RECLAMATION

Managing Water in the West

Environmental Assessment

Imperial Dam Facilities Electrical Improvements

U.S. Department of the Interior
Bureau of Reclamation
Yuma Area Office
Yuma, Arizona

July 2013

Mission Statements

The U.S. Department of the Interior protects America's natural resources and heritage, honors our cultural and tribal communities, and supplies the energy to power our future.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Environmental Assessment

Imperial Dam Facilities Electrical Improvements

Prepared by

United States Department of the Interior
Bureau of Reclamation
Yuma Area Office
7301 Calle Agua Salada
Yuma, Arizona 85364

Acronyms and Abbreviations

AAC	All-American Canal
AF	Acre-Feet
AGFD	Arizona Game and Fish Department
BMPs	Best Management Practices
BLM	Bureau of Land Management
Camp	Imperial Dam Camp Site
CFR	Code of Federal Regulations
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
HVAC	Heating Ventilation and Air Conditioning
ICAPCD	Imperial County Air Pollution Control District
IID	Imperial Irrigation District
ITAs	Indian Trust Assets
LCR	Lower Colorado River
LSB	Laguna Settling Basin
MSCP	Multi-Species Conservation Program
NAAQS	National Ambient Air Quality Standards
NWR	National Wildlife Refuge
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOx	Nitrogen Oxides
O_3	Ozone
O&M	Operation and Maintenance
PCBs	Polychlorinated biphenyls
PM_{10}	Particulate Matter that is 10 microns in diameter or less
Reclamation	Bureau of Reclamation
SHPO	State Historic Preservation Office
SCADA	Supervisory Control and Data Acquisition
US	United States
USFWS	United States Fish and Wildlife Service
USACE	United States Army Corps of Engineers
VOCs	Volatile Organic Compounds
YCEPD	Yuma County Environmental Programs Division
YCR	Yuma clapper rail

Contents

Appendices

1.0 Purpose of and Need for Proposed Action

1.1 Introduction

The Bureau of Reclamation (Reclamation) has prepared this environmental assessment (EA) to evaluate potential impacts associated with the proposed electrical improvements to the Imperial Dam facilities. This EA was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 UCS 4321 et seq.), the Council on Environmental Quality regulations (40 CFR 1500-1508) for implementing NEPA, and the Department of the Interior's NEPA Regulations (43 CFR Part 46), and Reclamation Manual NEPA Policy (ENV P03). Reclamation is the lead Federal agency pursuant to NEPA.

1.2 Location

Imperial Dam is located along the lower Colorado River (LCR), approximately 18 miles northeast of Yuma, Arizona. The project is located in the Imperial and Laguna Divisions of the LCR. The project area lies on both the Arizona and California side of the river in Yuma and Imperial Counties, at approximate River Mile 49.3, see Figure 1 for project location.

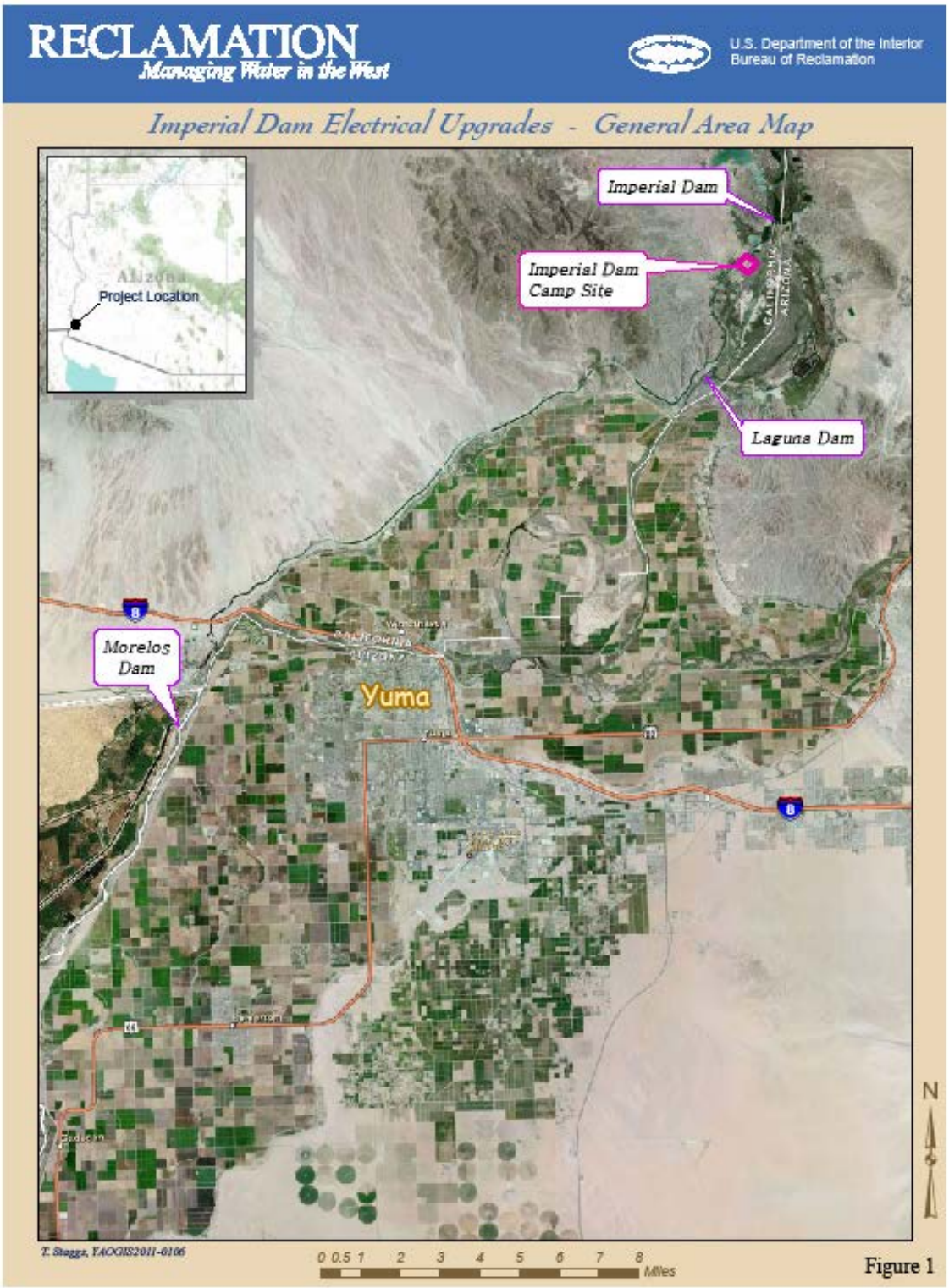

Figure 1. Location Map

1.3 Background

Imperial Dam was constructed between 1936 and 1938 under the authorization of the Boulder Canyon Project Act of 1928 to divert water from the Colorado River to the All-American Canal (AAC) and the Gila Gravity Main Canal. The project delivers irrigation water, through irrigation districts, to over 600,000 acres of farmland in Arizona and California, and to municipalities that are dependent on Colorado River water for consumptive use. The Imperial Dam facilities are owned by Reclamation. The Imperial Irrigation District (IID), in accordance with contractual agreements with Reclamation's Yuma Area Office, has operation and maintenance responsibility for the facilities, including: Imperial Dam, Gila Canal headworks, and the AAC.

Imperial Dam is approximately 3,479 feet long. The Imperial Dam facilities consist of seven sections that include the California abutment, the AAC headworks, the sluiceway, the overflow weir section, the Gila Canal headworks, the Arizona abutment, and the Arizona dike. The AAC trashrack and headgates are located adjacent to the California abutment of Imperial Dam. Three desilting basins (design capacity 4,000 cubic feet per second each) remove the sand and silt from the river water before it passes to the AAC. The sand and silt removed are conveyed to the Laguna settling basin through the California sluiceway channel. The California sluiceway is also used to discharge excess water flows arriving at Imperial Dam that are not pumped to Senator Wash Reservoir or diverted to the canals. The Gila Canal headgates are located adjacent to the Arizona abutment of Imperial Dam. One desilting basin removes the sand from the water before it enters the Gila Gravity Main Canal, which serves the Yuma area. The sediment removed is returned to the river when necessary by opening the sluiceway gates located on the bottom and downstream end of the basin (IID 2012).

1.4 Purpose and Need

The purpose of the proposed project is to upgrade the electrical system of the Imperial Dam facilities with minimal operational disruptions.

The need for the project is to upgrade and improve the overall electrical system and components of Imperial Dam and its associated facilities and bring it up to safety standards and National Electrical Codes. Imperial Dam is over 75 years old, more than half way through the design life of 125 years. Most of the technology in the facility is dated and technically obsolete. The electrical systems at the Imperial Dam facilities are in need of extensive refurbishment in order to ensure long term operational efficiency and reliability. Originally built in 1936, the electrical systems initially installed still remain.

Although most of the original equipment is operational, the outdated equipment at Imperial Dam poses a safety hazard. Employees (electricians, journeymen, and mechanics) are at greater risk of arc flash.

1.5 Determinations to be Made

This EA will be distributed to appropriate decision-makers within Reclamation for review to determine whether a Finding of No Significant Impact (FONSI) is appropriate. This decision will be based on a determination that all potential impacts are either not significant or can be reduced to not significant levels through the implementation of mitigation measures. If any potential impacts are considered significant and cannot be avoided or reduced to not significant levels, the preparation and processing of an Environmental Impact Statement is required.

2.0 Alternatives Considered

This chapter describes the alternatives considered for the proposed upgrades to Imperial Dam and its associated facilities. It includes the Proposed Action and No Action alternatives.

2.1 No Action Alternative

NEPA guidelines require that an EA evaluate the "No Action" alternative in addition to the Proposed Action. The no action alternative provides a basis for comparison of the environmental consequences of the Proposed Action. In this EA, the no action alternative assumes that the Project would not occur and the Imperial Dam facilities will be operated and maintained in its current condition.

Under the No Action alternative electrical improvements would not be conducted and the facilities would continue to function with dated and technically obsolete equipment, which may also lead to high risk safety issues.

2.2 Proposed Action

2.2.1 Construction Activities

Upgrades and improvements within the Imperial Dam facilities would include the replacement of outdated electrical components such as: circuit breaker panels, communication and control panels, gate motor controls, gate position indicators, regulators, transformers, wiring, conduit, underground cables, power poles, and an emergency standby generator system. These components, if not upgraded and replaced, can impede the function of the facilities, and they no longer meet current codes. See Figures 2 and 3 for specific project area locations.

Additionally, other features of the proposed activities would also entail: hazardous materials abatement efforts (where all phases of activities listed below would require the removal, handling, and disposal of various hazardous materials; installation of a communication systems (fiber optic cable); and security (access/intercom and video surveillance systems) within the facilities.

Electrical upgrades will not change Imperial Dam operations and/or adversely modify the structures. The project would be conducted in phases to allow for activities to occur over the course of a couple of years. During refurbishment activities, temporary power to Imperial Dam will be required to ensure Imperial

Dam operations (water deliveries and desilting) will not be disrupted. Temporary power will be provided to all areas of Imperial Dam and associated buildings throughout the duration of construction.

Phase I

Work includes the refurbishment of the existing Imperial Dam Substation. The Imperial Dam Substation is located west of the AAC desilting basin No. 1. It measures about 90 feet long by 50 feet wide and is encircled by a chain-link fence topped with barbed wire

Activities would consist of the following: remove and discard fence and all electrical equipment (wiring, switchboard, generators, and transformers). In addition, remove overhead communication lines. Replacement activities include placement of new foundations and fencing, and installation of new switch board, transformers, voltage regulators, and associated electrical equipment and the supervisory control and data acquisition (SCADA) system, specific to water delivery management.

Phase II

Includes work in the following locations:

- Imperial Dam main control house
- Maintenance workshop
- California sluiceway

The Imperial Dam main control house is located just west of the AAC headworks. The building measures about 75 feet by 50 feet and houses the main control panel (and associated gauges and switches). Activities would consist of removing and upgrading the: electrical equipment, cabinets, restroom plumbing fixtures, flooring and reconfiguration of interior walls, restroom facilities, kitchen area, storage room, and motor generator room. Additionally, it would include upgrading the heating ventilation and air conditioning (HVAC) system.

The Maintenance workshop is located adjacent to the main control house; the corrugated metal building measures 75 feet long by 45 feet wide. Activities at the Maintenance workshop would consist of removing and installing new flooring, electrical fixtures, and communication lines. In addition, it would include upgrading restroom fixtures and the HVAC system.

The 250-foot wide California sluiceway channel extends downstream nearly a mile from Imperial Dam. Activities at the California sluiceway would consist of upgrades to the electrical distribution system, lighting and branch circuit wiring, and the SCADA system.

Phase III

Includes work in the following locations:

- AAC desilting basins
- Gila Canal headworks
- Gila Canal diversion gates

The three AAC desilting basins are located at the ends of inlet channels that originate at the AAC headworks. The desilting system removes sediment from the flow of the Colorado River to prevent debris from clogging the AAC and reduces maintenance associated with sediments in the canal. Each basin measures approximately 770 feet long by 540 feet wide and is nearly 18 feet deep. Within the AAC desilting basin area electrical improvements are scheduled to be conducted in the gallery tunnels, bypass gates, walkway areas, and desilting basin control houses. The desilting basin control houses are located on the east end of each of the desilting basins. These smaller control houses supplement the function of the Imperial Dam main control house. Upgrades would consist of replacing communication lines and electrical fixtures.

The Gila Canal headworks measures 765 feet in length and consists of three sets of 134-foot long outlet units. Each of the outlet units has three radial gates and four piers which rest on concrete pilings. Gila Canal headworks activities would consist of demolition and replacement of electrical wiring, upgrading electrical service and distribution, communication and SCADA systems.

Activities at the Gila Canal diversion gates, located just below the Gila Canal headworks, would consist of replacing the existing electrical wiring system and upgrading of electrical and SCADA systems, and the upgrading of lighting fixtures and timers.

Phase IV

Includes work in the following locations:

- AAC headworks
- AAC trashrack
- Imperial Dam overflow weir
- AAC Stations 48+50 and 60+00

The AAC headworks are located on the western side of Imperial Dam. The structure measures 371 feet long and has four gate opening and five piers. The AAC trashrack is a 660-foot long arcing structure that connects the California abutment with the east side of the AAC trashracks and prevents debris from entering the AAC. The Imperial Dam overflow weir is located between the AAC headworks and the Gila Canal headworks, it measures 1,197 feet long. Activities at the AAC trashrack, headworks and Imperial Dam overflow weir would include the removal and replacement of electrical wiring, electrical distribution and

communication equipment to also include inside the AAC's headworks and pier areas. Additionally, the SCADA systems would be upgraded in these areas.

Activities at Stations 48+50 and 60+00 of the AAC, areas located downstream of the AAC desilting basins, would consist of electrical upgrades to the radial gates to include removal and replacement of gate motor starters and associated wiring and equipment, including the SCADA system.

Phase V

Includes work at the following locations:

- Imperial Dam camp site (Camp)

The Camp, which is currently maintained and occupied by employees of the IID, is located approximately 1.5 miles southwest and downstream of Imperial Dam, see Figure 3. The Camp site was constructed by Reclamation between 1935 and 1938 under the authorization of the Boulder Canyon Project Act of 1928. The Camp (also known as the Imperial Dam Government Camp and the IID Camp) was built to house laborers during the construction of the Imperial Dam (Rayle and Ruter 2012b). The Camp continues to house IID (Imperial Dam) workers. Work within the Imperial Dam camp site would consist of removing and replacing wood utility poles, pole mounted transformers and light fixtures, and overhead communication and electrical lines. Additionally, the Camp's water pump station's electrical equipment would be upgraded.

2.2.2 Maintenance Activities

Once electrical refurbishment activities are completed, IID will continue to perform O&M on the Imperial Dam facilities in accordance with contract No. 3-07-30-W0030 between IID and Reclamation.

Figure 2

Figure 2

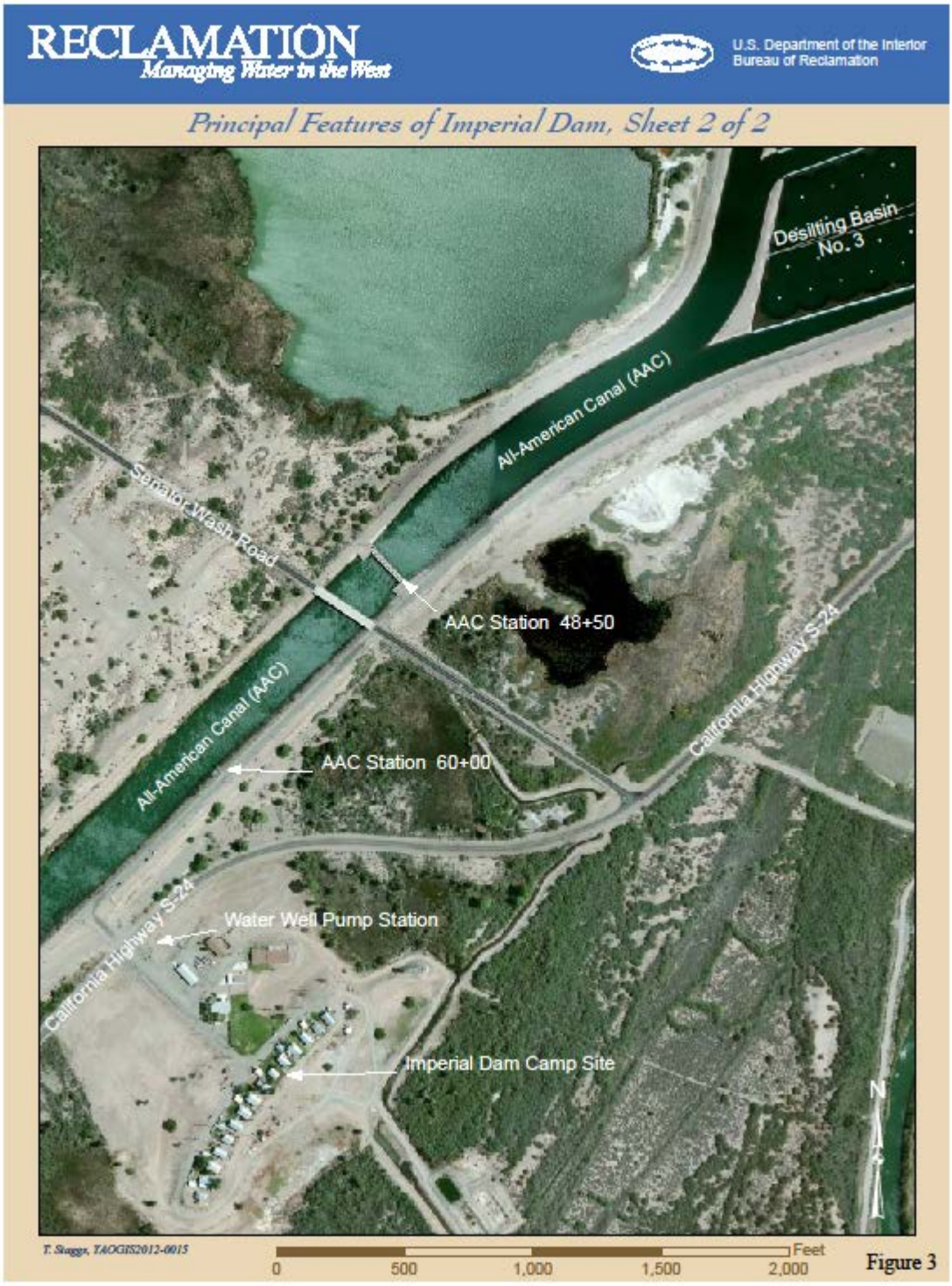
RECLAMATION
Managing Water in the West
U.S. Department of the Interior
Bureau of Reclamation
Principal Features of Imperial Dam, Sheet 2 of 2
Desilting Basin No. 3
All-American Canal (AAC)
Senator Wash Road
AAC Station 48+50
California Highway S-24
All-American Canal (AAC)
AAC Station 60+00
California Highway S-24
Water Well Pump Station
Imperial Dam Camp Site
N
T. Suggs, TAOGIS2012-0015
Feet
0
500
1,000
1,500
2,000
Figure 3

Figure 3

3.0 Affected Environment and Environmental Consequences

This section describes the existing environmental resources in the project area that may be affected by the Proposed Action and the No Action alternative, if implemented. It also serves as the baseline for the comparisons of alternatives. The following critical elements of the human environment are not present or would not be affected by the alternatives; therefore, they will not be addressed in this EA: Geology, Soils, Floodplain, Population, Visual, and Recreation.

3.1 Land Use

3.1.1 Affected Environment

The Imperial Dam facilities and the Imperial Dam camp site are situated within the LCR, bordering the Imperial Reservoir to the north, Laguna Dam to the south, Mittry Lake and the old Colorado River channel to the southeast, and the AAC to the west. The project site is located on Reclamation withdrawn lands. Adjacent lands located easterly of the project site are also Reclamation withdrawn and are managed by the Bureau of Land Management (BLM) under the Department of the Interior's Departmental Manual Part 613, where BLM manages certain Reclamation land bordering the LCR for recreation and wildlife purposes. Land uses on these adjacent lands consist of a BLM concession for the Hidden Shores Village, and the Squaw Lake campground. Additionally, the Mittry Lake Wildlife Area is located southeast of the project area; this area is leased under a Reclamation lease to Arizona Game and Fish Department (AGFD) and managed cooperatively by AGFD, BLM, and Reclamation.

3.1.2 Environmental Consequences

No Action – Under this alternative, use and status of the land would not change.

Proposed Action – There would be no change in land use or status. Management of adjacent lands would not be impacted. All activities would be conducted within existing facilities.

3.1.3 Management and Mitigation Measures

No mitigation measures are proposed.

3.2 Air Quality

3.2.1 Affected Environment

The majority of the Imperial Dam facilities and the entire Camp site are located within Imperial County, California. The Imperial County Air Pollution Control District (ICAPCD) relies on the project proponent to comply with all applicable ICAPCD rules and to implement mitigation measures identified in the California Environmental Quality Act Air Quality Handbook to reduce air quality impacts to an insignificant level. Rule 925 of the *Rules and Regulations of the Imperial County Air Pollution Control District* requires that no department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an Applicable Implementation Plan.

A portion of the project, including the eastern half of the Imperial Dam and the Gila Gravity Canal headworks is in Yuma County, Arizona. Yuma County Environmental Programs Division (YCEPD) and Arizona Department of Environmental Quality regulate emissions in the applicable portion of the project area. YCEPD publishes "Suggested Dust Control Methods," and operates Dust Control and Outdoor Burning hotlines.

The Clean Air Act, as amended in 1990, requires EPA to set National Ambient Air Quality Standards (NAAQS) for wide-spread pollutants from numerous and diverse sources considered harmful to public health and the environment. Imperial County is designated by the EPA as a Moderate Nonattainment Area for the 1997 8-Hour Ozone (O_3) NAAQS. PM_{10} is defined as particulate matter that is 10 micrometers in diameter or smaller. A portion of Imperial County, not including the project area, is designated as a Serious Nonattainment Area for the PM_{10} NAAQS. A portion of Yuma County, not including the project area, is designated as a Moderate Nonattainment Area for the PM_{10} NAAQS. The project area is designated as being in attainment for all other NAAQS.

3.2.2 Environmental Consequences

No Action - Under the No Action Alternative air quality in the area would not change from its present readings.

Proposed Action – Construction activities associated with the Proposed Action have the potential to release small amounts of ozone precursors such as nitrogen oxides (NOx) or volatile organic compounds (VOCs) from vehicle and machine exhaust. Ground disturbance associated with the replacement of utility poles has the potential to generate dust, resulting in an increase in PM_{10} emissions.

3.2.3 Management and Mitigation Measures

Subsections D.2 and D.3 of ICAPCD Rule 925 exempt the Proposed Action from conformity if its annual emissions remain below 100 tons of NOx or VOCs.

Proposed activities would limit emissions to less than 100 tons of these compounds in any given year.

Due to the potential increase in PM_{10} emissions, the following rules would be adhered to by IID and its contractors:

- ICAPCD Regulation VIII: Fugitive Dust Rules
- Yuma County Ordinance 05-01: Construction Project Sign Ordinance

In addition, Best Management Practices (BMPs) would be followed to limit PM_{10} emissions, including at a minimum:

- Vehicle and equipment traffic would be limited to paved or graveled roads as much as possible.
- Where equipment traffic, excavation, or demolition is required outside of paved or graveled roads, water or soil binders would be applied to exposed surfaces.
- Equipment should be properly maintained to minimize exhaust emissions, and equipment idling would be limited.
- Ground disturbing activities would cease temporarily when wind speeds at the site exceed 20 miles per hour.

3.3 Biological Resources

3.3.1 Affected Environment

The site where the Imperial Dam facilities and the Camp site are located are heavily disturbed and no native vegetation is present. Vegetation in the surrounding areas above Imperial Dam (Imperial Reservoir) consists predominantly of large stands of marsh type plants: cattail (*Typha spp.*) and bulrush (*Scirpus spp.*) with some common reed (*Phragmites australis*). Downstream of Imperial Dam, dominant species include saltcedar (*Tamarix chinensis*), arrowweed (*Pluchea sericea*), quailbush (*Atriplex lentiformis*) and some scattered mesquite (*Prosopis pubescens*) in the upland areas. Reclamation's Laguna Settling Basin's dredge disposal area is located below Imperial Dam. Areas along the old river channel located southeast of the project areas consist of cattail (*Typha latifolia*), common reed (*Phragmites australis*), and giant reed (*Arundo donax*). In the upper portion of the old river channel, saltcedar and arrowweed are more prevalent.

Woody riparian vegetation and uplands provide habitat for common mammals such as coyote (*Canis latrans*), bobcat (*Felis rufus*), desert cottontail (*Sylvilagus audubonii*), several species of rodents and bats, striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*) (Anderson and Ohmart 1984). The Colorado River corridor, including the old river channel, provides important habitat for migratory birds, both upland species and waterfowl, as well as habitat for resident species. Common birds include various egrets, herons, and owls, Gambel's quail (*Callipepla gambelii*), white-winged dove (*Zenaida asiatica*), mourning dove

(*Zenaida macroura*), flycatchers, and woodpeckers. Reptiles and amphibians are represented by several species of lizards, snakes, toads, and frogs, many of which are native to the area. Other species known to occur in the adjacent areas are the desert bighorn sheep (*Ovis canadensis nelsoni),* great egret, Sonoran desert tortoise (*Gopherus morafkai*), least bittern *(Ixobrychus exilis),* and the western burrowing owl (*Athene cunicularia hypugaea*).

Federally listed threatened or endangered wildlife species potentially occurring in the vicinity of the project area were identified using information from the United States Fish and Wildlife Service (USFWS) (endangered species list by county) for Imperial County and Yuma County.

There are four federally listed threatened, endangered, or candidate species which may occur in the vicinity of the project area:

Razorback sucker (*Xyrauchen texanus*) - Historically, the razorback sucker inhabited the Colorado River and its tributaries from Wyoming to the Gulf of California. Most razorback suckers in the LCR MSCP planning area are currently restricted to Lake Mohave, with smaller populations occurring in the Colorado River below Davis Dam, Lake Mead, and Senator Wash Reservoir (Bradford and Vlach 1995). Critical habitat has been designated for the razorback sucker and, within the LCR MSCP planning area, includes Lake Mead to its full-pool elevation; the river between Hoover Dam and Davis Dam, including Lake Mohave to its full-pool elevation; and the river and 100-year floodplain between Parker Dam and Imperial Dam.

Southwestern willow flycatcher (*Empidonax traillii extimus*) - Throughout its range, the southwestern willow flycatcher is a riparian obligate, insectivore that breeds in summer along rivers, streams, and other wetlands where dense willow, cottonwood, saltcedar, or other similarly structured riparian vegetation occurs (USFWS 2002).

Yuma clapper rail (*Rallus longirostris yumanensis*) - In the US, the Yuma clapper rail is associated primarily with freshwater marshes, with the highest densities of this subspecies occurring in mature stands of dense to moderately dense cattails and bulrushes. In the LCR MSCP planning area, Yuma clapper rail populations are considered regionally significant. Population centers for this subspecies include Imperial Division, Imperial National Wildlife Refuge (NWR), Cibola NWR, Mittry Lake, West Pond, Bill Williams River Delta, Topock Gorge, and Topock Marsh (LCR MSCP, 2004b).

Yellow-billed cuckoo (*Coccyzus americanus*) - The yellow-billed cuckoo is a USFWS candidate species for listing under the endangered species act (ESA) and is listed as endangered under California ESA. Western yellow-billed cuckoos require structurally complex riparian habitats with tall trees and a dense woody vegetative understory (Halterman 1991, Hughes 1999).

3.3.2 Environmental Consequences

No Action - Under the No Action Alternative, no electrical upgrades would be conducted. There would be no impacts to biological resources.

Proposed Action – The proposed project would have no impact on open water, marsh and riparian vegetation located in the surrounding area. The project area is currently occupied by water delivery (Imperial Dam) infrastructure, residential units, and maintenance shop and office buildings. All activities would be confined to previously disturbed upland areas (Imperial Dam and Camp facilities).

3.3.3 Management and Mitigation Measures

No mitigation measures are proposed.

3.4 Cultural Resources

3.4.1 Affected Environment

The National Historic Preservation Act (NHPA) establishes national policy for protecting significant cultural resources that are defined as "historic properties" under 36 CFR 60.4. NHPA Section 106 (36 CFR §800) requires that Federal agencies consider and evaluate the effect that Federal projects may have on historic properties under their jurisdiction. The area of potential effect for this undertaking includes the locations noted in Section 2.2 (above).

Imperial Dam and associated facilities were constructed by Reclamation between 1936 and 1938 under the authorization of the Boulder Canyon Act of 1928. Reclamation recently conducted a Level II Historic American Engineering Record and an evaluation for the Dam's eligibility for listing on the National Register of Historic Places (NRHP). Reclamation has determined that Imperial Dam is a contributing property to the newly proposed Imperial Dam Historic District under NRHP Criteria A and C (Rayle and Ruter 2013a).

The Camp site is located 1.5 miles downstream from the Dam in Imperial County, California. The Camp was constructed in 1935 to house government works and their families that worked on the project. The Camp consisted of buildings and structures that provided office space, and housed employees of the IID. Reclamation has completed a cultural resources assessment of the buildings at the Camp and an evaluation of the Camp's eligibility for listing on the NRHP. Reclamation determined that due to substantial renovations to the majority of the buildings, the Camp no longer retains integrity of design, materials and workmanship and it is not eligible for listing in the NRHP (Rayle and Ruter 2013b).

3.4.2 Environmental Consequences

In accordance with 36 CFR Part 800.5 Reclamation has applied the criteria of adverse effect to historic properties subject to the No Action and Proposed Action Alternative to determine if they would directly or indirectly alter any of the characteristics of historic properties that qualify them for inclusion in the NRHP.

No Action - Under the No Action Alternative, no electrical upgrades would be conducted. Further deterioration of electrical systems could degrade the integrity of historical resources due to mechanical failure or fire hazard. The effects of mechanical failure or fire to historic resources would have to be assessed if and when it occurs, based on how they may have diminished the properties ability to convey significance.

Proposed Action - The effects to the historic integrity of Imperial Dam, the Camp, and the contributing properties subject to the Proposed Action will not be adverse.

3.4.3 Management and Mitigation Measures

In accordance with 36 CFR part 800.5 Reclamation has applied the criteria of adverse effect to historic properties to determine if the Proposed Action would directly or indirectly alter any of the characteristics of historic properties that qualify them for inclusion in the NRHP. Based on our findings of no adverse effect, no mitigation measures are proposed.

If during the course of any activities associated with the implementation of the Proposed Action any sites, buildings, structures, or objects not addressed in this assessment are discovered, activities will cease in the vicinity of the resource. Reclamation's Environmental Group Manager and project archaeologist will be notified immediately. Reclamation shall ensure that the stipulations of 36 CFR Part 800.11 are satisfied before activities in the vicinity of the previously unidentified property resume.

3.5 Indian Trust Assets

3.5.1 Affected Environment

Indian Trust Assets (ITAs) are legal interests in property held in trust by the US for Indian tribes or individuals, or property in which the US is charged by law to protect for Indian tribes or individuals. In accordance with the Indian Trusts Fund Management Reform Act of 1994, as amended, all Department of Interior agencies, including Reclamation, are responsible for protecting ITAs from adverse impacts resulting from their programs and activities. In cooperation with tribes, Federal agencies must inventory and evaluate assets, and mitigate or compensate for adverse impacts to the asset. While most ITAs are located on reservation lands, they may also be located off-reservation. Examples of ITAs

include, but are not limited to, land, minerals, rights to hunt, fish, and gather, and water rights.

3.5.2 Environmental Consequences

Reclamation departmental policy requires the agency to address potential impacts to ITAs even if impacts are found to be non-significant. The Imperial Dam facilities and the Camp site are located northeast of the Fort Yuma Indian Reservation.

Trust Lands

The Proposed Action is not located on ITA lands; the nearest tribal lands are located approximately 2.5 miles from the project area. There are no tribal residences and/or facilities within the project area.

Water Rights

Currently, the Fort Yuma Indian Reservation possesses present Decreed rights to divert 51,616 acre-feet (AF) per year of Colorado River water. Irrigation water is supplied through facilities of the IID (Colorado River diversion at Imperial Dam and the AAC), Yuma County Water Users Association (Yuma Main Canal), and the Reservation Division (LCR MSCP 2004a).

Hunting, Fishing, and Gathering Rights

The Colorado River and its tributaries provide habitat for sensitive fish and wildlife species, especially in the riparian woodlands and marshes. Some members of the tribe still collect a variety of plants, which are eaten as well as used for medicinal and ceremonial purposes, and in traditional craft production (LCR MSCP 2004c).

3.5.2.1 No Action Alternative

Under the No Action Alternative, upgrades to the Imperial Dam facilities and the Camp site would not take place. Therefore, no change to Federal actions will occur that could result in an adverse effect to identified ITAs.

3.5.2.2 Proposed Action

Trust Lands

The Proposed Action will not interfere with any Trust Lands. The project is not located on Trust Lands and does not prevent the use or management of any tribal or Trust Lands.

Water Rights

The Proposed Action will not interfere with the Fort Yuma Indian Reservation's reserved water rights. The Proposed Action will not result in a change to any tribal water right, or to the diversion or delivery of tribal water entitlements.

During construction, there would be no disruption of operations at Imperial Dam; therefore, no impacts would occur.

Hunting, Fishing, and Gathering Rights
The Proposed Action will not interfere with any hunting, fishing or gathering rights which could be exercised by any tribe.

3.5.3 Management and Mitigation Measures
No mitigation measures are proposed.

3.6 Environmental Justice and Socio-Economic Conditions

3.6.1 Affected Environment
Executive Order 12898 requires Federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the US.

Minority populations include all persons identified by the Census of Population and Housing to be of Hispanic or Latino Origin, as well as, non-Hispanic persons who are African American, American Indian and Alaska Native, Native Hawaiian or other Pacific Islander.

Low-income populations are those that fall within the annual statistical poverty thresholds from the Bureau of the Census for the 2010 Census. The definition of poverty is dependent on the size of the family. For example, the poverty threshold for a family of three is $17,374; whereas, $22,314 is the threshold for a family of four (U.S. Census Bureau 2010b). If the total income of a person's family is less than the threshold appropriate for that family, then the person is considered as being below the poverty level. Information on total population, minority population, and poverty status for Yuma and Imperial Counties and surrounding cities is provided in Table 1.

Table 1

Location	Total Population	Percent Minority	Percent Population Living Below Poverty Level
Yuma County, AZ	195,751	64.7	20.9
Yuma, AZ	93,064	62.1	18.5
Imperial County, CA	174,528	86.3	21.4
Winterhaven, CA	394	96.1	47.1
Source: US Census Bureau 2010			

3.6.2 Environmental Consequences
No Action - Under the No Action Alternative, the Imperial Dam Electrical Upgrades project will not take place. Therefore, no Federal actions will occur

that could result in a disproportionately high and adverse effect on the health or environment of minority or low-income populations.

Proposed Action - Implementation of the Proposed Action would not disproportionately affect the minority and impoverished population in the area. Based on the analysis for air quality, water resources, and hazardous materials in this EA, changes resulting from implementing the project will not result in proportionately high and adverse impacts to the environment or to the health of low-income and minority populations. For a more detailed discussion on air quality in the greater Yuma area, refer to Sections 3.2 and 3.10 of this EA.

3.6.3 Management and Mitigation Measures

No mitigation measures are proposed for the environmental justice and socio-economic conditions section.

3.7 Hazardous Materials or Solid Waste

3.7.1 Affected Environment

Given the age of the Imperial Dam facilities and nature of operations, the project area is known or assumed to contain various sources of hazardous materials including: asbestos, lead, polychlorinated biphenyls (PCBs), mercury, and biohazards.

3.7.2 Environmental Consequences

No Action - Under this alternative, no waste would be generated beyond that created during continuing operations. The facilities would continue to age and degrade, which could cause a portion of the hazardous materials to be released to the environment. Facility workers would also continue to be potentially exposed to these materials.

Proposed Action – Under this alternative, construction waste would be generated, in addition to standard waste created during continued operations.

A hazardous materials survey (SCA Environmental 2011) was conducted to identify sources of hazardous materials impacted by this alternative. Potential contamination from small quantities of hazardous materials and solid waste could result from the Proposed Action if approved.

The proposed improvements would potentially have a positive effect with regard to hazardous materials and solid waste by allowing for proper abatement and disposal of the materials before they could enter the environment in an uncontrolled manner.

3.7.3 Management and Mitigation Measures

Mitigation actions designed to limit the potential impact of hazardous materials or solid waste would be implemented according to State and Federal regulations. Details of the proposed mitigation actions are contained in the *Imperial Irrigation District Facilities Electrical System Refurbishment 100% Submittal: Abatement Work Plan and Hazardous Materials Procedures,* (SCA Environmental 2011) and constitute environmental commitments with respect to the Proposed Action.

Other hazardous materials anticipated to be used during construction of the project are small volumes of petroleum hydrocarbons and their derivatives (for example, fuels, oils, lubricants, and solvents) required to operate the equipment used in the construction activities. These materials are those routinely associated with the operation and maintenance of heavy equipment or other support vehicles, including gasoline, diesel fuels, and hydraulic fluids.

- A site specific contingency spill plan should be developed and implemented. The plan should consist of reporting guidelines in the event of a spill, good housekeeping techniques, and employee training in the use of required equipment and proper handling of potentially hazardous materials.

- Hazardous materials used for this project would be contained within vessels engineered for safe storage.

- Areas for refueling of equipment would be chosen so as to prevent any accidental fuel leakage from contaminating surface water, groundwater, or soils.

3.8 Noise

3.8.1 Affected Environment

Noise that currently exists in the area generally comes from river recreation (motor boats), Imperial Dam operations, farming equipment, and vehicle travel along Highway S-24. Residences in the general vicinity include the Imperial Dam Camp, the Hidden Shores Village Recreational Vehicle Park, and camp sites located near Squaw Lake. There are no other sensitive noise receptors, such as schools or hospitals, in the area.

3.8.2 Environmental Consequences

No Action - In the No Action Alternative, current noise levels including noise from river recreation, highway, and Imperial Dam operations would continue at the present levels.

Proposed Action - The use of equipment during the implementation of the project will slightly increase noise disturbance in the vicinity of where work is occurring. This could affect adjacent areas.

3.8.3 Management and Mitigation Measures

No mitigation measures are necessary because noise levels would continue to be consistent with current ongoing Imperial Dam operations and adjacent recreational activities. Additionally, the project would be conducted in phases which will further minimize any excessive noise levels within the project area.

3.9 Water Resources

3.9.1 Affected Environment

The Imperial Reservoir, California sluiceway, the AAC and the Gila Gravity Canals are the closest sources of surface water in the area. Imperial Dam retains the waters of the Colorado River into the Imperial Reservoir before diverting into the AAC, the Gila Gravity Canal, and for desilting operations. Water deliveries to Mexico are made from Imperial Dam, through the AAC, returning to the Colorado River at Pilot Knob; and to Yuma project through the AAC and the Yuma Main Canal's conveyance system. Below Imperial Dam, the California Sluiceway extends downstream. As sediment collects in the sluiceway from the AAC desilting operations, it is moved downstream by high rate, short duration (sluicing) flows of water discharged through the sluiceway gates. The sluicing flows from Imperial Dam are stored behind Laguna Dam and released over extended periods. Laguna Dam releases become part of the water delivered to Mexico.

The U.S. Army Corps of Engineers (USACE), under Section 404 of the Clean Water Act, regulates the discharge of dredged, excavated, or fill material in wetlands, streams, rivers, and other US waters. The Colorado River is USACE jurisdictional water identified within the project area.

3.9.2 Environmental Consequences

No Action – Implementation of the No Action Alternative would not entail any construction activity; therefore, no impacts to surface water, or jurisdictional waters would occur.

Proposed Action – The Proposed Action's impacts on water resources are anticipated to be minimal, with no changes to water delivery operations. Project activities would be conducted in phases in order to ensure Imperial Dam operations are not impacted. Potential impacts to surface water could include water quality degradation. Although highly unlikely, spills from construction activities could migrate into surface water conduits or infiltrate the groundwater,

contaminating the source. If a spill were to occur, the impacts to water resources could be minimized with immediate response and clean-up procedures.

No construction components of the Proposed Action would affect waters of the US, as no fill material will be discharged into the Colorado River.

3.9.3 Management and Mitigation Measures

- The development and implementation of a project specific Storm Water Pollution Prevent Plan would reduce potential negative effects to water resources.

- During construction, no refueling equipment should be permitted within 100 feet of the sluiceway or any other surface water conveyance system.

3.10 Cumulative Effects of the Proposed Action

Cumulative effect is the impact on the environment that results from the incremental impacts of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or nonfederal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7). Several current and planned projects either located within or in the vicinity of the planning area and having the potential to impact common resources will be addressed in this section.

Maintenance Dredging above Imperial Dam and the Laguna Settling Basin

Reclamation conducts maintenance dredging immediately above Imperial Dam (Imperial Reservoir) and the area below identified as the Laguna Settling basin (LSB) under the Colorado River Front Work and Levee System program. These reoccurring maintenance activities have been ongoing since the 1960s. Settling basins must occasionally be dredged to maintain capacity and effectiveness (LCR MSCP 2004a). Accumulated sediment is removed from in front of the dam and the LSB to ensure water deliveries can be made through the headworks to the AAC and the Gila Gravity Main Canal and to alleviate sediment aggradation problems that may occur downstream of Laguna Dam along the river. All sediment removed is placed in the LSB's designated disposal (upland) area via hydraulic pipeline that extends from the project areas, along the O&M access road to the disposal site. In addition, retention dikes along portions of the disposal site's western boundary are constructed to prevent water runoff in the California sluiceway.

Laguna Reservoir Restoration Project

The Laguna Reservoir Restoration Project is an ongoing project that proposes to increase the amount of water storage capacity in the reservoir from 400 AF to 1,500 AF. The current reduced storage capacity within the Laguna Reservoir is insufficient to accommodate regular sluicing events which require release of approximately 300 to 400 AF of water per event and should occur two to three times per week (Reclamation 2006). The project area is located immediately above Laguna Dam. The project is intended to provide sufficient storage space at the Laguna Reservoir to allow for the release of sluicing flows from Imperial Dam designed to remove sediment accumulated at the AAC headworks and along the California Sluiceway channel. As sediment collects in the sluiceway, it is moved downstream to a sediment settling basin using high rate, short duration sluicing flows.

MSCP's Laguna Restoration Project

The MSCP is in the process of restoring, enhancing, and creating a large-scale riparian and marsh habitat through the creation of natural channels; restoration of water flows in degraded wetlands and aquatic habitats. The project design would incorporate the proposed project area of 1,800 acres, with the intent of restoring approximately 1,200 acres. A mosaic of native vegetation such as Fremont cottonwoods (*Populus fremontii*), Goodding's willow (*Salix gooddingii*), coyote willow (*Salix exigua*), honey mesquite (*Prosopis glandulosa*), and quail bush (*Atriplex lentiformis*) would be planted on various land configurations to enhance and restore riparian, marsh and upland habitat (LCR MSCP 2011). The project is located along the historic Colorado River channel (between Imperial Dam and Laguna Dam). The need for the proposed action is for Reclamation to satisfy the requirements of the LCR MSCP's biological opinion and the final environmental impact statement. The proposed project would support the goals of the LCR MSCP.

BLM's Laguna Emergency Stabilization and Rehabilitation Project

The current project is in the process of rehabilitating 86 acres of habitat and recreational facilities that were recently destroyed in the Laguna fire that started in May 2011. The Proposed Action would rehabilitate the burned area within Betty's Kitchen, Pratt Nursery, Mittry South, Teal Alley, and south of Laguna Dam which would include removing hazard trees, clearing weeds, seeding and planting native species, replacing destroyed structures and infrastructure, improving the damaged trail, and monitoring the effects of the treatments (Bureau of Land Management 2011).

3.10.1 Impacts by Resource

Land Use

The Proposed Action Alternative would not change any land uses in the area and/or disrupt any established land configurations, wildlife or recreational areas.

Implementation of the Proposed Action Alternative, in conjunction with the other actions is not anticipated to have negative cumulative impacts to land use.

Air Quality

Implementation of the Proposed Action and other actions described in section 3.10 may result in increased area emissions associated with construction activities. Due to the mobile nature and short duration of most emission sources, project emissions in combination with future emission sources would not be expected to contribute to an exceedance of an ambient air quality standard. As a result, the Proposed Action, in combination with other foreseeable projects and mitigation requirements, would not produce significant cumulative impacts to air quality and climate conditions.

Biological Resources

The Proposed Action Alterative and the above mentioned projects in section 3.10 have the potential for biological impacts due to short-term habitat loss for sensitive and common wildlife species. However, several of the projects are restoration and enhancement projects that are designed to benefit targeted species and other wildlife that utilize the proposed project site, resulting in a net positive impact over the duration of the proposed project implementation. With incorporation of avoidance, minimization, and mitigation measures the Proposed Action Alternative, in conjunction with the other actions, is not anticipated to have negative cumulative impacts to biological resources.

Cultural Resources

Reclamation has made a finding of no adverse effect to historic properties for the activities associated with the implementation of the Proposed Action. During the implementation phase of projects identified in section 3.10, there is potential for unforeseen cultural resources to be discovered or damaged. Reclamation has established "stop work" procedures that shall be implemented should an unanticipated discovery situation arise. Therefore, the Proposed Action, in conjunction with other projects listed in section 3.10, would not result in significant cumulative impacts on cultural resources.

Indian Trust Assets

There are no ITAs or other resources of tribal concern in the project area, and significant impacts on ITAs or other tribal resources from implementation of the Proposed Action would not occur. Therefore, the Proposed Action, in combination with other proposed or on-going projects, would not cause disproportionate cumulative effects on ITAs.

Environmental Justice and Socio-economic

The Proposed Action would have negligible effects on population, housing, and other socioeconomic issues. The Proposed Action would not displace persons or housing, nor would it induce substantial population growth in the area, either directly or indirectly. The types of potential effects identified (e.g., increased noise, and fugitive dust) for the Proposed Action and the other projects would be localized and short-term. The Proposed Action, in combination with other foreseeable projects described in section 3.10, is not expected to have a cumulatively significant impact on socioeconomics and minority or low-income populations.

Hazardous Materials

The project site is not located in close proximity to any known or suspected hazardous waste or petroleum waste sites. However, incidental spills of petroleum products could occur during construction activities, and such spills could result in significant impacts to water quality. Additionally, disposal of any hazardous materials (Asbestos, lead based paint, and PCBs) would be conducted in compliance with applicable Federal, state, and local regulations and would reduce the likelihood of potentially significant impacts. With the implementation of mitigation measures, the risks of incidental spills would be reduced to less than significant. Other projects described in section 3.10 have hazards/hazardous materials related impacts due to construction activities. However, with anticipated mitigation measures, these risks would be cumulatively less than significant as these impacts are localized and temporary.

Noise

The Proposed Action Alternative would require some use of heavy equipment to assist in the replacement of power poles. Overall, proposed project activities would be phased out over a couple of years to minimize noise impacts. Other projects described in section 3.10 would have similar temporary construction noise. The Proposed Action, in conjunction with the other actions, is not anticipated to have long term negative cumulative impacts in the vicinity of the proposed project area.

Water Resources

The Proposed Action would have beneficial impacts related to ensuring water deliveries to area users continue to be met. The Proposed Action, in conjunction with other proposed or on-going projects described in section 3.10, would not result in cumulatively significant impacts to water resources.

4.0 Consultation, Coordination, and List of Preparers

4.1 Agencies Consulted

An electronic copy of this EA has been posted for public viewing on Reclamation's Yuma Area Office web site at http://www.usbr.gov/lc/yuma/. Paper copies of the Notice of Availability memorandum and EA were distributed to the following entities:

US Fish and Wildlife Service
CA Department of Fish and Game
Quechan Indian Tribe
Bureau of Land Management
Imperial Irrigation District
Bureau of Land Management
AZ Game and Fish Department
Cocopah Indian Tribe
Yuma Audubon Society

Consultations with the state historic preservation office were conducted under Section 106 of the NHPA (36 Part 800) for undertakings involving Federal facilities:

AZ State Parks State Historic Preservation Office
CA State Parks Office of Historic Preservation

4.2 List of Preparers

4.2.1 Bureau of Reclamation

Julian DeSantiago	Environmental Protection Specialist
Nicholas Kilb	Environmental Protection Specialist
James Kangas	Archaeologist
Terry Staggs	GIS

5.0 References

Anderson, B.W., and R.D. Ohmart
1984 A vegetation management study for the enhancement of wildlife along the lower Colorado River. Final report. Boulder City, NV: Bureau of Reclamation, Lower Colorado Region.

Bradford, R. H., and B. R. Vlach
1995 Razorback sucker habitat assessment indices for the lower Colorado River. (Cooperative Agreement No. 3-FC-34-08243). Prepared for U.S. Bureau of Reclamation, Yuma, AZ.

Bureau of Land Management
2011 Environmental Assessment for the Laguna Emergency Stabilization and Rehabilitation.

Bureau of Reclamation
2006 Final Environmental Assessment for the Laguna Reservoir Restoration Project. Yuma Area Office. September.

California State Parks Office of Historic Preservation
2008 Letter to Bureau of Reclamation, Proposed Demolition of Imperial Irrigation District Camp Garage, Imperial County, California. September.

Halterman, M.D.
1991 Distribution and habitat use of the Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*) on the Sacramento River, California, 1987-90. Masters' Thesis California State University, Chico 49 pp.

Hughes, J.M.
1999 Yellow-billed cuckoo (*Coccyzus americanus*). The Birds of North America, No. 418 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Jacobs Engineering Group, Inc.
2011 Imperial Irrigation District Facilities Electrical System Refurbishment – Hazardous Materials Abatement Work Plan. February 11, 2011.

Imperial County Air Pollution Control District
2005 Rules and Regulations. Revised. January 11.

Imperial Irrigation District
2012 Imperial Dam. Website. http://www.iid.com/index.aspx?page=174 Accessed May 2012.

Lower Colorado River Multi-Species Conservation Program (LCR MSCP)
____. 2004a. Lower Colorado River Multi-Species Conservation Program, Volume III: Final Biological Assessment December 17. Sacramento, CA.

____. 2004b. Lower Colorado River Multi-Species Conservation Program, Volume IV: Final Appendices (Appendix I) December 17. Sacramento, CA.

____. 2004c. Lower Colorado River Multi-Species Conservation Program, Final Programmatic Impact Statement/Environmental Impact Report: Volume I, December 17.

2011 Final Environmental Assessment for the Laguna Division Conservation Area Yuma County, Arizona and Imperial County, California. February.

Rayle, J. G., and H. Ruter.
___. 2013a. A Cultural Resource Assessment and Level II HAER Documentation for the Imperial Dam, Yuma County, Arizona and Imperial County, California. Report prepared by Logan Simpson Design Inc. Tempe, Arizona for the Yuma Area Office, Bureau of Reclamation. July.

___. 2013b. A Cultural Resource Assessment of the Imperial Dam Camp, Southeast of the Imperial Dam, Imperial County, California. Report prepared by Logan Simpson Design Inc. Tempe, Arizona for the Yuma Area Office, Bureau of Reclamation. March.

SCA Environmental, Inc.
2011 Summary Report: Pre-Renovation Hazardous Materials Survey – Imperial Irrigation District, Facilities Electrical System Improvements, Laguna and Imperial Dam Facilities. February.

U.S. Census Bureau.
___ 2010a. Available at www.censusbureau.gov

___ 2010b. www.census.gov/hhes/www/poverty/data/threshld/index.html

U.S. Fish and Wildlife Service
___. 2002. Final recovery plan for the southwestern willow flycatcher (*Empidonax traillii extimus*). Albuquerque, NM: Region 2.

___. 2012. http://www.fws.gov/carlsbad/TEspecies.html

___. 2012. http://www.fws.gov/southwest/es/arizona/Threatened.htm

This Page is Intentionally Left Blank

Appendix A

NOV 19 2012

YAO-7210
ENV-6.00

Interested Parties (See Enclosed List)

Subject: Imperial Dam Facilities Electrical Improvements Project (Project) – Draft Environmental Assessment (EA) Notice of Availability

Dear Ladies and Gentlemen:

The Bureau of Reclamation is proposing to authorize the Imperial Irrigation District (IID) to conduct electrical upgrades to the Imperial Dam Facilities (Dam). The Dam is owned by Reclamation, and IID in accordance with contractual agreements has operation and maintenance responsibilities. Reclamation is the lead federal agency pursuant to National Environmental Policy Act (NEPA).

The purpose of this project is to upgrade and improve the overall electrical system and components of the Dam and bring up to safety standards and codes. Most of the technology on the Dam is dated and technically obsolete. Proposed project is located along the lower Colorado River, approximately 18-miles northeast of Yuma, Arizona. The Dam lies on both the Arizona and California side of the river.

Pursuant to NEPA and Reclamation policy, a Draft EA was prepared and is available for a 30-day review. The deadline for receipt of comments is 30 days from the date of this letter. In addition, this EA has been posted on Reclamation's Yuma Area Office web page http://www.usbr.gov/lc/yuma/. Comments may be mailed to Mr. Julian DeSantiago at Bureau of Reclamation, Yuma Area Office, 7301 Calle Agua Salada, Yuma, Arizona 85364. If you have any questions regarding the project, please contact Julian DeSantiago at (928) 343-8259, or jdesantiago@usbr.gov.

Sincerely,

Jill Dale

Jill S. Dale, Group Manager
Environmental Compliance and Planning

Enclosure

Distribution List:

Bureau of Land Management
Yuma Field Office
Attn: Erica Steward
2555 East Gila Ridge Road
Yuma, AZ 85365

Mr. Bill Knowles
Habitat Manger
AZ Game and Fish Department
9140 East 28 Street
Yuma, AZ 85365

Mr. David D. Vigil
CA Department of Fish and Game
P.O. Box 2160
Blythe, CA 92226

Ms. Leslie Fitzpatrick
U.S. Fish and Wildlife Service
2321 West Royal Palm Road, Suite 103
Phoenix, AZ 85021

Ms. Jenness McBride
Chief, Coachella and Imperial Valleys
Division
U.S. Fish and Wildlife Service
Palm Springs Fish and Wildlife Office
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, CA 92262

2000 (w/o encl)
2200 Larson (w/o encl)
6200 Lee (w/o encl)
7001
7210 DeSantiago (w/encl)

WBR:JDeSantiago:pt:11/13/2012:928-343-8259
Dir:7000\DeSantiago\7210-11.003 (12)

Ms. Jill McCormick
Cocopah Indian Tribe
14515 South Veterans Drive
Somerton, AZ 85350

Mr. John Bathke
Historic Preservation Officer
Quechan Indian Tribes
P.O. Box 1899
Yuma, AZ 85366-0213

Mr. Cary Meister
Yuma Audubon Society
P.O. Box 6395
Yuma, AZ 85364

Mr. Joel Lopez
Imperial Irrigation District
P.O. Box 937
Imperial, CA 92251

Mr. Bruce Wilcox
Imperial Irrigation District
PO Box 937
Imperial, CA 92251
(w/encl to each)

United States Department of the Interior
U.S. Fish and Wildlife Service
Arizona Ecological Services Office
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
Telephone: (602) 242-0210 Fax: (602) 242-2513

In reply refer to:
AESO/SE
02EAAZ00-2013-TA-0007
02EAAZ00-2013-I-0049

December 13, 2012

Memorandum

To: Group Manager, Environmental Compliance and Planning, Yuma Area Office, U.S. Bureau of Reclamation, Yuma, Arizona (YAO-7210, ENV-6.00)

From: Field Supervisor

Subject: Review of Imperial Dam Electrical Improvements Project Draft Environmental Assessment, Imperial County, California and Yuma County, Arizona

Thank you for your correspondence received by us on November 20, 2012, requesting review of the Draft Environmental Assessment (DEA) for the subject project at Imperial Dam. The proposed action would involve upgrading and improvements to the existing electrical systems at the Dam and supporting buildings and structures over several years divided into four phases. The proposed action also includes some non-electrical restoration work in some buildings (plumbing and interior design modifications) and removal of hazardous materials.

We have reviewed the DEA and find it very complete. All work under this project would be in the footprint/disturbed areas of the Dam and the supporting buildings and structures and appropriate mitigation is included for affected natural resources (air quality, water quality, and hazardous materials).

You included an evaluation of potential effects to the endangered razorback sucker (*Xyrauchen texanus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and Yuma clapper rail (*Rallus longirostris yumanensis*), and candidate yellow-billed cuckoo (*Coccyzus americanus*). These are species covered under the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) and independent section 7 consultation is not required for Bureau of Reclamation (Reclamation) projects included in the LCR MSCP. Based on a review of the LCR MSCP Biological Assessment (which lists covered actions for Reclamation), it is not clear if this project is considered a covered action. We suggest that the final EA or Finding of No Significant Impact include reference to any coverage for effects to endangered species afforded to the project by the LCR MSCP.

ENVIRONMENTAL ASSESSMENT

Thank you for providing this document for our review. If there are any questions regarding our response, please contact Lesley Fitzpatrick (602) 242-0210 (x236) or me (x244). In all future correspondence on this project, please refer to consultation number 02EAAZ00-2013-TA-0007.

Steven L. Spangle

cc: Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ
Field Supervisor, Palm Springs Ecological Services Office, FWS, Palm Springs, CA

W:\Lesley Fitzpatrick\13-TA0007 Imp Dam.docx:cgg

From:	Thomas Bommarito
To:	DeSantiago, Julian A
Cc:	Barbara Cook; Bill Knowles
Subject:	Imperial Dam Facilities Improvement Project - Draft EA
Date:	Monday, November 26, 2012 3:14:50 PM

Mr. Julian Santiago
Bureau of Reclamation
7301 Calle Agua Salada
Yuma, AZ85364

The Arizona Game and Fish Department (Department) has reviewed the November 2012 Environmental Assessment for the Imperial Dam Facilities Electrical Improvements Project – Draft Environmental Assessment. A review of our Heritage Data Management System showed the presence of special status species as occurring near the project vicinity, but we do not foresee any negative impacts to those species from this project.

The Department has no further comments at this time. If you have any questions, please contact me at 928-341-4069.

Sincerely,

Tab Bommarito

M12-11260537

Thomas (Tab) Bommarito
Habitat Specialist II
Arizona Game & Fish Department
9140 E. 28th Street
Yuma, AZ 85365
(928) 341-4069

THE COCOPAH INDIAN TRIBE
Cultural Resource Department
14515 S. Veterans Drive
Somerton, Arizona 85350
Telephone (928) 627-2102
Fax (928) 627-3173

CCR-027-12-002

December 11, 2012

Mr. Julian DeSantiago
US Department of the Interior
Bureau of Reclamation – Yuma Area Office
7301 Calle Agua Salada
Yuma, Arizona 85364

RE: Imperial Dam Facilities Electrical Improvements Project – Draft Environmental Assessment

Dear Mr. DeSantiago

The Cultural Resources Department of the Cocopah Indian Tribe appreciates your consultation efforts on this project. We are pleased that you contacted the Cocopah Tribe on this cultural resource issue for the purpose of solicitation of our input and to address our concerns on this matter. At this time we wish to make no comments on the Draft Environmental Assessment.

If you have any questions or need additional information please feel free to contact the cultural resource department. We will be happy to assist you with any and all future concerns or questions.

Sincerely,

H. Jill McCormick, M.A.
Cultural Resource Manager

OFFICIAL FILE COPY - YAO
RECEIVED DATE DEC 17 2012
IMH Code ENV-6.00
Control No. 12075313
Folder No. 155411-0
Project Name/No.
3437

Environmental Assessment

This Page is Intentionally Left Blank

Appendix B

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

October 21, 2013 In reply refer to: BUR_2012_1126_002

FILE COPY - YAO

RECEIVED DATE
IMH Code ENV-3.00
Control No. 1304529C
Folder No. 1222550-C
Project Name/No.

Jennifer McCloskey, Area Manager
Bureau of Reclamation
Lower Colorado Region
Yuma Area Office
7301 Calle Agua Salada
Yuma, AZ 85364

Re: Section 106 Consultation for Electrical and Communications System Upgrades at 212 the Imperial Dam and Associated Facilities, Imperial County, California

Dear Ms. McCloskey:

Thank you for your letter of September 9, 2013 continuing consultation for the above referenced project to comply with Section 106 of the National Historic Preservation Act of 1966 and its implementing regulation found at 36 CFR Part 800. You are requesting that I concur with the Bureau of Reclamation's (Reclamation) determination of eligibility for the Imperial Dam Historic District (IDHD) and finding of no adverse effect for the undertaking.

The undertaking consists of the removal and replacement of outdated electrical systems and communication components within the Dam and associated facilities, and for remodeling of the Dam's Main Control House, to be completed in four stages.

In response to the comments in my January 16, 2013, letter, your current submission includes a revised copy of *A Cultural Resources Assessment and Level II HAER Documentation for the Imperial Dam, Yuma County, Arizona and Imperial County, California* (evaluation, July 2013), which includes the *California SHPO DPR Forms for the Imperial Dam Historic District.*

Reclamation has determined that the IDHD is eligible under Criteria A and C. The evaluation has identified the contributing and non-contributing resources in the table on page 16, and describes the character-defining features of each structure except the Imperial Dam. However, neither the initial evaluation nor the revised evaluation provided a sufficient context or significance statement for me to either agree or disagree with the eligibility determination.

In the interest of moving the project forward, and as the IDHD is likely significant as a component of the larger Boulder Canyon Project, I suggest assuming the IDHD eligible for the purposes of this project only. Reclamation has determined that the undertaking will have no adverse effect on the IDHD. I concur with this determination.

Cultural Resources - Section 106 Consultation

Please be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, you may have future responsibilities for this undertaking under 36 CFR Part 800.

Thank you for considering historic properties during project planning, and I look forward to consulting with you on future projects. If you have any questions, please contact Kathleen Forrest of my staff at (916) 445-7022 or email at kathleen.forrest@parks.ca.gov.

Sincerely,

Carol Roland-Nawi, Ph.D.

Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer

STATE OF CALIFORNIA – THE NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

June 13, 2013 In reply refer to: BUR120126B

Jennifer McCloskey, Area Manager
Bureau of Reclamation
Lower Colorado Region
Yuma Area Office
7301 Calle Agua Salada
Yuma, AZ 85364

Re: Revised Architectural Survey and National Register of Historic Places (NRHP) Evaluation of the Imperial Dam Camp and Finding of No Effect for the Demolition and Replacement of Three Houses, Imperial County, California

Dear Ms. McCloskey:

Thank you for your letter of April 25, 2013 continuing consultation for the above referenced project to comply with Section 106 of the National Historic Preservation Act of 1966 and its implementing regulation found at 36 CFR Part 800. You are requesting that I concur with the Bureau of Reclamation's (Reclamation) determination of eligibility for the Imperial Dam Camp (Dam Camp) and finding of no historic properties affected for the undertaking.

Reclamation submitted an evaluation of the Dam Camp in September of 2012, finding it eligible for the NRHP. However, due to subsequent discussions and my letter of January 14, 2013, Reclamation reexamined the finding and has concluded that due to substantial renovations of the majority of the buildings, the Dam Camp no longer retains integrity of design, materials and workmanship. Therefore, Reclamation has determined that the Dam Camp is not eligible for listing on the NRHP. I concur with this determination.

The undertaking consists of the demolition and replacement of Houses 1, 9 and 10. As the Dam Camp is not eligible for listing on the NRHP, no historic properties are present within the Area of Potential Effect (APE). Reclamation has determined that the undertaking will result in no historic properties affected. I concur with this determination.

Thank you for considering historic properties during project planning, and I look forward to consultation on future projects. If you have any questions, please contact Kathleen Forrest of my staff at (916) 445-7022 or email at kathleen.forrest@parks.ca.gov.

Sincerely,

Carol Roland-Nawi, Ph.D.

Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer
Office of Historic Preservation

This Page is Intentionally Left Blank