

**U.S. Department of the Interior
Bureau of Land Management**

ENVIRONMENTAL ASSESSMENT

DOI-BLM-AZ-C020-2013-027-EA

AZA 23275

**Paradise Cove East Rehabilitation and Restoration
of Native Habitat and Recreational Trail**

Yuma Field Office
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Table of Contents

1. INTRODUCTION	4
A. Project Location	4
B. Project Background	4
C. Purpose and Need for the Proposed Action	4
D. Decision to be Made.....	5
E. Conformance with Land Use Plan	5
F. Scoping and Issues.....	6
2. PROPOSED ACTION AND ALTERNATIVES	8
A. Proposed Action (Alternative 2)	8
B. Alternative 3	10
C. Alternative 4	10
D. Alternative 5	10
E. No Action Alternative (Alternative 1)	10
F. Alternatives Considered but Eliminated From Detailed Analysis.....	10
G. Relationship to Statutes, Regulations, or Other Plans.....	11
H. Past and Present Actions	11
3. AFFECTED ENVIRONMENT	11
A. Resources / Concerns	11
1. Cultural Resources.....	11
2. Climate Change	12
3. Environmental Justice.....	12
4. Floodplain.....	12
5. Fire and Fuels	12
6. Human Health and Public Safety.....	12
7. Lands and Realty	12
8. Migratory Birds	12
9. Native American Religious Concerns	13
10. Recreation.....	13
11. Socioeconomics	13
12. Soils	14
13. Threatened and Endangered Species	14
14. Travel Management.....	14

15.	Vegetation.....	14
16.	Visual Resources	14
17.	Water Quality	14
18.	Wetland/Riparian Zones.....	15
19.	Wildlife.....	15
4.	ENVIRONMENTAL CONSEQUENCES	15
A.	Potential Direct and Indirect Effects	15
1.	Cultural Resources.....	15
2.	Climate Change	16
3.	Environmental Justice.....	17
4.	Floodplains	18
5.	Fire/Fuels Management	18
6.	Human Health and Public Safety.....	20
7.	Lands and Realty	20
8.	Migratory Birds	21
9.	Native American Religious Concerns	22
10.	Recreation.....	23
11.	Socioeconomics	23
12.	Soils	24
13.	Threatened and Endangered Species	25
14.	Travel Management.....	26
15.	Vegetation.....	27
16.	Visual Resources	28
17.	Water Quality	28
18.	Wetland/Riparian Zones.....	29
19.	Wildlife.....	30
5.	TRIBES, INDIVIDUALS, ORGANIZATIONS OR AGENCIES CONSULTED	33
6.	REFERENCES, GLOSSARY	34
A.	References Cited	34
7.	APPENDICES	35
A.	Appendix A – Cultural Clearance	35
B.	Appendix B – Maps.....	31
C.	Appendix C – Approved Pesticide Use Proposals	38
D.	Appendix D – Climate Change Worksheet Yuma County	42

1. INTRODUCTION

A. Project Location

The Paradise Cove East Rehabilitation and Restoration of Native Habitat and Recreational Trail (PCE) project is located within Yuma County, Yuma, Arizona, along the lower Colorado River (LCR), and would affect an area totaling approximately 20 acres (Appendix B). This project is between the River's Edge Trailer Park (on private land) and the Paradise Cove West (PCW) Restoration Project that was identified in 2008 as mitigation on Federal land for the Customs and Border Patrol Right of Way Clearing on the Limitrophe.

The project lies on the following Federal lands:

San Bernardino Meridian, Arizona
T. 16 S., R. 22 E.,
sec. 28, lots 7, 8, 9, and 10
(General Land Office No. 3922-B2,
Dependent Resurvey, Book 5972.)

B. Project Background

The PCE project site flooded in 1983, 1993, and 2012, where previous work to establish wildlife habitat was underway. The site then and now provides access to the LCR by foot and boat. It is also used by birdwatchers, hunters, and hikers.

Since the flood, this area is dominated by dumping and other illegal activities. Community efforts to assist in managing the site include dumping clean-ups, vegetation removal, and increased law enforcement presence. Starting in 2001 and carried into the present, treatments were conducted to rehabilitate the project area post wildland fire destruction through youth and community efforts.

Transient communities have lingered throughout this area and have caused wildland fires. These fires destroy the native riparian vegetation that provide habitat for many species of neo-tropical migratory birds and many have worked to establish and maintain through the site.

PCE and the adjacent PCW is closed to the public, through Federal Register Vol. 60, No. 61 March 30, 1995, due to safety concerns after the Colorado River flooded. After continued extensive community use through 2014, Federal law enforcement posted a sun up to sun down sign to assist in the area's enforcement. PCE is currently heavily patrolled by city, county, state, and federal law enforcement agents.

C. Purpose and Need for the Proposed Action

The PCE Project Area is currently infested with invasive saltcedar, overrun by illegal activities, does not provide a safe recreational setting, and access is currently closed to all personnel through Federal Registry Vol. 60, No. 61 dated March 30, 1995.

The purpose and need for this project is to allow the public to legally recreate on public lands within PCE, provide for wildlife focused recreational opportunities, and provide native wildlife habitat for threatened and endangered species as directed by the 2010 Yuma Resource Management Plan (RMP).

D. Decision to be Made

The decision to be made is which alternative would be implemented.

E. Conformance with Land Use Plan

The Proposed Action is in conformance with the Yuma Field Office Resource Management Plan (RMP) which was approved on January 19, 2010.

The Proposed Action is in conformance with the applicable RMP because it is specifically provided for in the following RMP decision(s):

FM-023: Integrate fire management into upland and riparian habitat restoration actions for non-game bird species.

RR-003: Ample recreation opportunities are provided on BLM-administered lands within the 100-year floodplains of the lower Colorado and Gila rivers.

VM-008: Where and when practicable, develop new riparian habitat or restore damaged, degraded, and saltcedar habitats within the Colorado and Gila River WHA for the protection and enhancement of riparian or floodplain associated species. Install facilities to protect restoration sites as needed.

VM-014: Plant trees in suitable areas to provide perch sites and enhance foraging habitat for raptors.

WF-027: Restore degraded habitats (both upland and riparian) to ecological conditions consistent with non-game migratory bird habitat management objectives, emphasizing maintenance and/or enhancement of natural biological diversity.

WF-029: Create or maintain habitat for dove and quail at suitable sites such as riparian restoration areas or retired agricultural leases.

WS-017: Floodplains and riparian areas administered by the BLM along the Colorado and Gila rivers will continue to be managed with priority consideration given to maintenance as wildlife habitat.

WS-018: Desired plant communities and suitable wildlife habitat are restored and maintained for the benefit of migratory birds, waterfowl, reptiles, big-game mammals, and other desired species within riparian areas and floodplains.

F. Scoping and Issues

PROJECT RESOURCE REVIEW				
Resources & Programs Considered	Not Present	Present and Not Affected	Present and/or Potentially Affected	Rationale
Air Quality		X		Project Area not within a PM10 Attainment Area, so air quality is not analyzed in this document.
Areas of Critical Environmental Concern	X			The project is not within or adjacent to an ACEC.
Climate Change		X		See Section 3.2
Cultural Resources			X	See Section 3.1 for analysis.
Paleontological Resources		X		The project is within an Area with Low Paleontological Sensitivity; which does not require assessment or mitigation.
Environmental Justice			X	See Section 3.3 for analysis.
Farmlands (Prime or Unique)	X			There are no prime or unique farmlands in the project area.
Floodplains			X	See Section 3.4 for analysis.
Fuels/Fire Management			X	See Section 3.5 for analysis.
Grazing	X			There is no grazing within the project area.
Human Health and Public Safety			X	See Section 3.6 for analysis.
Lands and Realty			X	See Section 3.7 for analysis.
Migratory Birds			X	See Section 3.8 for analysis.
Minerals	X			There are no active mining claims within the project area.
Native American Religious Concerns			X	See Section 3.9 for analysis.
Rangelands and Forests	X			There is no range or forest within the project area.

Recreation			X	See Section 3.10 for analysis.
Socioeconomics			X	See Section 3.11 for analysis.
Soils			X	See Section 3.12 for analysis.
Threatened and Endangered Species			X	See Section 3.13 for analysis.
Travel Management			X	See Section 3.14 for analysis.
Vegetation			X	See Section 3.15 for analysis.
Visual Resources			X	See Section 3.16 for analysis.
Water Quality (Drinking or Groundwater)			X	See Section 3.17 for analysis.
Wetlands/Riparian Zones			X	See Section 3.18 for analysis.
Wild & Scenic Rivers	X			There are no wild and scenic rivers within the project area.
Wild Horses/Burros	X			The project area is not within the Herd Area or the Herd Management Area.
Wilderness	X			There is no wilderness within the project area.
Wildlife/Special Status Species			X	See Section 3.19 for analysis.

The Proposed Action was presented to the BLM interdisciplinary NEPA team on March 22, 2013.

In June 2013, the team met to discuss the proposed concept design and reported any needed changes to the contractor.

BLM received a final concept design plan September 2013.

On August 21, 2013, the team met specific to this project and the scoping issues identified are addressed in this EA.

On September 3, 2013, Bureau of Reclamation received BLM YFO's letter requesting project concurrence based on the concept plan dated September 2013.

The letter notifying the potentially affected parties within a 1-mile radius of the proposed project was mailed on September 24, 2013.

On September 25, 2013, John MacDonald YFO Field Manager, with the wildlife biologist and archeologist met with the Cocopah Tribe to discuss the concept plan.

On October 22, 2013, the team met to discuss this project's Proposed Action in detail which is addressed in this EA.

November 2013, Bureau of Reclamation (BR) requested a reduced footprint due to their Operations and Maintenance activities within the original proposed project area. This resulted in a reduction of 10 acres.

On April 18, 2014, John MacDonald met with Bureau of Reclamation managers to discuss BR's specific concerns regarding the project impact area. Due to the revised footprint from the original proposed area, BR confirmed there were no additional concerns to move forward with the project. John MacDonald followed up this meeting with email correspondence with Maria Ramirez, BR's Yuma Area Office Manager on April 22, 2014. At the meeting, O&M's Manager Ed Virdin requested additional engineering information in order to have his crews conduct the construction for the work.

2. PROPOSED ACTION AND ALTERNATIVES

A. **Proposed Action (Alternative 2)** (include headers for the following if applicable: Design Features of the Proposed Action, Connected Actions, Cumulative Actions, Similar Actions)

The Proposed Action is to improve the PCE project area for visitors by the removal of hazardous fuels, rehabilitation and restoration utilizing native vegetation, creating a public walking path and law enforcement access route. The Proposed Action includes all aspects of Phase 1 & 2 in addition to the following design features:

Design Features:

1. Modify the Federal Register notice for the PCE Project Area: No. 61 of Volume 60 FR16499, published March 30, 1995.
2. Create new and maintain existing fuels management sites throughout the project area including the West parking area, the administrative staging area in the middle of the site, and 100 foot wide break on the east boundary of the public land. Treatment methods would include mechanical, chemical, and prescribed fire to achieve hazardous fuel reduction project goals (See Appendix B).
3. Remove invasive species throughout the project area, including but not limited to conducting mechanical and chemical application to remove vegetation that would allow for law enforcement line of site. Vegetative materials could be chipped to be used as soil stabilization or hauled to a transfer site.
4. Install a post and cable fence around the perimeter of the project site, and to separate the parking areas to separate it from the restoration areas. (Appendix B). A minimum of three vehicle gates would be installed to assist in management of the site.
5. To discourage additional dumping, remove illegally dumped materials, and utilize heavy equipment if needed.

Phase 1 of the project would include the following and is in accordance with the Paradise Cove concept maps provided in Appendix B:

1. Create native riparian wildlife habitat through use of a flood irrigation design. Flood irrigation would encompass 8 acres on the upper bench along the river within the project area. Flood irrigation would be possible through the creation of irrigation berms, expansion of the existing canal outlet located at: N -114.657 W 32.7325, and possible creation of a new canal outlet located at: N-114.6529 W 32.7321. (Appendix B).
2. Plant native vegetation species consistent with the LCR riparian system focusing on willow, cottonwood, and mesquite trees throughout the project site and cattails and bulrush species along the LCR bankline. All trees planted along the river would be caged to protect them from beavers. (Appendix B).
3. Utilize the current and future native tree populations as a nursery to be planted within this and other restoration areas.

Phase 2 of the project would include the following and is in accordance with the Paradise Cove Concept Maps provided in Appendix B:

1. Establish a 2-wheel drive road for public and administrative access to the project site. The improved road would be a single lane road composed of gravel approximately 300 feet in length and 10 foot wide with multiple pullouts and one turn around to allow for vehicle passing.
2. Gravel the public parking area for 2-wheel drive public accessibility.
3. Conduct cut/fill earth moving operations within the project site to construct the site as

specified in the concept maps. Materials needed would be removed from the lower bench within the project site closest to the Colorado River, but would not create moist soils. These materials would be placed as reinforcement to the upper bench for a base to establish a public walking trail which would also be used as an administrative law enforcement access road. The trail would be created at the same elevation as the upper bench to allow for a scenic view over the lower bench and the Colorado River. Material would also be used to create four foot tall irrigation berms to contain the flood irrigation water to the upper bench of the native riparian habitat. (Appendix B).

4. Install a walking trail and fishing access. (Appendix B). The walking trail would initially be wood chips at ten foot wide that could be used for public walking and administrative vehicle access, which could be later improved into a gravel based ADA accessible trail. Fishing access trails would be five foot in width made of wood chips to allow access from the walking trail to identified locations along the LCR.

5. Establish interpretative signs for outreach information including: site rules and regulations, wildlife and their habitat, maps, and safety concerns in the area. A kiosk would be placed within the public parking area and interpretative signage would occur along the trail.

6. As funding allows, establish trash and above ground toilet facilities within public parking areas as identified in Appendix B.

B. Alternative 3

This alternative would incorporate the proposed design features as well as Phase 1 of the project proposal. The Federal Register Notice amendment would allow public parking and boat ramp access, identify hours of operation, and allow administrative access throughout the site. No access for a public recreational trail would be allowed.

C. Alternative 4

This alternative would incorporate the proposed design features as well as Phase 2 of the project proposal. The Federal Register Notice amendment would allow public parking, boat ramp and trail access, identify hours of operation, and allow administrative access throughout the site.

D. Alternative 5

This alternative would incorporate all of the proposed design features. The Federal Register Notice would allow administrative access, but maintain the site as closed to the public.

E. No Action Alternative (Alternative 1)

Under the No Action Alternative, the Federal Register Notice: No. 61 of Volume 60 FR16499, published March 30, 1995, would remain in effect and no improvements within the project site would occur.

F. Alternatives Considered but Eliminated From Detailed Analysis

The BLM considered a fee site to assist in the control of dumping within the PCE project area. Creation of the fee site would also include vault toilets as part of the developed site. This was eliminated because the site is within the existing floodplain of the LCR. Construction would require costly enhancements to the project site in order to create flood resistant infrastructure. Creation of a fee site within this project would also disproportionately affect economically

challenged recreationists because low income families may not afford to recreate on these public lands due to the fees.

G. Relationship to Statutes, Regulations, or Other Plans

Urban Interface Hazardous Fuels Reduction Projects at Colorado and Gila River Confluence and Paradise Cove Environmental Assessment (EA-AZ-050-2002-0021)

Paradise Cove and Transient Fire Rehabilitation Categorical Exclusion (CX-AZ-050-2004-0071)

Paradise Cove and Transient Fire Rehabilitation Biological Evaluation

Transient Restoration Phases 2 & 3 (DNA-AZ-320-2006-32)

H. Past and Present Actions

Historically, the area was farmed by an agricultural lease. After the 1983 flood that destroyed the fields and infrastructure, the agricultural lease was modified to reduce the acres farmed and eliminated them from their lease.

In 2004, a rehabilitation project to replace native vegetation that was lost in a wildland fire was started. This was later enhanced by a restoration project that started in 2006. Restoration was expanded across 49.7 acres to address tree planting, trash removal, and vegetation removal for fire breaks.

All saltcedar and arrowweed was mechanically removed and chipped to be used as biomass within the project site. It was followed up by a cut stump herbicide treatment on resprouting saltcedar. The bank of the Colorado River was cleared of *Phragmites* where the invasive vegetation was dominating the bank line.

3. AFFECTED ENVIRONMENT

This section describes the existing conditions of the affected environment. The table below summarizes the resources and concerns reviewed for this project. Resources not present within the project study area, as well as those present and not affected, are not discussed. Those resources that have been identified by an interdisciplinary team as present and potentially affected are discussed below.

A. Resources / Concerns

1. Cultural Resources

Previously recorded cultural resource sites within a one-mile radius of the proposed project area include several linear historic features, such as the Valley Levee [AZ X:6:15 (ASM)], the Yuma Valley Railroad [AZ X:6:43 (ASM)], the West Main Canal [AZ X:6:63 (ASM)], and the Thacker Lateral Canal [AZ X:6:87 (ASM)]. Because of dense impenetrable vegetation, the project's Area of Potential Effects (APE) could not be fully inventoried for cultural resources; however, a field visit in 2006 evaluated any open areas in the vegetation for cultural resources, and none were identified. Despite the negative survey, it is generally assumed that prehistoric sites are buried beneath the Colorado River floodplain. Given the seasonal flood cycles and the deposition associated with those cycles, it is assumed that any such sites would be deeply buried.

2. **Climate Change**

Drought induced by Climate Change would require a higher demand of water for the LCR. Over the next 50 years, precipitation and soil moisture would stay the same, where temperature would increase by 5 degrees.

3. **Environmental Justice**

The minority and low economic income communities in Yuma County are adjacent to the Project Site. Utilization of this site by these communities is very high. Future uses are projected to be from these communities and the surrounding middle-class and visiting community.

4. **Floodplain**

The PCE project area is within the 100 year floodplain of the LCR. Floods have occurred throughout the project site in 1983, 1993, and in 2012.

5. **Fire and Fuels**

The PCE project area vegetation has burned due to human caused wildland fires ranging from 0.10 to 69 acres in size. These fires burn native and invasive riparian vegetation that dominated the site post the 1983 flood. Native riparian vegetation, including cottonwood and willow species rejuvenate part of the time. Due to the wildland fires, and low native vegetation rejuvenation, monotypic stands of invasive saltcedar dominate the site. Riparian fires along the LCR are carried by low fuel moisture in dominant vegetation including saltcedar and arrowweed. Annual growth rates of saltcedar and arrowweed range from four to six foot per year within riparian zones, resulting in continuous hazardous fuel growth within the site.

6. **Human Health and Public Safety**

Illegal activity including drugs, prostitution, and dumping are an ongoing human health and public safety concern within PCE. The cove within the project site is currently managed under a sunrise to sundown posting. Multiple law enforcement agencies, including federal, state, and city officers, all patrol the project area for illegal activity which results in countless citations and arrests throughout the year. Revision of the Federal Register Notice and active management of the site would greatly increase the safety of the public within the project site.

7. **Lands and Realty**

The project area is located on lands along the LCR that are withdrawn by BR. Several BR facilities, including the Yuma Mesa Conduit, are within or adjacent to the project site.

The Paradise Cove Boat Ramp was authorized as a Special Recreation Use Permit (SRUP) pursuant to the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2743; 43 U.S.C. 1701, *et seq.*). The SRUP was serialized as AZA 023275. As a result of the flooding of the Gila River in 1993, the flood waters entered the Colorado River at the confluence and inundated the boat ramp facility within the proposed project area. On March 24, 1995, in response to concerns of public health and safety, the BLM issued a Notice of Closure for the area known as the Paradise Cove Boat Ramp Recreation Area.

8. **Migratory Birds**

The PCE project area is migratory habitat for over 50 species of migratory birds. They migrate through or are seasonal (summer or winter) residents. The greatest variety and abundance of birds occur in the riparian habitat which is an oasis within the upland desert scrub habitat. Birds

that may be seen throughout or adjacent to the project site include shorebirds, waterfowl, passerines, pigeons, game birds, and raptors.

9. Native American Religious Concerns

The LCR has been a vital source of water and sustenance within a dry desert climate throughout history. Indigenous peoples used to plant their crops in the river floodplain and camp on the adjacent river terraces. There are extensive remnants of these campsites at higher elevations, where past flood events have not impacted their traces. In addition, the river corridor is known for its associated intaglio features, rock art, and extensive trail networks. Many of these features are considered traditionally important or sacred to Native Americans. The Limitrophe of the Colorado River continues to be important to today's Native Americans for traditional uses, such as tribal education, gathering, hunting, and fishing; collection of mesquite wood for funerary and construction purposes; collection of willow for basket materials; possible collection of clay used for pottery making; and collection of river rocks.

The BLM coordinates and consults with Native American tribes pursuant to the following authorities: American Indian Religious Freedom Act of 1978; NHPA; Native American Graves Protection and Repatriation Act of 1990, Executive Order 13007, "Indian Sacred Sites" (May 24, 1996); Presidential Memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments"; and Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" (November 9, 2000). For this Proposed Action, project input has been sought from 14 Native American tribes and groups with an interest in the project area. Coordination and consultation with the tribes to date has consisted of a project introduction letter dated September 20, 2013, e-mails, telephone calls, and meetings. A copy of the EA for this project was made available to the Tribes. All tribal input received has been considered and incorporated into this EA as appropriate.

10. Recreation

PCE project area encompasses 20 acres within the overall 90 acres of the Paradise Cove closed area, but is still visited by an estimated 20-25 people per day to conduct recreational activities, including walking, swimming, fishing, boating, and wildlife viewing. The visitors are from the adjacent housing communities averaging five miles away. The site offers recreational opportunities at no charge to the public, including a concrete boat ramp, unmaintained dirt roads for access, walking access to the LCR, and visitor created walking trails through vegetation that parallels the river. There is trash dumping throughout the site, no interpretative facilities, and no restroom or trash receptacle facilities within this project site.

11. Socioeconomics

Social conditions concern the human communities in the planning area, and the custom, culture, and history of the area as it relates to human use, as well current social values. Recreational vehicle parks, Native American communities, and one of the older portions of Yuma are near the project area. Proposed management actions could affect social conditions in the nearby areas.

Economic activities connected to management decisions in the planning area include recreation management. Decisions with regard to economic programs may also affect social conditions, lifestyle, and quality of life. Nearby communities may also affect management of the public lands because the residents demand various uses such as the high demand for recreation use of

the proposed project area.

12. Soils

The project area is on a floodplain characterized by alluvial soils, which are nearly level, well-drained, and clay based having periodic inclusions of more gravelly, well-drained soils. The area was surveyed from 1972 to 1977 (USDA, SCS 1980). Three soil types are present: Holtville clay, Indio silt loam, and Salorthids.

The majority of the project area is mapped as Salorthids. These soils are deep, poorly drained, strongly saline, and contain floodplain soils from the Gila and Colorado Rivers.

13. Threatened and Endangered Species

The Paradise Cove project area may provide migratory habitat for the endangered Southwestern willow flycatcher (SWFL) and the proposed Yellow-billed cuckoo (YBC). The current stand of cottonwood, willow, and mesquite proves suitable migratory habitat, but no presence has been detected since the native tree plantings were established in the mid-1990s.

14. Travel Management

The PCE Project Area is located within the Gila River Valley Travel Management Area (TMA) which was created in 2013 by the merger of the Greater Yuma TMA and the pre-existing, but smaller, Gila River Valley TMA. The area is currently being accessed by vehicles using existing unimproved routes. There is currently no legal access because the area was closed through a BLM initiated legal land closure in 1995. However, due to its proximity to the Colorado River and the City of Yuma it has become a very popular area for hikers and off highway vehicle travel.

15. Vegetation

The Paradise Cove project area is within the Lower Colorado Valley Subdivision of the Sonoran Desert. This is the most arid and largest region of the Sonoran Desert. Within the proposed project area, the vegetation currently consists of a mix of native and invasive riparian habitat. Dominant cover species include 25% saltcedar, 25% willow, 20% mesquite, 15% arrowweed, 10% cottonwood, 3% Phragmites, 1% quail bush, 1% palms, and 1% desert sunflower.

16. Visual Resources

BLM inventories and classifies public lands in order to identify and maintain areas that contain important scenic qualities. BLM lands fall into one of four Visual Resource Management (VRM) classes, with Class I offering the most visual resource protection and Class IV offering the least visual resource protection.

The project area is located within VRM Class II and the management objective is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low.

17. Water Quality

The project would utilize ground water and flood irrigation. The lower bench would not be directly irrigated, since all existing trees utilize ground water. New plantings would be placed directly into the cut area as described on the maps in Appendix B post construction. No irrigation would take place other than vehicle mounted sprayers in extreme drought conditions.

The upper bench of the proposed project area would be flood irrigated. Water from the Bonneville -Yuma Corporation's Well (Arizona Department of Water Quality [ADWQ] Well # 527429) would pump Colorado River water into the system of canals to irrigate the farm crops. Upon completion of irrigation, excess water would be drained into the proposed project area. If the project area needed additional irrigation, water would be pumped from the well and directly dumped into the project area. A separate agreement with Lee Farms for use of their well may be required. BLM YFO would use its current LCR ADWQ Colorado River water right which is ordered and reported to BR monthly, followed by an annual report.

18. **Wetland/Riparian Zones**

The project area is within a riparian area associated with the LCR. Currently the riparian zone is dominated by monotypic vegetation. Southwestern riparian ecosystems are one of the most critically endangered habitats in North America (USFWS 2001). There are no wetlands within the project site, but removal of bankline Phragmites and installation of cattails and bullrush may create marsh habitat in the future.

19. **Wildlife**

The Paradise Cove project area encompasses many small game and nongame wildlife species. Quail, rodents, and nongame birds that find protection within the upland and riparian system are among the most common seen throughout the site.

4. ENVIRONMENTAL CONSEQUENCES

A. **Potential Direct and Indirect Effects**

This section describes the environmental consequences of those resources/concerns identified in Chapter 3 as present and/or potentially affected. Resources not present within the project study area, as well as those present and not affected, are not discussed.

1. **Cultural Resources**

a. **Proposed Action**

The Proposed Action would have no effect on cultural resources within the project area due to the absence of such resources within that area. Similarly, the project would not affect the previously documented historic canals in the area as they are well outside of the project boundaries. Given the general assumption that prehistoric sites are buried beneath the Colorado River floodplain, and could be buried within the project area, it is possible that unknown cultural resources could be inadvertently affected by project implementation; however, these resources would likely be of sufficient depth to be avoided by the project.

b. **No Action Alternative**

No impacts would occur that could affect cultural resources.

c. **Alternative 3**

Same as Proposed Action.

d. Alternative 4

Same as Proposed Action.

e. Alternative 5

Same as Proposed Action.

f. Cumulative Impacts

No cumulative impacts are anticipated due to project implementation.

g. Mitigation

A qualified BLM employee would notify workers of cultural resource laws and regulations, and monitor compliance. Should cultural resources be encountered during project ground-disturbing activities, work would cease in the area of the discovery and the BLM Yuma Field Office would be notified immediately. Work may not resume until written authorization to proceed is issued by BLM.

h. Residual Impacts

No residual impacts are anticipated due to project implementation.

2. Climate Change

a. Proposed Action

The Proposed Action may be impacted by climate change through drought and floods. During drought years, higher temperatures, increased evapotranspiration, and limited soil moistures would affect the overall site health. Flooding can create bank erosion, site destruction, and tree germination.

b. No Action Alternative

Under the No Action Alternative, climate change would continue to dry out the site, reducing native tree germination. Flooding may reduce depth to ground water, but would be temporary.

c. Alternative 3

Under the Alternative 3, Climate Change would not be affected.

d. Alternative 4

Same as the Proposed Action.

e. Alternative 5

Same as Alternative 3.

f. Cumulative Impacts

Early establishment of native riparian habitats that are self-sufficient may provide long-term habitat upon reduced LRC water levels, and continued increases in climate change triggers.

g. Mitigation

None.

h. Residual Impacts

None.

3. **Environmental Justice**

a. **Proposed Action**

Implementation of the Proposed Action would not disproportionately affect the minority and poverty population in the area. The Proposed Action would serve to create a safer and more accessible environment facilitating healthy recreation by the general public at the site. The creation of a 2-wheel drive accessible road would allow a larger range of vehicles to visit, increasing availability of access to those who previously were unable to visit.

b. **No Action Alternative**

Implementation of Alternative B would not disproportionately affect the minority and poverty population in the area. The No Action Alternative would allow the site to continue being overrun by dumping and illegal activities, inhibiting the ability of the local community to safely participate in healthy recreation at the site. Safety concerns would continue to deter the public from using this area as a recreation site.

c. **Alternative 3**

Implementation of Alternative 3 would not disproportionately affect the minority and poverty population in the area. Proposed Alternative 3 would improve the safety of the site by increasing law enforcement presence, in addition to removing illegally dumped materials, which would serve to increase access to the site by the local residents. Installation of the fence and gates will assist in actively managing the site.

d. **Alternative 4**

Implementation of Alternative 4 would not disproportionately affect the minority and poverty population in the area. Alternative 4 would serve to create a safer and more accessible environment facilitating healthy recreation by the general public at the site. The creation of a 2-wheel drive accessible road would allow a larger range of vehicles to visit, increasing availability of access to those who previously were unable to visit.

e. **Alternative 5**

Implementation of Alternative 5 would continue to affect the low income minority communities surrounding the Project Area. As a closed area, these communities would not be able to enjoy the opportunities that this project would offer under the other alternatives.

f. **Cumulative Impacts**

Cumulative Impacts of the project's implementation on Environmental Justice would be positive. The project would create a safer and more accessible environment facilitating healthy recreation by the general public at the site, while increasing the availability of access.

g. **Mitigation**

No mitigation is required for Environmental Justice

h. **Residual Impacts**

Residual impacts include positive long-term effects to the health and safety of the local population but are based on continued law enforcement presence and the removal of illegally dumped materials.

4. **Floodplains**

a. Proposed Action

The Proposed Action would not change the functionality of the floodplain of the Colorado River or interfere with potential flood flows. The potential flood flows would decrease the depth to ground water throughout the project site, potentially increasing the survivorship of native riparian plantings along the lower bench and increasing the quality of the wildlife habitat.

b. No Action Alternative

The potential flood flows would be unimpeded as a result of the no action alternative.

c. Alternative 3

Alternative 3 would not change the functionality of the floodplain of the Colorado River or interfere with potential flood flows. The potential flood flows would decrease the depth to ground water throughout the project site, potentially increasing the survivorship of native riparian plantings along the lower bench and increasing the quality of the wildlife habitat.

d. Alternative 4

Alternative 4 would not change the functionality of the floodplain of the Colorado River or interfere with potential flood flows. The proposed recreational opportunities would be implemented as to not affect the functioning floodplain in the event of higher than normal river waters or in the event of a flood.

e. Alternative 5

Alternative 5 would not change the functionality of the floodplain of the Colorado River or interfere with potential flood flows.

f. Cumulative Impacts

Cumulative Impacts of the project's implementation on floodplains would be minimal. Historically, the lowest bench of the project site floods every 10 year, increasing the viability of the native riparian habitat within the floodplain. The proposed project would not alter effects of these flood events.

g. Mitigation

No mitigation is proposed for Floodplains.

h. Residual Impacts

Residual Impacts of the Proposed Action may include catastrophic flooding and destruction of the project site. A 100-year flood event may destroy all existing features of the project site, including any improvements that may be approved through this environmental assessment.

5. **Fire/Fuels Management**

a. Proposed Action

The proposed project would create fire breaks separating hazardous fuels from wildland/urban interface area near the River Ranch trailer park and the Paradise Cove site along the north levee road. The project would be to create and maintain two fire breaks by the use of mechanical, herbicide, or prescribed fire treatments. The purpose of these fuels management sites is to protect private property and the public from the threat of a wildland fire. The second purpose is to

protect native plants, wildlife habitat, and wildlife from destruction of wildland fires.

b. No Action Alternative

Under the no action alternative, hazardous fuel reduction would occur, as approved in EA-AZ-050-2002-0021 Urban Interface Hazardous Fuels Reduction Projects at the Colorado and Gila River Confluence and Paradise Cove Environmental Assessment. Fuel would continue to accumulate increasing the potential for a wildland fire.

c. Alternative 3

Same as the Proposed Action.

d. Alternative 4

Same as the Proposed Action.

e. Alternative 5

Alternative 5 would create fire breaks separating hazardous fuels from wildland/urban interface area near the River Ranch trailer park and the Paradise Cove site along the north levee road. The project would be to create and maintain two fire breaks by the use of mechanical, herbicide, or prescribed fire treatments. The purpose of these fuels management sites is to protect private property and the public from the threat of a wildland fire.

f. Cumulative Impacts

Past wildland fires have burned all acres within the proposed project areas. Efforts to reduce large fires have led to hazardous fuels reduction, including mechanical and chemical treatment of invasive saltcedar, and arrowweed. Annual removal of saltcedar and arrowweed has contributed to smaller acre fires, where no treatment years have resulted in larger fires.

g. Mitigation

All treatments could be conducted year round. Upon confirmation of migratory or nesting threatened or endangered species by survey, including but not limited to the YBC or SWFL, mechanical treatment would be restricted from implementation between April 15th and September 15th each year. Cottonwoods and willows would not be disturbed where possible within the fuel break areas.

h. Residual Impacts

Vegetation treatments in the future highly depend on funding availability. If there are no vegetation treatments conducted, the chance of wildland fires throughout the site would increase in areas dominated by saltcedar and arrowweed. Native vegetation planted may decrease the chances of fire spread within the flood irrigated restoration areas. Increases in law enforcement from opening the site would decrease the number of transients camping within the PCE project area, resulting in fewer human caused starts.

If maintenance of saltcedar and arrowweed is conducted annually, lessened potential for wildland fires would be due to removed prime fire carriers. Native vegetation would create a green fuel break, with a lower potential for fire occurrence. Fires within saltcedar dominated areas average higher in acres, where wildland fires within green vegetation rehabilitation sites average lower acres.

6. **Human Health and Public Safety**

a. **Proposed Action**

The Proposed Action would increase the safety of the public and administrative staff within the project area. This would be a combined effort of increased patrols, vegetation clearing, and post and cable with gates. Active management of the site would increase positive recreational use of the site, and decrease the ongoing negative activities.

b. **No Action Alternative**

Under the No Action Alternative, Paradise Cove would remain an unmanaged site that has a high rate of citations and arrests due to illegal activities.

c. **Alternative 3**

Same as the Proposed Action.

d. **Alternative 4**

Same as the Proposed Action.

e. **Alternative 5**

Under Alternative 5, the post and cable fence and vehicle gates would assist in implementing the project site closure to the public, reducing the health and safety risks that are currently ongoing.

f. **Cumulative Impacts**

Cumulative impacts of the proposed project include the increase in positive community recreation to replace the current negative activities within the project site.

g. **Mitigation**

No mitigation is proposed for Human Health and Public Safety.

h. **Residual Impacts**

Residual Impacts from the Proposed Action include the change from negative to positive recreational use of the project area. Alternative 4 and 5 would reduce the public experience within the project area, pushing the illegal activities down river to other properties.

7. **Lands and Realty**

a. **Proposed Action**

The Proposed Action would create a new BLM Lands action, authorizing BLM a Right-of-Way. In addition, changes to the AZA 023275 case file would change through a Federal Register Notice.

b. **No Action Alternative**

No land and realty actions are necessary under the No Action Alternative.

c. **Alternative 3**

Same as the Proposed Action.

d. **Alternative 4**

Same as the Proposed Action.

e. Alternative 5

Same as the proposed action.

f. Cumulative Impacts

The Project is within BR DM 6:13 managed lands. Reclamation is proposing a modification to the Yuma Mesa Conduit that is directly west of the PCE project site. Construction would temporarily impact the public parking area. BLM's construction, including gravel, post and cable, and gates within the Cove would be postponed by BLM until BR's construction has been completed.

g. Mitigation

Upon post and cable and gate installation, BR operations and maintenance (O&M) will be given access through gate codes or keys to allow for O&M maintenance as required by BR.

h. Residual Impacts

None.

8. Migratory Birds

a. Proposed Action

The Proposed Action would allow for the expansion and enhancement of migratory bird habitat, in addition to the expansion of opportunities for the public to enjoy them. Currently over 50 species of migratory bird are known to occur within or adjacent to the project area. Once completion of the Proposed Action has occurred and maintenance is ongoing, many additional species are expected to visit the project area at different times in their lifecycle.

b. No Action Alternative

The No Action Alternative would not allow for the continued habitat growth for the approximate 50 wildlife species known to occur within the project area. Irrigation that stimulates insects that attract migrating birds would cease, reducing the overall positive effects of the restoration and rehabilitation efforts.

c. Alternative 3

Same as the Proposed Action.

d. Alternative 4

Alternative 4 would allow for the expansion of recreational opportunities for the public to enjoy them. Currently the public recreates near the boat ramp, but implementation of this alternative would allow for access throughout the site by a walking path, water access for fishing, and public parking. Irrigation that stimulates insects that attract migrating birds would cease, reducing the overall positive effects of the restoration and rehabilitation efforts.

e. Alternative 5

Alternative 5 would be the same as the no action alternative.

f. Cumulative Impacts

Cumulative impacts include the overall positive health of migratory bird habitat. Implementation and management of the proposed project would allow for long-term migration habitat for many wildlife species. Implementation of flood irrigation, native tree planting, and wider fire breaks

would ensure ideal situations for migrating wildlife and protection of their habitat.

g. Mitigation

No mitigation for migratory birds is required.

h. Residual Impacts

Residual Impacts include improved habitat for migratory birds, increased access to the site for fire and law enforcement activities, and the introduction of recreationists into native riparian habitat along the LCR.

9. Native American Religious Concerns

a. Proposed Action

With the implementation of the Proposed Action, some of the characteristics that make this corridor significant to Native American tribes, such as riparian vegetation and wildlife habitat values, would be enhanced. The removal or treatment of large areas of invasive species would enhance the type of vegetation that is of traditional importance to the tribes, such as cottonwoods, willows and mesquites. Similarly, the planting and the habitat creation associated with Phase 1 would enhance that vegetation type. However, the implementation of Phase 2 would introduce a built environment that would affect the traditional setting of the Limitrophe.

b. No Action Alternative

The No Action Alternative would maintain the current conditions on the Limitrophe, but would not restore or enhance the vegetation that is of traditional importance to the tribes.

c. Alternative 3

The implementation of Phase 1 would enhance the vegetation type that is of traditional importance to the tribes and restore a more traditional setting to the project area.

d. Alternative 4

The implementation of Phase 2 would affect the traditional setting of the Limitrophe and introduce a built environment.

e. Alternative 5

Same as Alternative 3.

f. Cumulative Impacts

Combined with the other restoration projects proposed on the Limitrophe, the implementation of the Proposed Action would incrementally enhance the vegetation type that is of traditional importance to the tribes.

g. Mitigation

Mitigation would be added pursuant to consultation with the tribes.

h. Residual Impacts

None.

10. Recreation

a. Proposed Action

The Proposed Action would increase the positive recreationalists within the project area offering a positive experience utilizing the LCR and its adjacent habitat. This site, along with others along the LCR would be used as an outdoor classroom which would include the local community and encourage public lands uses and education of the natural resources.

b. No Action Alternative

The No Action would continue to draw negatively impacting recreationalists and continue to allow dumping on public land. Implementation of the No Action would result in the continued drug use, transient camp sites, and illegal activities currently ongoing.

c. Alternative 3

Alternative 3 would negatively affect recreationalists, as it would only allow access to the site at the parking area and boat ramp.

d. Alternative 4

Alternative 4 would allow public use for parking, the concrete boat ramps, and the trail through a Federal Register Notice, which would increase positive uses.

e. Alternative 5

Alternative 5 would allow for administrative access, but would negatively affect recreationalists, as it would reinforce no public access to the LCR within the Project Area.

f. Cumulative Impacts

Potential loss of recreational opportunities may occur if the LCR floods, which has occurred to this project site in 1983 and 1993. The trail would create improved administrative access and a parallel fuel break between vegetation between the upper and lower benches within the site. Interpretative opportunities would educate the public on the hazards of dumping, wildland fire destruction, wildlife viewing opportunities, and necessary contact information for reporting incidents.

g. Mitigation

Establish the "Leave No Trace" program through the use of scout troops and other community members.

h. Residual Impacts

None.

11. Socioeconomics

a. Proposed Action

The proposed action would improve social conditions and economic communities surrounding the Project Area. Improved recreation opportunities within minority groups, historic communities, and cultural communities create benefits for all.

b. No Action Alternative

Under the no action alternative, minority groups would continue to suffer from illegal activities

that are currently ongoing within the project area.

c. Alternative 3

Same as the proposed action.

d. Alternative 4

Under Alternative 4, social conditions and economic communities surrounding the Project Area would not improve.

e. Alternative 5

Same as Alternative 4.

f. Cumulative Impacts

Implementation of the proposed action in conjunction with the adjacent land owners' restoration projects including the Yuma West Wetlands and Cocopah River Tribal restoration.

g. Mitigation

None

h. Residual Impacts

None

12. **Soils**

a. Proposed Action

Soils over the entire project area would be moderately disturbed by the action of the bladed tractor and planting. Soil disturbance would occur in the surface strata due to the mechanical action of the machine's blade and tracks. There would be some compaction due to machine weight.

b. No Action Alternative

No soil would be disturbed as a result of this alternative. Tamarisk would continue to out-compete native vegetation increasing the accumulation of hazardous fuels and leaving poor wildlife habitat. Soils would likely increase in salinity as a result of tamarisk dominance

c. Alternative 3

Soils would be treated through leaching with chemical applications to reduce salts. Fertilizers may be used to assist with vegetation growth stimulation.

d. Alternative 4

Soil conditions would be negatively impacted from lack of leaching and increase invasive species within PCE.

e. Alternative 5

Same as the No Action Alternative.

f. Cumulative Impacts

Flood events bring in new and remove soils. Fluctuation in ground water and mechanical treatments may cause unstable ground throughout the Project Area. Bank stabilization would be engineered and implemented by contractor to ensure bank line stability during and after

restoration efforts.

g. Mitigation

Soil salinity would be tested annually to determine if salinity treatments are needed to ensure native riparian plant community survivorship.

h. Residual Impacts

Residual impacts include positive long term stabilization.

13. Threatened and Endangered Species

a. Proposed Action

The Proposed Action would enhance migratory and possibly create nesting habitat for the proposed YBC. The site currently would support migrating SWFLs, but none have been recorded within the project area. Both species require standing water and large quantities of insects for nesting habitat, which could be obtained by the flood irrigation. Native tree plantings would be sufficient for YBC, since their requirements for nesting are more open stands of native habitat.

b. No Action Alternative

The No Action Alternative would not enhance the habitat, nor would it introduce additional recreationists into the site. Defacing and destruction of key habitat vegetation species would continue, eventually resulting in no native trees within the project site.

c. Alternative 3

Alternative 3 would enhance the habitat for both the SWFL and the YBC. No recreation enhancements would be made, creating a site that is not public friendly which could often increase the number of illegal actions that occur within a project site.

d. Alternative 4

Alternative 4 would enhance the public and administrative uses of the project site, but would not enhance the wildlife habitat. This would add public into a system of invasive species that are prone for wildland fires, transient camps, and illegal dumping. Selection of this alternative may result in a greater human safety risk, with no added benefits for threatened and endangered species.

e. Alternative 5

Alternative 5 would be the same as the No Action Alternative.

f. Cumulative Impacts

Cumulative impacts would include the expansion of native migratory and possible nesting habitat for threatened and endangered species. Addition of recreationalists, administrative personnel, would increase visibility throughout the site. The project was designed to create user friendly native riparian habitat that would be safe for the public, where those seeking illegal activities would not recreate. West of the project site, the US Customs and Border Patrol Mitigation Site and the Cocopah Tribe restoration work would complement the PCE project proposal.

g. Mitigation

All treatments may be conducted year round. Upon confirmation of migratory or nesting threatened or endangered species by survey, including but not limited to the YBC or SWFL, mechanical treatment would be restricted from implementation between April 15th and September 15th each year.

h. Residual Impacts

Residual impacts include positive long-term effects to threatened and endangered species habitat, healthy river management, and prevention of wildland fires that may destroy habitat and homes on the adjacent private properties.

14. **Travel Management**

a. Proposed Action

The Proposed Action would improve the ease and safety of all types of travel within the project area. It would create positive travel conditions for hiking, biking and vehicle access with designated parking. The new access road would accommodate all types of vehicles allowing access to the parking area to vehicles such as motorcycles and two-wheel drive cars that previously could not drive on the unimproved roads.

b. No Action Alternative

The no action alternative would have a negative effect on Travel Management by allowing the continuation of the random and illegal route network proliferation currently occurring within the project area. This also allows for the continuation of illegal activities within the project area due to the existing limited access to local law enforcement patrols because of the unimproved routes.

c. Alternative 3

This alternative is more beneficial to Travel Management than the No Action Alternative, but not as beneficial as the Proposed Action, due to the incorporation of the “design features” listed in the Proposed Action. The phase-1, but not phase-2, plan included in this alternative would not affect Travel Management.

d. Alternative 4

This alternative is more beneficial to Travel Management than the no action alternative, but not as beneficial as the Proposed Action, due to the incorporation of the “design features” listed in the Proposed Action. The phase-2, but not phase-1, plan included in this alternative would be positive for travel management due to its incorporation of a two-wheel drive access road, a walking trail, fishing access, and associated signage.

e. Alternative 5

Same as the No Action Alternative.

f. Cumulative Impacts

The cumulative impact to travel management would be an overall increase in travel within the project area. This would include agency construction and maintenance and public recreational use. However, it would be much more managed than the current situation allowing for high use corridors to limit and reduce the overall travel impacts outside of these corridors. The current situation of vehicles creating illegal routes and damaging the environment would be dramatically reduced.

g. Mitigation

Mitigation for travel management would be achieved thru effective use of signage, access gates and specific hours when the area would be open and/or closed to public access. Vehicle access control would be fairly easy to achieve with gates but pedestrian access would be harder to manage. Proper signage would be required to notify users of travel management mitigation decisions and access.

h. Residual Impacts

Possible residual impacts to travel management of the Proposed Action, after mitigation measures, could be an increased draw to after-hours usage due to its park like setting being a draw to the public.

15. **Vegetation**

a. Proposed Action

Invasive vegetation in the project area would be disturbed or removed. Native vegetation, specific to cottonwood, willow, and mesquite would be avoided. Within the fuels management sites, invasive species, including native arrowweed and quail bush would be mowed and sprayed to keep fuel loading down and protect private and native lands adjacent to the project site.

b. No Action Alternative

Under the no action alternative, the nonnative vegetation would be allowed to dominate the site, which would result in additional illegal activities, transients, a higher probability of catastrophic fires, and degraded wildlife habitat.

c. Alternative 3

Same as the Proposed Action.

d. Alternative 4

Same as the Proposed Action.

e. Alternative 5

Same as the Proposed Action.

f. Cumulative Impacts

Cumulative Impacts include miles of continuous native riparian habitat along the LCR from the East Wetlands through the Paradise Cove project site. Additional impacts include the protection of the private and tribal lands adjacent to the site with the use of the implemented fuels management sites identified in the concept plan.

g. Mitigation

All treatments may be conducted year round. Upon confirmation of migratory or nesting threatened or endangered species by survey, including but not limited to the YBC or SWFL, mechanical treatment would be restricted from implementation between April 15th and September 15th each year.

Herbicide application would follow the most recent BLM approved Pesticide Use Proposal, and associated BLM herbicide guidance.

h. Residual Impacts

Residual Impacts specific to vegetation includes possible drift from herbicide application that may negatively affect native species growth and development. Additional residual impacts would include the reduction of invasive species throughout the site and the creation of native riparian habitat that would create the dominant seed source for volunteer germination.

16. **Visual Resources**

a. Proposed Action

Initial site construction would have a minor short-term adverse effect due to the presence of equipment and construction materials, and vegetation disturbance. In the long term, the proposed habitat rehabilitation would create a low visual impact. The Proposed Action meets the management objectives of the VRM Class II areas.

b. No Action Alternative

Under the No Action Alternative, Visual Resources would not be impacted.

c. Alternative 3

Same as the proposed action.

d. Alternative 4

Same as the proposed action.

e. Alternative 5

Same as the No Action Alternative.

f. Cumulative Impacts

Cumulative impacts to the project site include the change from negative to positive recreational activities within a managed site.

g. Mitigation

All infrastructures that are placed within the project area would comply with VRM Class II requirements, resulting in a low impact.

h. Residual Impacts

Residual impacts include the existing Bureau of Reclamation (BR) facilities and their management by BR. BLM would create a naturally camouflaged barrier around BR wells and other designated facilities within the project sites.

17. **Water Quality**

a. Proposed Action

Utilization of LCR groundwater would not be affected.

Use of Bonneville -Yuma Corporation's LCR Well water may affect the proposed project. Excess water from irrigation canals may include remnants of pesticides and fertilizers. Deposit of these waters within the project site would be detrimental at high quantities. Due to strict environmental regulations, the excess water from the irrigation canal is closely monitored resulting in a very low possibility of detrimental effects.

b. No Action Alternative

Under the No Action Alternative, Water Quality would not be affected.

c. Alternative 3

In addition to the Proposed Action, this alternative would have chemicals and fertilizers added to the irrigation water by BLM to treat soil salinity.

d. Alternative 4

Same as the Proposed Action.

e. Alternative 5

Same as the No Action Alternative.

f. Cumulative Impacts

Cumulative Impacts include application of chemical and fertilizers across the LRC adjacent lands that are utilized for farming, recreation, and residential establishments. Cumulative applications may impact LCR water quality into the future.

g. Mitigation

The flood irrigation portion of the site would be posted “keep on trail” to prevent any contamination to human or pets in the event chemicals and/or fertilizers are in the irrigation water.

h. Residual Impacts

Residual Impacts include long term chemical accumulation within the project area’s soils. Limiting applications to follow label instructions for per acre application would mitigate consistent chemical and fertilizer use within the project area.

18. Wetland/Riparian Zones

a. Proposed Action

The project would enhance and protect the current riparian zone through the irrigation, plantings, and fire breaks. Herbicide application would be used according to label instructions, as to prevent invasive species regrowth, and allow for native species dominance.

b. No Action Alternative

The no action alternative would allow for the continued management of the site as described in the Federal Register Notice, but without habitat or recreational enhancements.

c. Alternative 3

The project would enhance and protect the current riparian zone through the irrigation, plantings, and fire breaks. Herbicide application would be used according to label instructions, as to prevent invasive species regrowth, and allow for native species dominance.

d. Alternative 4

The project would be dominated by monotypic stands of saltcedar with the recreation enhancements encouraging the public’s visitation. Higher public visitation in this area has increased wildland fires and their destruction of native riparian habitat within the river system. This alternative may increase the destruction of the riparian habitat within the project site.

e. Alternative 5

The design features would protect the current riparian zone through fencing, gates, and fuel breaks. No improvements would be made resulting in minimal recruitment for habitat creation, and

f. Cumulative Impacts

Cumulative impacts include the improvement and expansion of riparian habitat within the project site. Through the recreational improvements, the public would be able to use the site as an outdoor educational classroom, in addition to a recreational playground for walking, hiking, and fishing.

g. Mitigation

All treatments could be conducted year round. Upon confirmation of migratory or nesting threatened or endangered species by survey, including but not limited to the YBC or SWFL, mechanical treatment would be restricted from implementation between April 15th and September 15th each year.

h. Residual Impacts

Residual impacts include those from long-term recreational use. The project proposal would focus the recreation use on the trail, within the parking lot, and within the Paradise Cove where the boat ramp is located. Use of these areas would receive greater impact than those without recreationally focused enhancements.

19. **Wildlife**

a. Proposed Action

Impacts to the project area within the Proposed Action include the potential to crush, bury, or kill small, less mobile animals such as rodents, lizards, or snakes during heavy equipment operation. Indirect impacts include the temporary loss of invasive species habitat within and adjacent to the project area. Animals living in the area would be potentially displaced into adjacent habitats or forced to encroach into the territories upon individuals adjacent to the project area. Consequently, displaced and encroached upon individuals would have more difficulty finding food, seeking shelter, and attracting mates because of higher animal densities and competition for limited resources.

The immediate benefit of constructing the project would be to protect adjacent habitat from destruction by wildland fire, and creation of new native habitat. Native vegetation provides better quality and more complex structure for wildlife. Many studies have found higher bird species diversity and abundance in native cottonwood, willow, and mesquite stands compared to Tamarisk stands (Anderson et al. 1977; Cohan et al. 1979, cited in Dudley 2000; Anderson and Ohmart 1985; Schroeder 1993, cited in Dudley 2000).

The Proposed Action would also provide the public with educational and recreational opportunities to see wildlife in their native habitats. This would allow for educating the public, including school children and bird-watching winter visitors through kiosks, information signs, and tours.

b. No Action Alternative

Besides failing to support high density and abundance of wildlife within the project area, allowing tamarisk to exist in the project area has far-reaching negative impacts beyond the border of the project area. Tamarisk and other invasive species within the project area would continue to cause a risk to the habitat by providing an invasive species seed source and increase fire occurrence.

c. Alternative 3

Alternative 3 would directly include the potential to crush, bury, or kill small, less mobile animals such as rodents, lizards, or snakes during heavy equipment operation. Indirect impacts include the temporary loss of invasive species habitat within and adjacent to the project area. Animals living in the area would be potentially displaced into adjacent habitats or forced to encroach into the territories upon individuals adjacent to the project area. Consequently, displaced and encroached upon individuals would have more difficulty finding food, seeking shelter, and attracting mates because of higher animal densities and competition for limited resources.

The immediate benefit of constructing the project would be to protect adjacent habitat from destruction by wildland fire, and creation of new native habitat. Native vegetation provides better quality and more complex structure for wildlife. Many studies have found higher bird species diversity and abundance in native cottonwood, willow, and mesquite stands compared to Tamarisk stands (Anderson et al. 1977; Cohan et al. 1979, cited in Dudley 2000; Anderson and Ohmart 1985; Schroeder 1993, cited in Dudley 2000).

d. Alternative 4

Alternative 4 would fail to support high density and abundance of wildlife within the project area, allowing tamarisk to exist in the project area. Tamarisk and other invasive species within the project area would continue to cause a risk to the habitat by providing an invasive species seed source and contribute to an increased fire occurrence.

This alternative would also provide the public with educational and recreational opportunities to see wildlife in their habitats. This would allow for educating the public, including school children and bird-watching winter visitors through kiosks, information signs, and tours.

e. Alternative 5

Same as the No Action Alternative.

f. Cumulative Impacts

Cumulative Impacts to include the potential loss of habitat due to wildland fires. Creation of the fuels management sites does not guarantee protection of the site from fires, but it does increase the management options in the event of a wildland fire.

g. Mitigation

All treatments could be conducted year round. Upon confirmation of migratory or nesting threatened or endangered species by survey, including but not limited to the YBC or SWFL, mechanical treatment would be restricted from implementation between April 15th and September 15th each year.

h. Residual Impacts

Residual Impacts from habitat loss include the need for additional funding to recreate the native riparian habitat for wildlife use. If this does not occur, than the tamarisk would become the dominant vegetative species that creates degraded riparian habitat, and species quantities and numbers may greatly reduce from those that visit or nest within the native riparian habitat.

5. TRIBES, INDIVIDUALS, ORGANIZATIONS OR AGENCIES CONSULTED

U.S. Bureau of Reclamation, Yuma Area Office
Arizona Game and Fish Department Region IV
Ak-Chin Indian Community
Chemehuevi Indian Tribe
Cocopah Indian Tribe
Colorado River Indian Tribes
Fort Mojave Indian Tribe
Fort Yuma-Quechan Tribe
Gila River Indian Community
The Hopi Tribe
Hualapai Tribe
Pueblo of Zuni
Salt River Pima-Maricopa Indian Community
Tohono O'odham Tribal Nation
Yavapai-Apache Nation
Yavapai-Prescott Indian Tribe

6. REFERENCES, GLOSSARY

A. References Cited

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43 CFR 3809.11(c)(3).

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Yuma Field Office La Posa Interdisciplinary Management Plan (IMP) approved on July 1, 1997.

7. APPENDICES

A. Appendix A – Cultural Clearance

B. Appendix B – Maps

Paradise Cove East Proposed Fuel Breaks



Legend

 FuelBreaks

0 0.025 0.05 0.1 Miles

1:3,000



Paradise Cove East Proposed Fence and Vehicle Gates



Legend

-  Proposed Vehicle Gates
-  Proposed Fence

0 0.025 0.05 0.1 Miles

1:3,000



Paradise Cove East Flood Irrigation Zone



Legend

-  Water Outlet
-  Flood Irrigated Acres
-  Berms
-  Project Boundary

0 0.025 0.05 0.1 Miles

1:3,000



Paradise Cove East Riparian Planting Areas



Legend

 Riparian Planting Areas

0 0.025 0.05 0.1 Miles

1:3,000



Paradise Cove East Proposed Cut and Fill Locations



Legend

-  PCE_Fill_Material_Location
-  PCE_Cut_Material_Location

0 0.025 0.05 0.1 Miles

1:3,000



Paradise Cove East Proposed Trail and Water Access



Legend

- Water Access
- Trail
- Project Boundary

0 0.025 0.05 0.1 Miles

1:3,000



Paradise Cove East Proposed Parking and Facilities



Legend

Trash

Above Ground Restrooms

 Parking Areas

0 0.025 0.05 0.1 Miles

1:3,000



COPY

UNITED STATE DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PESTICIDE USE PROPOSAL

STATE: Arizona, California
COUNTY: Yuma, AZ & Imperial, CA
DURATION OF PROPOSAL: Three Years
LOCATION: Colorado District
Yuma Field Office:

DATE: October 01, 2012
PROPOSAL NUMBER: AZ-PUP-C020-12-0002
EA REFERENCE NUMBER: EA-AZ-320-2005-026
DR NUMBER: EA-AZ-050-2005-026

This is a programmatic PUP to cover all of the locations.
** See attached separate pages for locations in the following table.

ORIGINATOR – NAME: Lalo Heredia
ORIGINATOR – COMPANY: Bureau of Land Management
ORIGINATOR – CONTACT INFORMATION: 2555 E Gila Ridge Rd
Yuma, Arizona 85365
928-317-3215
eheredia@blm.gov

I. APPLICATION INFORMATION – Including mixtures and adjuvants):

1. TRADE NAME(S):

a) Habitat	b) Tahoe 4E
c) CMR Activator	d) Induce
e) Activator 90	f) Mark-It
2. COMMON NAME(S)

a) Imazapyr	b) Triclopyr
c) Crop oil Concentrate	d) Non-ionic Surfactant
e) Non-ionic Surfactant	f) Marker dye Solution
3. EPA REGISTRATION NUMBER(S):

a) 241-426	b) 228-385	c) 1050775-50020-AA
d) 5905-50091-AA	e) 34704-50034-AA	f) N/A
4. MANUFACTURER(S):

a) BASF Corporation	b) Nufarm Americas
c) Creative Marketing&Research	d) Helena
e) Loveland Products	f) Monterey AgResources
5. METHOD OF APPLICATION: Backpack sprayer, vehicle-mounted spray tank, boat-mounted spray tank, foliar, cut stump, and basal.
6. MAXIMUM RATE OF APPLICATION – AS STATED IN THE Programmatic Veg. EIS:
 - a. Imazapyr: 1.5 lbs. a.e./acre/year
 - b. Triclopyr: 8.0 lbs. a.e./acre/year
 - c-f. CMR Activator, Induce, Activator 90, and Mark-It: N/A
7. MAXIMUM RATE OF APPLICATION – AS STATED ON THE LABEL:
 - a. Habitat:
 - i. Formulated Product: 6.0 pints/acre/year
 - ii. Pounds Acid Equivalent: 1.5 lbs. a.e./acre/year

VIII. SIGNATURES:

- 1. Pesticide Use Proposal's Originator: Eulalia Hoadi Date: 10/10/12
 - a. Company: N/A
- 2. Certified Pesticide Applicator: Eulalia Hoadi Date: 10/10/12
 - b. License Number: 11-049
 - c. Certifying Organization: USDI BLM

- 3. Field Office Pesticide/Noxious Weed Coordinator: Kenneth Hunt Date: 12/17/12

- 4. Field Office Manager: John M. [Signature] Date: 12.17.12

- 5. BLM State Pesticide Coordinator: [Signature] Date: 5/6/2013

- 6. Deputy State Director: [Signature] Date: 5/7/13

- Concur or Approved
- Not Concur or Disapproved
- Concur or Approved With Modifications

- Any changes (modifications) to this proposal by the state pesticide Coordinator will be listed below or in an attached memo to the manager requesting approval from the Deputy State Director

UNITED STATE DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PESTICIDE USE PROPOSAL

STATE: Arizona, California
 COUNTY: Yuma, AZ & Imperial, CA
 DURATION OF PROPOSAL: Three Years
 LOCATION: Colorado River District
 Yuma Field Office:

DATE: March 19, 2013
 PROPOSAL NUMBER: AZ-PUP-C020-12-0001
 EA REFERENCE NUMBER: EA-AZ-320-2005-026
 DR NUMBER: EA-AZ-050-2005-026

This is a programmatic PUP to cover all of the locations.

** See attached separate pages for locations in the following table.

ORIGINATOR – NAME: Lalo Heredia

ORIGINATOR – COMPANY: Bureau of Land Management

ORIGINATOR – CONTACT INFORMATION: 2555 E Gila Ridge Rd
 Yuma, Arizona 85365
 928-317-3215
 eheredia@blm.gov

I. APPLICATION INFORMATION – Including mixtures and adjuvants):

1. TRADE NAME(S):

a) Polaris	b) Pathfinder II
c) Garlon 4	d) Mor-Act Adjuvant
e) Hi-Lite	
2. COMMON NAME(S)

a) Imazapyr	b) Triclopyr
c) Triclopyr	d) Oil/Diesel substitute
e) Blue Marker dye	
3. EPA REGISTRATION NUMBER(S):

a) No.228-534	b) 62719-176	c) No.62719-40
d) 2935-50098	e) N/A	
4. MANUFACTURER(S):

a) Nufarm Americas	b) Dow Agrosience
c) Dow Agrosience	d) Wilbur Ellis
e) Becker Underwood	
5. METHOD OF APPLICATION: Backpack sprayer, vehicle-mounted spray tank, boat-mounted spray tank, foliar, cut stump, and basal.
6. MAXIMUM RATE OF APPLICATION – AS STATED IN THE Programmatic Veg. EIS:
 - a. Imazapyr: 1.5 lbs. a.e./acre/year
 - b. Triclopyr: 10.0 lbs. a.e./acre/year
 - c. Triclopyr: 10.0 lbs-a.e./acre/year
7. MAXIMUM RATE OF APPLICATION – AS STATED ON THE LABEL:
 - a. Polaris:
 - i. Formulated Product: 6.0 pints/acre/year
 - ii. Pounds Acid Equivalent: 1.5 lbs. a.e./acre/year

VIII. SIGNATURES:

- 1. Pesticide Use Proposal's Originator: Eulalia Heachi Date: 3/19/13
 - a. Company: N/A
- 2. Certified Pesticide Applicator: Eulalia Heachi Date: 3/19/13
 - b. License Number: 11-049
 - c. Certifying Organization: USDI BLM
- 3. Field Office Pesticide/Noxious Weed Coordinator: Erica Stewart Date: 3-19-2013
- 4. Field Office Manager: John H. Jones Date: 3.19.13
- 5. BLM State Pesticide Coordinator: Joni Sw Date: 5/6/2013
- 6. Deputy State Director: Janie A. Nicker Date: 5/7/13
 - Concur or Approved
 - Not Concur or Disapproved
 - Concur or Approved With Modifications
 - o Any changes (modifications) to this proposal by the state pesticide Coordinator will be listed below or in an attached memo to the manager requesting approval from the Deputy State Director

D. Appendix D – Climate Change Worksheet Yuma County

Technical Review:

Supplemental Authorities /Other Resources or Concerns	May Be Affected		If May affect / Mitigations Assigned	Signature Name/Title	Date
	Yes	No			
Cultural Resources/ Paleontological Resources				<i>Tom Jones</i>	
Environmental Justice				<i>Ron Morfin</i>	
Farm Lands (Prime or Unique)				<i>Erica Stewart</i>	
Floodplain				<i>Erica Stewart</i>	
Fuels / Fire Management				<i>Lalo Heredia</i>	
Public Health and Safety				<i>Peter Thompson</i>	
Invasive & Non-Native Species				<i>Erica Stewart</i>	
Lands/Realty Land Use and Access				<i>Candy Holzer</i>	
Migratory Birds				<i>Erica Stewart</i>	
Recreation				<i>Ron Morfin</i>	
Socio-economics				<i>Ron Morfin</i>	
Soils				<i>John Hall</i>	
Threatened or Endangered Species				<i>Erica Stewart</i>	
Travel Management				<i>Joe Raffael</i>	

Vegetation					
				<i>Erica Stewart</i>	
Visual Resources Management					
				<i>Erica Stewart</i>	
Water Quality, Drinking or Ground					
				<i>John Hall</i>	
Wetlands/Riparian Zones					
				<i>Erica Stewart</i>	
Wildlife					
				<i>Erica Stewart</i>	

Review:

Prepared by: _____ **Date** _____
 Erica Stewart
 Project Lead

Reviewed by: _____ **Date** _____
 David Daniels
 Planning and Environmental Coordinator

Reviewed by: _____ **Date** _____
 John Mac Donald
 Field Manager,
 Yuma Field Office

**FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD**

YUMA FIELD OFFICE
Insert Applicant
Insert Project Title
Insert EA number

FONSI

I have reviewed this environmental assessment including the discussion of environmental impacts. I have determined that the Proposed Action with the mitigation measures described below will not have any significant impacts on the human environment and that an Environmental Impact Statement is not required. I have determined that the proposed project is in conformance with the approved land use plan.

DECISION

It is my decision to authorize the Proposed Action as described in Environmental Assessment DOI-BLM-AZ-C020-2009-00XX-EA. The Proposed Action will be subject to the stipulations attached to this environmental assessment.

Insert legal description

Compliance and monitoring will periodically be performed by a member of the Lake Havasu Field Office *insert program*.

RATIONALE

My decision to approve the Proposed Action analyzed in EA-AZ-020-0010-00XX is based on the following:

The Proposed Action has been analyzed, with no apparent significant impacts anticipated. The environmental assessment adequately covers all affected resource values.

The decision to allow the Proposed Action does not result in any undue or unnecessary environmental degradation, and is in conformance with the Yuma Field Office Resource Management Plan (RMP), approved in June 2010. The Proposed Action is specifically provided for in the following RMP decisions: *insert decision number(s), exact text and page number*.

** If the RMP does not specifically address the Proposed Action, but is consistent with the Proposed Action, edit the following text as an introduction before listing the exact text and page number of the objective, terms or condition. Delete this statement before finalizing the document.*

The Proposed Action is in conformance with the RMP, even though it is not specifically provided for, because it is clearly consistent with the following RMP objectives, terms and conditions:

ALTERNATIVES CONSIDERED

ALTERNATIVE 3

PROPOSED ACTION (ALTERNATIVE 2)

NO ACTION ALTERNATIVE (ALTERNATIVE 1)

The No Action Alternative was considered for this project. Under the No Action Alternative,

PUBLIC INVOLVEMENT

Describe the Public Involvement process. For example:

The Environmental Assessment was posted on the Arizona BLM Internet at the following location: http://www.blm.gov/az/st/en/fo/lake_havasu_field.html. A public comment period was offered between XX and XX. One written comment was received prior to the close of the comment period.

COMMENT:

RESPONSE:

STIPULATIONS

APPEALS

(Be sure to use text appropriate to the BLM program.)

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success on the merits,
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

APPROVED

John MacDonald, Field Manager
Yuma Field Office
Authorized Officer

Date