

**SAN BERNARDINO COUNTY
DRAFT INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM**

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

PROJECT LABEL:

APN: 0480-011-08 and 0479-13-106	
Applicant: County of San Bernardino, Regional Parks Department 777 East Rialto Avenue San Bernardino, CA 92415-0763	USGS Quad: Victorville
Community: Victorville	T, R, Section: T5N R4W Sect 14,15
Location: Unincorporated San Bernardino County west of the City of Victorville and east of the Town of Apple Valley	Thomas Bros.: Year 2000, Page 4386
Project No: Horseshoe Lake Levee Restoration and Park Enhancement, Mojave Narrows Regional Park	Planning Area: N/A
Staff: Philip Krause, County of San Bernardino Regional Parks Department, Park Planner III	LUZD: Open Space-State Land
Rep: Lilburn Corporation	Overlays: Dam Inundation-Area of Inundation
Proposal: The Proposed Project is the restoration of Horseshoe Lake at Mojave Narrows Regional Park. The Proposed Project includes the construction of a new earthen levee abutting the existing levee, restoration of the lakebed depth, contouring of the group camping area and Upper Pond detention basins, and parkland enhancements such as the naturalization of the Pelican Lake–Horseshoe Lake connecting waterway, deposit of excavated lake bottom material in the Park’s pastures, and the relocation of the Park equestrian area.	

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino
Regional Parks Department
777 East Rialto Avenue
San Bernardino, CA 92415-0763

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Project Sponsor: County of San Bernardino
Regional Parks Department
777 East Rialto Avenue
San Bernardino, CA 92415-0763

BACKGROUND

Mojave Narrows Regional Park is located in the High Desert area of Victor Valley, along the western bank of the Mojave River in an unincorporated area of San Bernardino County (see Figure 1). The park lies within the City of Victorville Sphere of Influence and just west of the Town of Apple Valley. Access to the Park is through the community of Spring Valley Lake via Yates Road (see Figure 2).

Mojave Narrows Regional Park encompasses approximately 840 acres of land owned by the California Department of Fish and Game (DFG); the San Bernardino County Regional Parks Department (Regional Parks) holds a long-term lease to the land and has operated the Park since 1967. Mojave Narrows Regional Park is managed by Regional Parks as a passive recreational area and nature preserve. The park consists primarily of two man-made fishing lakes, pasture lands, open turf recreation areas, an equestrian area, and RV and tent campgrounds.

Horseshoe Lake is the larger of the two man-made lakes at the Park. The lake was formed by a privately-built earthen levee in 1958; creation of the lake precedes the lease of the Park by Regional Parks (Scott Campbell, personal communication, August 17, 2010). Water supply for the two lakes enters Mojave Narrows Regional Park via a water channel that extends from Spring Valley Lake (located to the south) beneath Yates Road at the southeast corner of the park boundary. Water flows through a riprap-enhanced waterway and outlets into Pelican Lake, the smaller of the two man-made lakes. A second waterway traverses the park from Pelican Lake in a westerly direction to Horseshoe Lake. The waterway provides Horseshoe Lake with a constant supply of water and a natural stream that is used by park visitors.

Horseshoe Lake also receives seasonal runoff flows from a detention basin referred to as the Upper Pond, located in the southwestern corner of the park. An existing bypass channel located on the eastern edge of the Upper Pond berm was designed to convey flow from the Upper Pond to the natural drainage connecting to Horseshoe Lake. As urban development occurs in the Desert Knolls sub-watershed, the volume of runoff received at the Park has increased. As a result, the Upper Pond bypass has become obstructed by sedimentation and the detention basin has been rendered under capacity, inefficient, and unable to achieve its detention function during large storm events.

During the winter storm event of January 2010 (declared disaster FEMA-1884-DR), excessive upstream storm runoff passed through the Upper Pond spillway, then over the Upper Pond berm ultimately flowing into Horseshoe Lake and overtopping the northeast section of the Horseshoe Lake earthen levee. The overtopping of the levee and subsequent erosion damage resulted in a breach approximately 40-50 feet in length of the earthen levee. Since the levee breach, the lake has remained drained and therefore does not support the fishing and boating activities for which it was previously utilized.



View of the levee breach as seen from Google aerial satellite view.

ENVIRONMENTAL/EXISTING SITE CONDITIONS

Mojave Narrows Regional Park is an 840-acre developed parkland managed by Regional Parks as a passive recreation area and nature preserve. The two lakes within the Park, Horseshoe Lake and Pelican Lake are managed by Regional Parks as year-around fishing lakes. Under normal operating conditions, both lakes are stocked with trout, catfish, and bass. The Park also offers 38 Recreational Vehicle (RV) camping sites, 31 tent camping sites, nine group camping sites, and related camping amenities. Other park amenities include six group picnic shelters, a playground, a zero depth water playground, a challenge course, walking and hiking trails, and horse and pony rentals. On-site structures include the park gatehouse, a boathouse/concessions stand, restrooms, showers, picnic shelters, equestrian stables, office and maintenance buildings, and two historic silos.

The Park is only accessible via Yates Road, a two-lane street that primarily serves the residential community of Spring Valley Lake. The Town of Apple Valley, County of San Bernardino, and City of Victorville have proposed a joint undertaking to construct a thoroughfare extending from the Yucca Loma Road/Apple Valley Road Intersection in the east, aligning with Yates Road and continuing to the Green Tree Boulevard/Hesperia Road intersection in the west as shown on Figure 2. A project start date or anticipated completion date has not been established.

Mojave Narrows Regional Parks is located along the western side of the Mojave River. The bank of the Mojave River is dominated by a Southern Cottonwood Riparian Forest area consisting of tall, open canopy, broadleaf winter deciduous forest and meadows. The riparian forest is dominated by cottonwood (*Populus fremontia*) and several tree-sized willows (*Salix* sp.). Understory is usually dominated by shrub-sized willows. The river has been designated as critical habitat for the southwestern willow flycatcher by the United States Fish and Wildlife Service.

The Proposed Project would occur in the developed parkland west of the Mojave River. The Project Area occurs in an area of the park most heavily utilized by park patrons. Biological and vegetative resources in the Project Area include fresh water marsh, lacustrine habitat, rabbitbrush/atriplex sp. Dominant vegetation, atriplex dominant vegetation, willow/cottonwood forests, pasture land, and farmland

SURROUNDING LAND USES

The Mojave Narrows Regional Park site designation in the San Bernardino County General Plan is Open Space – State Land. Land uses and zoning designations surrounding the park include:

	EXISTING LAND USE	OFFICIAL LAND USE DESIGNATION
North	Open Space (County of San Bernardino)	Institutional
South	Single Family Residential (County of San Bernardino)	Medium Density Residential
East	Mojave River (County of San Bernardino)	Open Space – State Land
West	UPRR Right-of-way and Vacant Land (City of Victorville)	Open Space

PURPOSE

Regional Parks is proposing to construct improvements at the Mojave Narrows Regional Park to repair storm damage, increase stormwater management capacities, prevent future flooding and erosion potential, improve freshwater lake habitat and improve camping and equestrian facilities.

SUMMARY OF PROPOSED PROJECT ACTIVITIES

The Proposed Project includes the restoration of Horseshoe Lake as a warm water fishery; the improvement of on-site stormwater detention capacity and flow patterns; and the renovation of existing campgrounds and support facilities. At this time Regional Parks has secured a funding source for the restoration of Horseshoe Lake, including lakebed excavation and the construction of a levee abutment on the lakeside of the existing damaged earthen levee. Due to funding restrictions, Regional Parks does not have an anticipated construction timeline for all of the proposed project components and does not foresee when funding for these will be available. CEQA compliance will be verified and regulatory permits will be requested when/should funding for each of the proposed components be secured. An asterisk has been used to identify project components Regional Parks anticipates to construct at a future unidentified date should funding be secured.

To address the various aspects of the Proposed Project, the Project has been broken down into three primary planning areas as shown on Figure 3. Figure 3 also shows existing uses within the planning areas. The locations of Proposed Project components are identified on Figure 4.

Planning Area 1 consists of approximately 101 acres and includes the following components of the Proposed Project:

- Construction of a reinforcing abutment on the south side of the existing Horseshoe Lake levee to replace the levee breached in the 2010 storm events;
- Excavation/grading of Horseshoe Lake to more closely replicate lake bottom conditions present in approximately 1973;
- Contouring of the Group Camping area to increase the Upper Pond surface area and detention basin capacity;
- Construction of a culvert crossing (over) an existing sewage line easement that crosses the Group Camping area to maintain and enhance the existing natural runoff flow patterns;
- Enhancement of the Pelican Lake/ Horseshoe Lake connecting waterway to create a more natural streambed/channel;
- Renovation of the Park boathouse and concession stand;
- Relocation of the Equestrian Center to the north portion of Planning Area 3; and
- Enhancement of existing Recreation Vehicle (RV) hook-ups in the RV campground area.

Planning Area 2 consists of approximately 31 acres and includes the following components of the Proposed Project:

- Spreading of excavated material from Horseshoe Lake on the Park's Front Pasture to create a landscaped open turf area for recreational use and animal grazing; and

**Horseshoe Lake Levee Restoration and Park Enhancement
Initial Study
April 2012**

- Construction of a roadway and parking area easterly from the Park Road/Middle Lake road intersection for improved patron access and circulation to the Front Pasture and Pelican Lake areas.

Planning Area 3 consists of approximately 30 acres and includes the following components of the Proposed Project:

- Reconstruction of the equestrian area (relocated from Planning Area 1) in the meadow and grazing areas located in the north portion of Planning Area 3; and
- Expansion of the Park Core Amenities (Playgrounds, Zero-depth Water Park, etc.) into Planning Areas 1 and 3.

PROJECT ACTIVITY DETAIL AND REGULATORY PERMITS REQUIRED

Construction of a Reinforcing Abutment

A reinforcing abutment, 2,200 linear feet in length is proposed to be constructed on the south side of the existing Horseshoe Lake levee. The proposed abutment would have a 12-foot top width and would raise the existing levee by approximately three feet. The abutment would incorporate an emergency overflow spillway near the lake's northeastern corner to prevent future overtopping by allowing a controlled release of water at a controlled elevation. Construction of the reinforcing abutment would entail remedial grading to portions of the existing damaged levee in preparation for construction. Removal of existing trees from the levee surface would occur in compliance with the County's Development Code Ordinance for plant protection and management (Section 88.01). Construction of the abutment would require approximately 44,400 cubic yards of material. Material needed for the construction of the levee would likely be imported from a local source.

Regulatory Permits Required: Construction of the abutment would require a California Department of Fish and Game (CDFG) 1602 Streambed Alteration Agreement, an ACOE Nationwide Permit No.3, and a Regional Water Quality Control Board (RWQCB) 401 Certification.

Culvert*

Off-site urban runoff from an unnamed ephemeral drainage enters the Park at its southwestern corner. During small storm events, runoff is detained in the Upper Pond; during larger storm events, runoff flows over the Upper Pond berm and along a natural drainage north to Horseshoe Lake. An existing bypass channel located on the eastern edge of the Upper Pond berm was designed to convey flow from the Upper Pond to the natural drainage at a rate of approximately 40 cubic feet per second (cfs). However, due to increased stormwater flows and sediment accumulation, the bypass no longer has the capacity to convey the volume of runoff entering the Upper Pond; it is considered obstructed and unserviceable. Under the Proposed Project new dual 42-inch culverts with perforated debris risers would be constructed to convey flow across (over) the existing sewage line easement and new berm to rejoin flows to the natural drainage that flows into Horseshoe Lake. The stream capacity of the culvert would be approximately 180 cfs, about four times that of the original Upper Pond spillway.

**Horseshoe Lake Levee Restoration and Park Enhancement
Initial Study
April 2012**

Regulatory Permits Required: Construction of the new culvert would require a CDFG 1602 Streambed Alteration Agreement, an ACOE Nationwide Permit No. 43, and a RWQCB 401 Certification.

Lakebed Excavation

The Horseshoe Lake levee was privately-constructed in 1958. The Park property was obtained by the California Department of Fish and Game following the construction of the lake. In 1967 Regional Parks entered a long-term lease with CDFG and began to operate the Park as a passive recreation area and nature preserve. Since its acquisition of the Park, Regional Parks has not conducted lakebed maintenance activities. Historic aerial photographs and topography maps of the lake show that significant siltation accumulation has occurred. The Proposed Project would utilize current topography data of the lake and historic data to establish a baseline depth ranging from eight feet on the south end of the lake to twelve feet at the north end of the lake and comparable to depths recorded in the Park's 1973 Improvement Plan. Excavation/grading of the lakebed would take place concurrent with the construction of the lake levee reinforcing abutment; cut ranges are estimated to average between 3.5 and 5.5 feet across the length of the lake. It is estimated that approximately 430,000 cubic yards of material would be excavated. Excavated material would either be repurposed on site by spreading it across the Park's pasture lands, or may be stockpiled on the easterly side of the park. Stockpiling the material would entail spreading the material over an approximately 4.5 acre area in the park's pasture lands and would include the implementation of erosion and sediment control BMPs.

Regulatory Permits Required: Lake depth restoration activities would require a CDFG 1602 Streambed Alteration Agreement, an ACOE Nationwide Permit No. 27, and RWQCB 401 Certification.

Front Pasture Turf

The Park's Front Pasture is currently an undeveloped 28.5 acre open area used for livestock grazing purposes via concession contract (lease). Clean organic material excavated from Horseshoe Lake may be deposited and spread throughout the Front Pasture. The material would be used in the development of an irrigated and landscaped open turf area. The existing use of the Front Pasture would remain unchanged.

Regulatory Permits Required: No specific permits would be required from regulatory agencies for this aspect of the Proposed Project.

Management and Maintenance Plan

In order to ensure continued maintenance of the Park's lakes, waterways, and detention basins, as part of the Proposed Project Regional Parks would develop a management and maintenance plan. The plan would establish management goals and set guidelines and protocols for activities such as: aquatic vegetation management, sediment removal, and erosion control. Such activities would be conducted regularly on a quarterly, seasonal and/or annual basis as identified by the plan. Maintenance and management of the runoff detention basins would entail annual removal of accumulated debris prior to the rainy season.

Maintenance of the Park's lakes would be covered by the existing County of San Bernardino Regional Parks and Public Works Departments joint NPDES General Permit for the application of aquatic

**Horseshoe Lake Levee Restoration and Park Enhancement
Initial Study
April 2012**

pesticides at Regional Parks' recreational facilities and Public Works' flood control facilities. The County has developed an Aquatic Pesticide Application Plan (APAP) to meet the requirements of the General Permit within the jurisdictions of the Lahontan, Colorado, and Santa Ana Regional Water Quality Control Boards. The APAP outlines acceptable herbicides, target aquatic species, establish guidelines for herbicide management and application, as well as monitoring and reporting.

Regulatory Permit Required: Utilization of aquatic pesticides for aquatic weed control would require a State Water Resources Control Board General Permit No. CAG990005; the County has an existing permit for the maintenance of Regional Parks' recreational facilities.

New Park Roadway and Parking*

Proposed parkland enhancement activities include the construction of a new park roadway from the Middle Lake Road/Park Road intersection, easterly to the existing Pelican Lake parking area. Construction of the new roadway would be consistent with existing park roads; the new road would be two lanes and 26 feet wide. Approximately 120 new parking spaces (10'x20') would be added along the shoulder of the road. Under existing conditions access to Pelican Lake is available from Park Road via a maintained dirt road.

Regulatory Permit Required: No specific permits would be required from regulatory agencies for this aspect of the Proposed Project

Other Park Improvements*

Activities associated with the Pelican Lake/Horseshoe Lake connecting waterway, boathouse, concession stand, and RV campground would entail rehabilitation and renovation of the existing facilities. These facilities are shown on Figure 4. The equestrian area currently located in the Park Core, straddling Planning Areas 1 and 3 (see Figure 3), would be relocated north of the Park Core to an existing pasture area (see Figure 4), and the existing Park Core would be expanded into the former equestrian area. The activities would not result in new disturbances to existing habitat. It is anticipated that these activities will occur as funding sources are secured.

Regulatory Permits Required: No specific permits would be required from regulatory agencies for these aspects of the Proposed Project.

Upper Pond –Detention Basin Enhancement*

The Upper Pond is located in the southwestern corner of the Park and receives off-site urban runoff from an unnamed ephemeral drainage. In recent years, development in the Desert Knolls sub-watershed has led to runoff volumes that surpass the capacity of this detention basin. Excessive runoff has resulted in the obstruction of the basin bypass, estimated to have a stream capacity of 40 cfs, and in the overtopping and erosion of the basin berm. Excessive runoff flow from the Upper Pond to Horseshoe Lake was identified as a contributing factor of the 2010 Horseshoe Lake levee overtopping and subsequent breach. The Proposed Project would enhance stormwater management capacities to prevent future flooding and erosion problems in the Upper Pond by opening a 50-foot section of the existing berm to reestablish the natural flow pattern from the detention basin to Horseshoe Lake.

**Horseshoe Lake Levee Restoration and Park Enhancement
Initial Study
April 2012**

The Group Camping area located immediately north of the existing Upper Pond would be contoured to increase the stormwater detention capacity of the Upper Pond by constructing two detention basins; South and North. The bottom elevation of the South Basin would be 2,753 feet above mean sea level (AMSL) with its normal water level (spillway elevation) at 2,756.5 feet AMSL. The bottom elevation of the North Basin would be 2,751 feet AMSL with its normal water level at 2,752.5. The berm surrounding the South Basin and separating it from the North Basin, will be at 2,759 feet AMSL and coincides with existing sewage line easement (see Figure 4). A four-foot high berm ranging in elevation from 2,755 to 2,756 feet AMSL and extending 400 feet would be constructed at the northern extent of the Group Camping Area adjacent to Middle Park Road. The berm would serve to channel runoff flow along the natural drainage on the eastern end of the Group Camping Area. Approximately 6,000 cubic yards of material would need to be imported for construction activities in the Upper Pond/Group Camping Area.

Off-site flows into the Upper Pond detention basin have resulted in the formation of a 0.12 acre wetland special aquatic site in the northwest corner of the pond. Impacts to the wetland would be avoided by the proposed activity. Special aquatic site is defined as: a geographic area, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological value. Special aquatic sites are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

Regulatory Permit Required: The Upper Pond contouring activity would require a CDFG 1602 Streambed Alteration Agreement, ACOE Nationwide Permit No. 43, and a RWQCB 401 certification.

PROJECT IMPLEMENTATION

The proposed schedule is as follows:

Milestones	Quarter/Year
Interim Lake and Levee Restoration	
Begin Design Engineering	2Q/2011
Plans/Specifications/Cost Estimates Completed	3Q/2011
Prepare Initial Study/Environmental Checklist	3Q/2011
Conduct Environmental Surveys/Prepare Reports	3Q/2011
Finalize Environmental Documentation	4Q/2011
Acquire 401/404 and 1602 Permits for interim project	1Q/2012
Construction Begins - Interim Project	1Q/2012
Levee and Lakebed Re-contouring Construction Completed	4/Q/2012

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

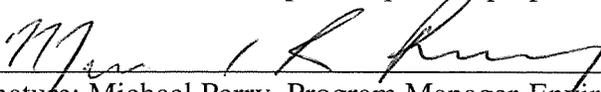
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology /Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use/ Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION:

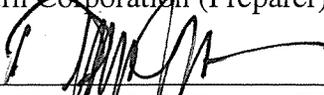
On the basis of this initial evaluation, the following finding is made:

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature: Michael Perry, Program Manager-Environmental Studies
Lilburn Corporation (Preparer)

4-3-12
Date



Philip Krause, Park Planner III
County of San Bernardino Regional Parks Department

4-8-12
Date

Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
I. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

- a,c) **Less than Significant with Mitigation.** Mojave Narrows Regional Park is located along the western bank of the Mojave River. The City of Victorville General Plan conservation policy seeks to conserve the river corridor for flood hazard protection, wildlife habitat and movement, and aesthetic value. The Proposed Project will restore the use of Horseshoe Lake as a fishing lake and provide for parkland enhancements. Project Activities would include the repair of storm induced damages to the lake’s earthen levee, restoration of the lake bed depth, improvement of on-site stormwater detention and flow, and parkland enhancements as identified in the Project Description. The Proposed Project will maintain the integrity of the park as a nature preserve and passive recreation area. The proposed project activities would require the removal of approximately seven trees from the existing Horseshoe Lake earthen levee and approximately 1.71 of 5.14 acres of riparian vegetation from the Upper Pond area in order to protect the structural integrity of the new levee abutment and recontoured detention basins. All removal of plants and trees would occur in accordance with the County Development Code Section 88.01 for Plant Protection and Management.
- b) **No Impact:** Mojave Narrows Regional Park is located along the western bank of the Mojave River and is not located in the vicinity of a scenic highway. Therefore, no impacts to trees, rock outcroppings, and historic buildings within a state scenic highway would occur.
- d) **No Impact.** The Proposed Project would not introduce new sources of substantial light or glare. No impacts are anticipated.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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II. AGRICULTURE RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION:

a-b) **No Impact.** The most recent Farmland Mapping and Monitoring Map prepared for the North San Bernardino area identifies Prime Farmland at the Front Pasture Area of Mojave Narrows Regional Park. The map identifies the location of Horseshoe Lake as “other.” The Proposed Project would excavate the Horseshoe Lake lakebed and distribute the organic material in the Front Pasture. Soil samples from the lake bottom excavation area have been collected and analyzed for potential contaminants; the results of the sampling showed that the material is nonhazardous and unrestricted use with respect to contaminants is warranted. The Front Pasture is currently a vacant field used for passive recreation and animal grazing; the Proposed Project activity will not alter the existing use of the pasture, conflict with agricultural use, or conflict with a Williamson Act Contract. No impact is anticipated.

**Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012**

c-e) **No Impact.** Mojave Narrows Regional Park is managed as a passive recreational area and nature preserve. The Proposed Project would not conflict with timberland or zoned Timberland Production; result in the loss of forestland or its conversion to non-forest use, or convert farmland to non-agricultural use. No impacts to these resources would occur as a result of the Proposed Project.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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III. AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

The Project Site is located in the Mojave Desert Air Basin (MDAB). Mojave Desert Air Quality Management District (MDAQMD) has jurisdiction over air quality issues and regulations within the MDAB. To assist local agencies to determine if a project's emissions could pose a significant threat to air quality, the MDAQMD has published its Air Quality Rule Book. The air and dust emissions from the implementation of the Project would be temporary, occurring during the excavation and grading activities. These were measured based on the MDAQMD standards and evaluated against the most recent thresholds applicable.

a) **No Impact.** The Project involves the disturbance of approximately 40 acres. The project includes the restoration of Horseshoe Lake as a warm water fishery; the improvement of on-site stormwater detention

capacity and flow patterns; and the renovation of existing campgrounds and support facilities. All material is to be balance onsite.

Upon completion of earthmoving activities, no permanent emissions would occur from the Proposed Project. Therefore, the Project would not conflict with or obstruct implementation of the MDAQMD Air Quality Management Plan (AQMD) or any other applicable air quality plans. No impact is anticipated.

- b) **Less Than Significant Impact:** The proposed improvements to Horseshoe Lake would require earthmoving, hauling, and other activities such as material screening compacting and approximately 814 cubic yards of asphalt. The Project’s proposed earthwork activities were screened for emission generation using South Coast Air Quality Management District (SCAQMD) “Rule Book” guidelines, SCAQMD Off-Road Mobile Source Emissions Factors (2012) and On-Road Heavy-Heavy-Duty Diesel Trucks 2012 Emissions Factors. MDAQMD allows the use of SCAQMD emission factors. These tables are used to generate emissions estimates for development projects. The criteria pollutants screened for included: reactive organic gases (ROG), nitrous oxides (NO_x), carbon monoxide (CO), and particulates (PM₁₀ and PM_{2.5}). Two of these, ROG and NO_x, are ozone precursors.

Construction Emissions

Construction earthwork emissions are considered short-term, temporary emissions and are estimated in Table 1. The following construction parameters were assumed:

Horseshoe Lake Material Handling, Typical daily equipment:

- 1 Water Truck
- 2 Rubber Tired Dozers
- 1 Loader/Backhoe
- 2 Excavators
- 2 Dump Trucks
- 1 Other Material Handling Equipment
- 2 Onsite Material Relocation/Handling

Table 1
Construction Emissions
Horseshoe Lake Improvements
(Pounds per Day)

Source¹	ROG	NO_x	CO	PM₁₀	PM_{2.5}
Water Truck	1.6	11.2	4.1	0.5	0.5
Rubber Tired Dozer	4.8	43.2	19.2	1.6	1.6
Loader/Backhoe	1.0	8.0	4.0	0.5	0.5
Excavators	2.0	16.0	8.0	0.2	0.2
Dump Trucks	0.2	1.0	0.5	0.04	0.04
Other Material Handling Equipment	1.6	11.2	4.1	0.5	0.5
Onsite Material Relocation/Handling	0.5	5.4	1.8	0.6	0.4
Totals (lbs/day)	11.7	96.0	41.7	3.9	3.7
MDAQMD Threshold	137	137	548	82	55
Significant	No	No	No	No	No

¹ SCAQMD Off-Road Mobile Source Emissions Factors (2012)

**Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012**

As indicated in Table 1, Project emissions would not exceed MDAQMD thresholds.

Compliance with MDAQMD Rule 403

Although the Proposed Project does not exceed MDAQMD thresholds for construction emissions, the County Regional Parks Department is required to comply with all applicable MDAQMD rules and regulations as the MDAB is in non-attainment status for suspended particulates (PM₁₀). The Project shall comply with 403 fugitive dust, which require the implementation of Best Available Control Measures (BACM) for each fugitive dust source; and the AQMP, which identifies Best Available Control Technologies (BACT) for area sources and point sources, respectively. This would include, but not be limited to the following BACMs and BACTs:

1. The Project proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.
 - I. The Project proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site. Portions of the site that are actively being graded shall be watered regularly to ensure that a crust is formed on the ground surface, and shall be watered at the end of each workday.
 - II. The Project proponent shall ensure that all disturbed areas are treated to prevent erosion.
 - III. The Project proponent shall ensure that all grading activities are suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

Exhaust emissions from construction vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, would increase NO_x and PM₁₀ levels in the area. Although the Proposed Project would not exceed MDAQMD thresholds during construction, the County would be required to implement the following conditions as required by MDAQMD:

2. To reduce emissions, all equipment used in earthwork must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.
3. The Project proponent shall ensure that construction personnel are informed of ride sharing and transit opportunities.
4. The operator shall maintain and effectively utilize and schedule on-site equipment in order to minimize exhaust emissions from truck idling.
5. The operator shall comply with all existing and future CARB and MDAQMD regulations related to diesel-fueled trucks, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

Operational Emissions

With the exception of occasional clearing or removal of depositional sediments to maintain functional capacity, routine operational emissions are not associated with the Proposed Project. Therefore, impacts are anticipated to be less than significant.

Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012

- c) **No Impact:** The Proposed Project would not individually exceed any MDAQMD thresholds for criteria pollutants. The County of San Bernardino General Plan EIR concluded that continued development would contribute to pollutant levels in the County, many areas of which already exceed State and Federal air quality criteria. Findings on potentially significant impacts of the General Plan indicated that policies contained in the General Plan and mitigation measures in the EIR are expected to reduce emissions associated with future development. However, even after application of these policies and mitigation measures, the General Plan when viewed as a whole project, is expected to generate emission levels that would exceed the MDAQMD thresholds for criteria pollutants, resulting in a significant unavoidable adverse air quality impact. A Statement of Overriding Considerations for the General Plan EIR was adopted by the County Council. No impact is anticipated.
- d) **Less Than Significant Impact:** The proposed project is improvements to Horseshoe Lake. Air quality impacts are limited to construction activities and material handling maintenance. As shown in Table 1 impacts are determined to be less than significant, therefore, the proposed improvement is not anticipated to impact any sensitive receptors. A less than significant impact is anticipated.
- e) **No Impact:** The proposed project is improvements to Horseshoe Lake. Air quality impacts are limited to construction activities and material handling maintenance. The Proposed Project is not anticipated to generate emissions that would create objectionable odors affecting a substantial number of people. No impact is anticipated.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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IV. BIOLOGICAL RESOURCES - Would the project:

- | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc...) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Horseshoe Lake Levee Restoration and Park Enhancements
 Initial Study
 April 2012

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

a) **Less than Significant with Mitigation.** The existing Horseshoe Lake earthen levee occurs within critical habitat for southwestern willow flycatcher as defined by the United States Fish and Wildlife Service. The levee and lakeside do not exhibit constituent elements of critical habitat for southwestern willow flycatcher. As identified by the U.S. Fish and Wildlife Service constituent elements of critical habitat for the flycatcher include dynamic, successional, riverine environments for breeding, foraging, migration dispersal, and shelter that is characterized by riparian trees and shrubs with dense foliage. No habitat for the flycatcher exists on the lakeside of the levee, and the levee itself does not support the constituent elements due to high pedestrian traffic and disturbance by anglers. However, construction impacts such as the removal of vegetation and generation of noise have the potential to affect a special status species. Implementation of the following mitigation measures shall ensure that impacts are reduced to a less than significant level.

BIO-1: Project activities with the potential to impact riparian habitat, including removal of vegetation, shall be scheduled to occur outside of the bird nesting season of March 15 through September 15 unless otherwise authorized by the California Department of Fish and Game and the U.S. Fish and Wildlife Service.

BIO-2: Pre-construction surveys of all riparian habitat within the Project Area, shall be conducted no more than 30 days before commencement of ground disturbing activities.

BIO-3: In order to avoid impacts to sensitive areas outside of the Project Area, the limits of work areas shall be clearly flagged. All staging and equipment areas shall be located within the flagged work areas.

BIO-4: Have a biological monitor present or available on-call during construction activities to assure no sensitive biological resources are impacted.

- b) **Less than Significant with Mitigation.** The Jurisdictional Delineation for the Horseshoe Lake Restoration and Park Enhancement project identified approximately 11.5 acres of riparian habitat in the Project Area. Project activities associated with the construction of the new stormwater detention basins have the potential to impact approximately 1.7 acres of willow/cottonwood woodland and Atriplex dominated habitat. Potential impacts to riparian habitat would be considered less than significant with the incorporation of mitigation.

BIO-5: Areas of temporary impact within the Project Area shall be restored to pre-project conditions at the conclusion of project activities.

- c) **Less than Significant.** The Jurisdictional Delineation for the Horseshoe Lake Restoration and Park Enhancement project identified a 0.12 acre wetland in the northwestern portion of the Upper Pond and 14.9 acres of fresh water marsh in and around Horseshoe Lake. None of the project activities would result in impacts to the wetland. Project activities associated with the lake bottom would result in 5.47 acres of temporary impacts to the fresh water marsh. Impacts to the marsh would be incidental to reversing the lake bottom to conditions recorded in the Park's 1973 Improvement Plan. Since its acquisition of the Park in 1967, Regional Parks has not conducted lakebed maintenance activities. Historic aerial photographs and topography maps of the lake and historic data show that significant siltation accumulation has occurred. By reversing the lake bottom conditions to their prior documented condition, Horseshoe Lake will have a net increase in aquatic resource functions and service. Areas of the fresh water marsh temporarily impacted by excavation activities are anticipated to naturally and rapidly revegetate; therefore, these impacts are considered to be less than significant
- d) **Less than Significant.** Mojave Narrows Regional Park is managed as a passive recreation area and nature preserve. The western park boundary is defined by the Mojave River and large stands of willow and cottonwood trees. The portion of the Mojave River adjacent to the Park is a large strand of riparian forest and habitat for numerous species of wildlife. This portion of the river has been identified as foraging habitat for least Bell's vireo and is identified as critical habitat for southwestern willow flycatcher by the U.S. Fish and Wildlife Service. The Mojave River may serve as a wildlife corridor for both terrestrial and aquatic plant and animal species. However, the Proposed Project is not anticipated to impede the corridor function of the river, and therefore, this would be a less than significant impact.
- e) **Less than Significant.** The County of San Bernardino Development Code regulates the removal of native trees with a six inch or greater stem diameter or with a stem 19 inches in circumference measured 4.5 feet above the natural grade level. Project activities associated with the construction of new stormwater detention basins have the potential to impact 0.08 acres of willow/cottonwood forest. The removal of regulated trees is allowed when a tree removal permit is issued by the County; such permit would be issued in conjunction with the development permit. The need for a tree removal permit would be determined at the time of pre-construction inspections. Impacts associated with tree removal are anticipated to be less than significant.
- f) **No Impact.** The Horseshoe Lake levee restoration and Park enhancement project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan as its construction is proposed within the developed and most heavily utilized areas of the park.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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V. **CULTURAL RESOURCES** - Would the project:

- | | | | | |
|---|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION:

- a-c) **Less than Significant.** The drainages and banks of the Mojave River in the vicinity of Mojave Narrows Regional Park are known to contain archaeological, cultural, and paleontological resources associated with the region’s historical uses. According to the City of Victorville General Plan, prehistoric settlements and Native American sites have been recorded along the Mojave River drainages and banks through the course of project related surveying. Ground disturbing activities associated with the restoration of Horseshoe Lake and with drainage improvement will occur within the man-made lake and developed parkland outside of the Mojave River’s bank and any associated drainages. Because no project activities would occur immediately adjacent to the Mojave River, no impacts to cultural or historical resources are anticipated.
- d) **Less than Significant with Mitigation.** Depth restoration activities in the dry Horseshoe Lake bed and grading of the Park’s detention basins may have the potential impact of unearthing human remains. Since its acquisition of the Park in 1967, Regional Parks has not conducted lakebed maintenance activities. Historical aerial photographs and topography maps show that significant siltation accumulation has occurred. The Proposed Project would restore the lake’s depth to a level comparable to that recorded in the Park’s 1973 Improvement Plan. Cut ranges are estimated to average between 3.5 and 5.5 feet across the length of the lake. The following mitigation measure shall be implemented to ensure impacts to potential buried remains are reduced to a less than significant level:

CR-1: If at any time, additional resources are identified within the project area (in a buried context near existing facilities or in the excavation areas), the monitoring program should be expanded to cover the remainder of the excavations. If at any time there is evidence of human remains, the County Coroner must be notified within 24 hours. If the remains are deemed Native American in origin, the Coroner will notify the Native American Heritage

Commission and the Most Likely Descendant (MLD) will be identified. Through consultation between the County, the archeological consultant, and the MLD, the disposition of the remains will be determined. Costs relating to the disposition of human remains will be borne by the applicant.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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VI. GEOLOGY AND SOILS - Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ii. Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii. Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv. Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 181-B of the California Building Code (2001) creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION:

- a) **Less Than Significant Impact.** The San Bernardino County Geologic Hazards Overlay Map (EHFHC) does not identify any faults in the immediate vicinity of Mojave Narrows Regional Park. No known faults pass through the site and the Park does not occur in an Earthquake Fault Zone. The North Frontal Fault Zone, primarily a thrust fault passes approximately six miles southeast of the Park. The Northern Frontal fault zone consists of numerous fault segments. The magnitude of the maximum probable event along this fault is estimated at a moment magnitude M_w 6.0 – 7.1 earthquakes. It is offset by the Helendale fault, which is capable of producing up to M_w 7.3 earthquakes. This fault is located 10.5 miles northeast of the Park. Each of these faults can produce ground shaking in the vicinity of the park; geologic impacts associated with a seismic event are less than significant.
- b) **No Impact:** Under existing conditions runoff in excess of the Upper Pond's capacity overtops the detention basin berm leading to surge flow that has resulted in erosion damage to both the berm and Middle Lake Road. The Proposed Project would increase runoff detention capacity at the Upper Pond and Group Camping areas as well as enhance the existing natural runoff flow patterns from the Upper Pond to Horseshoe Lake. Ultimately, the project would result in a reduction of erosion and loss of topsoil from the existing conditions.
- c) **Less Than Significant Impact.** The San Bernardino County General Plan Geologic Hazards Overlay Map (EHFHC) does not identify the project location as a zone of landslide susceptibility, liquefaction susceptibility, or in the vicinity of an earthquake fault. The topography of the park would be slightly altered by the construction of the Horseshoe Lake Levee abutment and grading of the Upper Pond and Group Camping areas. All grading would be done in accordance to a grading plan approved by the County Engineer. The proposed activities would not create unstable soils, and impacts are considered less than significant.
- d) **Less than Significant Impact.** Soil type within the Project Planning Areas is Victorville sandy loam. This very deep moderately well drained soil occurs on low river terraces and on flood plains along the Mojave River. It formed in alluvium derived dominantly from granitic material. Soils are present at slopes of 0 to 2 percent in elevations ranging from 2,200 to 2,800 feet.
- Permeability of the Victorville soil is moderately rapid to a depth of 50 inches and moderately slow below this depth. In some areas permeability is moderately rapid throughout the profile. Available water capacity is moderate. Runoff is medium, and the hazard of water erosion is slight. The soil is subject to rare periods of flooding. The soil is adaptable to land development and is not of an expansive nature.
- e) **No Impact.** All facilities at Mojave Narrows Regional Park are connected to the existing waste water disposal infrastructure. The Proposed Project does not include new facilities that would expand the existing capacity of the waste water disposal system and therefore, no impacts would occur.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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VII. GREENHOUSE GAS EMISSIONS - Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION:

Greenhouse Gas Emissions Interim Measures

According to CEQA Guidelines section 15064.4, when making a determination of the significance of greenhouse gas emissions, the “lead agency shall have discretion to determine, in the context of a particular project, whether to (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use.” Moreover, CEQA Guidelines section 15064.7(c) provides that “a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts” on the condition that “the decision of the lead agency to adopt such thresholds is supported by substantial evidence.”

The County of San Bernardino and the Mojave Desert Air Quality Management District (MDAQMD) has not adopted its own thresholds of significance for greenhouse gas emissions. However, the County and the District finds persuasive and reasonable the approach to determining significance of greenhouse gas emissions established by South Coast Air Quality Management District (SCAQMD).

- a) **Less Than Significant Impact.** In September 2006 Governor Schwarzenegger signed Assembly Bill 32, The Global Warming Solutions Act of 2006. The Act requires that by the year 2020, the Greenhouse Gas (GHG) emissions generated in California be reduced to the levels of 1990. However, although thresholds of significance guidelines have been developed; standards or significance thresholds have not yet been established by MDAQMD or the California Air Resources Board (CARB).

Per CEQA guidelines, new project emissions are treated as standard emissions, and air quality impacts are evaluated for significance on an air basin or even at a neighborhood level. Greenhouse gas emissions are treated differently, in that the perspective is global, not local. Therefore, emissions for certain types of projects might not necessarily be considered as new emissions if the project is primarily population driven. Many gases make up the group of pollutants that are believed to contribute to global climate change. However three gases are currently evaluated Carbon dioxide (CO₂) Methane (CH₄) and Nitrous oxide (N₂O). SCAQMD provides guidance methods and/or Emission Factors. Project GHG emissions are shown in Table 2. An interim threshold of 10,000 MTCO₂E per year has been adopted by SCAQMD

as potentially significant or global warming (Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, SCAQMD, October 2008).

**Table 2
 Construction Emissions
 Greenhouse Gases**

Task	CO₂¹	CH₄¹	N₂O²
Water Truck	203,040	14.4	0.2
Rubber Tired Dozer	688,320	72	0.4
Loader/Backhoe	156,960	14.4	0.1
Excavators	345,600	36	1.0
Dump Trucks	21,960	1.8	0.0
Other Material Handling Equipment	203,040	18	0.2
Onsite Material Relocation/Handling	121,536	3.6	0.1
Total Per Year (lbs)*	1,740,456	160.2	2.0
MTCO ₂ e	789.5	0.07	0.0
Total MTCO₂e	790.0		
Threshold	10,000 ³		
Significant	N/A		

¹ Off-Road Mobile Source Emissions Factors (2012);
 Emission Factors for On-Road Heavy-Duty Diesel Trucks (Emfac 2012)
² California Climate Action Registry General Reporting Protocol, 2009I;
 Table A9-8-C SCAQMD Handbook; Climate Leaders EPA, Section 3, Table 2.
³ Interim SCAQMD thresholds, 10,000 MTCO₂e/year
 * 180 work days

As shown in Table 2, GHG emissions are not anticipated to exceed the SCAQMD interim GHG emissions threshold. Therefore a less than significant impact is anticipated

- b) **Less Than Significant Impact.** The state and local regulatory programs for GHG emissions and climate change are described above. There are no existing GHG plans, policies, or regulations that have been adopted by CARB or MDAQMD that would apply to this type of emissions source. It is possible that CARB may develop performance standards for Project-related activities prior to Project construction. In this event, these performance standards would be implemented and adhered to, and there would be no conflict with any applicable plan, policy, or regulation. Therefore, less than significant impact is anticipated.

Potentially Significant Impact Less than Significant with Mitigation Incorp. Less than Significant Impact No Impact

VIII. HAZARDS AND HAZARDOUS MATERIALS -
 Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012**

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

SUBSTANTIATION:

- a) Less than Significant Impact.** Maintenance of the two lakes at the park would entail the application of aquatic pesticides to maintain recreational functionality of the lakes. The County of San Bernardino Regional Parks and Public Works Departments hold a joint NPDES General Permit for the application of aquatic pesticides at Regional Parks' recreational facilities and Public Works' flood control facilities. The County has developed an Aquatic Pesticide Application Plan (APAP) to meet the requirements of the General Permit within the jurisdictions of the Lahontan, Colorado, and Santa Ana Regional Water

Horseshoe Lake Levee Restoration and Park Enhancements

Initial Study

April 2012

Quality Control Boards. The APAP outlines acceptable herbicides, target aquatic species, establish guidelines for herbicide management and application, as well as monitoring and reporting. Maintenance of the lakes would be a covered activity under the existing General Permit and resulting impacts would be less than significant.

- b) **Less than Significant Impact.** The Proposed Project would excavate approximately 430,000 cubic yards of material from the Horseshoe Lake bottom. Excavated material would either be repurposed on site by spreading it across the Park's pasture lands, or may be stockpiled on the easterly side of the park. Stockpiling the material would entail spreading the material over an approximately 4.5 acre area and would include the implementation of erosion and sediment control BMPs. Prior to repurposing or stockpiling of the material, excavated material would be placed in wind-rows just east of Horseshoe Lake.

Soils sampling and analysis of the lake bottom was conducted on January 18, 2012 in order to assess whether potential soil contaminants, associated with the past use of the lake and/or its feeder system, are present, and determine the suitability of the dredge material for future use in the Park. Soil samples from twelve hand-excavated locations were collected and analyzed for TPH-G, TPH-D, TPH-MO, VOCs, fuel oxygenates, California Title 22 metals, chlorinated herbicides, OCPs, PCBs, and macronutrients. Based on the results of the soil sampling and analysis for potentially hazardous contaminants, it appears that unrestricted use of the dredge soil with respect to these contaminants is warranted; the dredge material should be considered nonhazardous.

- c-d) **No Impact.** Mojave Narrows Regional Park is not identified within the County of San Bernardino's General Plan as a Hazardous Material site and the Park is not located within one-quarter mile of an existing or proposed school. No impacts would occur as a result of the Proposed Project.
- e-f) **No Impact.** Mojave Narrows Regional Park is not located in the immediate vicinity of a public airport or of a private airstrip. The Southern California Logistics Airport is the nearest airport to the project site, and is located approximately 4.5 miles northeast of the Park. The Proposed Project would occur outside of the airport safety review area and would not expose park visitors or employees to an airport related hazard. No impacts are anticipated.
- g) **No Impact.** The Proposed Project would restore the use of a fishing lake at Mojave Narrows Regional Park following damage by the winter storm events of 2010 and provide for parkland improvements. The Proposed Project would not alter or change existing Park uses and therefore, would not impair implementation of an adopted emergency response or evacuation plan. No impacts would occur as a result of the Proposed Project.
- h) **No Impact.** According to the County's Hazards Overlay Map (EH30B), Mojave Narrows Regional Park is not located within a fire safety boundary. The Proposed Project would not expose people or structures to a significant risk from wildland fires. No impacts are anticipated.

Potentially Significant Impact Less than Significant with Mitigation Incorp. Less than Significant Impact No Impact

IX. HYDROLOGY AND WATER QUALITY –

Would the project:

- | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Otherwise substantially degrade water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012**

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

a) **Less than Significant.** The Proposed Project is the restoration of the Horseshoe Lake aquatic system to its former fishing lake state. Project activities related to the restoration of the lake will include excavation of the dry lakebed to restore lake depth. Water flow in to the lake from the connecting Pelican Lake will be restricted prior to the commencement of project activities. Because of the footprint of the Proposed Project, a General Construction Permit requiring the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) would be obtained. In order to prevent impacts to waters downstream of Horseshoe Lake, the following mitigation measure will be put in place:

HWQ-1: Storm Water Pollution Prevention Program – To avoid Project impacts on waters downstream of Horseshoe Lake two Storm Water Pollution Prevention Programs will be implemented, one for excavation and grading activities occurring in Horseshoe Lake and the detention basins and one for the stockpiling of excavated material. The SWPPP must include a list of Best Management Practices (BMPs) to be implemented as part of the Project, and a visual monitoring program to ensure the effectiveness of the Plan. Sediment and Erosion control BMPs likely to be included in the SWPPPs include silt fences, fiber rolls, and gravel bag berms.

b) **No Impact.** The Proposed Project would restore Horseshoe Lake as a fishing lake at Mojave Narrows Regional Park. Horseshoe Lake is part of a man-made multi-lake water distribution system. The Park’s lakes, Pelican Lake and Horseshoe Lake, are fed by Spring Valley Lake located just south of the Park. In turn, Horseshoe Lake feeds Pony Lake, located north of the Park and outside its boundaries. Restoration of Horseshoe Lake and the associated waterway improvements would re-establish the multi-lake system and would not interfere with groundwater recharge or with the production rate of nearby pre-existing wells. No impact is anticipated as a result of the Proposed Project.

c-d) **Less than Significant.** In addition to receiving a constant supply of water from the Pelican Lake waterway, Horseshoe Lake receives seasonal runoff flows from the Upper Pond detention basin located within the Park boundaries and south of Horseshoe Lake. Inefficient flow detention and inflow surge from the Upper Pond area were identified as contributing factors of the levee breach of 2010. During minor storm events off-site runoff entering the Park is detained in the Upper Pond. However, during more significant storm events, runoff overflows the existing Upper Pond berm and clogged spillway. Surge flow from the Upper Pond to Horseshoe Lake has resulted in significant erosion of the Upper Pond bank and the Park’s Middle Lake Road. The Proposed Project will grade the Group Camping area located immediately north of the Upper Pond to increase runoff detention, and redefine the existing

**Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012**

natural flow of runoff via the installation of a culvert to minimize erosion and siltation effects. The Proposed Project would result in less than significant impacts.

- e-f) **No Impact.** Proposed project activities include the restoration of a fishing lake and enhancement of runoff inflow to the lake. The Proposed Project would not create a water run-off source and would increase the runoff detention and drainage efficiency within the Park. The Proposed Project would not generate polluted runoff that would substantially degrade water quality or exceed the capacity of existing or planned storm water drainage systems.
- g-i) **No Impact.** The County of San Bernardino General Plan Hazards Overlay Map (EH30B) identifies Horseshoe Lake and the Mojave Narrows Regional Park within a zone of inundation in the 100 year flood plain. The General Plan’s Land Use Zoning District Map (EH30A) identifies the lake as a floodway. Repairs to the Horseshoe Lake levee would result in restoration of the floodway and flood control. The proposed project is the restoration of the levee and does not include placing any housing or structures within the 100 year flood plain.
- j) **No Impact.** Mojave Regional Park is located in an area of the Mojave river that is relatively flat; the river does not support a body of water large enough to generate inundation by seiche, tsunami, or mudflows.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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X. LAND USE AND PLANNING - Would the project:

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION:

- a) **No Impact.** The Proposed Project will occur within a regional park identified in the County General Plan as Open Space. Project activities would include the restoration of Horseshoe Lake for use as a fishing lake, improvement of on-site runoff infrastructure, and enhancement of parkland amenities. Existing land uses within the park will not be altered or changed. The Proposed Project would not physically divide an established community; no impacts are anticipated.

Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012

- b) **No Impact.** The Proposed Project does not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. No impacts would result.
- c) **No Impact.** Mojave Narrows Regional Park is managed as a passive recreational area and nature preserve. Policy in the County and in the City of Victorville General Plans seeks to preserve the park for wildlife habitat and movement. The proposed lake restoration, drainage improvements, and parkland enhancements would result in the re-establishment of an aquatic system and provide for habitat improvement. The Proposed Project would not conflict with an applicable habitat conservation plan or with the natural conservation goals established for the area. No impacts are anticipated.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
XI. MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

a-b) **No Impact.** The Proposed Project will restore the use of a recreational fishing lake, improve on-site run-off detention and flow, and provide for parkland amenity enhancements at Mojave Narrows Regional Park. No mineral resources overlay map for the County of San Bernardino has been prepared to date; however, the Victorville Planning Area Mineral Land Classification Map, found in the City of Victorville General Plan, identifies the location of the project as a MRZ-2b zone. MRZ-2b zone designations are defined as follows: “Areas underlain by mineral deposits where geologic information indicated that significant inferred resources are present. Areas classified as MRZ-2b contain discovered mineral deposits that are significant inferred resources as determined by their lateral extensions from proven deposits or their similarity to proven deposits. Further exploration work could result in upgrading these areas to MRZ-2a.” The Proposed Project will restore a historical use of the park in a conservation area of the West Mojave Plan. No impacts to mineral resources would result from implementation of the proposed project.

**Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012**

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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XII. NOISE - Would the project:

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|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION:

- a,b,d) **Less than Significant Impact.** Construction activities associated with the Proposed Project would require the use of heavy machinery such as bulldozers and graders. Therefore, a temporary increase in ambient noise levels would result from the Proposed Project. However, the project is located within the boundaries of Mojave Narrows Regional Park and no sensitive receptors occur in the immediate vicinity of the project. Construction activity associated with the project would occur in accordance with the County’s Development Code Noise Ordinance. All Construction activity would be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday and no construction activity would be allowed on Sundays or during Federal holidays resulting in a less than significant impact.
- c) **No Impact.** Upon the completion of construction activities, the Proposed Project would not result in the generation of excessive ground borne vibration or in a permanent increase in ambient noise levels without

the project. Following the completion of construction activities, conditions at the Park would be restored to those existing before the levee breach. No impact would result from the Proposed Project because no change in the historical noise generation would occur following restoration of the lake.

- e-f) **No Impact.** No public airports or private airstrips occur in the immediate vicinity of the Proposed Project. The nearest airport is the Southern California Logistics Airport located approximately 4.5 miles northeast of the project site. The project site does not lie within the airport review safety area. Therefore, no impacts would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
XIII. POPULATION AND HOUSING - Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

- a-c) **No Impact.** The Proposed Project will restore the use of a recreational fishing lake, improve on-site run-off detention, and provide for parkland amenity enhancements at Mojave Narrows Regional Park. Mojave Narrows Regional Park is designated as Open Space in the County’s General Plan. Related construction activities would be short-term and would not provide long-term employment that would require people to move to the area. The project would not directly or indirectly, induce population growth in the area nor would it displace existing houses or structures. The Proposed Project would have no impacts on population and housing in the area.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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XIV. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

No Impact. The Proposed Project would restore Horseshoe Lake following a breach of the earthen levee caused by the winter storm events of 2010, declared disaster FEMA-1884-DR. Additionally, the Proposed Project provides for run-off detention and flow improvements and parkland enhancements. The Proposed Project would not change the existing uses at the Park or significantly increase the number of Park users. The project would not result in impacts to government facilities or require the construction of new government facilities. Service ratios, response times, or other performance objectives of public services would not be impacted as a result of the Proposed Project.

a) Fire Protection – Mojave Narrows Regional Park is located on Yates Road, and is served by a fire station located on Jacaranda Avenue, approximately three miles south of the Project Site. Fire hydrants are located at various locations within the Regional Park. The Proposed Project would not result in conditions for inadequate fire protection.

Police Protection – The Proposed Project would not require additional police protection. The project would not create a substantial increase in park visitors or change the park’s hours of operation.

Schools - The proposed repairs would not generate a substantial number of new job opportunities or induce people to move to the project area. The proposed project would not adversely impact local schools.

Parks - Proposed construction activities would not generate a substantial number of new job opportunities or induce people to move to the project area. The Proposed Project is not anticipated to significantly increase the number of park visitors.

Public facilities – The proposed project would not significantly increase traffic on adjacent streets or create a need for other public facilities. The majority of users would likely already be visitors or campers at the Mojave Narrows Regional Park.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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XV. RECREATION

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION:

a-b) **No Impact.** The Proposed restoration of Horseshoe Lake as a fishing lake would reestablish the use of the lake to pre-2010 storm conditions. The restoration of the lake and parkland amenity enhancements are not anticipated to significantly increase the number of park visitor or lead to substantial physical deterioration of the park facilities. No impacts to the Park or its facilities are anticipated.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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XVI. TRANSPORTATION/TRAFFIC - Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Horseshoe Lake Levee Restoration and Park Enhancements
Initial Study
April 2012

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a-b) Less than Significant. The Proposed Project is not expected to significantly increase the number of park patrons upon completion. A temporary increase of traffic into the traffic would occur during the construction of the new internal road and parking lot. The importation of asphalt for the construction of these improvements would require approximately 163 vehicle trips (assumes five cubic yards of asphalt per street legal dump truck). Access to Mojave Narrows Regional Park is available via Yates Road. The temporary impacts from the importation of asphalt are not anticipated to cause a significant increase in traffic in relation to the existing traffic load at Yates Road and its level of service. Less than significant impacts are anticipated.				
c) No Impact. According to the County of San Bernardino General Plan Hazards Overlay Map EH08B, the project site does not occur within an airport safety review zone. The Proposed Project would not result in a change in air traffic patterns, an increase in traffic levels or substantial safety risks therefore, no impacts are anticipated.				
d-e) Less than Significant. The Proposed Project would construct a new roadway and parking area within the Park. The new roadway and parking would be constructed easterly from the Park Road–Middle Lake Road intersection and would allow for improved patron access and circulation to the Front Pasture and Pelican Lake areas. No public roadways in the vicinity of the park would be impacted as a result of the proposed project. Therefore, existing emergency access to the park would not be significantly impacted.				
f) No Impact. Parking at Mojave Narrows Regional Park is available throughout the park at designated paved parking lots and designated unpaved parking locations. Construction of a new park roadway would include the construction of 127 paved parking spaces along the shoulder of the road. Because the Proposed Project is not anticipated to result in a significant increase in the number of park patrons, no negative impacts to parking capacity are anticipated.				

- g) **No Impact.** The Proposed Project would not significantly alter the existing park circulation system or impact roadways outside the park. Implementation of the project would not conflict with adopted policies, plans, or programs supporting alternative transportation.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

- a-b) **No Impact:** The Proposed Project would restore Horseshoe Lake as a fishing lake, improve run-off detention and flow on-site, and provide for parkland amenity enhancements. Park uses will not be altered as a result of the Proposed Project and no significant increase in park users is anticipated to occur. The

Proposed Project would not result in impacts to waste water treatment facilities or waste water treatment requirements of the Regional Water Quality Control Board.

- c) **Less than Significant.** Proposed project activities would include the contouring of the Group Camping area located north of the Upper Pond to increase run-off detention and flow efficiency on-site. The Proposed activities are designed to enhance the existing natural drainage patterns and would not significantly expand existing facilities or cause significant environmental effects.
- d-e) **No Impact.** The Proposed Project would not impact the available water supply. Parkland amenity enhancements will not significantly increase the Park’s water demand or result in inadequate capacity by the wastewater treatment provider to serve the project demand.
- f-g) **Less Than Significant.** Mojave Narrows Regional Park is serviced by the Victorville Landfill. The Victorville Landfill has an estimated design capacity of over 50 years. The Proposed Project may result in a temporary increase in solid waste disposal volume through the course of construction activities. However, upon completion of construction, no net change in solid waste generation would result from pre-existing conditions. Therefore, less than significant impacts are anticipated.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant Impact	No Impact
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XVIII. MANDATORY FINDINGS OF SIGNIFICANCE:

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|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION:

- a) **Less than Significant with Mitigation.** The Proposed Project is the construction of improvements at Mojave Narrows Regional Park to repair storm damage, increase stormwater management capacities,

Horseshoe Lake Levee Restoration and Park Enhancements

Initial Study

April 2012

prevent future flooding and erosion potential, improve freshwater lake habitat and improve camping and equestrian facilities. Major components of the Proposed Project include the construction of a reinforcing abutment to the existing Horseshoe Lake levee, excavation/grading of the lake bottom, on-site stockpiling of material excavated from the lake bottom, grading and contouring of the Group Camping Area and Upper Pond area, and construction of a new park road.

The existing Horseshoe Lake levee is located within critical habitat for the southwestern willow flycatcher. However, the levee and lakeside critical habitat does not exhibit the constituent elements of critical habitat. Potential impacts associated with all project activities may be mitigated; therefore, the proposed project will not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. With the incorporation of the proposed mitigation measures, impacts are anticipated to be less than significant.

- d) **Less than Significant Impact.** Impacts associated with the Proposed Project would not be considered cumulatively adverse or unfavorable. The Proposed Project is not anticipated to generate significant amounts of air pollutants, traffic or noise. Cumulative impacts to cultural resources are not anticipated to be significant; and impacts to biological resources and water resources are not anticipated to be significant with the incorporation of mitigation. The incorporation of mitigation measures to reduce impacts at a project level to less than would result in no significant cumulative adverse impacts.

- c) **Less Than Significant Impact:** The proposed project would not be used for storing any toxic or hazardous materials nor does the construction and operation of the project involves such a use. Temporary construction impacts due to noise will be mitigated to a less than significant level. Any direct or indirect impacts to human beings would therefore, be mitigated.

XVIII MITIGATION MEASURES.

(Any mitigation measures which are not ‘self-monitoring’ shall have a Mitigation Monitoring and Reporting Program prepared and adopted at the time of project approval)

- BIO-1:** Project activities with the potential to impact riparian habitat, including removal of vegetation, shall be scheduled to occur outside of the bird nesting season of March 15 through September 15 unless otherwise authorized by the California Department of Fish and Game and the U.S. Fish and Wildlife Service.
- BIO-2:** Pre-construction surveys of all riparian habitat within the Project Area, shall be conducted no more than 30 days before commencement of ground disturbing activities.
- BIO-3:** In order to avoid impacts to sensitive areas outside of the Project Area, the limits of work areas shall be clearly flagged. All staging and equipment areas shall be located within the flagged work areas.
- BIO-4:** Have a biological monitor present or available on-call during construction activities to assure no sensitive biological resources are impacted.
- BIO-5:** Areas of temporary impact within the Project Area shall be restored to pre-project conditions at the conclusion of project activities.
- CR-1:** If at any time, additional resources are identified within the project area (in a buried context near existing facilities or in the excavation areas), the monitoring program should be expanded to cover the remainder of the excavations. If at any time there is evidence of human remains, the County Coroner must be notified within 24 hours. If the remains are deemed Native American in origin, the Coroner will notify the Native American Heritage Commission and the Most Likely Descendant (MLD) will be identified. Through consultation between the County, the archeological consultant, and the MLD, the disposition of the remains will be determined. Costs relating to the disposition of human remains will be borne by the applicant.
- HWQ – 1:** Storm Water Pollution Prevention Program – To avoid Project impacts on waters downstream of Horseshoe Lake two Storm Water Pollution Prevention Programs will be implemented, one for excavation and grading activities occurring in Horseshoe Lake and the detention basins and one for the stockpiling of excavated material. The SWPPP must include a list of Best Management Practices (BMPs) to be implemented as part of the Project, and a visual monitoring program to ensure the effectiveness of the Plan. Sediment and Erosion control BMPs likely to be included in the SWPPPs include silt fences, fiber rolls, and gravel bag berms.

GENERAL REFERENCES

County of San Bernardino Development Code, 2007.

County of San Bernardino General Plan, March 2007.

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