09-03; as described in Reid and Denardo, 2009) a qualified archaeologist shall delineate a 50-foot buffer, using flagging tape, around each archaeological site where ground disturbances are proposed prior to the start of Project construction.
- Mowing, minor vegetation removal, planting, and fence installation within the flagged buffer zones shall be monitored by an archaeologist.
- Black locust trees located within the flagged buffer zone areas shall be treated with herbicide and left in place.
- If more extensive ground disturbances (including, but not limited to, tree removal or grading) become necessary within the flagged buffer zones, further archaeological investigations, which may include evaluation, testing and data recovery, will be required prior to implementation of those actions.
- If previously unrecorded cultural resources are encountered during the project, all work shall cease within 100 feet of the discovery until the find can be evaluated by a qualified archaeologist.
- Prior to the start of construction, construction personnel shall be trained regarding the possibility of encountering previously unidentified or buried cultural materials, including both prehistoric and historic resources, during construction. Prior to the

initiation of construction or ground-disturbing activities, the project proponent should complete training by a qualified archaeologist for construction personnel. Worker education will focus on the rationale for cultural resources monitoring; regulatory policies protecting resources - a discussion of applicable laws and penalties under the law; a basic identification of cultural resources; and the protocol to follow in case of discovery, including Native American burials.

With implementation of the above mitigation measure, CUL-1, Project-related impacts on cultural resources will be less than significant.

- c) **Less Than Significant Impact With Mitigation Incorporated.** A fossil locality search was conducted for Inyo County on June 6th, 2009 through the Berkeley Natural History Museum online database. The following geologic units have been mapped with the project areas (Bateman, et al., 1965):
 - <u>Cretaceous Rocks</u> Rocks Similar to the Cathedral Peak Granite Alaskite, which is a geologic subgroup of this geologic unit, only crops out in the north-eastern part of the Baker Creek restoration area. This unit is not known to carry any fossils.
 - <u>Tertiary and Quaternary Sediments</u> Older Dissected Alluvial Fan and Lakebed Deposits While the majority of this unit is thought to be of Pleistocene age, some strata may contain tertiary sediments. Alluvial fans and lakebed deposits are known to be fossiliferous. Both vertebrate and invertebrate fossils have been documented here.
 - <u>Holocene and Pleistocene Deposits</u> Younger Alluvial Fan Deposits Because alluvial fans often mix both new and older sediments, this geologic unit, while consisting predominantly of Holocene age sediments, may contain Pleistocene aged sediments too, thus making fossil finds of both vertebrate and invertebrate fossil finds possible.

Pedestrian survey of the proposed new fence lines and planting areas at the habitat areas was conducted on June 10, 2009. No paleontological resources were observed. Since the project includes only minimally invasive excavation for fence installation and plantings, impacts to paleontologically sensitive geologic units will be less than significant with mitigation incorporated.

With implementation of the following mitigation measure, CUL-2, Project-related impacts on paleontological resources will be less than significant.

CUL-2

Prior to the start of construction, a qualified paleontologist will conduct training for
construction personnel to review the procedures to be followed upon the discovery of
paleontological materials. Worker education will focus on the rationale for
paleontological resources monitoring; regulatory policies protecting resources - a
discussion of applicable laws and penalties under the law; a basic identification of
fossils; and the protocol to follow in case of discovery.

d) Less Than Significant Impact With Mitigation Incorporated. There was no evidence of human remains within the project site at the time the pedestrian surveys were conducted (2006, 2009). However, in the unexpected event that human remains are discovered, the Inyo County Coroner would be contacted, the area of the find would be protected, and provisions of State CEQA Guidelines Section 15064.5 would be followed.

With implementation of the below mitigation measure, CUL-3, Project-related impacts on cultural resources will be less than significant.

CUL-3

• In the unexpected event that human remains are discovered, the Inyo County Coroner would be contacted, the area of the find would be protected, and provisions of State CEQA Guidelines Section 15064.5 would be followed.

2.3.6 Geology and Soils

		Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	uld t	he project:				
a)	ad\	pose people or structures to potential substantial verse effects, including the risk of loss, injury, or death polying:				
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii)	Strong seismic ground shaking?				
	iii)	Seismic-related ground failure, including liquefaction?				
	iv)	Landslides?				
b)	Res	sult in substantial soil erosion or the loss of topsoil?				
c)	tha and	located on a geologic unit or soil that is unstable, or t would become unstable as a result of the project, d potentially result in on- or off-site landslide, lateral eading, subsidence, liquefaction, or collapse?				
d)	of t	located on expansive soil, as defined in Table 18-1-B he Uniform Building Code (1994) creating substantial as to life or property?				
e)	sep who	ve soils incapable of adequately supporting the use of otic tanks or alternative wastewater disposal systems, ere sewers are not available for the disposal of stewater?				

Discussion:

a)-i) and a)ii **Less Than Significant Impact.** The Baker Creek area is fully within a delineated Alquist-Priolo Special Studies Zone for the Owens Valley / Sierra Nevada Fault Zone, as shown on the most recent Alquist-Priolo fault zone map for Northern and Eastern California (Davis, 1985). The faults present at the Baker Creek area are just west of the northern end of the possible active rupture from the 1872 earthquake. Faults within the Project area are considered to have exhibited Holocene surface rupture and present-day seismicity (USGS, 2005). Surface rupture on these faults is possible outside of the currently mapped active traces of these range-front faults in the vicinity of the Project area.

The Hogback Creek area is immediately east of a mapped surface rupture of the Sierra Nevada Fault Zone, but does not have other mapped surface ruptures within the Project area. It is likely that the spring which provides surface flow during summer months to the lower part of Hogback Creek is associated with this fault. No Alquist-Priolo Special

Study Zones are mapped within the Hogback Creek area (Davis, 1990). However, the Lone Pine Fault at the eastern margin of the Alabama Hills was the locus of rupture in the 1872 earthquake.

Since habitable structures will not be built as part of the proposed Project, people will not be exposed to adverse effects involving seismic ground shaking. Proposed structures include fences and gates; damage to these facilities could be easily repaired and impacts will therefore be less than significant.

- a)-iii) Less Than Significant Impact. Liquefaction is a process by which sediments below the water table temporarily lose strength and behave as a liquid rather than a solid. In the liquefied condition, soil may deform enough to cause damage to buildings and other structures. Seismic shaking is the most common cause of liquefaction. Liquefaction occurs in loose sands and silts in areas with high groundwater levels; generally in areas where groundwater occurs within 30 feet of the ground surface (EERI, 1994). At both project sites, depth to groundwater is less than 30 feet over portions of the sites. However, the coarse-grained, well drained soils that occur at both sites serve to reduce liquefaction potential. Since habitable structures will not be built as part of the proposed Project, people will not be exposed to adverse effects involving seismic-related ground failure. Proposed structures include fences and gates; damage to these facilities could be easily repaired and impacts will therefore be less than significant.
- a)-iv) Less Than Significant Impact. The Project sites are located well away from the mountain front which has slopes steep enough to initiate a landslide during an earthquake—the western margin of the Baker Creek Project area is located 1,500-2,000 feet toward the valley center from the toe slopes of the Sierra, while Hogback Creek is located over 2 miles from the valley margin. Portions of both locations could experience debris flows if saturated materials within nearby mountain stream valleys were released during an earthquake or as a result of an extreme meteorological event (e.g., heavy rainfall, rapid melt of a high snowpack). However, since habitable structures will not be built as part of the proposed Project, people will not be exposed to adverse effects involving landslides. Proposed structures include fences and gates; damage to these facilities could be easily repaired and impacts will therefore be less than significant.
- b) **Less Than Significant Impact.** The proposed Project includes minor soil disturbance related to fence installation, plantings and re-routing a portion of an existing OHV trail. Since the areas to be affected are small, impacts related to erosion and loss of topsoil will be less than significant.
- c) Less Than Significant Impact. Landslides are not anticipated at the generally gently sloped Project sites. The potential for subsidence at the Project sites will not be altered since groundwater withdrawals with the potential to induce subsidence are not part of the proposed Project. Due to high groundwater, liquefaction (and related lateral spreading) is potentially applicable at the Project sites, although the coarse-grained soils of the Project sites limit this potential. Overall, since no habitable structures will be built as part of the proposed Project, the impact from unstable soils will be less than significant.

- d) **No Impact.** Habitable structures will not be built as part of the proposed Project. Therefore, there will be no Project-related impacts from expansive soils.
- e) **No Impact.** Sanitation facilities are not present or proposed for the project site. Therefore, there will be no impact on soils related to wastewater disposal.

2.3.7 Hazards and Hazardous Materials

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	uld the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h)	Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

Discussion:

a) and b) Less Than Significant Impact. Construction and operation of the proposed Project will require the routine transport of limited quantities of fuel and herbicide. Fuel will be used for vehicles and power equipment during fence installation, tree removal and planting. Fuel will be contained within the manufacturer's tanks on all powered heavy equipment onsite, or in approved canisters for powered hand equipment (e.g., chainsaws). A fuel/service truck will visit the site as needed, parking at a non-sensitive location such as a road shoulder on level ground. Equipment operators will move equipment to the fuel/service truck for refueling. No fuel will be stored onsite.

Herbicide will be used for black locust control and potentially for the control of weeds and non-native plants. Pesticides will be applied by trained personnel in a highly targeted manner to individual woody plants or targeted patches. Pesticides will not be applied when weather conditions, including wind conditions, are unsuitable for application. Pesticides used to control invasive plants and weeds will conform to the requirements of the California Food and Agricultural Code. Herbicides to be used include (but may not be limited to):

• Garlon 4® Herbicide with triclopyr (as butoxyethylester; BEE) as the active ingredient (62 percent) and vegetable oil as one of the inert ingredients

This material will be contained onsite only in very small quantities (e.g., the 2.5 gallon container in which it is packaged) sufficient for a single day use by backpack-sized sprayers. According to the Material Safety Data Sheet (Crop Data Management Systems, 2005), Garlon 4® exhibits low levels of human and ecological toxicity in terrestrial environments, and bioconcentrates and biodegrades moderately. All label directions will be followed during use of Garlon or any other herbicide including avoidance of exposure of aquatic habitats.

As is the current practice by LADWP, use of these hazardous materials will be carefully monitored to limit exposure of humans or environmental receptors. Therefore, impacts related to release or accidental exposure to humans or the environment will be less than significant.

- c) Less Than Significant Impact. There are no existing or proposed schools with ¼ mile of the Hogback Creek project area. Portions of the Baker Creek site are within ¼ mile of the Bernasconi Education Center and the Palisade Glacier Alternative High School. Hazardous materials use will be limited to herbicides and fuels. Since these materials will be properly handled (as described above), the impact on the schools from hazardous materials will be less than significant.
- d) **No Impact.** Section 65962.5 of the California Government Code requires the California Environmental Protection Agency (CalEPA) to update a list of known hazardous materials sites, which is also called the "Cortese List." The sites on the Cortese List are designated by the State Water Resources Control Board, the Integrated Waste Management Board, and the Department of Toxic Substances Control.

A records search of relevant federal, state, and local environmental regulatory databases was conducted for the Project sites (EDR, 2009a and 2009b). Since the project sites were not listed in any of the databases searched by EDR, the project will have no impact related to hazardous waste sites.

e) and f) **No Impact.** The Project areas are not located sufficiently near either a private airstrip or public airport to pose a safety risk. Therefore, there are no Project-related impacts on airport safety.

- g) Less Than Significant Impact. The project does include alternation of any roadways. Since construction activities would only occur within the habitat areas, construction activities or vehicles would not interfere will the movement of emergency vehicles on public roads. The impact from travel of the construction workers and equipment to the Project site will have a less than significant impact on emergency access and evacuation plans.
- h) Less Than Significant Impact. The only structures proposed under the Project are new fences to create habitat exclosures. No habitable structures exist or are proposed on either project site. However, the Baker Creek habitat area is adjacent to two school/retreat facilities. A plan to create a continuous forested area from the Bernasconi property to the Brown Exclosure and Brown Pasture was abandoned based on review by the California Department of Forestry (CDF) in 2008 (LADWP, 2009a; Appendix 1). A shaded fuel break in the forested area to the southeast of the school facility in the Brown Exclosure is planned by CDF.

The riparian habitats at both Baker and Hogback Creeks have been impacted by fire. Under the Project, grazing and vegetation management may increase the volume of fuels and potentially increase fire frequency and intensity. Therefore, fire management strategies are included in the Habitat Enhancement Plan. Elements include:

- A fire break will be created between the Baker Creek project area and the community of Big Pine. Fifteen feet on either side of Power Line Road that runs between the Baker Creek Pasture and Glacier Lodge Road will be cleared with hand tools. Tree branches will be trimmed to 10 feet in height and native grasses and forbs will be left as ground cover.
- The lessee will continue to graze areas outside the exclosures. Grazing within the exclosures will also be used to reduce fire hazards outside of the June 1 to September YBC nesting period.
- No burning, firewood cutting or wood gathering will be allowed by any individual (including the lessee) without the written approval of LADWP.
- Managed burning for the purposes of improving rangeland, wildlife, and/or watershed condition will be conducted under the direction of LADWP.
- Unintentional fires in riparian areas will be given high priority for fire suppression.
- At Hogback Creek, fire breaks will be installed prior to any controlled burns within adjacent grazing leases to manage the potential risk of wildfire.

With implementation of the fire control plans contained in the Habitat Enhancement Plan, impacts on people and structures from wildland fires will be less than significant.

2.3.8 Hydrology and Water Quality

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	uld the project:				_
a)	Violate any water quality standards or waste discharge requirements?				
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
f)	Otherwise substantially degrade water quality?			\boxtimes	
g)	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				\boxtimes
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j)	Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?				

Discussion: Water is diverted from Big Pine Creek (located at the southern end of the Baker Creek project area) into Giroux Ditch. Flows then go north to Baker Creek, then to Big Pine Canal and south to the Owens River. Mean flows have been estimated at 6.0 cubic feet per second (cfs) for Baker Creek (with an average of 6.5 cfs diverted into Giroux Ditch) and 35 cfs for Big Pine Creek (LADWP, 2009b). Other smaller ditches and drainage features traverse the site. Springs and seeps are common across the site and the area is mapped as spring/seep complex DWP 26 (Ecosystems Sciences, 2000). Some of this complex will be within the new Brown Exclosure and the Apple Orchard Exclosure.

At the Hogback Creek project area, an old ditch exists north of Hogback Road and several springs located north of the ditch support riparian vegetation. Channels from the springs (mapped by Ecosystem Sciences (2000) as spring/seep complex DWP 6) converge with Hogback Creek and drainage from the area flows northeast across the site and then to the Los Angeles Aqueduct. Median daily flows are estimated at 4.3 cfs (LADWP, 2009b).

Beneficial uses of Project area streams are itemized in the Basin Plan for the Lahontan Region (Lahontan Regional Board, 2005) and include (among others) domestic supply, recreation, and wildlife habitat for Baker Creek and Hogback Creek. Specific numeric water quality standards for Big Pine and Hogback Creeks are also set in the Basin Plan. None of the water bodies located in the project areas are listed on the 2006 Clean Water Act Section 303(d) list of impaired water bodies (Lahontan Regional Board, 2006).

- a) and f) Less Than Significant Impact. No waste discharges are associated with operation of the proposed Project. During Project construction, minor disturbance to surface soils will result from fence post installation, plantings, and from construction of the short length (approximately 600 feet) of new OHV trail/track on the eastern edge of the Apple Orchard Exclosure at Baker Creek. The new trail does not cross any active drainages that could result in the delivery of eroded soil to surface waters. Since the volume of soil to be disturbed under the project is minor, increases of sediment load in stormwater would not adversely affect surface water beneficial uses and impacts will therefore be less than significant.
- b) **Less Than Significant Impact.** At Baker Creek, groundwater is estimated to be within 5 feet of the ground surface on over 76 percent of the Project area, in part maintained by flood irrigation of the lease (WHA, 2004a). At Hogback Creek, groundwater is estimated to be within 5 feet of surface on 15 percent of the Project area (WHA, 2004b).
 - The planting plan for the Baker Creek site was developed with no irrigation planned to establish the pole cuttings. No changes to surface water diversions are included in the Project, and therefore there will be no change in groundwater recharge from the on-site water bodies. Changes in vegetation resulting from the project (more willows and cottonwoods in existing meadow areas at Baker Creek) will change evapotranspiration rates over existing conditions, but this minor effect would not substantially deplete groundwater supplies or impact off-site groundwater users. The Project will have a less than significant impact on groundwater volumes.
- c) and d) Less Than Significant Impact. No alteration to surface water features which would result in a change to the drainage pattern of the area is proposed under the Project. The only structures proposed are new fence posts (approximately 2 inches wide).

Additionally, approximately 600 feet of new OHV trail will be constructed at Baker Creek using brush clearing equipment and minor grading if necessary. Since these minor improvements are so limited in area, alteration to surface drainage and exiting flooding patterns will not be substantial. The impact on erosion, siltation and flooding is less than significant.

- e) **No Impact**. Stormwater flows across both Project sites and enters existing surface water features, eventually reaching the Owens River via the Big Pine Canal from Baker Creek and the Los Angeles Aqueduct from Hogback Creek. Since the proposed Project will not alter the volume of stormflows, and since engineered stormdrains are not present on the project site and are not proposed, there will be no impact on the capacity of existing or planned stormwater drainage systems nor an addition of substantial new sources of polluted runoff.
- g), h) and i) **No Impact.** A 100-year floodplain has not been delineated with the Baker Creek or Hogback Creek Project areas. A floodplain is mapped by FEMA (1985) adjacent to Big Pine Creek downstream of the site. Since no structures aside from fence posts are proposed as part of the project, there will be no impediment or redirection of flood flows, nor risks to habitable structures. No levees or dams are present on the Project sites and no off-site levees or dams will be modified as part of project implementation. The Project will have no impact on housing or structures in a 100-year flood hazard area.
- j) Less Than Significant Impact. Due to the distance to large surface water features from the Project sites, seiche and tsunami are not relevant for the proposed Project. However, mudflows originating at higher elevations above project areas and then moving across the sites are a possible phenomenon. Since no habitable structures are planned as part of the Project, people would not be exposed to injury or death from mudflows. Fences, pole cuttings and a short length of OHV trail are the only Project elements that could potentially be damaged in the event of mudflow. Since the damage could be readily repaired by reinstalling the fences, replanting, and re-establishing the trail, the impact will be less than significant.

2.3.9 Land Use and Planning

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				
a)	Physically divide an established community?				\boxtimes
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				

- a) **No Impact.** The proposed Project is located in an area zoned for open space and used for ranching, wildlife habitat, and recreation. No habitable structures are located on or immediately adjacent to the properties, and none are planned as part of the proposed Project. There will be no Project-related impacts on established communities.
- b) **No Impact.** The Inyo County General Plan (2001) includes Goal BIO-1: Maintain and enhance biological diversity and healthy ecosystems through the County. Policy BIO-1.2 calls for the preservation of riparian habitat and wetlands and Policy BIO-1.3 calls for the restoration of biodiversity. As a habitat enhancement project, the proposed Project is consistent with these General Plan goal and policies. There will be no adverse impacts on applicable land use plans and policies.
- c) **No Impact.** There is no designated critical habitat that includes the Hogback Creek or Baker Creek sites (USFWS, 2005). There are no Significant Natural Areas (SNAs) as determined by CDFG at the Hogback Creek or Baker Creek sites, and there are no adopted habitat conservation plans or natural community conservation plans for these sites. LADWP is currently preparing a Habitat Conservation Plan (HCP) for LADWP-owned lands in Inyo County; this plan is not yet finalized. The proposed Project is a habitat plan that will be adopted by LADWP. There will be no impact on any other adopted habitat plan or natural community conservation plan.

2.3.10 Mineral Resources

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	uld the project:				_
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				

Discussion:

a) and b) **No Impact.** There is no existing mining activity at the Project sites. Neither Baker Creek nor Hogback Creek are locally-important mineral resource recovery sites. Implementation of the proposed Project will include installation of fences and changes to vegetation and grazing management. These actions will not limit future mineral recovery activities or result in the loss of availability of known mineral resources. There will be no Project-related impacts on mineral resources.

2.3.11 Noise

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	uld the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				

Discussion:

a) and d) Less Than Significant Impact. The Baker Creek habitat area is surrounded by open space used for seasonal grazing and recreation. The nearest sensitive noise receptors are the Bernasconi Education Center and Palisade Glacier Alternative High School located immediately adjacent to the Brown Exclosure at the southwest portion of the Project site. The multipurpose Bernasconi Center is used by various groups for field studies, retreats and as an outdoor camp. The buildings house office space as well as classrooms. The Palisade School, part of the Bishop Joint Union High School District, is an alternative education school serving grades 9 through 12. These education facilities are located adjacent to the existing fencing for the Baker Creek lease and approximately 350 feet from proposed new fencing at the Brown Pasture. Other receptors (residences and schools) are located a mile or more east of the site in Big Pine.

The Hogback Creek habitat area is also surrounded by open space used for seasonal grazing and recreation. This site is more remote, with the nearest sensitive receptors located over 4 miles

from the site; Lone Pine is located southeast of the site, and the Manzanar National Historic Site is north of the Hogback Creek habitat area.

According to the Inyo County General Plan, suggested maximum noise levels for schools in Inyo County are 65 dBA CNEL (community noise equivalent level; which includes weighting factors for evening and nighttime sound levels).

Of the equipment likely to be used for project implementation, power augers for fence post installation would have the highest noise emission rate. The specific decibels emitted would vary depending on model and age of the equipment selected, but powered hand tools emit approximately 73 to 82 dbA at 50 feet (Bolt, Beranek, and Newman, 1971). [The A-weighted decibel scale (dBA) discriminates against frequencies in a manner approximating the sensitivity of the human ear.]

The following equation is used to estimate the attenuation of noise with distance from its source to the nearest receptor:

$$SL2 = SL1 - 20 \log 10 (r2/r1)$$

Where:

SL1 =sound level at 50 feet, in dB

SL2 = sound level at the boundary of the nearest noise sensitive receptor's property, in dB

r1 = 50 feet

r2 = distance to the boundary of the nearest noise sensitive receptor's property, in feet

(Source: Canter, 1977)

Based on this equation, noise level drops by approximately 6 dB for every doubling of distance. The noise levels estimated using the above equation represent the worst-case scenario, since the equation does not take into account noise attenuation due to site topography (i.e., difference in elevation between the noise source and the receiver), presence of natural or man-made sound barriers, and ground conditions (hard vs. soft surfaces).

Based on this equation, a power auger emitting 82 dB at 50 feet would be attenuated to 65 dB at 350 feet. Noise generated for project implementation would be intermittent and experienced only in the daytime. Noise generated during project operation would include intermittent vehicle travel and recreation-related noise - the same as existing conditions. Since the project-related noise levels at the nearest sensitive receptor would be at or below the recommended Inyo County maximum, noise impacts will be less than significant.

b) Less Than Significant Impact. Use of power augers for fence installation may create minor intermittent groundborne vibration or groundborne noise. Ground-borne vibration is rarely annoying to people who are outdoors. Although the motion of the ground may be perceived, without the effects associated with the shaking of a building, the motion does not provoke the same adverse human reaction. Since the closest buildings to the project sites are the school facilities located 350 feet from the proposed fence at Baker Creek, impacts related to groundborne vibration or groundborne noise will be less than significant.

- c) **No Impact.** Noise generated during Project operation would include intermittent vehicle travel and recreation-related noise the same as existing conditions. Therefore, there will be no permanent increase in ambient noise levels related to the project.
- e) and f) **No Impact.** The Project areas are not located sufficiently near either a private airstrip or public airport to expose people residing or working in the area to experience excessive noise levels. There will be no Project-related impacts on noise near an airport/airstrip.

2.3.12 Population and Housing

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				_
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				

Discussion:

a) through c) **No Impact.** No habitable structures are located on or immediately adjacent to the properties, and none are planned as part of the proposed Project. A OHV trail will be constructed to re-route existing OHV users at the Baker Creek lease. Since existing OHV trails will be blocked from use, this new trail segment does not constitute a roadway extension. There will be no Project-related impacts on population and housing.

2.3.13 Public Services

		Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	imp phy phy con env ser	ruld the project result in substantial adverse physical pacts associated with the provision of new or visically altered governmental facilities, need for new or visically altered governmental facilities, the astruction of which could cause significant vironmental impacts, in order to maintain acceptable vice ratios, response times or other performance ectives for any of the public services:				
	i)	Fire protection?			\boxtimes	
	ii)	Police protection?				\boxtimes
	iii)	Schools?				\boxtimes
	iv)	Parks?				\boxtimes
	v)	Other public facilities?				\boxtimes

Discussion:

- a)-i) Less Than Significant Impact. Under the project, grazing and vegetation management may increase the volume of fuels and potentially increase fire frequency and intensity. Therefore, fire management strategies are included in the Habitat Enhancement Plan. Elements include:
 - A fire break will be created between the Baker Creek project area and the community of Big Pine. Fifteen feet on either side of Power Line Road that runs between the Baker Creek Pasture and Glacier Lodge Road will be cleared with hand tools. Tree branches will be trimmed to 10 feet in height and native grasses and forbs will be left as ground cover
 - The lessee will continue to graze areas outside the exclosures. Grazing within the exclosures will also be used to reduce fire hazards outside of the June 1 to September YBC nesting period.
 - No burning, firewood cutting or wood gathering will be allowed by any individual (including the lessee) without the written approval of LADWP.
 - Managed burning for the purposes of improving rangeland, wildlife, and/or watershed condition will be conducted under the direction of LADWP.
 - Unintentional fires in riparian areas will be given high priority for fire suppression.
 - At Hogback Creek, fire breaks will be installed prior to any controlled burns within adjacent grazing leases to manage the potential risk of wildfire.

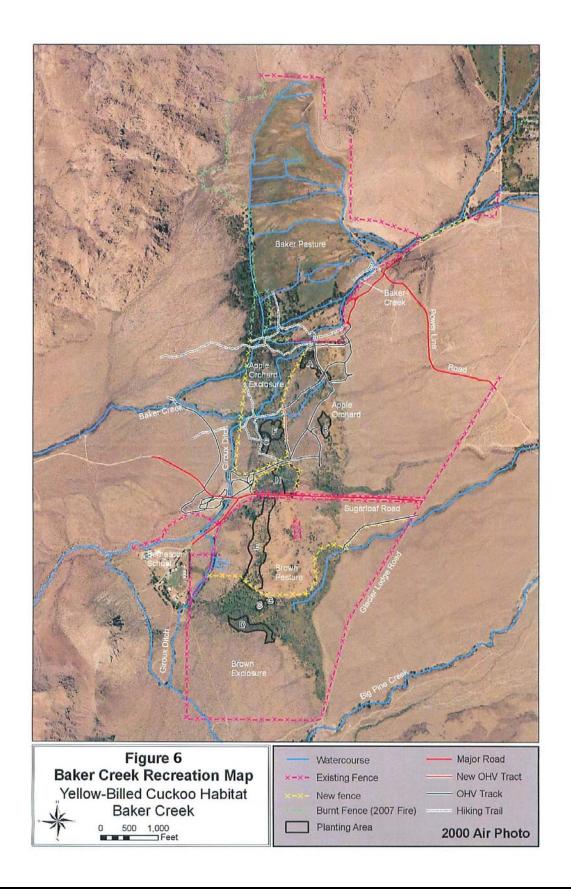
With implementation of the fire control plans contained in the Habitat Enhancement Plan, increases in the need for fire services will be less than significant.

a)-ii -v) **No Impact.** Habitable structures are not present on the Project sites and none are proposed as part of the Project. Recreation use and the subsequent need for police services would be the same as existing conditions. Therefore, there would be no Project-related impacts on police protection, schools, parks, or other public facilities.

2.3.14 Recreation

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

- a) Less Than Significant Impact. Habitable structures are not present on the Project sites and none are proposed as part of the Project, therefore the Project will not result in population increases that subsequently increase the use of park and recreational facilities. With implementation of the project, the level of recreational use at the sites is expected to be similar to existing conditions. With increased management of the sites, impacts from recreation are expected to be reduced; a less than significant but beneficial impact.
- b) Less Than Significant Impact. Unless increased demand or conflicts require increased management, recreational management of the Hogback Creek and Baker Creek leases will not change as part of the Project except that off-highway vehicle (OHV) use at Baker Creek will not be allowed within the habitat exclosures. Existing OHV trails within the Apple Orchard Exclosure will no longer be accessible for off-road vehicle use, but the exclosures will have walk-through access for foot traffic and the trails will be available for hiking. A short length of new OHV track will be created to provide a loop outside and along the western edge of the exclosure to maintain access between the east and west sides of the Apple Orchard exclosure (Figure 6). At least 75 percent of the Baker Creek lease will continue to remain open for OHV recreational use. Access for fishing, hunting, hiking, bird-watching, and biking in the Baker Creek area will remain open. Within the context of overall recreational opportunities on LADWP lands in the Owens Valley, the impact on recreation of restricting OHV use on a portion of the Baker Creek lease will be less than significant.



2.3.15 Transportation and Traffic

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project:				
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				\boxtimes
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e)	Result in inadequate emergency access?				\boxtimes
f)	Result in inadequate parking capacity?				
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				\boxtimes

- a) and b) **Less Than Significant Impact.** Construction of the Project will result in a minimal number of construction vehicles and workers traveling to the site. There will be no impact on traffic patterns in the nearby towns of Big Pine and Lone Pine. The temporary increase in traffic in and around the rural project sites is less than significant.
- c) **No Impact.** The Project areas are not located sufficiently near either a private airstrip or public airport, nor does the Project contain features that would alter air traffic patterns. No impacts on air safety will occur.
- d) **Less Than Significant Impact.** Roadway alterations are not proposed as part of the Project. However, since OHV use will not be allowed within the habitat exclosures, a short length (approximately 600 feet) of new OHV trail will be constructed along the eastern edge of the Apple Orchard Exclosure to maintain OHV access between the east and west sides of the exclosure. This straight segment of OHV trail will have a less than significant impact on roadway hazards.
- e) **No Impact.** Roadway alterations are not proposed as part of the Project so access to the Project sites will not be altered. As is existing practice, keys to gates at the Project areas will be provided to emergency service providers. There will be no impact on emergency access.

- f) Less Than Significant Impact. At Baker Creek, recreational users park at two locations on the road that comes up from the Baker Creek Campground. One of these locations provides access to the Baker Pasture, the other to the Apple Orchard area. There is also parking in the borrow pit to the north of Sugarloaf Road and sometimes on Sugarloaf Road. At Hogback Creek, people park along the main Hogback Creek Road, at the corrals along the road, and along the southern end of the project area.
 - The proposed Project does not include construction of parking areas nor would construction and operation of the Project impact existing parking capacity. Ample parking is available for the small number of construction vehicles and those visiting the sites for recreation. The impact is less than significant.
- g) **No Impact.** The Project does not include housing, employment, or roadway improvements relevant to alternative transportation measures. Recreational biking (but not commuting) within the Project area is an existing use that would continue under the proposed Project. There will be no Project-related impacts on alternative transportation.

2.3.16 Utilities and Service Systems

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	uld the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c)	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g)	Comply with federal, state, and local statues and regulations related to solid waste?				

- a) through c) and e) through g) **No Impact.** The Project does not include or induce housing or employment which would result in the need for public services and utilities. With the exception of irrigation water features, the Project sites do not contain water, sewage, or solid waste infrastructure, nor are any proposed under the Project. Therefore, there will be no Project-related impacts on public utilities and service systems.
- d) **No Impact.** There is no plumbed potable water serving the project sites. At Baker Creek, livestock water is supplied via irrigation ditches in the irrigated pastures. Under the proposed Project, new exclosure fences will be built to allow livestock to water in Baker Creek when in the Apple Orchard Pasture and from the Giroux Ditch and Bell Canyon when in the Brown Pasture. At Hogback Creek, stockwater for horses and mules is sufficient, there are no plans to develop additional watering sites. Since the Project does not increase the number of cattle or pack animals on the leases or include new irrigation, there will be no increase in livestock or irrigation water demands. The Project will have no impact on water utility service.

2.3.17 Mandatory Findings of Significance

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have the potential to achieve short- term, to the disadvantage of long-term, environmental goals?				
c)	Does the project have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.)?				
d)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

Discussion:

a) Less Than Significant Impact With Mitigation Incorporated. Construction of the proposed Project has the potential to temporarily disturb wildlife on the Project sites due to noise and human presence. Additionally, rare plants are known for the Project sites and could be disturbed during fence installation or equipment movement for vegetation management activities. However, work at the two Project sites will be conducted under the supervision of LADWP biologists. Active bird and mammal nests as well as rare plants will therefore be avoided during construction activities, and impacts on biological resources will be less than significant. Overall, implementation of the Habitat Enhancement Plan will have a beneficial impact on vegetation and wildlife.

Cultural resources are present on the Project sites. Mitigation measures have been defined to avoid existing resources, and to monitor construction activities in areas within 50 feet of existing resources. With implementation of mitigation measures, impacts on cultural resources will be less than significant.

b) **No Impact**. The goal of implementing the Habitat Enhancement Plan is to maintain and improve habitat conditions at Baker and Hogback Creeks. This is a long-term goal to potentially increase the population of YBC in California. There are no short-term goals related to the Project that would be disadvantageous to this long-term goal.

- c) Less Than Significant Impact. There are no known projects in the immediate area of the Project sites that would have overlapping construction schedules with the proposed Project. Therefore, cumulative construction-related impacts on air quality, noise, and traffic will be less than significant. Cumulatively with other habitat restoration efforts in the Owens Valley, the proposed Project will be beneficial.
- d) Less Than Significant Impact. The proposed Project would have an impact on local agriculture by restricting the operations of two lessees on LADWP-owned lands and restricting a portion of the Baker Creek site to non-agricultural use a majority of the time (within the exclosures). While these restrictions include construction of limited fencing, they do not represent irrevocable conversion of land use. Since these restrictions do not eliminate grazing on the lease and are management actions necessary to meet the multi-purpose uses of the parcels (agriculture, wildlife habitat, and recreation), the impact will be less than significant. The Project will also redirect OHV use at the Baker Creek site. Since the new fencing will not eliminate OHV use in the area, and since a new connecting trail will be established, the impact on recreational OHV users is less than significant.

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3.2 ACRONYMS AND ABBREVIATIONS

BEE butoxyethylester

BLM (U.S.) Bureau of Land Management

CalEPA California Environmental Protection Agency

Caltrans California Department of Transportation

CDF California Department of Forestry

CDFG California Department of Fish and Game

CEQA California Environmental Quality Act

CNEL community noise equivalent level

CO carbon monoxide

CRHR California Register of Historical Resources

dBA Decibel, A-weighted scale

EDR Environmental Data Resources, Inc.

EERI Earthquake Engineering Research Institute

EIR Environmental Impact Report

Farmland Prime Farmland, Unique Farmland, or Farmland of Statewide Importance

FEMA Federal Emergency Management Agency

FMMP Farmland Mapping and Monitoring Program

GBUAPCD Great Basin Unified Air Pollution Control District

HCP Habitat Conservation PlanIES Initial Environmental Study

LADWP (City of) Los Angeles Department of Water and Power

Leq Equivalent noise level

MND Mitigated Negative DeclarationMOU Memorandum of Understanding

NAHC Native American Heritage Commission

NEPA National Environmental Policy Act

NOx nitrogen oxides

NRHP National Register of Historical Places

OHV off-highway vehicle

OVC Owens Valley Committee

PM10 particulate matter 10 microns or less in diameterPM2.5 particulate matter 2.5 microns or less in diameter

SLC State Lands Commission

SOx sulfur oxides

SNA Significant Natural Areas

SWPPP Storm Water Pollution Prevention Plan
 SWRCB State Water Resources Control Board
 USEPA U.S. Environmental Protection Agency

USFWS U.S. Fish and Wildlife Service

USGS U.S. Geological SurveyVOC volatile organic compound

YBC Yellow-billed Cuckoo

3.3 PREPARERS OF THE INITIAL ENVIRONMENTAL STUDY

PREPARED BY

Los Angeles Department of Water & Power

Environmental Services 111 N. Hope Street, Room 1044 Los Angeles, CA 90012

Charles C. Holloway, Manager of Environmental Assessment and Planning Irene Paul, Project Manager Adrene Briones (former Project Manager)

TECHNICAL ASSISTANCE PROVIDED BY

MWH Americas, Inc.

Sarah Garber, Project Manager Dr. Janet Fahey, P.E., Technical Reviewer

Garcia & Associates

Carole Denardo, RPA, Cultural Resources Manager Phillip Reid, Archaeologist Ferdinand Oberle, Paleontologist