

ATTACHMENT 3-B

Amethyst Basin Initial Study



SAN BERNARDINO COUNTY/FLOOD CONTROL DISTRICT
NOTICE OF AVAILABILITY & NOTICE OF INTENT

This is to announce that the San Bernardino County/Flood Control District (County) intends to adopt an Initial Study / Mitigated Negative Declaration (IS/MND) for the below described project. In accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, County Staff prepared a IS/MND that identifies and evaluates the environmental impacts of the below-described project:

Project Title: Amethyst Basin (Proposed Project)

Project Location: The Proposed Project is located within the western portion of San Bernardino County in the Desert Region. The Proposed Project site is located in the City of Victorville.

Project Description: The County proposes to construct Amethyst Basin (formerly known as Oro Grande Basin #9), with combined detention and stormwater recharge capabilities. The basin will include the construction of associated inlet and outlet structures, channels and/or closed conduits, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways along tops of the embankments and around the basins and access ramps to the basin floor.

Project No.: F01328

Applicant: San Bernardino County/Flood Control District

Environmental Review and Public Comment: The circulation of the IS/MND is meant to encourage written public comments. Interested persons can review the IS/MND at:

www.sbcounty.gov/dpw and at the following physical location:

County of San Bernardino
Department of Public Works
825 East Third Street, Room 201
San Bernardino, CA. 92415

The document may be obtained in electronic format by calling the Department of Public Works Environmental Management Division at (909) 387-1865, or by emailing the project Planner at patrick.egle@dpw.sbcounty.gov to request a PDF version of the document.

The public comment period will end on **04/7/2012 at 5:00 PM**. Please submit comments via Email to patrick.egle@dpw.sbcounty.gov, or Fax to 909-387-7876, or Mail to:

County of San Bernardino Department of Public Works
Environmental Management Division
825 East Third Street, Room 201
San Bernardino, CA 92415.

**INITIAL STUDY / MITIGATED NEGATIVE
DECLARATION**

**AMETHYST BASIN PROJECT (FORMERLY KNOWN
AS ORO GRANDE BASIN #9)
SAN BERNARDINO COUNTY, CA**

Prepared for:

**SAN BERNARDINO COUNTY/FLOOD CONTROL
DISTRICT
825 East Third Street
San Bernardino, CA 92415**



Prepared by:



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March 2012



San Bernardino County/Flood Control District

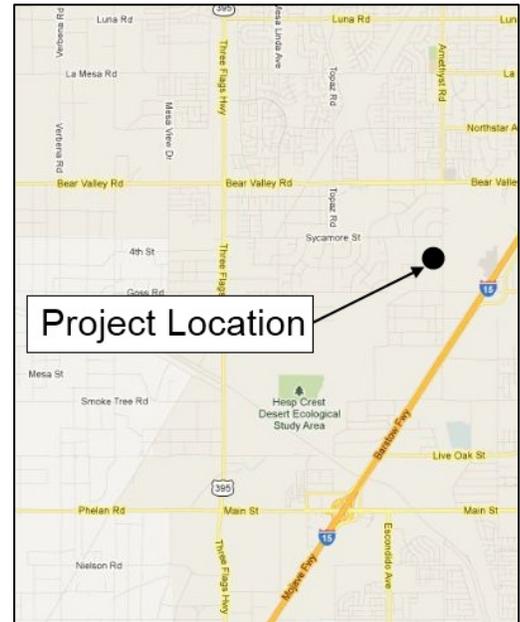
MITIGATED NEGATIVE DECLARATION

Project Description

APPLICANT: San Bernardino County/Flood Control District

PROPOSAL: The San Bernardino County/Flood Control District (County) proposes to construct Amethyst Basin (formerly known as Oro Grande Basin #9), with combined detention and stormwater recharge capabilities. The project includes the following:

- Construction of associated inlet and outlet structures, channels and/or closed conduits, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways along tops of the embankments and around the basins and access ramps to the basin floor.
- Two weakened dikes, each 5 feet high, which will subdivide this basin into three sub-basins.
- A 20-foot wide access road is located at the top of the embankment and around the basin. Three access ramps to the basin floors will be provided at each sub-basin for maintenance purposes. The access ramps will also have a minimum width of 20 feet.
- The embankments will have a maximum height of approximately 28 feet at the northern end and 27 feet at the southern end. The southern embankment is connected to the upstream natural flow path via a 200-foot wide spillway, while the northern embankment will discharge into the natural streambed via a double-reinforced 9-foot wide by 8-foot high concrete box. The maximum depth of excavation would be 28 feet at the basin's southern end. The three sub-basins are connected to each other via two 24-inch reinforced concrete pipes at the two weakened dikes.



LOCATION: The County's Amethyst Basin site is located approximately 13 miles north of the base of the San Bernardino Mountains at the Cajon Pass. The site is located in the City of Victorville approximately 0.5 mile west of Interstate 15, approximately 1.7 miles north of the California Aqueduct, and approximately 0.7 mile east of U.S. Highway 395

Mitigated Negative Declaration

Plans and specifications for the referenced project are available for public inspection at the Department of Public Works, 825 E. Third Street, Room 201, San Bernardino, CA 92415-0835.

Pursuant to provisions of the California Environmental Quality Act (CEQA) and the San Bernardino County Environmental Review Guidelines, it has been determined the above referenced project will not have a significant effect upon the environment after the implementation of mitigation measures listed in the Initial Study. An Environmental Impact Report will not be required.

Reasons to support this finding are included in the written Initial Study prepared under the supervision of the San Bernardino County/Flood Control District.

Josie Gonzales, Chair
Board of Supervisors of the County of San Bernardino

Date of Determination

Attachments: Initial Study

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SECTION 1.0 – INTRODUCTION

1.1. PURPOSE OF THE INITIAL STUDY

The San Bernardino County/Flood Control District (County) proposes to construct Amethyst Basin (Proposed Project [formerly known as Oro Grande Basin #9]), with combined detention and stormwater recharge capabilities. The basin will include the construction of associated inlet and outlet structures, channels and/or closed conduits, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways along tops of the embankments and around the basins and access ramps to the basin floor.

“Projects” within the State of California are required to undergo environmental review to determine the environmental impacts associated with implementation of the project in accordance with the California Environmental Quality Act (CEQA) unless a project is exempt. CEQA was enacted in 1970 by the California Legislature to disclose to decision makers and the public the significant environmental effects of a Proposed Project and identify possible ways to avoid or minimize significant environmental effects of a project by requiring implementation of mitigation measures or recommending feasible alternatives. CEQA applies to all California public agencies at all levels, including local, regional and state, as well as boards, commissions, and special districts. As such, the County is required to conduct an environmental review to analyze the potential environmental effects associated with the Proposed Project.

The attached Initial Study (IS) analyzes the potential for the Proposed Project to result in environmental impacts. The findings in this IS have determined that a Mitigated Negative Declaration (MND) is the appropriate level of environmental documentation because the Proposed Project can mitigate potential impacts to a less than significant level. These mitigation measures are discussed below and will be further addressed in the MND.

The County will be the Lead Agency for purposes of CEQA, as it is the agency charged with carrying out or approving the Proposed Project.

A thirty-day (30-day) public review period shall commence on **March 9, 2012**. Written comments must be sent to the County by **April 7, 2012**.

Correspondence and comments can be delivered to:

County of San Bernardino Department of Public Works
Environmental Management Division
825 East Third Street, Room 201
San Bernardino, CA 92415.

Comments can also be sent by email to patrick.egle@dpw.sbcounty.gov, or by FAX to 909-387-7876. Include “Amethyst Basin Project” in the subject line. Agency responses to the IS/MND should include the name of a contact person within the commenting agency.

1.2. AVAILABILITY OF THE IS

The IS for the Amethyst Basin Project is being distributed through the State Clearinghouse directly to numerous agencies, organizations, and interested groups and persons for comment during the scoping period. The IS is also available for review at the following locations:

County of San Bernardino
Department of Public Works
825 East Third Street, Room 201
San Bernardino, CA. 92415

In addition, the IS is also available online at the following website: www.sbcounty.gov/dpw and click **on public announcements.**

SECTION 2.0 – PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

2.1. INTRODUCTION

The County proposes to construct the Proposed Project. The Proposed Project would include combined detention and stormwater recharge capabilities, including construction of associated inlet and outlet structures, channels and/or closed conduits, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways along tops of the embankments and around the basins and access ramps to the basin floor.

2.2. PROJECT LOCATION AND SITE CHARACTERISTICS

2.2.1 Location

The Proposed Project is located within the western portion of San Bernardino County in the Desert Region. The Proposed Project site is located in the City of Victorville.

2.2.2 Project Site and Adjacent Land Uses

The County's Amethyst Basin site is located approximately 13 miles north of the base of the San Bernardino Mountains at the Cajon Pass. The site is located in the City of Victorville approximately 0.5 mile west of Interstate 15, approximately 1.7 miles north of the California Aqueduct, and approximately 0.7 mile east of U.S. Highway 395 (See Figure 1 – Project Vicinity Map). The site is within the U.S. Geological Survey (USGS) *Hesperia*, California 7.5-minute topographic quadrangle with most of the site in Section 2 and a small portion in the northeast corner of Section 1 of Township 4 north, and Range 5 west. The elevation range at the site is approximately 3,240 to 3,300 feet above mean sea level (amsl). Oro Grande Wash is an intermittent stream which receives water from the Cajon Pass area of the San Bernardino Mountains as well as from desert floor runoff and flows in a northeast direction, terminating at the Mojave River.

2.2.3 General Plan Designation/Zoning

The Proposed Project is located within a County of San Bernardino Recharge Area, and within a County of San Bernardino Land Use Zoning area designating the land as under the jurisdiction of the Victorville Economic Development Agency (EDA) and Victorville Redevelopment Agency (RDA). The City of Victorville has zoned the land as Single-Family Transitional (R-1T); and in the City of Victorville General Plan, the land has a land use designation of Low Density Residential (5 du/ac).

2.3. PROJECT DESCRIPTION

The County's Proposed Project would include combined detention and stormwater recharge capabilities, including construction of associated inlet and outlet structures, channels and/or closed conduits, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways along tops of the embankments and around the basins and access ramps to the basin floor.

The proposed detention/stormwater recharge basin footprint is approximately 30 acres in the northeast direction. Two weakened dikes, each 5 feet high, are proposed within this basin. These dikes will subdivide this basin into three sub-basins. The basin embankment slope will be constructed at a 3:1

ratio (3H: 1V) for the interior and 2:1 ratio (2H: 1V) for the exterior slopes, with a minimum top width of 20 feet. A 20-foot wide access road is located at the top of the embankment and around the basin. Three access ramps to the basin floors will be provided at each sub-basin for maintenance purposes. The access ramps will also have a minimum width of 20 feet.

The embankments will have a maximum height of approximately 28 feet at the northern end and 27 feet at the southern end. The southern embankment is connected to the upstream natural flow path via a 200-foot wide spillway, while the northern embankment will discharge into the natural streambed via a double-reinforced 9-foot wide by 8-foot high concrete box. The maximum depth of excavation would be 28 feet at the basin's southern end. The three sub-basins are connected to each other via two 24-inch reinforced concrete pipes at the two weakened dikes.

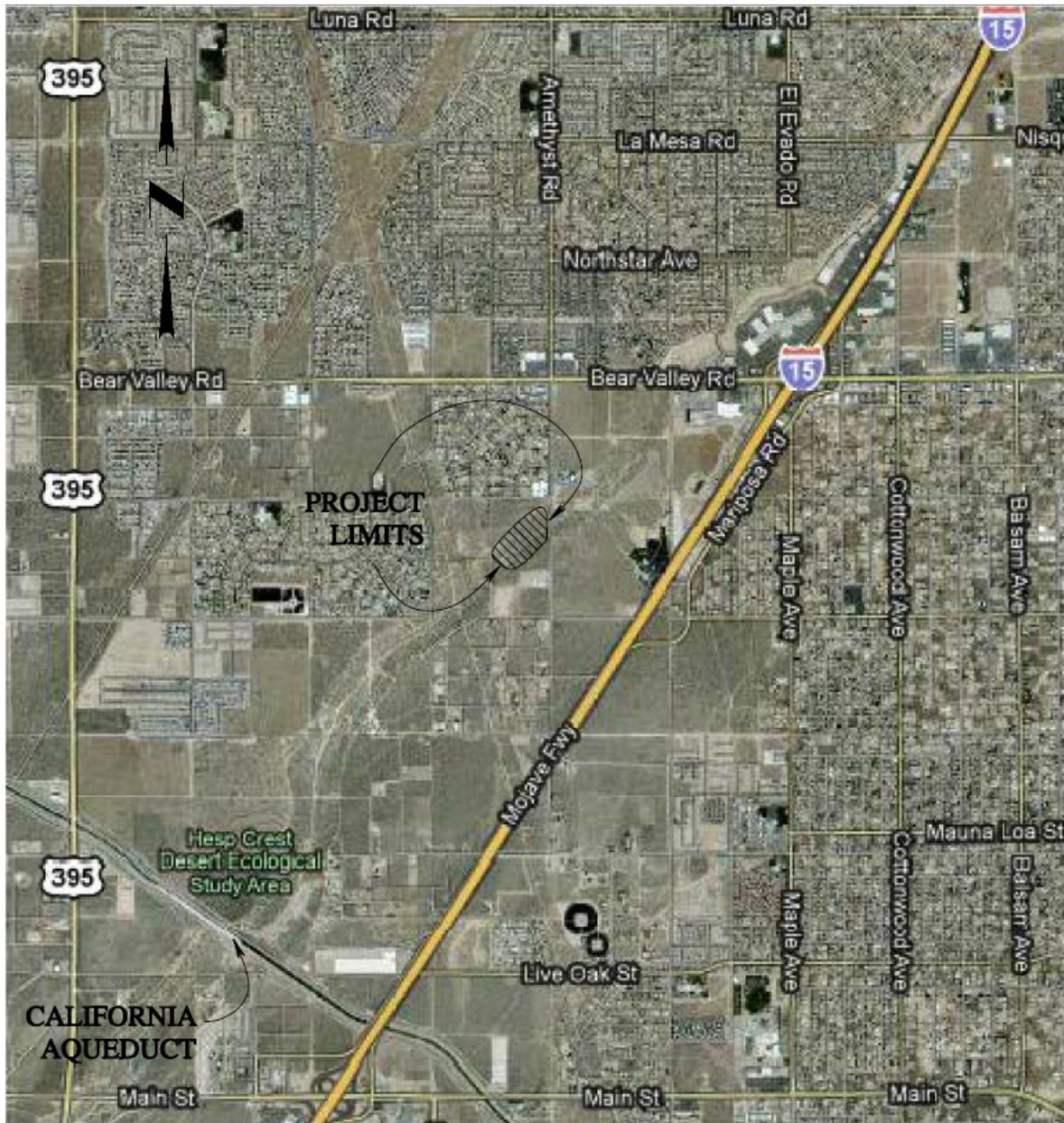
2.4. PURPOSE AND NEED

The basin will function as a detention as well as a retention basin. The purpose of the Proposed Project is to provide additional flood protection for the existing downstream structures, residences, businesses and for public safety in general. A secondary purpose of the Proposed Project is stormwater recharge. The outlet system will be designed to meet Q100 and Q1000 flows per the Flood Control District.

2.5. CONSTRUCTION ACTIVITIES

Proposed Project construction is expected to begin in December 2012 and end in the summer of 2013. Construction of the Proposed Project is planned as 120 working days. Construction equipment will include excavators, motor graders, dump trucks, bulldozers, water trucks, earthmovers, and various pieces of small equipment.

Figure 1 – Project Vicinity Map



2.6. REQUIRED PERMITS AND APPROVALS

2.6.1 Lead Agency Approval

The County has prepared this MND, which is subject to a 30-day public review period. This MND is provided to responsible, reviewing, trustee, federal, state, and local agencies and the public for the purpose of soliciting comments. The County will consider approval of the final MND after circulation. The County Board of Supervisors will consider the final MND as part of the decision-making process.

2.6.2 Other Required Permits and Approvals

A Responsible Agency is a public agency, other than the lead agency, that has discretionary approval authority over a project. The Responsible Agencies, and their corresponding approvals for this Project, include the following:

- California State Water Resources Control Board (SWRCB) – Section 401 Project Approval
- US Army Corps of Engineers (USACE) – Section 404 Project Approval
- California State Water Resources Control Board (SWRCB) - National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges
- California Department of Fish and Game (CDFG) – 1602 Streambed Alteration Agreement

2.6.3 Reviewing Agencies

Reviewing Agencies include those agencies that do not have discretionary powers but that may review the IS for adequacy and accuracy. Potential Reviewing Agencies include the following:

State of California

- Office of Historic Preservation
- Department of Transportation (Caltrans)
- Native American Heritage Commission
- State Lands Commission
- California Highway Patrol

Regional Agencies

- Southern California Association of Governments (SCAG)
- Mojave Desert Air Quality Management District (MDAQMD)

SECTION 3.0 – ENVIRONMENTAL DETERMINATION

3.1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

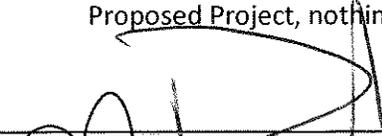
The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality/GHG Emissions |
| <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 Finding of Significance | |

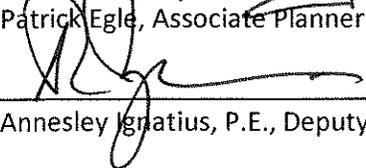
3.2. DETERMINATION

On the basis of this initial evaluation:

1. I find that the project **could not** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
2. I find that 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.
3. I find the Proposed Project **may have a significant effect** on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
4. I find that 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.
5. I find that 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.


Patrick Egle, Associate Planner

3/7/12
Date


Annesley Ignatius, P.E., Deputy Director

3/7/2012
Date

Environmental Management Division, Department of Public Works

SECTION 4.0 – EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers, except "No Impact" answers, that are adequately supported by the information sources a lead agency cites. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if substantial evidence indicates that an effect may be significant. If one or more "Potentially Significant Impact" entries are present when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses" may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to less than significant

*Note: Instructions may be omitted from final document.

SECTION 5.0 – CHECKLIST OF ENVIRONMENTAL ISSUES

5.1. AESTHETICS

1.	AESTHETICS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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"/>

5.1.1 Impact Analysis

- (a) **Less than significant.** The Proposed Project site is located in the City of Victorville within the County of San Bernardino. The Project site is within the Oro Grande Wash and is bounded by Sycamore Street to the north, Amethyst Road to the east, and Greasewood Lane to the west. The Proposed Project site is surrounded by mostly vacant land, except for some residential development to the north and a church to the south. The San Bernardino Mountains are distantly visible from the Proposed Project site. The Proposed Project will change the limited views of the site from a natural wash to a detention and stormwater recharge basin. No scenic vistas are identified within the vicinity of the Proposed Project site (County of San Bernardino General Plan, 2007). The Proposed Project would result in less than significant impacts.

- (b) **No impact.** The California Department of Transportation designates Official and Eligible scenic highways within the state. The Proposed Project is not within the vicinity of a scenic highway, historic building, or other scenic resource. The closest highways to the Proposed Project, Interstate 15 and U.S. Highway 395 are not listed as designated or eligible scenic highways in the portions nearest the Project site (Caltrans 2011). No impact would occur.

- (c) **Less than significant.** The Proposed Project would construct a detention and stormwater recharge basin within the current Oro Grande Wash. The area surrounding the Project site is mostly vacant land except for some residences to the north and a church to the south. Construction would be confined to the existing drainage and would be located away from visual receptors or key observation points. The Proposed Project would be consistent with the Oro Grande Wash and the existing drainage, due to the basin having earthen features. A less than significant impact would occur.

- (d) **No impact.** The Proposed Project would construct a basin within the Oro Grande Wash. The Proposed Project would not involve nighttime illumination of project components. As such, the Proposed Project does not include the installation or use of lighting fixtures either for construction or operational purposes. Therefore, the Proposed Project would result in no impacts related to light or glare.

5.2. AGRICULTURE & FOREST RESOURCES

2.	<p style="text-align: center;">AGRICULTURE & FOREST 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.) In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.) Would the project:</p>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 the conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.2.1 Impact Analysis

- (a) **No impact.** The Proposed Project site is designated as Single-Family Transitional by the City of Victorville General Plan. No agricultural activities presently occur on site. The site is classified as “Grazing Land” by the California Department of Conservation Farmland Mapping. The site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; and no farmland occurs in the immediate vicinity of the Project site (FMMP 2011). Therefore, the Proposed Project would not convert Farmland to non-agricultural use. No impact would occur.
- (b) **No impact.** The Proposed Project would not conflict with agricultural zoning or a Williamson Act contract. No Williamson Act contracts are applicable to the Proposed Project site; the site is zoned Single-Family Transitional and contains no agricultural uses. No impact would occur.
- (c-e) **No impact.** The Proposed Project site does not contain any forest land or timberland, nor is it zoned for forest land or timberland. The site is zoned for Residential Transitional and is located in a desert region where no forest lands exist. No impact would occur.

5.3. AIR QUALITY

3.	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:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d)	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e)	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5.3.1 Impact Analysis

- (a) **Less than significant with mitigation.** The Proposed Project is located in the Mojave Desert Air Quality Management District (MDAQMD). The MDAQMD and California Air Resources Board (CARB) operate a regional air quality monitoring network in the Mojave Desert Air Basin

consisting of 14 monitoring stations that provide information on ambient concentrations of criteria air pollutants. Monitored ambient air pollutant concentrations reflect the number and strength of emissions sources and the influence of topographical and meteorological factors.

The MDAQMD and CARB are the responsible agencies for providing attainment plans and meeting attainment with these standards; and the U.S. Environmental Protection Agency (EPA) reviews and approves these plans and regulations that are designed to ensure that the area attains and maintains attainment with the National Ambient Air Quality Standards (NAAQS). The Mojave Desert Air Basin is in a state of nonattainment relative for 8-hour ozone and respirable particulate matter (PM₁₀). MDAQMD plans and policies for the management of air quality in the Mojave Desert Air Basin have been formulated to meet both federal and CARB requirements.

Estimated Daily Emissions

Facility and Type	Estimated Daily Emissions (pounds per day)				
	ROG	CO	NO _x	SO _x	PM ₁₀
Oro Grande Wash Recharge	21.13	172.86	132.19	1.13	268.1
MDAQMD CEQA Thresholds	137	548	137	137	82

The Federal Particulate Matter Attainment Plan and the Ozone Attainment Plan for the Mojave Desert set forth a comprehensive set of programs that will lead the Mojave Desert Air Basin into compliance with federal and state air quality standards. The control measures and related emissions reduction estimates within the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan are based upon emissions projections for future development scenarios derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with these attainment plans for development projects is determined by demonstrating: (1) compliance with local land use plans, (2) compliance with all MDAQMD Rules and Regulations, and (3) that the project will not increase the frequency or severity of a violation in the federal or state ambient air quality standards.

The Proposed Project complies with the first criterion because it would not involve growth-inducing impacts or cause an exceedance of established population or growth projections. The Proposed Project complies with the second criterion because it will comply with all MDAQMD Rules and Regulations.

With mitigation measure AQ-1, the Proposed Project will not result in a violation or increase in the severity of an existing violation of the ambient air quality standards. As such, the Proposed Project will be consistent with the goals of the Mojave Desert Air Basin’s Air Quality Management Plans and will have less than significant impacts with incorporation of mitigation measures.

- (b) **Less than significant with mitigation.** CEQA inquires as to whether a project would violate any air quality standard or contribute substantially to an existing or projected air quality violation.

The MDAQMD has established standards for air quality constituents generated by construction and by operational activities for such pollutants as ozone (O₃) and particulate matter (PM₁₀). A violation could occur over the short-term during project construction. Air quality impacts may occur during site preparation, grading, and construction activities required for the Proposed Project. Major sources of emissions during construction include exhaust emissions generated during site preparation, grading, and the subsequent installation of concrete for the downstream reinforced concrete box. Fugitive dust will be emitted as a result of soil and material disturbance during site preparation and grading excavation activities. The Proposed Project is not anticipated to generate any new traffic trips or introduce any new stationary sources that would have the potential to emit criteria pollutants for the long-term operational activity. Mitigation measure AQ-1 will reduce construction impacts to less than significant.

- (c) **Less than significant with mitigation.** In addressing cumulative impacts for air quality, the Air Quality Management Plan (AQMP) is the most appropriate document to use because the AQMP sets forth a comprehensive program that will lead the Mojave Desert Air Basin, including the project area, into compliance with all federal and state air quality standards. Because the Proposed Project is in conformance with the Attainment Plans and the Proposed Project is not significant on an individual basis, it is appropriate to conclude that the Project's incremental contribution to criteria pollutant emissions is not cumulatively considerable. With mitigation measure AQ-1, the Proposed Project would not result in a cumulatively considerable net increase of criteria pollutants for which the project region is in non-attainment under the applicable federal or state ambient air quality standard.
- (d) **Less than significant with mitigation.** Sensitive receptors are land uses such as residences, schools, daycare centers, and medical and recreational facilities that are more susceptible to the effects of air pollution than the population at large. The Proposed Project would construct a detention and stormwater recharge basin in an existing drainage. The operation of the basin would not result in any potential exposure of sensitive receptors to substantial pollutant concentrations. The nearest sensitive receptors, residential uses to the north of the site, are approximately 200 feet from the Proposed Project boundary. With implementation of mitigation measure AQ-1, Proposed Project construction would have a less than significant impact on sensitive receptors.
- (e) **Less than significant.** The Proposed Project does not propose an odor-generating use identified in the MDAQMD (e.g., wastewater treatment plants, agricultural operations, landfills, composting, food processing plants, chemical plants, refineries) and would not create an odor nuisance pursuant to Rule 402. Project construction would involve the use of some heavy equipment creating exhaust pollutants from onsite earth movement. With regard to nuisance odors, any air quality impacts will be confined to the immediate vicinity of the equipment itself. By the time such emissions reach any sensitive receptor sites away from the Proposed Project site, they will be diluted well below any level of air quality concern. Such brief exhaust odors are not a significant air quality impact, and impacts would be less than significant.

Mitigation Measures:

AQ-1: The County will implement all the fugitive dust control measures required by Rule 403 (Fugitive Dust):

- Use periodic watering for short-term stabilization of the Disturbed Surface Area (maintaining moist disturbed surfaces);
- Take action sufficient to prevent project-related trackout onto paved surfaces;
- Cover loaded haul vehicles while operating on publicly maintained paved surfaces;
- Stabilize graded site surfaces upon completion on grading;
- Cleanup project-related trackout or spills on Publicly Maintained paved surfaces within 24 hours;
- Reduce non-essential earth-moving activity under high wind conditions;
- Feasible mitigation such as use of highway diesel fuels and use of additional pollution equipment to trap exhaust particulates or NO_x would be implemented as part of the project; and

5.4. BIOLOGICAL RESOURCES

4.	BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<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, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>
(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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.	BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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"/>

5.4.1 Background

Field surveys were conducted on July 25, 2011 by San Bernardino County Ecological Resource Specialists. A biological assessment report was completed by the County of San Bernardino Department of Public Works, Environmental Division in 2011 (Appendix A). The results of the assessment are presented here.

5.4.2 Impact Analysis

- (a) **Less than significant with mitigation.** The Proposed Project area is within the western Mojave Desert of California. No sensitive plant species found on the site are federally or state listed threatened or endangered. Nineteen sensitive plant species have the potential to be found within the project area. The special-status botanical species that have the potential to occur within or adjacent to the Project area include Booth’s evening-primrose, white pygmy-poppy, sagebrush loeflingia, and short-joint beavertail. However, due to suitable conditions in the project area, these species have an unlikely or low probability of occurrence. In addition, Joshua trees and other cactus plants occur within the project area, and they are protected by their own native plant protection ordinance that identifies Joshua trees as sensitive species. Of the 13 wildlife species listed on the California Natural Diversity Database (CNDDDB), 5 wildlife species have the potential to occur within or adjacent to the Project site. The potentially affected species include burrowing owl, loggerhead shrike, Le Conte’s thrasher, Mohave ground squirrel, and desert tortoise. Desert tortoise is both state and federally listed as threatened, and the Mohave ground squirrel (MGS) is a state-listed threatened species. However, except for burrowing owl, the other sensitive species are unlikely to occur onsite due to lack of suitable habitat.

The Project area was surveyed, and a trapping protocol was conducted for MGS consistent with CDFG guidelines in 2011. The trapping results were negative; and as a result, CDFG provided a letter relating that no take permit is needed for this Project. This concurrence and the trapping results do not, however, preclude the possibility of MGS occurring on the Project site. If a MGS is seen or found onsite before or during Project implementation, all work must stop and the CDFG must be contacted immediately.

In order to reduce impacts to special-status species to less than significant, mitigation measures Bio-1 through Bio-7 will be implemented.

- (b) **Less than significant.** No riparian habitat or other sensitive natural community was identified in the area of the Proposed Project. A less than significant impact would occur.

(c) **Less than significant.** A jurisdictional delineation (JD) was completed by Chambers Group, Inc. in 2011 for the Proposed Project. The JD found that no hydric soils or hydrophytic vegetation such as riparian scrub vegetation were present within the area where the soil pit data was recorded or within any of the eroded features found within the Proposed Project limits. The lack of two of the three wetland parameters (hydric soil *and* hydrophytic vegetation) indicates that no jurisdictional wetlands are present within the Proposed Project site. No wetlands were identified in the Proposed Project area. A less than significant impact would occur.

(d) **Less than significant with mitigation.** Wildlife movement includes seasonal movement along migration corridors, as well as daily movements for foraging. A wildlife corridor, often referred to as a green corridor, is an area of habitat connecting wildlife populations separated by human activities. Corridors allow the exchange of individuals between populations and increase genetic diversity and population elasticity. In addition, they help facilitate the re-establishment of populations that may have become isolated due to fires, disease, or temporary human impacts.

Those portions of the Project that occur in the residential areas are not part of any wildlife movement corridor, as the presence of homes makes this impossible. However, although the Oro Grande Wash is not a green belt, it does function fully as a wildlife movement corridor. The Oro Grande Wash itself is a drainage, a portion of which is part of the Proposed Project area; and drainages are often considered to be natural corridors conducive to movement of wildlife.

Although construction activities will take place within a portion of a natural corridor, these impacts are considered temporary. After Proposed Project construction, impacts related to interference with a wildlife corridor would be less than significant. During Project construction, mitigation measures Bio-1 through Bio-7 would reduce impacts to less than significant.

(e) **Less than significant with mitigation.** Native plant protection ordinances function to protect those native plant species that may, as a result of development and other factors, require protection. For example, Joshua trees are protected by Section 89.0420 of the San Bernardino County Government Code. If the Project proposes to remove any of the native species protected therein, the Project proponent shall comply with this code provision regarding the harvesting of desert native plants. All Joshua trees shall be relocated on site if needed. Mitigation measure Bio-2 would reduce impacts to less than significant.

(f) **No impact.** The Project site is not within a City-designated or County-designated conservation area, habitat conservation plan, or natural community conservation plan. No impact would result.

Mitigation Measures:

Bio-1: Due to CDFG restrictions on the MGS trapping results, if ground activities do not occur prior to July 14, 2012, the Project proponent must consult with CDFG and may be required to re-survey and/or obtain an Incidental Take Permit for MGS.

Bio-2: Joshua trees and other cactus species should be avoided to the extent possible. If the Proposed Project removes any of the native plant species listed as sensitive in Section 89.0420 of the San Bernardino County Government Code, or any plant regulated by the State Desert Native Plants Act or any plant species listed in Appendix A, the Project proponent shall comply

with the State and County regulations regarding the harvesting of native desert plants. Joshua trees shall all be relocated onsite.

As required by the San Bernardino County Plant Protection Ordinance, City of Victorville, and the CDFG, the Project proponents shall develop a cactus relocation plan to offset impacts to Joshua trees and other cactus species that may need to be relocated as part of this Project.

Finally, prior to any construction activity, a plant survey shall be completed to identify and quantify all sensitive plants present. If a sensitive plant is identified onsite, the plant will be flagged and avoided.

Bio-3: The Project site is within the currently known range of the desert tortoise. Focused protocol surveys shall be completed prior to any construction related activities.

Bio-4: Burrowing owl surveys shall be completed within the Oro Grande Wash and basin. If burrowing owls are found during surveys, construction-related activities shall not begin until authorization is given and the appropriate measures have been implemented according to CDFG.

Bio-5: To avoid impacts to any nesting migratory birds, any work shall occur outside the nesting season (February 15 through August 31). The exact time of year when species nest can vary greatly between members of the same species in the same geographic area; external factors, such as rainfall, temperature, and water levels may influence time of nesting from year to year. If construction is scheduled during nesting season, pre-construction nest surveys are required to ensure that impacts to any nesting birds are avoided. The last survey day is to be conducted within five days prior to start of work. If there are negative survey results for nesting birds, construction can take place during nesting season.

Bio-6: All Project-related activities will be limited to a well delineated area. Prior to all construction-related activities, the limits of disturbance will be clearly marked with flagging or stakes. It is also recommended that a biological monitor be onsite during any clearing, grading, excavation, and other ground-disturbing activities occurring within native vegetation and jurisdictional areas to minimize potential impacts to sensitive species.

Bio-7: Construction personnel shall attend an educational class containing general and specific information about desert tortoise, MGS, and other relevant species. The class will be conducted by an authorized biologist.

5.5. CULTURAL RESOURCES

5.	CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 type="checkbox"/>	<input checked="" type="checkbox"/>
(b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.5.1 Background

A records search/literature review was conducted on July 20, 2011, at the San Bernardino Archaeological Information Center, located at the San Bernardino County Museum in Redlands. The purpose of this review was to access any existing cultural resources survey reports, archaeological site records, and historic maps to evaluate whether previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or ethnic resources exist within or near the Project area. The records search/literature review was also conducted to evaluate whether any historic properties listed on or determined eligible for listing on the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR) exist within the Project area. The results of the prehistoric literature review failed to indicate the presence of archaeological sites on or near the Project area.

A Native American Heritage Commission (NAHC) Sacred Lands File (SLF) consultation was implemented with negative findings. A letter of inquiry was sent by Roger Hatheway to Dave Singleton, NAHC, on July 27, 2011. A reply was received on July 29, 2011 reading, in part, "The Native American Heritage Commission (NAHC) conducted a Sacred Lands File search for the 'areas of potential effect,' (APEs) based on the USGS coordinates provided found Native American cultural resources were not identified in the location you specified." See Appendix B for copies of the NAHC consultation letters.

One Chambers Group archaeologist conducted a high resolution pedestrian survey of the Project area on September 14, 2011. The survey was accomplished using parallel transects at 20-meter intervals. In this manner the entire Project area was visually inspected for the presence of cultural resources.

A search of the paleontological files/database was initiated with the Division of Geological Sciences of the San Bernardino County Museum in Redlands, California, on September 13, 2011. The purpose of the search was to provide information regarding previous paleontological studies that have been conducted within or near the Project area, known fossils or other paleontological resources that may have been identified within or near the Project area, and the sensitivity of the Project area to contain significant nonrenewable paleontological resources (Appendix B).

5.5.2 Impact Analysis

- (a) **No impact.** The Proposed Project is located on an undeveloped parcel. The records search and literature found that no significant historical resources are known to occur on the Project site. No impact would occur.
- (b) **Less than significant with mitigation.** *Results of the review of the survey reports and site records provided by the Archaeological Information Center indicate that a total of eight previous cultural resource inventories or other archaeological investigations have been conducted within one-quarter mile of the Project area, including one that focused on the current Project area. The records search also revealed the existence of two previously recorded cultural resources within a one-quarter-mile radius of the Project area. The first, P36-004269 (CA-SBR-4269H), is the historic Oro Grande Wash Road, which appears on the 1901 USGS 7.5-minute Hesperia, California topographical quadrangle. This resource runs along the bottom of the wash and, therefore, bisects the current Project area. The second cultural resource is P36-010316 (CA-SBR-10316H), the Southern California Edison Kramer-Victor 115kV transmission line. The line crosses the Oro Grande Wash just at the southwestern edge of the Project area.*

The cultural resources record search did result in the identification of one NRHP eligible property within a one-quarter-mile radius of the Project area. Since it is a high-power transmission line with towers and lines far removed from the Project area, it was determined that, by its very nature, this resource cannot be affected by the current Project.

The search of the Sacred Lands File by the NAHC did not indicate the presence of Native American cultural resources in the immediate Project area.

Due to the construction activities involving ground-disturbing activities, mitigation measure C-1 will be implemented to reduce any potential impacts to archaeological resources to less than significant.

- (c) **Less than significant.** Results of the search of the paleontological files/database conducted with the San Bernardino County Museum indicate that the Project area has a low potential to yield paleontological resources, and impacts would be less than significant.
- (d) **Less than significant with mitigation.** The Proposed Project site does not contain any known human remains, and no cemeteries are known to exist within the Project site. A less than significant impact would occur with the incorporation of mitigation measure C-2.

Mitigation Measures:

C-1: In the event that any subsurface archaeological deposits are unearthed during ground-disturbing construction activities, all activities must be suspended in the vicinity of the find until the deposit(s) are recorded and evaluated by a qualified archaeologist.

C-2: If human remains of any kind are found, all activities will cease immediately and a qualified archaeologist and the County Coroner will be notified. If the coroner determines the remains to be of Native American origin, he or she will notify the NAHC. The NAHC will then identify the most likely descendents to be consulted regarding treatment and/or repatriation of the remains.

5.6. GEOLOGY AND SOILS

6.	GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>
(d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.6.1 Impact Analysis

- (a) **Less than significant.** The Proposed Project site is located in the seismically active region of southern California; however, the site is not located within an Alquist-Priolo Earthquake Fault Zone. The nearest fault zones include the San Andreas and San Jacinto fault zones, which pass approximately 8 to 10 miles south of the Proposed Project site. Because southern California is a seismically active region, it is highly likely that regional earthquakes would occur in the vicinity of the Proposed Project site. The Proposed Project site could be subjected to moderate to severe ground shaking in the event of a major earthquake on any of the faults listed above or other faults in southern California. The Proposed Project site is also located in an area that could be subject to liquefaction (County of San Bernardino General Plan 2007). The Proposed Project involves the construction of a detention and stormwater recharge basin; no permanent structures or other components are proposed that would create a potential for seismic-related

ground failure. The Proposed Project site and surrounding area is relatively flat; additionally, the site is not located in an area prone to landslides (County of San Bernardino General Plan 2007). Therefore, the Proposed Project would not create substantial risks to life or property associated with earthquake faults, seismic ground shaking, ground failure, and landslides. Impacts will be less than significant.

- (b) **Less than significant.** Soil erosion can occur during ground-disturbance activities, and short-term impacts could occur during trenching and other construction work. The County is required to obtain a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) from the State Water Resources Control Board (SWRCB). The permit includes Best Management Practices (BMPs) that are required to be implemented onsite during all construction-related activities. The purpose of the permit is to eliminate sediment-laden discharge from impacting local waterways. The Proposed Project would, in the long-term, decrease the current potential for soil erosion by constructing a detention and stormwater recharge basin in an existing wash. A less than significant impact would occur.
- (c) **No impact.** Liquefaction occurs when seismic-induced groundshaking causes water-laden, cohesionless soils to form a quicksand-like condition below the ground surface. The construction of a detention and stormwater recharge basin is not expected to create a potential for hazards in regards to landslide, lateral spreading, subsidence, liquefaction, or collapse. No permanent structures or other project components are proposed by the Project that could create a potential for hazards associated with onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse. No impacts associated with liquefaction would occur.
- (d) **No impact.** Expansive soil is defined as soil that expands to a significant degree upon wetting and shrinks upon drying. A hazardous condition is created when buildings are placed on expansive soils and structural damage could occur. The Proposed Project does not involve the construction or placement of any buildings on the Proposed Project site; therefore, the Proposed Project would not create substantial risks to life or property due to being located on expansive soil. No impacts associated with expansive soils would occur.
- (e) **No impact.** The Proposed Project would not construct any buildings; therefore, the Proposed Project will not use septic tanks or alternative wastewater disposal systems. In addition, the Proposed Project will not involve the installation of septic tanks or an alternative waste water disposal system. No impact would occur.

5.7. GREENHOUSE GAS EMISSIONS

7.	GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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"/>

5.7.1 Background

Constituent gases that trap heat in the Earth's atmosphere are called greenhouse gases (GHGs), analogous to the way a greenhouse retains heat. GHGs play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface that would otherwise have escaped into space. Prominent GHGs contributing to this process include carbon dioxide (CO₂), methane (CH₄), ozone, water vapor, nitrous oxide (N₂O), and CFCs. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34 degrees Fahrenheit (°F) cooler. This natural phenomenon, known as the "Greenhouse Effect," is responsible for maintaining a habitable climate; however, anthropogenic emissions of these GHGs in excess of natural ambient concentrations are responsible for the enhancement of the "Greenhouse Effect." The anthropogenic enhancement of the "Greenhouse Effect" has led to a trend of unnatural warming of the Earth's natural climate known as global warming or climate change, or more accurately Global Climate Disruption. Emissions of these gases that induce global climate disruption are attributable to human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors.

In 2006, the California State Legislature enacted the California Global Warming Solutions Act (Act), or Assembly Bill 32, which focuses on reducing GHG emissions in California. The Act requires that greenhouse gas (GHG) emissions in California be reduced to 1990 levels by 2020. The Act is part of a larger plan in which California hopes to reduce its emissions to 80 percent below 1990 levels by 2050. This reduction is to be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012 and regulated by CARB. With this Act in place, CARB has statutory responsibility to maintain a statewide inventory of GHG emissions.

CEQA requires lead agencies to evaluate potential environmental effects based to the fullest extent possible on scientific and factual data. Significance conclusions must be based on substantial evidence that includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.

5.7.2 Impact Analysis

- (a) **Less than significant.** As discussed in Section 3 of this document, the Proposed Project's primary contribution to air emissions is attributable to construction activities. Proposed Project construction could result in GHG emissions from construction equipment emissions and emissions from construction workers' personal vehicles traveling to and from the construction site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. The primary emissions that would result from the Proposed Project would be carbon dioxide (CO₂) from gasoline and diesel combustion, with some limited vehicle tailpipe emissions of nitrous oxide (N₂O) and methane (CH₄), as well as other GHG emissions related to vehicle cooling systems. Although construction-related emissions are a one-time event, GHG emissions such as CO₂ can persist in the atmosphere for decades. Overall, due to the limited GHG emissions from the Proposed Project, impacts will be less than significant.
- (b) **Less than significant.** Currently, neither the SCAQMD nor the County has established a quantitative threshold or standard for determining whether a project's GHG emissions are

significant. In December 2008, SCAQMD adopted interim CEQA GHG significance thresholds of 10,000 metric tons of CO₂e (MTCO₂e) per year for stationary/industrial projects that include a tiered approach for assessing the significance of GHG emissions from a project (SCAQMD 2008). For the purpose of determining whether or not GHG emissions from a project are significant, SCAQMD recommends summing emissions from construction emissions over the life of a proposed project, generally defined as 30 years, and operational emissions, and comparing the result with the established interim GHG significance threshold. While the individual project emissions would be less than 10,000 MTCO₂e per year, it is recognized that small increases in GHG emissions associated with construction and operation of the Proposed Project would contribute to regional increases in GHG emissions. Since the long-term, operational GHG emissions are minimal and the construction emissions are short-term, the Proposed Project would not conflict with any applicable plan, policy, or regulation adopted for reducing the emissions of GHGs. Impacts will be less than significant.

5.8. HAZARDS AND HAZARDOUS MATERIALS

8.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Create a significant hazard to the public or the environment through reasonable 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 had 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
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5.8.1 Impact Analysis

- (a-b) **Less than significant.** The Proposed Project would not require the extended use of acutely hazardous materials or substances. Project activities, involving construction equipment, would be short-term and would involve the limited transport, use, disposal, and storage of hazardous materials. Some examples of the hazardous materials that may be handled include fuels, lubricating fluids, and solvents. These types of materials, however, are not acutely hazardous; and all storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control (DTSC), the EPA, the Occupational Safety & Health Administration (OSHA), the San Bernardino County Fire Department, and the County of San Bernardino Department of Public Health Department. Adherence to the regulations set forth by county, state, and federal agencies would reduce the potential for hazardous materials impacts to a less than significant level and would not pose a safety hazard to sensitive receptors.

- (c) **No impact.** No schools are located within one-quarter mile of the Proposed Project site. The nearest schools to the Proposed Project site are Lakeview Christian School and Hollyvale Elementary School, both located to the west of the Proposed Project site, 0.8 mile and 1.1 mile respectively. No impact would occur.

- (d) **No impact.** The Proposed Project site is not on a list of hazardous materials sites. Implementation of the Proposed Project would not occur on or immediately adjacent to a hazardous materials site; therefore, no impacts associated with work within a listed hazardous materials site would occur as a result of the Proposed Project.

- (e) **No impact.** The nearest airport to the Proposed Project site is the Hesperia Airport, approximately 6.4 miles to the southeast (Google Earth 2011); therefore, the Proposed Project would not result in an aircraft safety hazard for people residing or working in the Project area. No impact would occur.

- (f) **No impact.** No private airports or airstrips are located in the vicinity of the Proposed Project site; therefore, the Proposed Project would not result in a safety hazard related to aircraft for people residing or working in the Project area. No impact would occur.

- (g) **Less than significant.** The Proposed Project would construct a detention and stormwater recharge basin within the existing Oro Grande Wash. The Proposed Project would not affect the surrounding streets in a manner that would affect emergency response. A less than significant impact would occur.

- (h) **Less than significant.** The Project site is located in an open-space area with native and non-native vegetation existing on the site. Adjacent land uses are mostly open space, with some rural residential to the north. Due to the open space and existing vegetation, some potential is

present for wildfire; however, the Proposed Project is not located within a Fire Safety area (County of San Bernardino General Plan 2007). A less than significant impact would occur.

5.9. HYDROLOGY AND WATER QUALITY

9.	HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 which would result in a substantial erosion or siltation on- or offsite?	<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 which 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 stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f)	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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 checked="" type="checkbox"/>	<input type="checkbox"/>

5.9.1 Impact Analysis

- (a) **Less than significant.** The Proposed Project would involve the construction of a detention and stormwater recharge basin which could cause the deterioration of water quality if sediment or construction-related pollutants wash into the surface water system. The Proposed Project would require compliance with the Storm Water Construction Activities General Permit and require the Project proponent to obtain a National Pollution Discharge Elimination System (NPDES) permit. A Stormwater Pollution Prevention Plan (SWPPP) is a requirement of the NPDES permit for construction sites that result in soil disturbance of one acre or more. The permit includes BMPs that incorporate measures or comparable BMPs which describe the erosion control measures and maintenance responsibilities, and non-stormwater management controls. A less than significant impact would occur.
- (b) **Less than significant.** The Proposed Project involves the construction of a basin on a currently undeveloped site. The Proposed Project would result in an increase in the amount of impermeable surface area with the construction of the associated inlet and outlet structures, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways. However, this would not interfere substantially with groundwater recharge since the basin would also have a substantial area of permeable ground for water to percolate into the groundwater table. In fact, the Proposed Project would enhance groundwater recharge. A less than significant impact would occur.
- (c) **Less than significant.** The Proposed Project involves the construction of a detention and stormwater recharge basin within the Oro Grande Wash, which would alter the existing drainage pattern of the site. Overall, permanent impacts to the drainage pattern would include the construction of the dikes and spillways; otherwise the Proposed Project would allow for better stormwater recharge and better water quality for the Proposed Project site. The Proposed Project will require permits as listed in Section 2.6.2 of this document. A less than significant impact would occur.
- (d) **Less than significant.** The Proposed Project, by constructing the detention and stormwater recharge basin, will alter the existing drainage pattern of the site. During the high flow period, which would occur infrequently, the levees and the excavated ponds behind them could somewhat impede flows. The Oro Grande Wash, which is not designated as a flood hazard area upstream of Interstate 15, is a deeply incised channel in the affected reach; and its capacity greatly exceeds the anticipated 100-year flood. A typical flooding scenario in the Oro Grande Wash would involve the flows passing through the gap between levees until the levees are overtopped. If this occurs, flows would be diverted temporarily into the area behind the levees and subsequently wash out the next downstream levee. As a result of the intermittent levees running perpendicular to flow, flow velocity would decline; and sediments from the eroded levees would settle out. The excavated areas behind each levee would fill with the sediment from upstream erosion. The effect of the levees would be to somewhat impede peak flows and result in redistribution of the sediment in levees back to the floodplain. In addition, because some of the spoil from the construction of the berm areas would be pushed up above the berms to support a perimeter road, a portion of the existing sediment in the bottom of the wash would be raised outside the floodplain unless water depths exceed the elevation of the road. Impacts would be less than significant.

- (e) **Less than significant.** The stormwater runoff from the Proposed Project site drains through the Oro Grande Wash. As the proposed basin is not expected to create or contribute runoff water, the Proposed Project would not exceed the capacity of existing or planned stormwater drainage systems, nor would it significantly increase polluted runoff originating from the site. The Proposed Project would improve the wash’s capacity for stormwater runoff. Impacts would be less than significant.

- (f) **Less than significant.** The Proposed Project involves the construction of a basin in the Oro Grande Wash. During construction, all applicable water quality requirements would need to be followed. The Project would be required to comply with NPDES regulations and require the preparation and implementation of a SWPPP, which would avoid significant water quality impacts from sediment removal runoff. Impacts would be less than significant.

- (g-h) **No impact.** The Proposed Project involves the construction of a basin in the Oro Grande Wash. The Proposed Project would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map. As a detention basin, the Proposed Project will protect downstream areas from flood flows by retaining water. The Proposed Project will actually improve the capacity of the waterway to manage flood flows; therefore, no flood-related impact would result.

- (i) **No impact.** The Proposed Project involves the construction of a basin in the Oro Grande Wash. Although the linear distribution of stormwater recharge basins in the bottom of the wash would affect the behavior of flood flows, the general effect would be to roughen the surface of the wash, resulting in marginally lower flow velocities. Sediment used to push up berms would be redistributed by flows, and no substantial change in flooding in the Project reach would occur; therefore, the Proposed Project will not expose people or structures to a significant risk of loss, injury, or death involving flooding. No impact would result.

- (j) **Less than significant.** The Proposed Project is located inland and is not within the vicinity of any large bodies of water. The Proposed Project site is located in the high desert, and construction of the Project will not result in inundation by seiche, tsunami, or mudflow; therefore, impacts would be less than significant.

5.10. LAND USE AND PLANNING

10.	LAND USE/PLANNING Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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5.10.1 Impact Analysis

- (a) **No impact.** The Proposed Project site is located within the City of Victorville. The Proposed Project site serves as a defining feature in the landscape, as the Oro Grande Wash is an important drainage feature in the area. The Proposed Project involves the construction of a drainage basin. Although the site is zoned as Single-Family Transitional (R-1T), the Proposed Project site would not allow residential development due to the presence of the existing Oro Grande Wash. Construction of the detention and stormwater recharge basin would be consistent with the present condition of the existing wash. The Proposed Project would not divide an established community; no impact is expected.
- (b) **No impact.** The Proposed Project site has a General Plan land use designation of Low Density Residential and is zoned as Single-Family Transitional (City of Victorville 2008). The adjacent land is also zoned as Single-Family Transitional. The Proposed Project will not conflict with or require any change to the zoning or General Plan land use designations for the site. No impact would occur.
- (c) **Less than significant with mitigation.** The Proposed Project site is located within a Mohave ground squirrel (MGS) conservation area. In 2011, the Project area was trapped for MGS with a negative result. In addition, a letter from the CDFG stated that a permit was not needed for the Proposed Project. This concurrence expires one year from the last date of MGS trapping onsite, which was July 14, 2011. If ground activities do not occur prior to July 14, 2012, the Project proponent must consult with CDFG and may be required to re-survey and/or obtain an Incidental Take Permit. Mitigation measure Bio-1 would reduce this impact to less than significant.

5.11. MINERAL RESOURCES

11.	MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

5.11.1 Impact Analysis

(a-b) **Less than significant.** The Proposed Project site is undeveloped and is located in mineral resource zone (MRZ) 3a, which includes areas containing known mineral occurrences with undetermined mineral resource significance. Areas where significant resources are present are designated MRZ-2a; and, within the general vicinity, most of these are in the Mojave River area. The Proposed Project site and surrounding area are not designated as MRZ-2a; and, therefore, would not cause a significant impact to mineral resources (City of Victorville General Plan 2007). Impacts would be less than significant.

5.12. NOISE

12.	NOISE Would the project result in:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 checked="" type="checkbox"/>	<input 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 had 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"/>

5.12.1 Impact Analysis

(a-b) **Less than significant.** The Proposed Project involves the construction of a basin within the existing Oro Grande Wash. The grading and site preparation phases tend to create the highest noise levels because the noisiest construction equipment is found in the earthmoving equipment category. This category includes excavating machinery (backhoes) and earthmoving and compacting equipment (e.g., graders, compactors).

The most proximate residential area that is subject to potential construction noise impacts is the single-family, detached residential units within approximately 200 feet of the Proposed Project boundary. At this distance, construction equipment would generate noise levels of 66 dBA to 77 dBA. Additional construction would involve pushing up berms in the detention basin with a grader. Noise levels would be 66 dBA to 77 dBA at adjacent residences.

The Proposed Project would comply with the City of Victorville General Plan noise ordinance codified in Chapter 13.01 to reduce noise levels. A less than significant impact would occur.

- (c) **Less than significant.** After the proposed basin construction is complete, some periodic maintenance of the site will be necessary. These minor maintenance efforts will result in a temporary increase in ambient noise levels in the Project vicinity but would be periodic and temporary and would not result in a substantial permanent increase in ambient noise levels. Impacts would be less than significant.

- (d) **Less than significant.** The Proposed Project involves the construction of a basin on the Proposed Project site. These activities would result in a temporary increase in ambient noise levels in the Project vicinity. The Proposed Project would comply with the City of Victorville General Plan noise ordinance codified in Chapter 13.01 to reduce noise levels. The County would coordinate with City and town officials to develop methods for ensuring long-term compatibility of the basin with planned and existing development and design facilities to avoid noise effects to residential and commercial development using BMPs. Impacts would be less than significant.

- (e-f) **No impact.** The Proposed Project site is not in the vicinity of any airports or airstrips. The nearest airport to the Proposed Project site is the Hesperia Airport, approximately 6.4 miles to the southeast. Further, the Project does not involve a change in land use that would generate new residents or employment; therefore, the Proposed Project would not expose people residing or working in the Project area to excessive noise levels. No impact would occur.

5.13. POPULATION AND HOUSING

13.	POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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"/>

5.13.1 Impact Analysis

- (a) **No impact.** The Proposed Project site is currently occupied by the Oro Grande Wash. The Proposed Project involves the construction of a basin within the wash and would not stimulate population growth. According to the California Department of Finance, the January 2009 population estimation for the City of Victorville was 109,441 residents. According to the Bureau of Labor Statistics, the March 2009 unemployment rate for the City of Victorville was 15.3 percent. This unemployment rate is higher than the County of San Bernardino’s unemployment rate of 12.7 percent. Construction of the Proposed Project would not attract a long-term worker population to the Project vicinity, and the majority of construction-related jobs are anticipated to be filled by currently employed workers. The Proposed Project would not directly or indirectly induce substantial population growth in the area. No impact would occur.
- (b-c) **No impact.** No housing is located on the Proposed Project site. The Proposed Project site is currently occupied by the Oro Grande Wash. Residences are located to the north of the Proposed Project, but these are 200 feet from the Proposed Project boundary. No housing units or persons would be displaced as a result of the Proposed Project. The Proposed Project would have no impact on housing or populations that would require the construction of replacement housing elsewhere.

5.14. PUBLIC SERVICES

14.	PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of or 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::	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b)	Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c)	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d)	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e)	Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.14.1 Impact Analysis

- (a) **No impact.** Fire protection for the Project area is currently provided by the Victorville Fire Department as well as the San Bernardino County Fire Department. The Victorville Fire Station that would respond to calls in the area of the Proposed Project site is located approximately 4.2 miles from the site at 14343 Civic Drive. The Proposed Project is not expected to increase the need for fire protection services, as the Proposed Project would not change the existing land uses or increase the number of service calls. No impact would occur to fire protection services.
- (b) **No impact.** Police protection is provided by the Victorville Police Department as well as the San Bernardino County Sheriff’s Department. The Victorville Police Department that would respond

to calls in the area of the Proposed Project site is located approximately 4.1 miles from the Proposed Project site at 14200 Amargosa Road. The Proposed Project is not expected to increase the need for police protection services, as Project activities would not change the existing land uses or increase the number of service calls. No impact would occur to police protection services.

- (c) **No impact.** No impacts to schools are anticipated to result from Project implementation, as populations will not be affected. As such, no new schools that would cause significant environmental impacts will need to be built as a result of the Proposed Project.
- (d) **No impact.** The Proposed Project involves the construction of a basin within the existing Oro Grande Wash. Construction activities would not impact any existing parks, and no new construction of parks would be required.
- (e) **No impact.** No other public facilities are anticipated to be impacted by the Proposed Project. No impact would occur.

5.15. RECREATION

15.	RECREATION. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<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"/>

5.15.1 Impact Analysis

- (a-b) **No impact.** The Proposed Project involves the construction of a detention and stormwater recharge basin within the Oro Grande Wash. No recreation facilities are located in the area of the Proposed Project, and no short-term impacts will result. No long-term impacts are anticipated, as the Proposed Project will not induce population growth. No impacts would occur from the Proposed Project.

5.16. TRANSPORTATION AND TRAFFIC

16.	TRANSPORTATION/TRAFFIC. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

16.	TRANSPORTATION/TRAFFIC. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>
(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 type="checkbox"/>	<input checked="" type="checkbox"/>
(e)	Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.16.1 Impact Analysis

(a-b) **Less than significant.** The Proposed Project will involve the construction of a basin within the Oro Grande Wash. The main two roads that lead to Oro Grande Wash are Main Street and Phelan Road, and smaller arterials roads are present as well. The Proposed Project would have limited traffic impacts during the construction phase of the Project due to the movement and use of construction equipment; however, the Proposed Project would not conflict with any applicable plans, ordinances, or policies establishing measures for effectiveness of circulation systems. Additionally, the Proposed Project would not conflict with an applicable congestion management program. The Proposed Project would have less than significant impacts on congestion and traffic plans in the area.

- (c) **No impact.** The Proposed Project would not 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. The nearest airport to the Proposed Project site is the Hesperia Airport, approximately 6.4 miles to the southeast. Because the Proposed Project is over 2 miles from the nearest airport, the Proposed Project would not have any impact on air traffic patterns.

- (d) **No impact.** The Proposed Project involves the construction of a basin in the Oro Grande Wash. The Proposed Project would not include any alteration of the roads and would not include any design features of incompatible uses. No impacts would occur as a result of the Proposed Project.

- (e) **Less than significant.** The movement of construction equipment to the Proposed Project site will temporarily involve a limited increase in traffic on various streets in the vicinity of the Proposed Project. These impacts would be less than significant.

- (f) **No impact.** The Proposed Project involves the construction of a basin in Oro Grande Wash. The Proposed Project would not have an impact on adopted plans, policies, or programs regarding public transit, bicycle, or pedestrian facilities.

5.17. UTILITIES AND SERVICE SYSTEMS

17.	UTILITIES/SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 (including sewer (waste water) collection 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 stormwater 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 (including large-scale developments as defined by Public Resources Code Section 21151.9 and described in Question No. 20 of the Environmental Information Form) 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"/>

17.	UTILITIES/SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 with insufficient 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 wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5.17.1 Impact Analysis

- (a-b) **No impact.** The Proposed Project would not directly generate wastewater, and thus would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Additionally, the Proposed Project would not require the use of water or wastewater treatment facilities, as the Proposed Project would not involve long-term water use or wastewater generation; therefore, the Proposed Project would not have significant impacts on wastewater treatment requirements or water or wastewater treatment facilities.
- (c) **Less than significant.** The Proposed Project involves the construction of a detention and stormwater recharge basin within the Oro Grande Wash. As discussed previously, a SWPPP is a requirement of the NPDES permit for construction sites that result in soil disturbance of one acre or more. The County is required to obtain a NPDES Permit. The permit includes BMPs that incorporate measures to control stormwater runoff and water quality. With incorporation of BMPs, a less than significant impact would occur.
- (d) **No impact.** The Proposed Project area is serviced by the Mojave Water Agency through the purveyor, the Victorville Water District. The Proposed Project does not involve the long-term use of water supplies. The Proposed Project would not require new or expanded water entitlements. No impact would occur.
- (e) **No impact.** The Proposed Project would construct a detention and stormwater recharge basin within the Oro Grande Wash. The Proposed Project would not produce any wastewater or require expanded wastewater treatment capacity. No impact would occur.
- (f) **Less than significant.** Solid waste services in the Project area are provided by County of San Bernardino Solid Waste Management Division, Burrtec Company, and City of Victorville Solid Waste. The Proposed Project may generate some solid waste during construction that would require disposal at a landfill. All disposal would occur within San Bernardino County's regulations; therefore, through compliance with the applicable regulations, less than significant impacts on solid waste disposal needs would occur as a result of the Proposed Project.

- (g) **Less than significant.** During construction of the Proposed Project, the County would comply with the San Bernardino County Solid Waste Management Plan, developed in response to AB 939, which requires a reduction in solid waste entering County landfills. Through compliance with the San Bernardino County Solid Waste Management Plan, the Proposed Project would have less than significant impacts.

5.18. MANDATORY FINDINGS OF SIGNIFICANCE

18.	MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.18.1 Impact Analysis

- (a) **Less than significant with mitigation.** The Proposed Project would construct a basin in the Oro Grande Wash within the City of Victorville. The site contains sensitive plant and animal species; however, with the implementation of mitigation measures Bio-1 through Bio-7, a less than significant impact would occur. Due to ground-disturbing activities being a part of the Proposed Project, paleontological resources could potentially be impacted or human remains could potentially be discovered. Mitigation measures CUL-1 and CUL-2 will reduce any impacts to less than significant.
- (b) **Less than significant.** The Proposed Project would result in temporary impacts to air quality and noise during construction. The impacts would cease upon completion of construction and would not contribute to a cumulative impact. Construction-related emissions are not considered to be cumulatively considerable since various construction projects are not likely to occur at the same

time and in close proximity to each other. Impacts from the Proposed Project would be less than significant.

- (c) **Less than significant with mitigation.** The Proposed Project could potentially result in environmental effects that may cause adverse effects on human beings with regard to the following air quality. However, these would be reduced to a less than significant level with the incorporation of the mitigation measure AQ-1 included in this IS.

SECTION 6.0 – SOURCE REFERENCES

The following is a list of references used in the preparation of this document.

- 1) *California Department of Transportation (Caltrans), California Scenic Highway Mapping System.* Accessed online December 2011 at http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm.
- 2) *California Geological Survey. Alquist-Priolo Earthquake Fault Zone Maps.* Accessed online December 2011 at http://www.quake.ca.gov/gmaps/ap/ap_maps.htm.
- 3) *CEQA Guidelines.* CCR Title 14, Division 6, Chapter 3, Section 15381, 2008.
- 4) *Chambers Group, Inc. Phase I Cultural Resources Inventory and Evaluation for the Oro Grande Project Retention Basin Number 9.* 2011.
- 5) *City of Victorville. City of Victorville General Plan 2030.* Adopted October 2008.
- 6) *County of San Bernardino. County of San Bernardino 2007 General Plan.* Adopted March 2007.
- 7) *Farmland Mapping and Monitoring Program (FMMP). California Resources Agency.* Accessed online December 2011 at <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/>.
- 8) *Google Earth, 2011.*
- 9) *San Bernardino County Department of Public Works. General Biological Resources Assessment Report. Mojave Water Agency's Oro Grande Wash Recharge Basins, Project Phases A, B, and C.* 2011.

SECTION 7.0 – REPORT AUTHORS AND CONSULTANTS

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Appendix A - General Biological Resources Assessment Report

GENERAL BIOLOGICAL RESOURCES ASSESSMENT REPORT
MOJAVE WATER AGENCY'S ORO GRANDE WASH RECHARGE BASINS
PROJECT PHASES A, B & C



**San Bernardino County Public Works
Environmental Management Division**

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This biological report seeks to identify and highlight information concerning any environmental impacts of the project and to determine to what extent the project may affect threatened or endangered species and all special status species. Reconnaissance level surveys were conducted and all relevant information noted. The project consists of 3 phases of construction; Phase A consists of construction of turnouts; Phase B involves installation of pipeline; and Phase C consists of a connection between the turnout facilities to the recharge basins. The Project is located north of the California Aqueduct in Victorville, in San Bernardino County, California.

1.0 PROJECT DESCRIPTION AND LOCATION

The project includes three phases (Figure 1). Phase A consists of constructing an Aqueduct turnout, metering, screening facilities and associated pipelines. Phase B consists of installing a 30-inch pipeline within existing road right-of-way to connect the turnout facilities (Phase A) and recharge ponds (Phase C).

The project is mapped with the U.S. Geological Survey (USGS) – Hesperia and Baldy Mesa Quadrangles, 7.5 Minute Series topographic) within Section 2 of Township 4 North, Range 5 West “Hesperia quad”, and in Sections 3, 4, and 9 of Township 4 North, Range 5 West “Baldy Mesa quad”.

2.0 REGULATORY REQUIREMENTS

This section provides summary background information regarding the applicable regulations for protecting biological resources that are pertinent to the proposed project.

2.1 Federal Requirements

2.1.1 Clean Water Act (CWA)

The Clean Water Act developed by the Environmental Protection Agency (EPA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters. Administered by the U.S. Army Corps of Engineers (USACE), Section 404 of the Act establishes a permit program that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts (40 CFR Parts 230).

2.1.2 Federal Endangered Species Act

Under the FESA, species may be listed as either endangered or threatened. If listed as “endangered”, a species is believed to be in danger of extinction throughout all or a significant portion of its range, while “threatened” means a species is likely to become endangered within the foreseeable future. Candidate species are plants and animals for which the U.S. Fish and Wildlife Service (USFWS) has sufficient information on their biological status and threats to propose them as endangered or threatened under the

FESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. Finally, the FESA also requires the designation of “critical habitat” for listed species when “prudent and determinable.” Critical habitat includes geographic areas that contain the physical or biological features, also known as principle constituent elements (PCEs), which are essential to the conservation of the species and may need special management or protection.

To the extent that the proposed project is determined to affect federally listed species, compliance with Section 7 or 10 of the FESA is necessary. The provision under section 7 that is most often associated with the USFWS and other Federal agencies is section 7(a)(2). It requires Federal agencies to consult with the USFWS to ensure that actions they fund, authorize, permit, or otherwise carry out will not jeopardize the continued existence of any listed species or adversely modify designated critical habitats. Section 10 of the FESA provides relief to landowners including private citizens, corporations, Tribes, States, and Counties who want to develop property inhabited by listed species. Landowners can receive a permit to take such species incidental to otherwise legal activities, provided they have developed an approved habitat conservation plan which assesses the likely impacts on the species from the proposed action and the steps that the permit holder will take to minimize and mitigate those impacts.

2.1.3 Migratory Bird Treaty Act

This treaty makes it unlawful to pursue, hunt, take, capture, or kill migratory birds. The law applies not only the removal of nests, but the abandonment of nests occupied by migratory birds during the breeding season (February 1 – September 1).

2.2 State Requirements

2.2.1 Clean Water Act (CWA)

Issuing the California (CWA) 404 dredge and fill permits remains the responsibility of the USACE, but the State actively uses its CWA 401 certification authority to ensure section 404 permits protect State water quality standards. The Regional Water Quality Control Board (RWQCB), under section 401, protects all waters within the State’s regulatory jurisdiction, but has special responsibilities for wetlands, riparian areas, and headwater streams because these water bodies are not systematically protected by other State and regional board programs.

Under State law, anybody discharging “waste” (including clean fill, riprap or other revetment, excavation side casting, dredge spoils, soil displaced while clearing vegetation, etc.) where it could affect waters of the State must first file a report with the appropriate RWQCB, which will regulate the discharge as necessary to protect the waters.

2.2.2 Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, the RWQCB regulates activities such as dredging, filling, or discharging materials into waters of the State, that are not regulated by USACE due to a lack of connectivity with a navigable water body or lack of an ordinary high water mark (OHWM). Where resources are subject to both state and federal regulations, Porter-Cologne compliance is coordinated with CWA Section 401 certification. For situations not also subject to federal regulation under the CWA, an activity impacting waters of the State may require issuance of individual Waste Discharge Requirements (WDRs), or coverage under the General Waste Discharge Requirements (Water Quality Order No. 2004-0004-DWQ) for small volume fill and dredge projects.

2.2.3 California Department of Fish and Game Code, Sections 1600-1616

Under current California Department of Fish and Game Code (CDFG) Sections 1600–1616, CDFG has authority to regulate work that will substantially divert or obstruct the natural flow—or substantially change or use any material from the bed, channel, or bank—of any river, stream, or lake. CDFG also has authority to regulate work that will deposit or dispose of debris, water, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects involving state or local government discretionary approvals.

2.2.4 California Endangered Species Act (CESA)

This act establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. Under the CESA, the CDFG is responsible for permitting the “take” of state-listed species. “Take” means hunt, pursue, catch, capture, or kill, or attempts to hunt, pursue, catch, capture, or kill state-listed threatened or endangered

species. In contrast with the FESA, the CESA does not recognize harm and harassment as “take”. If the project will “take” a state-listed species, an Incidental Take Permit (ITP) is required under Fish and Game Code Section 2080.1. In addition, there are no state agency consultation procedures under CESA. For projects that affect both a state and federal listed species, compliance with FESA would satisfy CESA if the CDFG determines that the federal incidental take authorization is consistent with CESA.

CDFG maintains lists for Candidate-Endangered Species and Candidate-Threatened Species. California candidate species are afforded the same level of protection as listed species. California also designates Species of Special Concern which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species or fully protected species, but may be added to official lists in the future.

2.2.5 California Department of Fish and Game Code, Section 4700 - California Fully Protected Species

The State of California first began to designate species as “fully protected” prior to the creation of the CESA. Many fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations; however, the original statutes have not been repealed, and the legal protection they give the species identified within them remains in place. Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Thus, “fully protected species” have a greater level of legal protection than “listed” species because endangered or threatened species can be “taken” for development purposes with the issuance of a permit by CDFG.

2.2.6 California Fish & Game Code (Sections 3503, 3503.5, 3505, 3800, 3801.6)

These Fish and Game Code sections protect all birds, birds of prey, and all nongame birds, including eggs and nests, that are not already listed as fully protected and which occur naturally within the state.

2.2.7 California Environmental Quality Act (Section 15380(d))

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on federal or state lists of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria modeled after the definition in the FESA and CESA. CEQA Guidelines Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on a species that has not yet been listed by either the USFWS or CDFG (i.e., candidate species) would occur. Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

2.2.8 California Environmental Quality Act (Guidelines, § 15065, subd. (a)(1) and Appendix G of the Environmental Checklist)

State and federal ESA laws operate primarily at the species level, and therefore do not adequately consider or protect rare plant communities, except as an incident of protecting individually listed species. In the absence of more specific legal protections, several provisions of CEQA were created "to preserve for future generations representations of all plant and animal communities" [Pub. Resources Code, §21001, subd. (c)]. CEQA Guidelines Section 15065 require the preparation of an Environmental Impact Report (EIR) where substantial evidence indicates that "the project has the potential to threaten to eliminate a plant or animal community." This is a perilously low standard, similar to the "jeopardy" standard of the state and federal endangered species acts. However, there may be instances in which a project may threaten to completely eliminate a plant community, either through direct or indirect impacts, and this must be evaluated in an EIR.

Appendix G of the CEQA Environmental Checklist determines if the project will have a substantial adverse impact on a sensitive natural community identified by CDFG or USFWS [CEQA Guidelines, Appendix G Environmental Checklist, sample question IV (b).] The California Natural Diversity Database (CNDDDB) maintains a list of all vegetation communities that have been classified as "sensitive" in that they have 100 or fewer viable occurrences in the state, based on the best information about distribution and the likelihood of the community being found in currently unmapped areas. Appendix G of the Environmental Checklist also specifically asks if the project will have "a substantial adverse effect on any sensitive natural community identified in local or regional plans, policies, regulations," or whether the project will "conflict with any local

policies or ordinances protecting biological resources.” [CEQA Guidelines, Appendix G Environmental Checklist, sample question IV (b) & (e).]

2.2.9 Native Plant Protection Act

California’s NPPA requires all state agencies to utilize their authority to carry out programs to conserve endangered and rare native plants. Provisions of NPPA prohibit the taking of special-status plants from the wild and require notification of CDFG at least 10 days in advance of any change in land use. This allows CDFG to salvage listed plant species that would otherwise be destroyed. Project proponents are required to conduct botanical inventories and consult with CDFG during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

2.3 Local Requirements

2.3.1 Local Ordinances

Under the County of San Bernardino 2007 Development Code Title 8 Plant Protection and Management chapter (88.01), prior to the issuance of a development permit or approval of a land use application, regulations and guidelines that have been established for the management of plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership need to be addressed.

3.0 METHODS

3.1 Definitions

3.1.1 Special Status Species

Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as deserving special consideration. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as “sensitive” on the basis of adopted policies and expertise of resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as “special-status species” in this report. For purposes of this analysis, the term “special-status” includes those species that are:

- Federally listed or proposed (candidate) under the Federal Endangered Species Act (FESA, 50 Code of Federal Regulations [CFR] 17.11-17.12);
- State listed or proposed (candidate) under the California Endangered Species Act (CESA, 14 CCR670.5);
- Fully protected animals, as defined by California Fish and Game Code (Section 3511, 4700, and 5050);
- Species and plant communities listed by CDFG as rare or of special concern;
- Species or plant communities that meet the definition of threatened, endangered, or rare under CEQA(Guidelines Section 15380 and Appendix G); and
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).

3.1.2 Potential Impact to Special Status Species

The potential for the project to impact a listed special status plant and animal species was evaluated based on:

- Direct observation of the species or its sign in the project area or immediate vicinity during site visit(s);
- Data from the Department Fish and Game CNNDDB and Biogeographic Information and Observation System (BIOS), as well as, USFWS and California Native Plant Society species lists;
- Biological literature and professional expertise pertaining to the area;
- Known distributional range (CDFG) and/or critical habitat (USFWS) maps; and
- Suitable habitat (e.g. Primary Constitute Elements).

The potential for the project to impact a special status species was category as follows:

- **Unlikely:** The project site and/or immediate area does not support suitable habitat for a particular species and the project site is outside the species' known range.
- **Low Potential:** The project site and/or immediate area only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside the project area.
- **Medium Potential:** The project site and/or immediate area provide suitable habitat for a particular species, and the proposed project may directly or

- indirectly affect suitable habitat, though no known populations would be affected.
- **High Potential:** The project site and/or immediate area provide ideal habitat conditions for a particular species and suitable habitat would be directly affected. Known populations may be affected.

3.2 Biological Survey

Field surveys were conducted on July 25, 2011, and by San Bernardino County Ecological Resource Specialists. The temperature was approximately 92 degrees Fahrenheit, and the skies were clear with winds less than 5 miles per hour. Areas of potential biological value were considered to be locations supporting a predominance of native plant species that could support special status species, areas of wetland or riparian habitat, and areas that could provide a habitat linkage or corridor for wildlife movement. All plant and animal species observed during the field visit were noted (see Appendix A) as well as animal sign such as, scat, tracks, dust baths, and burrows. Photographs of the overall topography and habitat types were also taken and can be seen below. Appendix B lists all the flora and fauna that potentially exists within, as well as, within the immediate vicinity of the project.

4.0 RESULTS

4.1 Vegetation/Habitat Types

4.1.1 General Plants/Communities

The primary vegetation communities within the project area can be characterized as creosote bush scrub, alkali desert scrub, Joshua tree woodland, non-native grassland, and dry desert wash. The overall desert scrub community consists of low growing perennial plants with a few taller shrubs scattered throughout the project area (Photo 1). In addition, tall Joshua Trees occupy many areas within the drainage area and within the overall project area. Many different plants were observed of which the following is a sample; Joshua tree (burrowbush) (*Ambrosia dumosa*), creosote bush (*Larrea tridentata*), and buckwheat (*Eriogonum fasciculatum*) (Photo 2).

4.1.2 Federal and State Endangered and Threatened Plant Species

Of the 19 sensitive species found within the USGS quads, there are eight sensitive plants listed. However, of these plant species, none are federally or state listed threatened or endangered.

4.1.3 Special Status Species/Communities

Nineteen sensitive species have the potential to be found within the project area, and are listed within the Hesperia and Baldy Mesa quadrangles (Appendix B). Of the 8 plants listed as sensitive, 4 have the potential to occur within, or adjacent to, the project area. The special status botanical species identified as having potential to occur within, or adjacent to, the project area include Booth's evening-primrose (*C. boothii* spp. *Boothii*), white pygmy-poppy (*C. candida*), sagebrush loeflingia (*L. squarrosa* var. *artemisiarum*), and short-joint beavertail (*O. basilaris* var. *brachyclada*). In addition, Joshua trees and other cactus plants occur within the project area and they are protected by their own native plant protection ordinance that identifies Joshua trees as sensitive species.

4.2 Jurisdictional Waters and Wetlands

The USACE regulates discharges of dredged or fill material into waters of the United States. Waters of the United States include wetlands and non-wetland bodies of water that meet specific criteria. One of the mechanisms adopted by Congress to achieve restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters is a prohibition on the discharge of any pollutants, including dredged or fill material, into "navigable waters" except in compliance with other specified sections of the Act.

4.3 Wildlife

4.3.1 General Wildlife

Wildlife observations include foot surveys of the project area focusing on scat, tracks, burrows, nests, animal calls and vocalizations and direct observations of individual animals. Many different species were observed during the biological surveys and can be found in Appendix A.

4.3.2 Federal and State Endangered and Threatened Species

Of the 13 sensitive species listed on the CNDDDB within these two USGS quadrangles, only 5 wildlife species have the potential to occur within or adjacent to the project area. Potentially effected species include; Burrowing owl (*Speotyto cunicularia*), Loggerhead shrike (*Lanius ludovicianus*), Le Conte's thrasher (*Toxostoma lecontei*), Mohave ground squirrel (*Xerospermophilus mohavensis*) and desert tortoise (*Gopherus agassizii*). Of these species, two are listed as federally or state endangered or threatened. Desert tortoise is both state and federally listed as threatened and the Mohave ground squirrel (MGS) is state listed threatened species.

Desert tortoise:

Critical habitat for the desert tortoise was designated on February 8, 1994 (FR 59 5820 5866). Although the Project is not within critical habitat for the tortoise, consideration still must be given to whether or not there would be impacts to tortoise. Desert tortoise is a state and federal threatened species.

The desert tortoise is able to live where ground temperatures may exceed 140 degrees Fahrenheit because of its ability to dig underground burrows to escape the heat. It may spend up to 95% of its time underground to escape the heat of the summer and the cold of winter. The burrows can be 3 to 6 feet deep and are often helpful and utilized by other desert species for temporary shelter from the desert weather. The most active time for tortoises is spring when they will forage for food. Tortoises are typically found at the base of shrubs, in the sides of washes and in hillsides and tortoise presence can be seen by tortoise tracks, fresh dirt on the apron of the burrow, and fresh scat.

The U.S Bureau of Land Management issued the California Statewide Desert Tortoise Management Policy in 1992 and categorized habitat into three levels of classification. Category I are considered areas that contain viable populations, and in these areas the management strategy is to maintain the viable populations and to increase them when possible. The management strategy for Category II is to maintain stable, viable populations while Category III strategy is to prevent or limit the population declines to the extent feasible. The Project occurs within Category II.

Mohave ground squirrel:

Mohave ground squirrel (MGS) is endemic to the Mojave Desert and is about 9 inches from nose to tip of tail. MGS is found only in the western Mojave Desert and inhabits sandy soils of alkali sink and creosote bush scrub habitat. MGS were listed as state threatened species. However, CDFG does not designate critical habitat. Their

sophisticated desert survival skills allow them to avoid the extremes of the hostile climate by aestivating most of the year. MGS begin to emerge from their burrows in February, when the males may travel up to a mile per day in search of mates. By the end of March litters, 6-9 young are born with the babies weaned by early May. In just a few weeks, they are ready to set off in search of their own patch of desert. Young MGS disperse in late May and early June. Often they move in next door to their mother's home range, but some, especially the young males, can move up to four miles before settling down.

As the desert dries out in June and July, they fatten in preparation for a long period of dormancy. By midsummer they occupy their underground nests and allow body temperature, heart rate, and metabolism to fall drastically. In this physiological state, they can survive on stored body fat until the winter rains bring a new flush of green vegetation.

The project area was surveyed and a trapping protocol was conducted for MGS consistent with CDFG guidelines in 2011. The trapping results were negative and as a result, CDFG provided a letter to the District relating that no take permit is needed for this project. This concurrence and the trapping results do not, however, preclude the possibility of MGS occurring on the project site. If a MGS is seen or found onsite before or during project implementation, all work must stop and the DFG must be contacted immediately.

4.3.3 Special Status Species

Nineteen sensitive species have the potential to be found within the project area, and are listed within the Hesperia and Baldy Mesa quadrangles (Appendix B). Marginally suitable habitat exists within portions of the project area for 8 special status species, four botanical species and four faunal species. The special status botanical species

Burrowing Owl:

All migratory birds are protected by the MBTA and the burrowing owl is considered a species of special concern by the CDFG. The owl is a ground dwelling owl with a round head and no ear tufts. The owl is sandy colored with brownish mottling and large yellow eyes. Burrowing owls are comparatively easy to see as they are often active in the daytime and can be surprisingly bold and approachable.

Burrowing owls are heavily reliant upon the presence of mammal burrows and are found in open, dry grasslands, agricultural and range lands and desert habitats associated with burrowing animals such as prairie dogs, ground squirrels and badgers.

The nesting season begins in late March or April. Burrowing Owls are usually monogamous but occasionally a male will have 2 mates. The male performs display flights, rising quickly to 100 feet, hovering for 5 to 10 seconds, and then dropping 50 feet. Circling flights also occur. Burrowing Owls nest underground in abandoned burrows dug by mammals or if soil conditions allow, they will dig their own burrows. They often line their nest with an assortment of dry materials. Adults usually return to the same burrow or a nearby area each year. One or more "satellite" burrows can usually be found near the nest burrow, and are used by adult males during the nesting period and by juvenile Owls for a few weeks after they emerge from the nest. 6 to 9 (sometimes up to 12) white eggs are laid a day apart, which are incubated for 28-30 days by the female only. The male brings food to the female during incubation, and stands guard near the burrow by day. The care of the young while still in the nest is performed by the male. At 14 days, the young may be seen roosting at the entrance to the burrow, waiting for the adults to return with food. The young owls fledge at about 44 days and begin chasing living insects when 49-56 days old.

The project area will be surveyed for burrowing owl prior to implementation of project related activities.

Le Conte's thrasher:

Le Conte's thrasher is an uncommon, permanent resident of the deserts of the southwestern United States. The Le Conte's Thrasher is a secretive, difficult-to-find bird. It is sensitive to disturbance, including off-road vehicle use, livestock grazing, oil drilling and development. The Le Conte's Thrasher is designated as a species of special concern by the CDFG, and the U.S. Fish and Wildlife Service (USFWS) has considered listing it as federally threatened or endangered. This species prefers habitat that is sparsely vegetated with a high proportion of species of saltbush or shadscale and cholla cactus. Le Conte's thrasher needs vegetative litter for cover and for obtaining prey; it consumes plant seeds, lizards, arthropods, bird eggs and snakes. It nests in cholla cactus or thick, dense thorny desert shrubs in deep shade from overhanging branches. Scattered desert shrubs and cactus are necessary for cover, especially at night or in the hot afternoon sun.

The project site is unlikely to support Le Conte's thrasher, however a bird survey shall be conducted prior to implementation of project related activities. If a Le Conte's

thrasher is found, construction shall cease and consultation will be initiated with the USFWS immediately.

4.4 Wildlife Movement Corridor

Wildlife movement includes seasonal movement along migration corridors, as well as daily movements for foraging. A wildlife corridor, often referred to as a green corridor, is an area of habitat connecting wildlife populations separated by human activities. Corridors allow the exchange of individuals between populations, increase genetic diversity and population elasticity. In addition, they help facilitate the re-establishment of population that may have become isolated due to fires, disease or temporary human impacts.

Those portions of the project that occur in the residential areas are not part of any wildlife movement corridor as the presence of homes makes this impossible. However, although the Oro Grande Wash is not a green belt, it does function fully as a wildlife movement corridor. The Oro Grande Wash itself is a drainage, a portion of which is part of the Project area and drainages are often considered to be natural corridors conducive to movement of wildlife (Figure 2).

4.5 Local Policies and Ordinances

Native plant protection ordinances function to protect those native plant species that may, as a result of development and other factors, require protection. For example, Joshua Trees are protected in Section 89.0420 of the San Bernardino County Government Code. If the project proposes to remove Joshua Trees or any of the native species protected therein, the project proponent shall comply with Section 89.0420 of the Code regarding the harvesting of desert native plants

4.6 Adopted Habitat Conservation Plans

The project area does not lie within a draft or adopted HCP area.

5.0 RECOMMENDATIONS

Phase C of the proposed project area is located in a natural, high desert creosote scrub that has natural and vegetated upper slopes and benches which contain Joshua Trees and other native plant species. The following recommendations are to address all potential impacts to special status species.

- The Project area is within the western Mojave Desert of California and also within MGS conservation area. However, in 2011 the project area was trapped for MGS with a negative result. In addition, a letter from CDFG states that they feel no take permit is needed for this project. This concurrence expires one year from the last date of MGS trapping on site which was July 14, 2011. If ground activities do not occur prior to July 14, 2012, the project proponent must consult with CDFG and may be required to re-survey and/or obtain an Incidental Take Permit.
- The Project area contains Joshua trees and other cactus species and therefore it is recommended that these should be avoided. If the project proposes to remove any of the native plant species listed as sensitive in Section 89.0420 of the San Bernardino County Government Code, or any plant regulated by the State Desert Native Plants Act or any plant species listed in Appendix B, the project proponent shall comply with the regulations regarding the harvesting of native desert plants.

As required by the San Bernardino County Plant Protection Ordinance, City of Victorville, and the CDFG, the project proponents should develop a cactus relocation plan to offset impacts to Joshua trees and other cactus species that may need to be removed as part of this project.

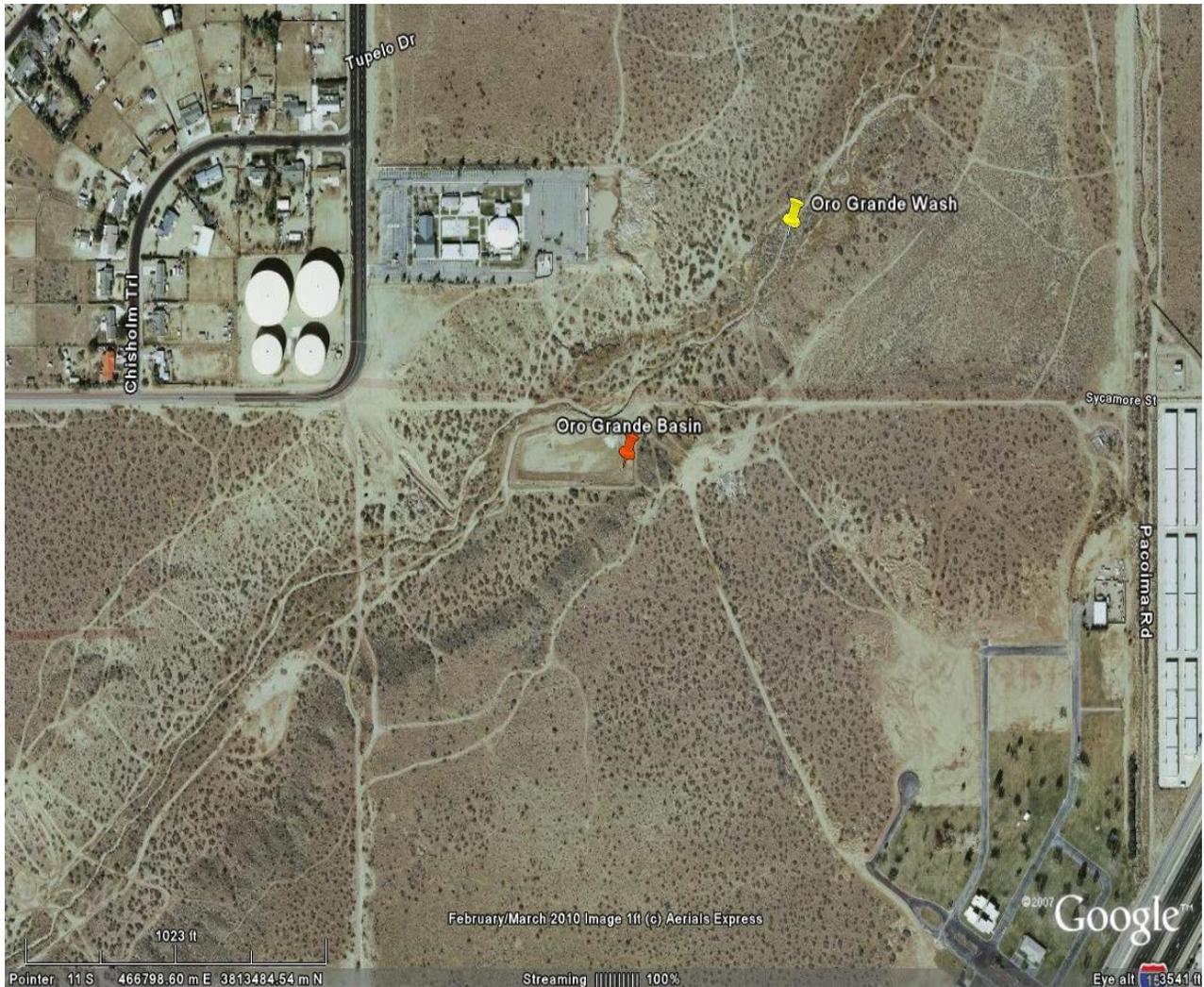
Finally, prior to any construction activity, a plant survey should be completed in the appropriate time frame to identify and quantify all sensitive plants present. If a sensitive plant is identified on site, the plant will be flagged and avoided.

- The Project site is within the currently known range of the desert tortoise. Although tortoise have not been observed in the Project area, portions of the project occur with suitable habitat for tortoise and therefore we recommend focused, protocol surveys be completed prior to any construction related activities.
- Burrowing owl surveys are recommended within Oro Grande Wash and basin. If burrowing owls are found during surveys, construction related activities shall not begin until authorization is given and the appropriate measures have been implemented according to CDFG.
- To avoid impacts to any nesting migratory birds, any work should occur outside the nesting season (February 15 through August 31). The exact time of year

when species nest can vary greatly between members of the same species in the same geographic area; external factors, such as rainfall, temperature, and water levels may influence time of nesting from year to year. If construction is scheduled during nesting season, pre-construction nest surveys are required to ensure that impacts to any nesting birds are avoided. The last survey day is to be conducted within five days prior to start of work. If there are negative survey results for nesting birds, construction can take place during nesting season.

- All project related activities will be limited to a well delineated area. Prior to all construction related activities the limits of disturbance will be clearly marked with flagging or stakes. It is also recommended that a biological monitor be on site during any clearing, grading, excavation and other ground disturbing activities occurring within native vegetation and jurisdictional areas to minimize potential impacts to sensitive species.
- Construction personnel shall attend an educational class containing general and specific information about desert tortoise, MGS and other relevant species. The class will be conducted by an authorized biologist.

Figure 2: Google Earth map showing the Project Area functions as a wildlife corridor.



APPENDIX A: LIST OF SPECIES OBSERVED

Scientific Name	Common Name
Plants	
<i>Larrea tridentata</i>	Cholla
<i>Atriplex canescens</i>	Salt bush
<i>Yucca brevifolia</i>	Joshua Tree
<i>Hymenoclea salsola</i>	Cheese bush
<i>Larrea tridentata</i>	Creosote bush
Reptiles	
<i>Uta Stansburiana</i>	Side Blotched lizard
<i>Cnemidophorus tigris</i>	Western whiptail
Birds	
<i>Tyrannus verticalis</i>	Western kingbird
<i>Corvus brachyrhynchos</i>	American Crow
<i>Corvus corax</i>	Northern Raven
<i>Calypte anna</i>	Anna's hummingbird
Mammals	
<i>Sylvilagus audubonii</i>	Desert cottontail
<i><u>Lepus timidus</u></i>	Black-tailed jackrabbit
<i>Ammospermophilus leucurus</i>	Antelope squirrel

APPENDIX B: SPECIAL STATUS SPECIES SUMMARY

California Natural Diversity Database results for Hesperia and Baldy Mesa Quads

Common Name	Scientific Name	Habitat	Status	Occurrence Probability
Plants				
Booth's evening-primrose	<i>Camissonia boothii</i> ssp. <i>boothii</i>	Occurs in Joshua tree woodland, pinyon-juniper woodland 900-2400 meters.	Fed: None CA: None CNPS: 2.3	Low to Unlikely: Recent occurrence within the area was in 1991, 7.5 miles away.
White pygmy-poppy	<i>Canbya candida</i>	Occurs in Joshua tree woodland, Mojavean desert scrub.	Fed: None CA: None CNPS: 4.2	Low to moderate: Suitable habitat exists in area surrounding the project site.
Sagebrush loeflingia	<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>	Occurs in dry slopes and flats, coastal sage scrub and chaparral.	Fed: None CA: None CNPS: 2.2	Unlikely: The project site and/or immediate area does not support suitable habitat.

Short-tailed beavertail	<i>Opuntia basilaris</i> <i>var. brachyclada</i>	Occurs in dry slopes and flats, coastal sage scrub and chaparral.	Fed: None CA: None CNPS: 1B.2	Unlikely: The project site and/or immediate area does not support suitable habitat.
Reptiles				
Coast (San Diego) horned lizard	<i>Phrynosoma coronatum</i> <i>(blainvillii population)</i>	Occurs in coastal sage scrub and chaparral in arid and semi-arid habitats and prefers friable, rocky and shallow soils.	Fed: None CA: None	Unlikely: The project site and/or immediate area does not support suitable habitat.
Desert tortoise	<i>Gopherus agassizii</i>	Occurs in desert scrub, desert wash, and Joshua tree woodland.	Fed: T CA: T	Unlikely: The project site and/or immediate area does not support suitable habitat
Birds				

<p>Burrowing owl</p>	<p><i>Athene cunicularia</i></p>	<p>Occurs in open, dry annual or perennial grasslands, desert and scrublands, characterized by low growing vegetation.</p>	<p>Fed: None CA: CSC</p>	<p>Moderate: May be suitable habitat nearby, nests in subterranean nests, dependent upon burrowing mammals, most likely the California ground squirrel.</p>
<p>Yellow Warbler</p>	<p><i>Dendroica petechia brewsteri</i></p>	<p>Occurs in riparian plant associations, prefers willows, cottonwoods, aspens, sycamores and Alders for nesting.</p>	<p>Fed: None CA: None CDFG: SC</p>	<p>Unlikely: The project site and/or immediate area does not support suitable habitat.</p>
<p>Cooper's hawk</p>	<p><i>Accipiter cooperii</i></p>	<p>Occupies woodland, chiefly open, interrupted or marginal type. Nests sites mainly in riparian growths of deciduous trees as in canyon bottoms or river floodplains.</p>	<p>Fed: None CA: None CDFG:</p>	<p>Unlikely: The project site and/or immediate area does not support suitable habitat.</p>

Long-eared owl	<i>Asio otus</i>	Occurs in riparian bottomlands grown to tall willows and cottonwood; also, belts of live oak paralleling stream courses.	Fed: None CA: None CDFG: SC	Unlikely: The project site and/or immediate area does not support suitable habitat.
Le Conte's thrasher	<i>Toxostoma lecontei</i>	Desert resident; primarily open desert wash, desert scrub, and alkali desert scrub. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Fed: None CA: None CDFG: SC	Unlikely: The project site and/or immediate area does not support suitable habitat.
Gray vireo	<i>Vireo vicinior</i>	Occurs in dry chaparral, in chamise dominated habitat; mountains of Mojave desert, associated with juniper and Artemisia.	Fed: None CA: None CDFG: SC	Unlikely: The project site and/or immediate area does not support suitable habitat.
Mammals				

Mohave ground squirrel	<i>Spermophilus mohavensis</i>	Occurs in open desert scrub; alkali scrub and Joshua tree woodland. Also feeds in annual grasslands, restricted to Mojave desert. Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover.	Fed: None CA: T CDFG:	Unlikely: The project site and/or immediate area does not support suitable habitat.
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Photo 1: Oro Grande Wash Basin area.



Photo 2: Oro Grande Wash looking south, note the drainage within the basin bottom.



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California Native Plant Society. 2007. On-line electronic inventory of rare and endangered vascular plants of California search for special status plants of USGS 7.5 Yucaipa TOPO quad. CNPS, Sacramento, California. California Natural Diversity Data Base, 2010. Rarefind (electronic record of special status species on the USGS 7.5' Yucaipa quad). Natural Heritage Division, California Department of Fish and Game, Sacramento, California.

California Fish and Game Code 3503 and 3503.5 state:

3503: It is unlawful to take, possess or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation made pursuant thereto.

3503.5: It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

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Appendix B – Cultural Resource Survey

CULTURAL RESOURCE AMENDED SURVEY

Amethyst Basin Project

(Formerly Oro Grande Detention Basin #9)

DATE: January 25, 2012
TO: John Schatz, Supervising Planner, Environmental Management Division, DPW
FROM: Roger Hatheway, Principal Investigator, Cultural Resources Specialist, DPW
RE: *Amended Archaeological Survey Report for the Amethyst Basin Project*
(Formerly Known as Oro Grande Detention Basin #9).

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I. INTRODUCTION/ABSTRACT

Two separate Cultural Resource management (CRM) surveys have been conducted for the proposed DPW Oro Grande Detention Basin #9 Project. The first, entitled *A Phase I Cultural Resources Inventory and Evaluation for the Oro Grande Detention Basin #9, Victorville, San Bernardino County, California*, was prepared by Jay K. Sander, the Chambers Group, on October 10, 2011. The second, entitled an *Amended Archaeological Survey Report for the Amethyst Basin Project*, formerly known as Oro Grande Detention Basin #9, was conducted by Roger G. Hatheway, Principal Investigator, DPW, in January 2012.

Note: Amethyst Basin was formerly known as Oro Grande Detention Basin #9.

Subsequent to October 10, 2011, design changes were made to the proposed DPW Oro Grande Detention Basin #9 Project, now known as Amethyst Basin, requiring the acquisition of additional parcels/property outside of the original APE. A new APE map was prepared (See Appendix D: Figure #3) by Flood Control staff, and the new areas were subsequently surveyed for cultural resources.

The new APE was surveyed on December 29, 2011, and again on January 11, 2012 with regards to potential impacts on cultural resources in accordance with all appropriate Federal (NEPA/Section 106), State (CEQA), and local (County General Plan) guidelines.

NOTE: The present *Amended Archaeological Survey Report for the Amethyst Basin Project* utilizes much of the information contained in the original Chambers Group, October 10, 2011 report. The amended report was prepared by Roger G. Hatheway, a NEPA/CEQA qualified cultural resource Principal Investigator.

A Historical Resources Record Search was completed on July 20, 2011 (See Appendix A) by the San Bernardino County Archaeological Information Center (AIC). The Records Search concluded that no significant cultural resources were identified within the APE of the *Amended Archaeological Survey Report for the Amethyst Basin Project*. However, two historic sites, CA-SBR-10316H (historic Edison Kramer-Victor Transmission Line), and CA-SBR-4269H (historic Oro Grande Wash Road) are located immediately adjacent to the APE.

A Native American Heritage Commission (NAHC) Sacred Lands File (SLF) consultation was implemented with negative findings. A letter of inquiry was sent by Roger Hatheway to Dave Singleton, NAHC, on July 27, 2011. A reply was received on July 29, 2011 reading, in part, "The Native American Heritage Commission (NAHC) conducted a Sacred Lands File search for the 'areas of potential effect,' (APEs) based on the USGS coordinates provided found **Native American cultural resources were not identified** in the location you specified." See Appendix B for copies of the NAHC consultation letters.

Native American Tribal entities were contacted in accordance with guidelines issued to the County of San Bernardino, DPW, by the U.S. Army Corps of Engineers, Regulatory Division, on July 6, 2011 (See Section VI). For additional information regarding tribal consultations please refer to the Chambers Group October 10, 2011 report entitled *A Phase I Cultural Resources Inventory and Evaluation for the Oro Grande Detention Basin #9, Victorville, San Bernardino County, California*. Please see Chambers Group report Appendix A: NAHC correspondence. Tribal consultation letters were mailed on November 7, 2011. As of January 23, 2012, no Tribal responses have been received by Chambers Group staff and/or DPW staff.

The cultural resources survey for the *Amended Archaeological Survey Report for the Amethyst Basin Project* resulted in negative findings. No significant cultural resources were identified within the project APE. With regards to the two previously identified historic resources, CA-SBR-4269H (Oro Grande Wash Road) was determined by the Chambers Group as not being eligible to the California Register and/or the National Register, and CA-SBR10316H (Edison Transmission Line) will not be impacted by construction of Amethyst Basin. In addition, the historic Edison Transmission Line, while immediately adjacent to the APE, is not within the project APE.

NO SITE-SPECIFIC MITIGATION RECOMMENDATIONS are here made with regards to architectural, historical, or archaeological resources as associated with properties surveyed in association with the *Amended Archaeological Survey Report for the Amethyst*

Basin Project. The APE was intensively surveyed by a qualified archaeologist and built environment cultural resource specialist, and no prehistoric or historic archaeological resources were identified. **A monitor shall, therefore, not be required during construction.**

However, should significant subsurface prehistoric or historic archaeological resources appear to be encountered during construction, the evaluation of any such resources should proceed in accordance with the criteria outlined in accordance with CEQA guidelines (1970, as amended), and in accordance with the County of San Bernardino General Plan. Specifically, all work must be halted in the immediate vicinity of the cultural resource found until a qualified archaeologist can assess the significance of the resource.

Finally it is here determined that implementation of the proposed DPW Amethyst Basin Project shall have NO EFFECT on architectural, historical, or archaeological resources within the APE of the *Amended Archaeological Survey Report for the Amethyst Basin Project.*

II. QUALIFICATIONS & CERTIFICATIONS

Mr. Hatheway has been a qualified Principal Investigator in the State of California since 1979. He has worked for the County of San Bernardino, Department of Public Works (DPW) since 1997. From 1997-2001 he served as the Principal Investigator for History and Architecture for the Freeway Study Team. He has subsequently served in a much more expanded capacity (2001-Present) as the in-house “Cultural Resource Specialist” for virtually all public works projects. In this capacity he has been responsible for the completion of a wide and complex variety of cultural resource surveys on behalf of the DPW, including documents prepared for federal, state, and local reviewing agencies. Large to small-scale projects have been completed under NEPA, CEQA, and National Historic Preservation Act – Section 106 guidelines. The County of San Bernardino, AIC, and the State OHP have approved Mr. Hatheway as a Principal Investigator for History, Architectural History, and Archaeology. His statewide qualifications are on file at the EIC, Riverside, California. A host of other federal and state agencies have also approved Mr. Hatheway as a qualified Principal Investigator at all levels of expertise. As an educator, Mr. Hatheway taught at UCLA for a period extending over twelve years. He is also the author of two books detailing San Bernardino County history. See also Appendix C: Qualifications.

III. PROJECT LOCATION AND DESCRIPTION

Project design changes required that a new archaeological survey be conducted for a new Area of Potential Effect (APE). Please refer to Appendix D: Figures #1-#3 for project-specific location information for the survey/study area of the *Amended Archaeological Survey Report for the Amethyst Basin Project.*

Project-specific information for the Amethyst Basin Project, including the USGS Quadrangle map location, is as follows:

COUNTY:

San Bernardino County

USGS QUAD: *Hesperia* Quadrangle, California, 7.5 Minute Series, 1956 (Photo Rev. 1980)

T, R, SECTION: T4N; R5W; SE 1/4 of Section 2; SB B.M.

THOMAS BROS: Map 4475, Grid G1, San Bernardino & Riverside, 2010 Edition

According to information supplied by DPW staff, the proposed *Amethyst Basin Project*, formerly known as Oro Grande Detention Basin #9 Project, is:

The District proposes to construct Oro Grande basin, with combined detention and recharge capabilities, including construction of associated inlet and outlet structures, channels and/or closed conduits, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways along tops of the embankments and around the basins, and access ramps to the basin floor. Location maps and conceptual plan sheets for the proposed basin site are included with this RFP.

The propose detention/recharge basin footprint is approximately 24 acres in the northeast direction (see attached location maps). Two weakened dikes each of 8-foot high are proposed within this basin to enhance groundwater recharge purposes. These dikes subdivide this basin into three sub-basins. Basin embankment slope will be constructed at 3 to 1 ratio (3H:1V) for both of the interior and exterior slopes, with a minimum top width of 20 feet. A 20-foot wide access road is located along the top of embankment and around the basin. Three access ramps to the basin floors will be provided at each sub-basin for maintenance purposes. The access ramps shall also have a minimum width of 20 feet.

The embankments will have a maximum height of approximately 28 feet and 27 feet at its northerly end and southerly end, respectively. The southern embankment is connected to upstream existing grade/natural flow path via a 125 feet wide spillway; while the northern embankment will discharge into natural stream bed via a double 7'x6' reinforced concrete box. Maximum depth of excavation is found to be 28 feet along the basin southerly end. The three sub-basins are connected with each other via two 24" reinforced concrete pipes at the two weakened dikes.

This proposed basin falls within the California Division of Safety of Dams (DSOD) jurisdiction.

IV. FIGURES & PHOTOGRAPHS (Appendix D and Appendix E)

For additional information regarding the proposed *Amethyst Basin Project* location see also Appendix D: Photographs #1 - #8, and Appendix E: Figures #1 - #3.

APPENDIX D: PHOTOGRAPHS

PHOTOGRAPH #1

Amended Archaeological Survey Report for the Amethyst Basin Project
APE Overall Looking Southwesterly From Amethyst Rd. - North End of Project

PHOTOGRAPH #2

Amended Archaeological Survey Report for the Amethyst Basin Project
APE Overall Looking Northeasterly From Golden Poppy Ln. - South End of Project

PHOTOGRAPH #3

Amended Archaeological Survey Report for the Amethyst Basin Project
Overall South End of APE: Looking SW Depicting Historic Power Lines

PHOTOGRAPH #4

Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View NW of New APE Survey Area "A" (See Also Figure #3)

PHOTOGRAPH #5

Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View NE of New APE Survey Area "B" (See Also Figure #3)

PHOTOGRAPH #6
Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View Southerly New APE Survey Area "C" (See Also Figure #3)

PHOTOGRAPH #7
Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View NE of New APE Survey Area "D" (See Also Figure #3)

PHOTOGRAPH #8
Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View to North of New APE Survey Area "E" (See Also Figure #3)

APPENDIX E: FIGURES

FIGURE #1
VICINITY MAP
Amended Archaeological Survey Report for the Amethyst Basin Project

FIGURE #2
LOCATION MAP
Amended Archaeological Survey Report for the Amethyst Basin Project

FIGURE #3
REVISED AREA OF POTENTIAL EFFECT (APE) MAP
Amended Archaeological Survey Report for the Amethyst Basin Project

V. AREA OF POTENTIAL EFFECT/STUDY AREA & PROJECT PLANS

Subsequent to October 10, 2011, design changes were made to the proposed DPW Oro Grande Detention Basin #9 Project, now known as Amethyst Basin, requiring the acquisition of additional parcels/property outside of the original APE. A new APE map for the *Amended Archaeological Survey Report for the Amethyst Basin Project* was prepared (See Appendix D: Figure #3) by Flood Control staff, and the new areas were subsequently surveyed for cultural resources. Project plans are on file at the Department of Public Works. The contact person regarding these plans and the APE map is:

Mervat Mikhail, Public Works Engineer III, Flood Control Design
Department of Public Works
825 East Third Street
San Bernardino, California 92415

According to information supplied by DPW staff, the proposed *Oro Grande Detention Basin #9 Project* is:

The District proposes to construct Oro Grande basin, with combined detention and recharge capabilities, including construction of associated inlet and outlet structures, channels and/or closed conduits, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways along tops of the embankments and around the basins, and access ramps to the basin floor. Location maps and conceptual plan sheets for the proposed basin site are included with this RFP.

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width of 20 feet. A 20-foot wide access road is located along the top of embankment and around the basin. Three access ramps to the basin floors will be provided at each sub-basin for maintenance purposes. The access ramps shall also have a minimum width of 20 feet.

The embankments will have a maximum height of approximately 28 feet and 27 feet at its northerly end and southerly end, respectively. The southern embankment is connected to upstream existing grade/natural flow path via a 125 feet wide spillway; while the northern embankment will discharge into natural stream bed via a double 7'x6' reinforced concrete box. Maximum depth of excavation is found to be 28 feet along the basin southerly end. The three sub-basins are connected with each other via two 24" reinforced concrete pipes at the two weakened dikes.

This proposed basin falls within the California Division of Safety of Dams (DSOD) jurisdiction.

VI. APPLICABLE HISTORIC PRESERVATION LAW, POLICIES, AND GUIDELINES

The following federal, state, and local guidelines have been utilized during preparation of this report.

Federal: The National Register of Historic Places (NRHP)

This is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect the country's historic and archeological resources. Properties listed in the National Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service, which is part of the U.S. Department of the Interior. Currently there are more than 80,000 listings that make up the National Register, including all historic areas in the National Park System, over 2,300 National Historic Landmarks, and properties nominated because they are significant to the nation, a state or a community.

Properties are nominated to the National Register by the State Historic Preservation Officer (SHPO) of the state in which the property is located, by the Federal Preservation Officer (FPO) for properties under Federal ownership or control, or by the Tribal Historic Preservation Officer (THPO), if the property is on tribal lands.

Application of National Register Guidelines

The findings and conclusions of this report are based upon the following general guidelines. In particular, the assessment of National Register eligibility is based primarily on federal guidelines contained in 36 CFR 60.4. Specifically:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or,
- (b) that are associated with the lives of persons significant in our past; or,
- (c) that embody distinctive characteristics of a type, period, or method of construction or,

(d) that have yielded or may be likely to yield, information important in prehistory or history.

Proper consideration of the above noted criterion provides sufficient information for the application of survey results to almost any cultural resource environmental document related to Section 106 compliance.

National Register District Authorization and Definitions Authorization and Expansion of the National Register

The *National Historic Preservation Act* of 1966, 80 Stat. 915, 16 U.S.C. 470 et seq., as amended, authorizes the Secretary of the Interior to expand and maintain a National Register of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering and culture. The regulations herein set forth the procedural requirements for listing properties on the National Register.

The National Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) of 1969, provides that Federal agencies are required to identify cultural resources within a project's potential environmental impact area. *Section 106(4)* provides for the continuing Federal responsibility to preserve historic, cultural and natural aspects of the environment. The Act states that "it is the continuing responsibility of the Federal Government to use all practical means, consistent with other essential consideration of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may preserve important historic, cultural, and natural aspects of our national heritage." The law requires Federal agencies to consider the impact of their proposed activities upon the environment, including historic and cultural resources.

The basis of all cultural resource management plans and programs is *the National Historic Preservation Act of 1966* which established procedures that Federal agencies must follow if a project under their jurisdiction has the potential to affect significant properties. These procedures are set forth in *Section 106*, and the significant properties are those which are eligible for nomination to the National Register of Historic Places. Among the many facets of this legislation was the expanding of the National Register to include properties of regional, state or local significance as well as those of national significance as established by the *Historic Sites Act* of 1935.

State of California

The Office of Historic Preservation (OHP) – is the governmental agency primarily responsible for the statewide administration of the historic preservation program in California. The chief administrative officer for the OHP is the State Historic Preservation Officer (SHPO). The SHPO is also Executive Secretary of the State Historical Resources Commission.

In addition to their role in the identification of National Register properties, OHP and SHPO are responsible for administering the State Historical Landmark, State Point of Historical Interest, California Register of Historical Resources, California Historical Resources Information Systems, and the California Heritage Fund programs. In accordance with federal and state laws and regulations, OHP comments on the impact of proposed projects and programs on historic resources, including those owned by the State of California. OHP assists project sponsors in identifying historic resources; evaluating their significance; determining a project's impact on the identified resources; and finding ways to avoid or satisfactorily mitigate any adverse effects. In

addition, the office develops guidelines and standards for cultural resource protection planning and management.

CEQA and California Register of Historical Resources (CRHR)

Archaeological and historical resources are protected on private land by the California Environmental Quality Act (CEQA: Statute as amended January 1, 2001 – Legislation: 1992-2001 – Guidelines as amended February 1, 2001). All project area archaeological and historical resources have been evaluated in accordance with California Register of Historical Resources (CRHR) guidelines.

California Register: Criteria for Listing

The California Register of Historical Resources (CRHR) – is a state version of the National Register of Historic Places program. The California Register of Historical Resources program was enacted in 1992, and became official January 1, 1998.

Potential historic resources are evaluated for inclusion in the California Register using the same four criteria as the National Register, though the California Register criteria are numbered (1-4) rather than lettered (a-d). These are:

An historical resource must be significant at the local, state or national level under one or more of the following four items:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California or national history;
3. It embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values;
4. It has yielded or has the potential to yield information important to the prehistory or history of the local area, California or the nation.

All resources nominated for listing must have integrity, which is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination.

Local: County of San Bernardino General Plan

This report has also been prepared in accordance with the County of San Bernardino General Plan. Specifically:

County of San Bernardino General Plan April 2007: Pages V-19 to V-22

2. CULTURAL/PALEONTOLOGICAL RESOURCES GOAL CO 3.

The County will preserve and promote its historic and prehistoric cultural heritage.

POLICIES

CO 3.1 Identify and protect important archaeological and historic cultural resources in areas of the County that have been determined to have known cultural resource sensitivity.

CO 3.2 Identify and protect important archaeological and historic cultural resources in all lands that involves disturbance of previously undisturbed ground.

Programs

1. Require the Archaeological Information Center at the San Bernardino County Museum to conduct a preliminary cultural resource review prior to the County's application acceptance for all land use applications in planning regions lacking Cultural Resource Overlays and in lands located outside of planning regions.

2. Should the County's preliminary review indicate the presence of known cultural resources or moderate to high sensitivity for the potential presence of cultural resources, a field survey and evaluation prepared by a qualified professional will be required with project submittal. The format of the report and standards for evaluation will follow the "Guidelines for Cultural Resource Management Reports" on file with the San Bernardino County Land Use Services Department.

United States Army Corps of Engineers: Consultations Guidelines

In accordance with email guidelines issued by Shannon Pankratz, U.S. Army Corps of Engineers, Regulatory Division, on July 6, 2011, the following Tribal consultation policies and procedures shall be implemented by the County of San Bernardino, DPW.

- 1.) All consultations shall proceed on a project-by-project basis.
- 2.) Record Search, NAHC, and Tribal consultations are considered as separate actions, to wit:
 - a.) For projects that involve earth movement/ground disturbance (especially in any areas not previously disturbed) there should be both the typical cultural records search, NAHC letter/letters to relevant Native American tribes.
 - b.) For areas that have been disturbed in the past, if future activities occur in those same areas (and not beyond the extent of the areas) then there is no need to redo the cultural records search or NAHC letter.
 - c.) If a specific site has been disturbed in the past and is proposed to be disturbed again, yet no NAHC letter was originally sent out, then an NAHC consultation should be implemented. However, if the NAHC response letter is negative, there would not be a need to send Tribal consultation letters.

VII. METHODS

All work was conducted utilizing professionals throughout preparation of the report. Mr. Hatheway, NEPA/CEQA qualified cultural resource Principal Investigator, is the primary author of this report although various DPW EMD and Design staff made specific contributions to the

report. The present *Amended Archaeological Survey Report for the Amethyst Basin Project* utilizes much of the information contained in the original Chambers Group, October 10, 2011 report.

Qualifications of Surveyor/Principal Investigator

All fieldwork was conducted by Roger G. Hatheway, a CEQA qualified Principal Investigator. Mr. Hatheway has served as a Principal Investigator since 1979. Architectural, historical, and archaeological experience covers the entire United States from southern California to Washington D.C. Large to small-scale projects have been completed under NEPA, CEQA, and National Historic Preservation Act – Section 106 guidelines. Projects include federal and military agencies, the state of California, various counties and cities throughout southern California, and a host of private developers. Entire cities, and/or substantial portions thereof, have been surveyed Mr. Hatheway. Research projects have also been completed nationwide, including at the Library of Congress, and various other government repositories of information. Mr. Hatheway has been recognized since 1979 as qualified to conduct architectural/historical surveys. His work has previously been reviewed and approved by a variety of federal, state, and local agencies. The County of San Bernardino, Archaeological Information Center and EIC, has approved Mr. Hatheway as a Principal Investigator for History, Architectural History, and Archaeology. His statewide qualifications are on file at the EIC, Riverside, California. The Bureau of Land Management has approved Mr. Hatheway as a qualified historical, archaeological, and architectural expert at all levels of expertise. He has worked as a Cultural Resources Specialist for the County of San Bernardino DPW since 1997. Please refer to Appendix C for additional information.

Historical Resources Record Search

A Historical Resources Record Search (HRRS) was prepared by Robin Laska on July 20, 2011, at the Archaeological Information Center (AIC), San Bernardino County Museum, Redlands, California. The results of the AIC Record Search (for a one mile radius) read in part:

20 July 2011
Roger Hatheway
San Bernardino County Public Works

HISTORICAL RESOURCES RECORD SEARCH: Plunge Creek Spillway

In response to your request for information dated 14 July 2011, a records search has been conducted for the above project on USGS Hesperia 7.5' quad.

Historical Resources:

Prehistoric Archaeological Resources:

- 0 prehistoric archaeological sites
- 0 pending prehistoric archaeological sites
- 0 prehistoric districts
- 1 prehistoric isolates

Historic Archaeological Resources (sites older than 50 years of age):

- 2 historic archaeological sites
- 0 pending historic archaeological sites
- 0 historic structures
- 0 historic districts
- 0 historic isolates
- 1 possible historic structure/archaeological site locations determined from historic maps (maps checked): Thompson, 1917/20, 1929; Beasley, 1892; Blackburn, 1932; Perris, 1896; Kremmerer, 1925; AAA-various; USGS Hesperia, 1898/9; US Army Hesperia 1942.

Cultural Landscapes:

- 0 cultural Landscapes

Ethnic Resources:

- 0 ethnic resources

Heritage Properties (designated by State and Federal commissions):

- 0 National Register Listed Properties

1 National Register Eligible Properties
 0 California Historic Landmarks
 0 California Points of Historic Interest

PREVIOUS HISTORICAL RESOURCE INVESTIGATIONS:

Historical resource reports for the project area include:

8 Area-specific survey reports
 10 General area overviews

In addition to the Center’s historical resources files, the following publications, manuscripts or correspondence also were consulted:

- 1986 Survey of Surveys: A Summary of California’s Historical and Architectural Resource Surveys.
- 1988 Five Views: An Ethnic Sites Survey for California. California Historical Landmarks. California Points of Historical Interest.
- 2011 Determinations of Eligibility--Records entered into the OHP computer file--received quarterly.
- 2011 Directory of Historic Properties--Records entered into the OHP computer file of historic resources--received quarterly.

SENSITIVITY OF PROJECT AREA FOR HISTORICAL RESOURCES:

Based upon the above information, available historical records and maps, and comparisons with similar environmental localities, the sensitivity assessment for this project area is:

Prehistoric Archaeological Resources	High
Historic Archaeological Resources	High
Historic Resources	Low
Cultural Landscapes	Unknown
Ethnic Resources	Unknown

Comments: Potential for Prehistoric Archaeological Resources based on sites near the APE. Potential for Historic Archaeological Resources based on sites associated with the historic road and powerline previously recorded within the APE & the telephone line shown on a historic map. APE is within boundaries of the historic Silver Mtn/Oro Grande Mining District.

Robin E. Laska
 Assistant Center Coordinator

Note: See Appendix A for a complete copy of the July 20, 2011 AIC letter.

Note Also: The “APE” utilized by and referred to in the AIC Record Search, includes a one-half mile radius surrounding the actual project APE for reports, and a one-quarter mile radius surrounding the actual project APE for sites.

The results of the Records Search identified eight reports within a one-half mile radius of the original APE. This includes:

TABLE 1
Previous Reports in Vicinity of Project APE

Report ID Number	Year Prepared	Project Name/Identification	Preparer Or Client	Relation to APE
1060372	1976	Historical Resources Assessment of Approximately 52 Acres	County Museum Association & Don McBain	East APE
1060602	1978	Historical Resources Assessment ... SW ¼ of Section 2	County Museum Association & Highland Engineers	Southwest APE
1060612	1978	Water System Master Plan for Victor Valley	County Museum Association & Consulting Engineers	North APE

Report ID Number	Year Prepared	Project Name/Identification	Preparer Or Client	Relation to APE
1060986	1980	Baldy Mesa Water Lines	County Museum Association & Nest, Brudin, and Stone	Areawide Contains APE
1063020	1993	Adelanto-Lugo Transmission Project	Woodward Clyde & LSA Associates	Southwest APE
1064975	2005	Baldy Mesa Water District Arsenic Treatment Project	CRM Tech & Tom Dodson	East APE
1065219	2006	Baldy Mesa Water District Well Sites and Pipeline Project	CRM Tech & Tom Dodson	Northeast APE
1065466	2007	Victor Valley Water District Pipeline Project	CRM Tech & Tom Dodson	Directly Adjacent to APE

The results of the Records Search identified three previously recorded sites as being in the immediate vicinity, or one-quarter mile of the proposed project location APE. This includes:

TABLE 2
Previously Recorded Resources Within or in Vicinity of Project Location APE

Site Number CA-SBR-	Primary Number	Initial Recorder/Year/Name	Site Type	Relation to APE
CA-SBR-4269H	P36-004269	Reynolds 1980	Road	Within APE
CA-SBR-10316H	P36-010316	KEA Environmental 2000	Powerline	Southwest of APE
	P36-060831	Reynolds 1980	Hammerstone Isolate	Southwest of APE

Summary of Findings: Previously Recorded Historic Sites Near Project APE

A Historical Resources Record Search was completed on July 20, 2011 (See Appendix A) by the San Bernardino County Archaeological Information Center (AIC). The Records Search concluded that no significant cultural resources were identified within the APE of the *Amended Archaeological Survey Report for the Amethyst Basin Project*. However, two historic sites, CA-SBR-10316H (historic Edison Kramer-Victor Transmission Line), and CA-SBR-4269H (historic Oro Grande Wash Road) are located immediately adjacent to the APE.

Built Environment Survey and Archaeological Field Survey

With regards to the two previously identified historic resources, CA-SBR-4269H (Oro Grande Wash Road) was determined by the Chambers Group as not being eligible to the California Register and/or the National Register, and CA-SBR10316H (Edison Transmission Line) will not be impacted by construction of Amethyst Basin. In addition, the historic Edison Transmission Line, while immediately adjacent to the APE, is not within the project APE. **The cultural resources survey for the *Amended Archaeological Survey Report for the Amethyst Basin Project* resulted in negative findings. No significant cultural resources were identified within the project APE.**

Archival Research

The present *Amended Archaeological Survey Report for the Amethyst Basin Project* utilizes much of the information contained in the original Chambers Group, October 10, 2011 report. The amended report was prepared by Roger G. Hatheway, a NEPA/CEQA qualified cultural resource Principal Investigator.

VIII. NAHC & TRIBAL CONSULTATIONS

A Native American Heritage Commission (NAHC) Sacred Lands File (SLF) consultation was implemented with negative findings. A letter of inquiry was sent by Roger Hatheway to Dave Singleton, NAHC, on July 27, 2011. A reply was received on July 29, 2011 reading, in part, “The Native American Heritage Commission (NAHC) conducted a Sacred Lands File search for the 'areas of potential effect,' (APEs) based on the USGS coordinates provided found **Native American cultural resources were not identified** in the location you specified.” See Appendix B for copies of the NAHC consultation letters.

Native American Tribal entities were contacted in accordance with guidelines issued to the County of San Bernardino, DPW, by the U.S. Army Corps of Engineers, Regulatory Division, on July 6, 2011 (See Section VI). For additional information regarding tribal consultations please refer to the Chambers Group October 10, 2011 report entitled *A Phase I Cultural Resources Inventory and Evaluation for the Oro Grande Detention Basin #9, Victorville, San Bernardino County, California*. Please see Chambers Group report Appendix A: NAHC correspondence. Tribal consultation letters were mailed on November 7, 2011. As of January 23, 2012, no Tribal responses have been received by Chambers Group staff and/or DPW staff.

IX. NATURAL ENVIRONMENT, ETHNOGRAPHIC, PREHISTORIC, AND HISTORICAL BACKGROUND

The following excerpts related to “Archaeology” are taken (edited for grammar) from a report entitled, *Historic Property Survey Report I-15 Widening Victorville to Barstow*, September 1998, as written by Principal Investigators Roger Hatheway and John Romani.

Note: References cited in the text quoted below are not individually included in the References section of this report.

NATURAL ENVIRONMENT

GEOLOGICAL

Physiography

The project area is in the southwestern high desert portion of the Mojave Desert, a part of the Sonoran Desert section of the Basin and Range province (Fenneman 1931). The Mojave Desert is bounded by the Sierra Nevada Mountains to the north; Tehachapi Ranges to the northwest; the San Gabriel and San Bernardino Mountains to the southwest and south; the Colorado River to the east; and it adjoins the Great Basin to the northeast. The topography consists of north-south trending ridges and mountain ranges, which have produced Pleistocene and Holocene alluvial deposits, terraces covered by desert pavement, intermittent drainages, and broad basins with sedimentary deposits from former playas or dry lakes.

Geology

The ranges within the Sonoran Desert are primarily the result of block faulting with areas of vulcanism. The core of the ranges are composed of crystalline igneous rocks (granite, schist, gneiss) overlain by sedimentary and volcanic rock. The basins are covered by layers of sedimentary deposits. Soils are generally Andisols (with pedogenic horizons) of recent and old alluvium (Greenwood and McIntyre 1978:13-14).

Climate

The climate of the Mojave Desert region is arid due to the western and northwestern mountains which cause a rain shadow effect. Annual precipitation is about four to six

inches, which usually occurs between November and March. Whereas winter temperatures can dip below freezing, the summers are commonly over 100⁰ F.

BIOLOGICAL

A brief overview of biological resources in the vicinity of the Study Area is as follows:

Flora

The greater project area is within a portion of the "Mohavian" Province (Jaeger 1957) which is primarily composed of Creosote Bush Scrub and Mojave Desert Scrub communities, between 800 and 5200 ft amsl. Within the project area, the vegetation consists of a Creosote Bush Scrub community which commonly occurs on well-drained slopes, fans, and valleys below 3500 ft above mean sea level (amsl). This plant community is dominated by widely spaced woody plants interspersed by annuals and perennials. The two most common species are creosote bush (*Larrea tridentata*) and burro bush (*Ambrosia dumosa*). Other species include cheesebush (*Hymenoclea salsola*), desert trumpet (*Eriogonum inflatum*), saltbush (*Artriplex* sp.), Joshua trees (*Yucca brevifolia*), Mojave yucca (*Yucca schidigera*), and several types of cacti (e.g., *Opuntia* sp., *Ferocactus acanthodes*). Riparian community plants are found along areas of the Mojave River. Many of these species were utilized for food, medicine, and utility by the former ethnographic inhabitants of this region, the Serrano and Vanyume.

Fauna

Fairly large populations of various mammals such as rabbits (*Sylvilagus auduboni*, *Lepus californicus*), coyote (*Canis latrans*), Mojave ground squirrel (*Spermophilus mohavensis*), mice (*Peromyscus* spp.), and wood rats (*Neotoma lepida*) can be found within the creosote bush community, and were utilized by aboriginal populations.

Reptiles are common and consist of diurnal lizards and mainly nocturnal snakes; whereas, the desert tortoise (*Xerobates [Gopherus] agassizii*) is becoming more infrequent. Amphibians are within aquatic areas of the Mojave River and seasonally filled dry lakes.

Large avifauna consists of vultures and hawks, and smaller species include ravens, crows, quail, and doves.

ETHNOGRAPHIC BACKGROUND

At the time of European contact, the greater project area was inhabited by several groups. The Mojave, who were Yuman speakers, inhabited the Colorado River area to the east. The Southern Paiute, who the Mojave called Chemehuevi, were Numic speakers. They came south from the Great Basin ca. A. D. 1500, and their territory included portions of the eastern Mojave Desert. The Kawaiisu, who spoke a language distantly related to the Chemehuevi, seem to have occupied the Sierra Nevada-Tehachapi watershed between the San Joaquin Valley and Mojave Desert, east to Death Valley. Although uncertain, their southern boundary may have included the northern slopes of the San Gabriel Mountains. The project area is within the ethnographic territory of the Serrano/Vanyume who were Takic-speakers of the Uto-Aztecan linguistic family. Their territory was from the San Bernardino Mountains in the south, northward into the Mojave Desert to the sink of the Mojave River (Bean et al, 1982: 4-1 – 4-45).

PREHISTORIC BACKGROUND

Since the 1930s, numerous cultural sequences and complexes have been proposed for the general area, referred to as the Great Basin, by various researchers (Rogers 1939, 1950, 1966; Campbells 1935, 1937; Harrington 1933, 1957; Hester 1973; Bettinger and Taylor 1974; MacNeish 1976; Davis 1978). Although a long utilization of the area has been suggested, not all work has been accepted by the larger professional community. Cultural sequences are usually proposed from a series of point style complexes with changes attributed to ecological adaptation to changing environments or technologies.

The sequences proposed by Hester (1973) and Hall and Barker (1975) will be used to provide a summary of the prehistory of the general study area.

Pre-Projectile Point Tradition (Pre-10,000 B.C.)

This tradition consists of simple percussion lithic tools such as choppers, scrapers, scraper planes, Teshoa flakes, and primary and secondary flakes. These tools are thought to represent an early, general hunting and gathering subsistence base for small, mobile family groups (Weide and Barker 1974:78). Rogers (1939) referred to this industry as Malpais in the Colorado Desert.

Three complexes have been identified for this time frame: the Manix Lake Industry, the Coyote Gulch Industry, and the Calico site.

The Manix Lake Industry, located on elevated desert pavement sites above the high line of pluvial Lake Manix, consists of a distinctive "scraper-chopper-coup de poing-like assemblage" which also includes hammerstones, pointed tools, bifacially and unifacially worked tools, utilized flakes, and "Clactonian flakes" (Simpson 1952, 1956, 1958, 1961, 1965, 1976; Glennan 1976). A date earlier than 15,000 B.C. was obtained from tufa samples just below the high stand line of Lake Manix (Simpson 1960).

The Coyote Gulch Industry is comprised of core tools, scrapers, flake perforators and pointed tools. Simpson (1961) has placed this assemblage in "later pluvial times" based on morphology, due to the lack of datable associations. Tuohy (1979:147) and Hester (1973:59) do not necessarily concur with the geological and hydrological variables used for the two aforementioned industries and object to the inferred typological similarities to that of the Palaeolithic in Europe. Wallace (1962:19) has also proposed that the quarry blanks used as type models for those industries, may be much younger.

Artifacts from the Calico site have been dated through geological association to 50,000-80,000 years B.P. (Leakey et al, 1969). However, many archaeologists believe the tools are natural, and not man-made (e.g., Haynes 1969; Hester 1973:19).

Fluted Point Tradition

Although these points are morphologically similar to Clovis and Folsom point types (dated ca, 10,000 to 8,000 B.C.), distance and lack of megafauna, have made the cultural and temporal association with the latter two point types, difficult to accept. In addition, they are nearly always surface finds, and at times been found in association with materials attributed to later time periods (Hester 1973:61-62; Hall and Barker 1975:48-51).

Western Pluvial Lakes Tradition (9000-6000 B.C.)

The tools of this early tradition are generally associated with shore lines of pluvial lakes (Hester 1973:62). It has been referred to as the Lake Mojave/San Dieguito complex and the Western Lithic Co-Tradition in the southwest Great Basin.

The Campbells (1937) reported the Lake Mojave Complex as marked by two projectile point types, Lake Mojave and Silver Lake. The lithic assemblage, primarily manufactured by percussion flaking, included hammerstones, unifacial and bifacial tools, choppers, a variety of scrapers, knives, drills or perforators, crescentics, oval knives, and leaf-shaped blades, but lacked floral processing tools (Amsden 1937:51-80). The Campbells initially estimated the tradition to be associated with the last pluvial period, at least 15,000 years old (Campbell et al. 1937:42). However, radiocarbon dating of fresh water shell from the high stand lines at Lake Mojave revealed a date of 8320±160 B.C. (Ore and Warren 1971).

Warren's (1967) San Dieguito Complex, which includes the Campbell's Lake Mojave Complex, is based on Rogers (1939, 1966) Playa and San Dieguito Complexes. The tool

assemblage includes both pressure and percussion flakes, choppers, scraper planes, notched pebbles, cores, ovate bifaces, hammerstones, keeled scrapers, cleavers, pulping planes, side scrapers, spoke shavers, inferred shelters, intaglios, and trails (Weide and Barker 1974). Radiocarbon dates from the type site in San Diego suggested its duration from approximately 7080 and 6000 B.C. (Warren and Crabtree n.d.:6). Based on work in the Panamint Valley, (Davis et al, 1969) proposed that the Western Lithic Co-Tradition, which coexisted alongside the Fluted Co-Tradition, was from ca. 6000-8000 B.C.; and had artifact types similar to both the Lake Mojave and San Dieguito complexes. Although the emphasis on hunting as opposed to seed gathering within the Western Pluvial Tradition complexes is not well understood, these complexes existed during wetter conditions and began changing ca. 7500 B.P., at the advent of the Alti-thermal (Antevs 1952).

Great Basin Archaic Tradition (6000 B.C.-A.D. 1500)

As a result of the gradual desiccation of Pleistocene lakes and lowered water table in the Mojave Desert, human activities may have become more restricted to highland springs and rivers. Shutler (1961:69; 1968:24) defined it as the exploitation of desert and lacustrine resources, as well as those in the mountain areas. It combines the subsistence patterns of the Jennings' Desert Culture or Desert Archaic with those of lacustrine or lake made margin. This tradition is marked by several diagnostic point types, Silver Lake, Humboldt, Pinto, Gypsum, and Elko series dart points, and by the increased use of seed grinding tools.

Pinto Complex (5000-2000 B.C.)

This complex was identified by the Campbells and Amsden (1935) from surface collections in the Pinto Basin. Meighan (1975:30) described this culture as a highly mobile desert economy with an emphasis on hunting and lesser dependence on seed gathering. By the end of this period, the assemblage included milling stone tools, hammerstones, flaked stone choppers, scrapers, knives, retouched flakes, and diagnostic projectile points. However, Bettinger and Taylor (1974:13) feel that "this lumping of widely separated specimens within a single 'Pinto' type obscures what seems to be significant stylistic variation," and suggest that similarities with points from Ventana Cave may infer a confinement of the Pinto Point complex to southeastern California and western Arizona with the Little Lake Complex point present in the Mojave and the Owens Valley.

Gypsum Complex (2000 B.C. to A.D. 500)

This period (Warren and Crabtree n.d.) includes Roger's (1939) Amargosa Periods, and Bettinger and Taylor's (1974) Newberry Periods, and includes large stemmed Gypsum and notched Elko points, which implies the use of atlatls. Based on information from the northern Great Basin, it implies the existence of a well developed hunting and gathering subsistence base, with specialized adaptations, such as the use of lacustrine resources (Weide and Barker 1974:82). The occurrence of certain pottery types and use of pit houses, suggests outside cultural influences (Warren and Crabtree n.d.:12-16).

Rose Spring-Eastgate Complex (A.D. 500 - A.D. 1000)

This complex is marked by the appearance of smaller Rose Spring and Eastgate projectile points, thought to be modifications of the Elko dart point series to adapt to the introduction of the bow and arrow (cf. Hall and Barker 1975:59-60). Although this period is a continuation of the prior one, it suggests greater influences from the Southwest (Warren and Crabtree n.d.:19).

Late Prehistoric (A.D. 1000-1776)

This period has been defined by the introduction of Tizon Brown Ware and Owens Valley Brown Ware, and Cottonwood and Desert Side-notched series projectile points (Hester 1973:127). An intensive exchange network developed along the Mojave River, with trade reaching as far as the Southwest and Pacific coast. Mojave River sites display an elaborate artifact assemblage which continues through the Protohistoric and Historic periods (Lerch 1996:10).

REGIONAL HISTORICAL BACKGROUND

The following excerpt is taken from a report entitled, *Historic Property Survey Report I-15 Widening Victorville to Barstow*, September 1998, as written by Principal Investigators Roger Hatheway and John Romani.

Exploration

The “Old Spanish Trail” was first developed as a prehistoric Indian trade route. It had many side trails and forks, subsequently known to Mission priests, explorers, traders, and was ultimately heavily utilized by immigrants to southern California during the 1830s and 1840s. In the 1850s it was used by Mormon immigrants and Mormon freighting companies trading between Salt Lake City and Los Angeles.

Transportation emerges as the single-most important feature in the recorded history of the desert. Interestingly, early transportation routes, like the “Road to Salt Lake” were developed essentially as an efficient means of getting from one source of water to another while en-route through an otherwise hostile desert environment. It was not until the construction of the first desert railroad alignment, completed in 1883, that the first major artificial supplies of water were created when water was simply brought to any given location on a railroad tank car. Even the first highways to cross the desert (including the Santa Fe Grand Canyon Needles Highway and National Old Trails Road) followed either the railroad tracks or older trails leading to natural springs. Together, water and transportation resources resulted in the development of mineral and agricultural resources, as well as the permanent settlement of the desert.

Railroad Surveys

On March 3, 1853, Congress passed a military appropriations bill allocating funds for the survey of all possible routes for a Pacific railroad. This inaugurated an extensive series of studies including Mojave Desert area surveys made by Lt. Robert Stockton Williamson and Lt. Amiel Weeks Whipple.

During the same time period when the railroad surveys were undertaken (1850s to 1860s), traffic and travel across the desert region increased dramatically. One of the pioneer trail blazers was Edward F. Beale. He received the job, using government appropriated funds, of opening a wagon road along the 35th Parallel alignment from the Needles area to Barstow, and he completed the task in 1857. Known as the Old Government Road, the route was increasingly utilized by the military, emigrants, miners, and trade caravans. This, in turn, resulted in a gradual growth of regional settlement. Settlements were isolated, but they did develop in the 1860s and 1870s, prior to completion of the railroad in 1883.

Improved transportation, and a military presence at Fort Mojave, brought the first permanent settlers to the western Mojave/Victor Valley area in the 1860s. This was soon followed by mining activity leading to the establishment of the Oro Grande, Clark Mountain, and Calico Districts. These districts are not located immediately adjacent to the present study area, but they are indicative of desert development as it took place during the period extending from the late 1860s to the early 1880s construction of the Southern Pacific (Atchison Topeka and Santa Fe) railroad.

The construction of the Southern Pacific line between Needles and Mojave was completed on July 12, 1883. This may well be regarded as a landmark event in the history of the western Mojave, as it quickly and permanently impacted all desert development activity. Many small towns and sidings were established. Agricultural development soon followed with increased settlement throughout the western Mojave. Sheep and cattle ranching predominated during the nineteenth century, with agricultural crops becoming of increasing importance in the first half of the twentieth century. The Southern Pacific

sold their Mojave to Needles route to the Atchison Topeka and Santa Fe on August 20, 1884. In 1885, the portion of the A.T. & S.F. alignment from Barstow to the Cajon Pass via Victorville, was completed.

A wagon road, paralleling the Needles to Barstow railway alignment and replacing the earlier Old Government Road as a continuation of it, was quickly established. This was later developed into the National Old Trails Road, and subsequently as Route 66.

HISTORICAL BACKGROUND, VICINITY OF VICTORVILLE

The following is taken from <http://aeve.com>. The information contained in the text was provided by the City of Victorville.

History of Victorville

The community of Victorville was incorporated on September 21, 1962, as a general law city with a population of approximately 8,111 and an area of 9.7 square miles. As of January 1, 1995 the City's population and area was 60,648 and 67.68 square miles respectively. These figures indicate the City has grown substantially in its history as a municipality. Prior to incorporation the community had a history which goes back over 100 years, when the first settlers of European descent arrived.

In about 1885, the community was known as Victor. It was named after Jacob Nash Victor, a construction superintendent for the California Southern Railroad (Santa Fe Railroad). The town was established as a result of the original railroad station constructed approximately one mile northwest of the Mojave River narrows. On January 18, 1886, the Plan of the Town of Victor was prepared which created the grid pattern of the original town. This original subdivision included property between "A" Street through "G" Street and First Street through Eleventh Street. The area encompassed approximately 200 acres or one-third of a square mile.

The abundance of good water and the availability of rich bottom lands led to agricultural development shortly after the establishment of the railroad depot. Near the turn of the century, large deposits of limestone and granite were discovered. Since then the cement manufacturing industry has emerged as the single most important industry of the Victor Valley.

In 1901 the community's name was changed by the United States Post Office from "Victor" to "Victorville" due to the confusion associated with the community of Victor, Colorado.

In 1926, U.S. Route 66 was established, which was one of the main arteries of the National Highway System linking Chicago, Illinois, with California. A portion of this famous highway provided a transportation corridor through Victorville, which was unsurpassed until Interstate 15 was constructed. Seventh Street and "D" Street were a part of this national highway.

The following is taken from the Wikipedia online encyclopedia. The text has been edited for content.

Victorville, California

Victorville is a city located in the Victor Valley of western San Bernardino County, California, US. According to the U.S. Census Bureau's 2000 census, the city has a total population of 64,029. The May 1, 2008 population estimate released by the state of California for Victorville is 107,721.

Geography

Victorville is located at 34°31'14" North, 117°20'40" West (34.520459, -117.344525).

Victorville is located at the southern edge of the Mojave Desert, 81 miles (130 km) northeast of Los Angeles, 34 miles (55 km) south of Barstow, 48 miles (77 km) east of Palmdale, and 37 miles (60 km) north of San Bernardino through the Cajon Pass on Interstate 15. Victorville has the Mojave Desert branch of the San Bernardino county government offices.

It is bordered by Apple Valley on the east, Hesperia on the south, and Adelanto on the west. The Mojave River flows through Victorville. The elevation at City Hall is approximately 2,950 feet (900 m) above sea level. The summer climate for this area in the Mojave Desert may be hotter than the Los Angeles basin or the Inland Empire, but actually 10 or 15 degrees cooler than in the Colorado Desert.

According to the United States Census Bureau, the city has a total area of 189.8 km² (73.3 mi²). 188.5 km² (72.8 mi²) of it is land and 1.3 km² (0.5 mi²) of it is water. The total area is 0.71% water.

Demographics

In 2005, the city was estimated to contain 86,473 people, 30,000 households, and 21,000 families residing in the city. The population density is 339.7/km² (879.7/mi²). There are 22,498 housing units at an average density of 119.4/km² (309.1/mi²). The racial makeup of the city is 41.92% White, 16.05% African American, 1.11% Native American, 1.48% Asian, 0.20% Pacific Islander, 16.26% from other races, and 5.98% from two or more races. 50.46% of the population are Hispanic or Latino of any race.

There are 30,000 households out of which 43.8% have children under the age of 18 living with them, 54.3% are married couples living together, 16.1% have a female householder with no husband present, and 24.0% are non-families. 19.4% of all households are made up of individuals and 8.5% have someone living alone who is 65 years of age or older. The average household size is 3.03 and the average family size is 3.47.

In the city the population is spread out with 34.2% under the age of 18, 8.6% from 18 to 24, 28.6% from 25 to 44, 17.4% from 45 to 64, and 11.2% who are 65 years of age or older. The median age is 31 years. For every 100 females there are 93.9 males. For every 100 females age 18 and over, there are 89.2 males.

The median income for a household in the city is \$36,187, and the median income for a family is \$39,988. Males have a median income of \$40,149 versus \$26,138 for females. The per capita income for the city is \$14,454. 18.7% of the population and 15.3% of families are below the poverty line. Out of the total population, 24.6% of those under the age of 18 and 10.6% of those 65 and older are living below the poverty line.

For the year ending July 2007, Victorville experienced the second-highest population growth rate in the country, according to the U.S. Census Bureau. That year, the population rose 9.5%, to 107,221.

Politics

In the state legislature Victorville is located in the 17th Senate District, represented by Republican George Runner, and in the 36th Assembly District, represented by Republican Steve Knight. Federally, Victorville is located in California's 25th congressional district, which has a Cook PVI of R +7^[7] and is represented by Republican Buck McKeon.

History

In 1858 Aaron G. Lane came to the High Desert and created Lane's Crossing, for many years a provider of shelter and supplies for folks making the trip across the desert to San Bernardino. Lane's Crossing was on the Mojave River just north of where the river crosses Interstate 15. Captain Lane was a Mexican-American war veteran who suffered from malaria during that war. Originally he migrated west to join the gold rush but found out it was better to sell supplies to the miners than pan for the gold. He settled in Ione near Sutter's mill during those years, migrating to San Bernardino in 1857. Although his health did not improve he found that the dry desert air was beneficial to him. He settled there in 1858. He was a rancher and became very involved in the Mojave Valley, providing the first polling place in the high desert at his home. That first year 10 citizens cast their votes at Lane's residence rather than making the long trip to San Bernardino.

About 1895 the town was named Victor after California Southern Railroad General Manager Jacob Nash Victor. In 1901, the United States Post Office Department changed the name to Victorville to avoid confusion with the town of Victor, Colorado.

In 1926, U.S. Route 66 was established and passed through Victorville. Today, the former route is the primary road through oldtown Victorville, known as Seventh Street.

In 1940, Herman J. Mankiewicz and John Houseman wrote the first two drafts of *Citizen Kane* in Victorville at the Green Spot motel along historic Route 66. Orson Welles sent the two of them to write in seclusion due to Mankiewicz's legendary drinking habits.

Victorville Army Airfield was constructed in 1941 and later named George Air Force Base.

In 1992, George AFB was deactivated and is now Southern California Logistics Airport. The former base housing is now vacant, forming a ghost town that is used for military training purposes by troops from Fort Irwin Military Reservation. The grounds of the former George AFB is also the location of the Victorville federal prison.

On November 19, 1954, Sammy Davis, Jr. almost died in an automobile accident in Victorville on a return trip from Las Vegas to Los Angeles. Davis lost his left eye as a result, and wore a glass eye for the rest of his life.

The city was incorporated on September 21, 1962.

On August 14, 1977, actor Ron Haydock was struck and killed while hitch-hiking near Victorville. Ron Haydock is also remembered for his hit rockabilly 45 rpm single "99 Chicks".

In 2003, the Roy Rogers and Dale Evans Museum was moved away from Victorville to Branson, Missouri.

On November 3, 2007, Victorville hosted the DARPA Urban Challenge, a six-hour autonomous robot driving contest through the streets of what was formerly George Air Force Base, now the Southern California Logistics Airport. The Carnegie Mellon team, known as Tartan Racing, took the US \$2 million first prize, while the Stanford Racing Team received a \$1 million check for finishing second. Team Victor Tango, made up of faculty and students from Virginia Tech, whose vehicle number was 32 in honor of the 32 students killed in the 2007 Virginia Tech massacre, received \$500,000 for taking third place. "Robots sometimes stun the world, inspire a lot of people and change the belief of what is possible," said William "Red" Whittaker, a Carnegie Mellon robotics professor and team leader of the university's Tartan Racing team. "We've seen that here and once the perception of what's possible changes it never goes back. This is a phenomenal thing for robotics."

Old Town Victorville

A revitalization project started in 1995 in the oldest part of the city, which encompasses ten square blocks along Old Route 66. The mostly consists of empty buildings, but does have the Veteran's Memorial on the corner of Seventh St. and Forrest Ave, the Route 66 Museum on D St, and Old Victor School on Sixth St.

X. SURVEY FINDINGS AND STATEMENT OF ELIGIBILITY

The following conclusions are made regarding the NRHP and CRHR eligibility of cultural resources within the APE of the proposed Amended DPW *Amethyst Basin Project*.

Archaeological Survey Results

No significant and/or potentially significant prehistoric and/or historic archaeological resources were identified within the APE during the field survey for the *Amended Archaeological Survey Report for the Amethyst Basin Project*.

Built Environment and Historical Resources Survey Results

No significant and/or potentially significant historical and/or built environment cultural resources (buildings, structures, and objects), were identified during the field survey for the *Amended Archaeological Survey Report for the Amethyst Basin Project*. However, two historic sites, CA-SBR-10316H (historic Edison Kramer-Victor Transmission Line), and CA-SBR-4269H (historic Oro Grande Wash Road) are located immediately adjacent to the APE.

Conclusions

The cultural resources survey for the *Amended Archaeological Survey Report for the Amethyst Basin Project* resulted in negative findings. No significant cultural resources were identified within the project APE.

XI. DETERMINATION OF EFFECT

It is here determined that implementation of the proposed DPW *Amethyst Basin Project* shall have NO EFFECT on architectural, historical, or archaeological resources within the APE of the *Amended Archaeological Survey Report for the Amethyst Basin Project*.

XII. RECOMMENDATIONS

NO SITE-SPECIFIC MITIGATION RECOMMENDATIONS are here made with regards to architectural, historical, or archaeological resources as associated with properties surveyed in association with the *Amended Archaeological Survey Report for the Amethyst Basin Project*. The APE was intensively surveyed by a qualified archaeologist and built environment cultural resource specialist, and no prehistoric or historic archaeological resources were identified. **A monitor shall, therefore, not be required during construction.**

However, should significant subsurface prehistoric or historic archaeological resources appear to be encountered during construction, the evaluation of any such resources should proceed in accordance with the criteria outlined in accordance with CEQA guidelines (1970, as amended), and in accordance with the County of San Bernardino General Plan. Specifically, all work must be halted in the immediate vicinity of the cultural resource found until a qualified archaeologist can assess the significance of the resource.

Finally, if human remains are encountered during construction, then the San Bernardino County Coroner's Office **MUST** be contacted in accordance with state law within 24 hours of the find, and all work should be halted until a clearance is given by that office and any other involved agencies. The Coroner's Office may be contacted at:

Coroner's Division
County of San Bernardino
175 S. Lena Road, San Bernardino, CA
Tel: 909-387-2978

XIII. DATA LIMITATIONS

The opinions expressed herein are based on visual observations made at the project site, on data gathered as part of the historical and archival research process, and on information provided by various DPW staff members, and/or consultant reports and staff. If additional information is made available at a later date, and/or the proposed project is changed in any manner whatsoever, the author of this report reserves the right to modify any and all opinions expressed herein.

XIV. REFERENCES

NOTE: Please also refer to original Chambers Group, October 10, 2011 report entitled, *A Phase I Cultural Resources Inventory and Evaluation for the Oro Grande Detention Basin #9, Victorville, San Bernardino County, California*, for additional references.

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1988 Five Views: An Ethnic Sites Survey for California.

1997 California Historical Landmarks.

1992 California Points of Historical Interest.

2005 Listing of National Register Properties--Records entered into the OHP computer file--received quarterly.

2005 Inventory of Historic Structures--Records entered into the OHP computer file of historic resources--received quarterly.

San Bernardino County Museum

1980 Historical Landmarks of San Bernardino County. Quarterly of the San Bernardino County Museum Association 28(1-2).

Maps

7.5 Minute Series, *Hesperia, CA*, USGS Quadrangle Map, 1956 Rev. 1980.

Museums/Libraries/Archives

Feldheim Library, City of San Bernardino

San Bernardino County Archives

San Bernardino County Museum, Redlands, California

Private Library and Collection, Roger G. Hatheway

Public Records

San Bernardino County Assessor's Office Information

2009 and 2010 Property Information Management System (PIMS) Reports

APN/Address/Ownership

Use Codes/Land Characteristics/ Building Characteristics

Building Record (Historic)

Assessors Map and Parcel Book

Respondents

-Robin Laska, San Bernardino County Archaeological Information Center

Websites/Internet

<http://en.wikipedia.org>

<http://aeve.com>

APPENDIX A
HISTORICAL RESOURCES RECORD SEARCH
Letter Dated: July 20, 2011

AMETHYST BASIN PROJECT
Formerly Known As:
ORO GRANDE DETENTION BASIN #9 PROJECT

ARCHAEOLOGICAL INFORMATION CENTER

San Bernardino County Museum

2024 Orange Tree Lane

Redlands, CA 92374

rlaska@sbcm.sbcounty.gov

(909) 307-2669 x 255

FAX (909) 307-0689



San Bernardino
County

20 July 2011

Roger Hatheway
San Bernardino County Public Works
825 E. Third St
San Bernardino, CA 92415-0835

(909) 387-8130

HISTORICAL RESOURCES RECORD SEARCH: Oro Grande Basin #9

In response to your request for information dated 14 July 2011, a records search has been conducted for the above project on USGS Hesperia 7.5' quad.

Historical Resources:

Prehistoric Archaeological Resources:

- 0 prehistoric archaeological sites
- 0 pending prehistoric archaeological sites
- 0 prehistoric districts
- 1 prehistoric isolates

Historic Archaeological Resources (sites older than 50 years of age):

- 2 historic archaeological sites
- 0 pending historic archaeological sites
- 0 historic structures
- 0 historic districts
- 0 historic isolates
- 1 possible historic structure/archaeological site locations determined from historic maps (maps checked): Thompson, 1917/20, 1929; Beasley, 1892; Blackburn, 1932; Perris, 1896; Kremmerer, 1925; AAA-various; USGS Hesperia, 1898/9; US Army Hesperia, 1942.

Cultural Landscapes:

- 0 cultural Landscapes

Ethnic Resources:

- 0 ethnic resources

Heritage Properties (designated by State and Federal commissions):

- 0 National Register Listed Properties
- 1 National Register Eligible Properties
- 0 California Historic Landmarks
- 0 California Points of Historic Interest

PREVIOUS HISTORICAL RESOURCE INVESTIGATIONS:

Historical resource reports for the project area include:

- 8 Area-specific survey reports
- 10 General area overviews

In addition to the Center's historical resources files, the following publications, manuscripts or correspondence also were consulted:

- 1986 Survey of Surveys: A Summary of California's Historical and Architectural Resource Surveys.
- 1988 Five Views: An Ethnic Sites Survey for California.
California Historical Landmarks.
California Points of Historical Interest.
- 2011 Determinations of Eligibility--Records entered into the OHP computer file--received quarterly.
- 2011 Directory of Historic Properties--Records entered into the OHP computer file of historic resources--received quarterly.

SENSITIVITY OF PROJECT AREA FOR HISTORICAL RESOURCES:

Based upon the above information, available historical records and maps, and comparisons with similar environmental localities, the sensitivity assessment for this project area is:

Prehistoric Archaeological Resources	High
Historic Archaeological Resources	High
Historic Resources (built environment)	Low
Cultural Landscapes	Unknown
Ethnic Resources	Unknown

Comments: Potential for Prehistoric Archaeological Resources based on sites near the APE. Potential for Historic Archaeological Resources based on sites associated with the recorded road and powerline previously recorded in the APE & the telephone line shown on a historic map. APE is within the boundaries of the historic Silver Mtn/Oro Grande Mining District.

RECOMMENDATIONS:

In order to minimally comply with CEQA, NEPA and/or Section 106 of the National Historic Preservation Act, a field survey should be conducted by a qualified professional for historical resources within portions of the project area not previously surveyed for such resources. A list of qualified professionals can be found at www.chrisinfo.org.

A CEQA Initial Study of "MAYBE" for potential adverse environmental impact to historical resources is warranted unless it can be documented by a qualified professional that NO resources older than 45 years in age exist on the property. Implementation of the above recommendation(s) will ensure that existing historical resources will be inventoried and evaluated, and that appropriate mitigation measures will be recommended to avoid adverse impacts.

If appropriate mitigation measures are not proposed for significant historical resources within the project area, then subsequent destruction of these resources may violated the California Environmental Quality Act, Nation Environmental Policy Act, National Historic Preservation Act, California codes or various local government ordinances.

If prehistoric or historic artifacts over 50 years in age area encountered during land modification, than activities in the immediate area of the finds should be halted and an on-site inspection should be performed immediately by a qualified archaeologist. This professional will be able to assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act and/or the Federal National Environmental Policy Act.

If human remains are encountered on the property, then the San Bernardino County Coroner's Office **MUST** be contacted within 24 hours of the find, and all work should be halted until a clearance is given by that office and any other involved agencies. Contact the County Coroner at 175 South Lena Road, San Bernardino, CA 92415-0037 or (909) 387-2543, or (760) 955-8535 in Victorville, or (760) 365-1668 in Yucca Valley or (760) 326-4825 in Needles.

The County of San Bernardino requests that historical resource data and artifacts collected within this project area be permanently curated at a repository within the County. Per a State Historical Resources Commission motion dated 7 Feb 1992, the repository selected should consider 36 CFR 79, Curation of Federally-owned and Administered Archaeological Collection: Final Rule, as published Federal Register, 12 Sept 1990, or a later amended for, for archival collection standards.

If you have any further questions, please, contact me at (909) 307-2669 x 255, Monday through Friday between 8 AM and 4 PM.



Robin E. Laska
Assistant Center Coordinator

APPENDIX B

NAHC & TRIBAL CONSULTATIONS

Request Dated: July 27, 2011

Response Dated: July 29, 2011

AMETHYST BASIN PROJECT

For additional information regarding tribal consultations please refer to the Chambers Group October 10, 2011 report entitled *A Phase I Cultural Resources Inventory and Evaluation for the Oro Grande Detention Basin #9, Victorville, San Bernardino County, California*. Please see Chambers Group report Appendix A: NAHC correspondence. Tribal consultation letters were mailed on November 7, 2011. As of January 23, 2012, no Tribal responses have been received by Chambers Group and/or DPW staff.

NAHC CONSULTATION

REQUEST FOR A RECORD SEARCH OF THE SACRED LANDS FILE *ORO GRANDE DETENTION BASIN #9 PROJECT*

DATE: July 27, 2011
TO: Native American Heritage Commission
Attn: Dave Singleton
915 Capitol Mall, Room 364
Sacramento, CA 95814
TEL: 916-653-4082
FAX: 916-657-5390
EMAIL: nahc@pacbell.net
FROM: Roger Hatheway, CRM Specialist, County of San Bernardino, DPW
825 East Third Street
San Bernardino, CA 92415-0835
RE: Sacred Lands File Record Search: *Oro Grande Detention Basin #9 Project*

Dear Mr. Singleton:

Introduction

The County of San Bernardino, Department of Public Works (DPW), is here requesting a record search of the Sacred Lands File for the County of San Bernardino, DPW, *Oro Grande Detention Basin #9 Project*.

Project-Specific Information

Project-specific information, including the USGS Quadrangle map location and project description, is as follows:

PROJECT DESCRIPTION

The proposed project consists of the construction of a Detention Basin in Oro Grande Wash, vicinity of Victorville, San Bernardino County, California.

COUNTY:

San Bernardino County

USGS QUAD: *Hesperia* Quadrangle, California, 7.5 Minute Series, 1956 (Photo Rev. 1980)

T, R, SECTION: T4N; R5W; SE 1/4 of Section 2; SB B.M.

THOMAS BROS: Map 4475, Grid G1, San Bernardino & Riverside, 2010 Edition

Agency

County of San Bernardino
Department of Public Works

Contact Person

Roger G. Hatheway
County of San Bernardino, Department of Public Works
Principal Investigator
Cultural Resources Specialist

Street Address:
County of San Bernardino
Department of Public Works
825 East Third Street
San Bernardino, CA 92415-0835

Phone:
Office: 909-387-8175
Cell: 909-289-2072

PLEASE SEND TO:
DIRECT DEDICATED FAX: 760-242-9128

Email:
RHatheway@dpw.sbcounty.gov

Sincerely and With Great Thanks,

ORIGINAL SIGNED AND FAXED ON JULY 27, 2011

Roger G. Hatheway
County of San Bernardino, Department of Public Works
Principal Investigator
Cultural Resources Specialist
CELL: 909-289-2072
DIRECT DEDICATED FAX: 760-242-9128
EMAIL: RHatheway@dpw.sbcounty.gov

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
 SACRAMENTO, CA 95814
 (916) 653-6251
 Fax (916) 657-5390
 Web Site www.nahc.ca.gov
 ds_nahc@pacbell.net



July 29, 2011

Mr. Roger G. Hatheway, Cultural Resources Specialist

County of San Bernardino Public Works Department

825 East Third Street
 San Bernardino, CA 92415-0835

Sent by FAX to: 760-242-9128

No. of Pages: 4

Re: Sacred Lands File Search and Native American Contacts list for the "Proposed Construction of a Detention Basin in Oro Grande Wash Project;" located in the Victorville area; San Bernardino County, California

Dear Mr. Hatheway:

The Native American Heritage Commission (NAHC) conducted a Sacred Lands File search of the 'area of potential effect,' (APE) based on the USGS coordinates provided and found **Native American cultural resources were not identified** in the USGS coordinates you specified. Also, please note; the NAHC Sacred Lands Inventory is not exhaustive. Native American cultural resources may be inadvertently discovered during ground breaking activity.

The California Environmental Quality Act (CEQA – CA Public Resources Code §§ 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. CA Government Code §65040.12(e) defines "environmental justice" provisions and is applicable to the environmental review processes.

Early consultation, even during Initial Study or First Phase surveys with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Local Native Americans may have knowledge of the religious and cultural significance of the historic properties of the proposed project for the area (e.g. APE). Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). We urge consultation with those tribes and interested Native Americans on the list of Native American Contacts we attach to this letter in order to see if your proposed project might impact Native American cultural resources. Lead agencies should consider avoidance as defined in §15370 of the CEQA Guidelines when significant cultural resources as defined by the CEQA Guidelines §15064.5 (b)(c)(f) may be affected by a proposed project. If so, Section 15382 of the CEQA Guidelines defines a

significant impact on the environment as "substantial," and Section 2183.2 which requires documentation, data recovery of cultural resources.

Partnering with local tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 4(f), Section 110 (f)(k) of federal NHPA (16 U.S.C. 470 *et seq.*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C. 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation.

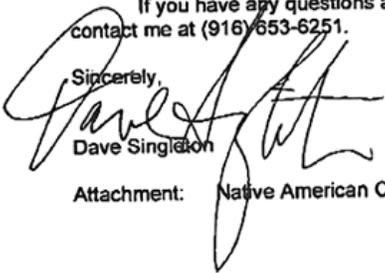
Also, California Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery', another important reason to have Native American Monitors on board with the project.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. An excellent way to reinforce the relationship between a project and local tribes is to employ Native American Monitors in all phases of proposed projects including the planning phases.

Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,


Dave Singleton

Attachment: Native American Contact List

California Native American Contact List
San Bernardino County
 July 29, 2011

Ramona Band of Cahuilla Mission Indians
 Joseph Hamilton, Chairman
 P.O. Box 391670 Cahuilla
 Anza , CA 92539
 admin@ramonatribe.com
 (951) 763-4105
 (951) 763-4325 Fax

San Manuel Band of Mission Indians
 James Ramos, Chairperson
 26569 Community Center Drive Serrano
 Highland , CA 92346
 (909) 864-8933
 (909) 864-3724 - FAX
 (909) 864-3370 Fax

Chemehuevi Reservation
 Charles Wood, Chairperson
 P.O. Box 1976 Chemehuevi
 Chemehuevi Valley CA 92363
 chair1clt@yahoo.com
 (760) 858-4301
 (760) 858-5400 Fax

Fort Mojave Indian Tribe
 Tim Williams, Chairperson
 500 Merriman Ave Mojave
 Needles , CA 92363
 (760) 629-4591
 (760) 629-5767 Fax

San Fernando Band of Mission Indians
 John Valenzuela, Chairperson
 P.O. Box 221838 Fernandefio
 Newhall , CA 91322 Tataviam
 tsen2u@hotmail.com Serrano
 (661) 753-9833 Office Vanyume
 (760) 885-0955 Cell Kitanemuk
 (760) 949-1604 Fax

AhaMaKav Cultural Society, Fort Mojave Indian
 Linda Otero, Director
 P.O. Box 5990 Mojave
 Mohave Valley AZ 86440
 (928) 768-4475
 LindaOtero@fortmojave.com
 (928) 768-7996 Fax

Morongo Band of Mission Indians
 Michael Contreras, Cultural Heritage Prog.
 12700 Pumarra Road Cahuilla
 Banning , CA 92220 Serrano
 (951) 201-1866 - cell
 mcontreras@morongo-nsn.
 gov
 (951) 922-0105 Fax

San Manuel Band of Mission Indians
 Ann Brierty, Policy/Cultural Resources Departmen
 26569 Community Center Drive Serrano
 Highland , CA 92346
 (909) 864-8933, Ext 3250
 abrierty@sanmanuel-nsn.
 gov
 (909) 862-5152 Fax

This list is current only as of the date of this document.
 Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,
 Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed
 Construction of a Detention Basin in Oro Grande Wash Project; located in the Victorville Area; Mojave Desert; San Bernardino County,
 California for which a Sacred Lands File search and Native American Contacts list were requested.

California Native American Contact List
San Bernardino County
July 29, 2011

Serrano Nation of Indians
Goldie Walker
P.O. Box 343 Serrano
Patton , CA 92369

(909) 862-9883

Ernest H. Siva
Morongo Band of Mission Indians Tribal Elder
9570 Mias Canyon Road Serrano
Banning , CA 92220 Cahuilla
siva@dishmail.com
(951) 849-4676

This list is current only as of the date of this document.
Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,
Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed
Construction of a Detention Basin in Oro Grande Wash Project; located in the Victorville Area; Mojave Desert; San Bernardino County,
California for which a Sacred Lands File search and Native American Contacts list were requested.

APPENDIX C

QUALIFICATIONS

Roger Hatheway
Department of Public Works
Principal Investigator, History, Architecture, Archaeology

ROGER G. HATHEWAY

CULTURAL RESOURCE SPECIALIST
HISTORICAL—ARCHITECTURAL—ARCHAEOLOGICAL
Department of Public Works
County of San Bernardino
825 E. Third Street
San Bernardino, CA 92415-0835

PRINCIPAL INVESTIGATOR
HISTORY, ARCHITECTURAL HISTORY, ARCHAEOLOGY
Cultural Resource Planning and Management Specialist

EDUCATION

MA, History

UCLA, 1977

BA, History

Brown University, 1975

Magna Cum Laude, Clarkson A. Collins University Prize

QUALIFICATIONS

Mr. Hatheway has worked for the County of San Bernardino, Department of Public Works (DPW) since 1997. From 1997-2001 he served as the Principal Investigator for History and Architecture for the Freeway Study Team. He has subsequently served in a much more expanded capacity (2001-Present) as the in-house “Cultural Resources Specialist” for virtually all public works projects. In this capacity he has been responsible for the completion of a wide and complex variety of cultural resource surveys on behalf of the DPW, including documents prepared for federal, state, and local reviewing agencies. Mr. Hatheway has served as the Principal Investigator for Hatheway & Associates since 1979. Architectural, historical, and archaeological experience covers the entire United States from southern California to Washington D.C. Large to small-scale projects have been completed under NEPA, CEQA, and National Historic Preservation Act – Section 106 guidelines. Mr. Hatheway has been recognized since 1979 as a Principal Investigator.

COUNTY OF SAN BERNARDINO

Select Reports Completed and Project Involvement

2009

Wildwood Creek Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, June 22, 2009. Also involved working directly with Flood Control staff to prepare APE maps.

Elder Creek and Plunge Creek Improvement Projects, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, June 22, 2009. Also involved working directly with Flood Control staff to prepare APE maps.

Yucaipa Emergency Protection Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County,

November 9, 2009. Also involved working directly with Flood Control staff to prepare APE maps.

Slover Avenue, Between Larch Ave. and Cedar Ave, Signal Installation & Road Widening Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, June 8, 2009.

Olive Street Sidewalk and Bus Shelter, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, June 29, 2009.

Mount Baldy Cinder Storage Bunkers, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, August 4, 2009.

Mountain View Acres Storm Drain Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, July 7, 2009. Also involved working directly with Flood Control staff to prepare APE maps.

Maple Lane Drainage/Slope Improvements Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, December 18, 2009.

A Cultural Resources Survey, Determination of Eligibility Statement, and Determination of Effect for the Lilac Road Realignment Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, February 12, 2009.

Parker Road/State Route 146/Highway 95 Inventory of Historical Documents and Items of Interest, Prepared by: Roger Hatheway, Department of Public Works, San Bernardino County, Prepared at the request of Kristin Berry, USGS Riverside, October 27, 2009.

Highland Road & SH-18 Intersection Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, July 14, 2009.

Request for Duncan Road Historical Information 2/24/2009, Prepared by: Roger Hatheway, Prepared for Jacob Babico, Department of Public Works, San Bernardino County, per request County Supervisor, February 25, 2009.

Colton Avenue Rehabilitation & Widening Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, June 15, 2009.

Architectural and Historical Survey of Caughlin Road Improvement Project APE, Vicinity of Phelan/Baldy Mesa, California, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, March 30, 2009.

Amboy Road Overlay Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, October 19, 2009.

Daggett Ditch Inventory of Historical Documents and Items of Interest, Prepared at the request of DPW Road Maintenance, Prepared by: Roger Hatheway, Department of Public Works, San Bernardino County, October 27, 2009.

Highway 173/Arrowhead Toll Road Inventory of Historical Documents and Items of Interest, Prepared at the request of Caltrans R/W staff, Prepared by: Roger Hatheway, Department of Public Works, San Bernardino County, Fall 2009.

Big Bear Pine Avenue Historic Aerials, Prepared by: Roger Hatheway for DPW Management Staff, Department of Public Works, San Bernardino County, Fall 2009.

Desert Knolls Wash Historic Aerials, Prepared by: Roger Hatheway for DPW Management Staff, Department of Public Works, San Bernardino County, Winter 2009.

Rim Forest Historic Aerials, Prepared by: Roger Hatheway for DPW Flood Control, Department of Public Works, San Bernardino County, Winter 2009.

2008

Cultural Resources Review: Bloomington Avenue Signal Installation Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, December 8, 2008.

Cultural Resources Review: Bohnert Avenue Sidewalk Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, December 8, 2008.

Cultural Resources Review: Howard Street Sidewalk Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, December 8, 2008.

Cultural Resources Review: Linden Avenue Sidewalk Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, December 8, 2008.

Cultural Resources Review: Pine Street Sidewalk Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, December 8, 2008.

Cultural Resources Review: Pipeline Avenue Sidewalk Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, December 8, 2008.

Cultural Resources Review: Roswell Avenue Sidewalk Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, December 8, 2008.

Cultural Resources Review: Cozzens Avenue Sidewalk Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, June 4, 2008.

Cultural Resources Review: 48th Street Sidewalk Improvement Project, Prepared by Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, June 4, 2008.

Cultural Resources Review: California Street Sidewalk Improvement Project, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, May 30, 2008.

A National Register of Historic Places (NEPA) and California Register of Historical Resources (CEQA) Survey, Determination of Eligibility Statement, and Determination of Effect for the Lake Drive Realignment Project Crestline, California, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, May 19, 2008.

Cultural Resources Survey Results: For Four San Bernardino Mountains Roadway Improvement Projects, Prepared by: Roger Hatheway, Prepared for Environmental Management Division, Department of Public Works, San Bernardino County, April 14, 2008.

A California Register of Historical Resources Survey, Determination of Eligibility Statement, and Determination of Effect for the Turquoise Avenue Construction Project, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, March 19, 2008.

Architectural and Historical Survey of Duncan Road Projects APE Vicinity of Pinon Hills, California, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, March 9, 2008.

A California Register of Historical Resources Survey, Determination of Eligibility Statement, and Determination of Effect for the Opal Avenue Roadway Improvement Project, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, February 19, 2008.

A California Register of Historical Resources Survey, Determination of Eligibility Statement, and Determination of Effect for the Sheep Creek Road at Lindero Street Roadway Improvement Project, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, February 12, 2008.

A California Register of Historical Resources Survey, Determination of Eligibility Statement, and Determination of Effect for the Fifth Avenue and Walnut Street Intersection Widening Project, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, January 28, 2008.

A National Register of Historic Places and California Register of Historical Resources Survey, Determination of Eligibility Statement, and Determination of Effect for the Proposed Demens Basin Stockpile Reclamation Project, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, January 15, 2008.

2007

Debris Removal Cultural Resources Monitoring Plan Update, Prepared by: Roger Hatheway, Prepared for: Solid Waster Management Division Staff/On-Site Contractors/ECORP Staff/and Various Reviewing Agencies, December 26, 2007 (Amended January 3, 2008).

A National Register of Historic Places and California Register of Historical Resources Survey, Determination of Eligibility Statement, and Determination of Effect for Three County of San Bernardino, Department of Public Works, Cajon Boulevard Roadway Protection and Improvement Projects Located on a Portion of Old Route 66 in the Cajon Pass, Prepared by: Roger Hatheway, with contributions by John Romani, Compass Rose Archaeological, Inc., Prepared for: Department of Public Works, San Bernardino County, November 9, 2007.

CEQA Cultural Resources Survey for a Proposed Vermont Street Sidewalk Project Vicinity of Muscoy, San Bernardino County, California, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, October 15, 2007.

Historical and Archaeological Survey of a Property Located at 5595 Smoke Tree Avenue, County of San Bernardino, City of Twentynine Palms, California, Prepared by: Roger Hatheway, Prepared for: Real Estate Services Department, San Bernardino County, March 31, 2007.

Field Survey Results: San Bernardino Mountains Wall Improvement Projects, Prepared by: Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, January 24, 2007.

2006

Cultural Resource Environmental Impact Evaluation for the Replacement of County Bridge #81 (Dola Ditch) and County Bridge #82 (Lanzit Ditch) Including a CRHR Eligibility Report, Alternatives Analysis, and Evaluation of Impacts, In Accordance with CEQA Guidelines, Prepared by: Roger Hatheway, with contributions by Department of Public Works Design Team Staff, Gene Huey, John Romani, and Jeanette McKenna, August 21, 2006 (Draft).

An Historical, Architectural, and Archaeological Survey and National Register Evaluation of Lytle Creek Road from the Intersection of Glen Helen Parkway on the South to the End of Pavement on the North, San Bernardino County, California, Prepared by: Roger Hatheway, Prepared for: USDA Forest Service, San Bernardino National Forest, July 4, 2006.

Historical, Architectural, and Archaeological Survey of Upper Cactus Basins 3 & 3A, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, June 9, 2006.

Garnet Street Bridge HPSR, HRER & ASR, Prepared by: Roger Hatheway and Compass Rose Archaeological, Inc., Prepared for: Department of Public Works, San Bernardino County, January 5, 2006.

Cultural Resources Review: Signal Project: Cedar Avenue at Jurupa Avenue, Prepared by Roger Hatheway, Prepared for: Environmental Management Division, Department of Public Works, San Bernardino County, January 2, 2006.

2005

An Historical, Architectural, and Archaeological Survey of an Emergency Bank Protection Project along Lytle Creek Road, 800 feet North of Green Mountain Road, San Bernardino National Forest, California, Prepared by: Roger Hatheway, with contributions by John Romani, Compass Rose Archaeological, Inc., Prepared for: USDA Forest Service, San Bernardino National Forest, October 24, 2005.

A Brief History of Paso Robles Road/Cable Canyon Road, Prepared by Roger Hatheway, Prepared for Department of Public Works and the Clerk of the Board, San Bernardino County, August 23, 2005.

Amboy Road Cultural Resources Update, Amboy Road Overlay Project, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, May 26, 2005.

Negative Findings: Phase I Historical, Archaeological, and Architectural Evaluation of the Institution Road Project Area, San Bernardino County, California, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, February 27, 2005.

2004

Summary: Archival/Field Investigations Wrightwood Project, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, San Bernardino County, September 13, 2004.

Daggett Quarantine/Inspection Station Historical Chronology, Prepared by: Roger Hatheway, Prepared for: Department of Public Works, August 28, 2004.

Hazard Mitigation Grant Program: Historical, Architectural and Archaeological Survey of Devore (KOA Campground), Prepared by: Roger Hatheway, Prepared for: Flood Control District, Department of Public Works, San Bernardino County, March 31, 2004.

2006-Present

Preparation of RS2477 documentation report entitled: *Mojave National Preserve County Roads Report: Part 1: Historical Overview and Part 2: Focused Histories of Individual Roads Relative to the Development of the Existing County of San Bernardino Maintained Roadway System Within or Adjacent to the Boundaries of the Mojave National Preserve*. Prepared by Roger G. Hatheway, Cultural Resources Specialist, County of San Bernardino, Department of Public Works. Contributions by: Doug Lewis, Transportation Analyst II, DPW, 2007.

2002-Present

Cultural Resources Specialist advising, as necessary, High Desert Corridor/Freeway Study Team, County of San Bernardino, Department of Public Works, regarding various tasks including preparation of project APE maps and consultant contracts.

2000-2004

Multi-year cultural resources survey (historical and archaeological) of National Trails Highway (Old Route 66) timber-trestle bridges between Daggett and the I-40 Mountain Springs Road Exit.

1997-1999

Preparation of various cultural resource documents including portions of the ASR and HPSR, and all of HASR for I-15 Freeway Widening Project between Victorville and Barstow.

PROFESSIONAL ORGANIZATIONS/ASSOCIATIONS

Mr. Hatheway is a past member of many historical societies and professional groups. He is a past-board member and past-president of the Rim of the World Historical Society. He is also a member of the:

California Council for the Promotion of History
Library of Congress, Phillip Lee Phillips Society

Society for Commercial Archaeology
National Trust for Historic Preservation
Archaeological Conservancy
Archaeological Institute of America

PUBLICATIONS/PRESENTATIONS

Mr. Hatheway is the author of two books. The first is entitled *Lake Arrowhead: Postcard History Series*. The second is entitled *Rim of the World Drive*, which is part of the popular *Images of America* series produced by Arcadia Publishing. Numerous articles authored by Mr. Hatheway focusing on the history of the San Bernardino Mountains have also appeared in the regional magazine "On the Mountain." He has also "published" or completed over 700 reports and documents during the period extending from 1979 to the present. A number of professional papers have also been published or presented. Most recent professional presentation is: "The Late Prehistory of Route 66 in the California Mojave Desert" 2001 Millennium Conference, May 9, 10, 11 & 12, Barstow, CA. The conference was sponsored by the BLM.

EMPLOYMENT HISTORY CHRONOLOGY

County of San Bernardino (1997-Present)

Initially served as the Principal Investigator for History and Architecture and as field crew member for archaeology on *the I-15 Freeway Widening Between Victorville and Barstow*. Subsequently has served as the "Cultural Resources Specialist" for the County of San Bernardino Department of Public Works.

Hatheway & Associates (1979-Present)

Mr. Hatheway has worked as a consultant to many Cultural Resource Management and/or archaeological consulting firms over the past 30+ years. In his capacity as Principal Investigator he has conducted in-depth historical research using all forms of historic maps, public records, photographs, and the written record. He has identified literally hundreds of potential historic sites and has joined with many survey crews over time in the evaluation of and on-the-ground location of these sites. Field survey experience includes the recognition, identification, evaluation and mapping of virtually every major type of building, object, feature, linear feature, site, historic archaeological site, and the identification and mapping of many inland prehistoric archaeological sites.

Hatheway & McKenna (1986-1989)

Jeanette McKenna and Roger Hatheway joined into partnership in 1986. Hatheway and McKenna served as Co-Principal Investigators on a considerable number of projects in Orange, Riverside, San Bernardino, and Los Angeles counties. Major tasks were related to history and architecture.

Scientific Resource Surveys (1983-1986)

Served as Principal Investigator for history and architecture for SRS for 3+ years. In this capacity, Mr. Hatheway also wrote numerous proposals for various archaeological surveys. Typically, however, Mr. Hatheway conducted in-depth historical research and provide all pertinent data to field survey crews, frequently joined SRS crews during field surveys, including several transportation related projects conducted in both Orange and Riverside counties.

Community Redevelopment Agency (1980-1983)

Principal Investigator and sole CRM consultant to the Community Redevelopment Agency, City of Los Angeles. Completed architectural/historical surveys of over 20 Redevelopment Areas (including all of Downtown Los Angeles).

City of Los Angeles, Engineering Department (1980-1983)

Principal Investigator and sole CRM consultant to the Engineering Department, City of Los Angeles. Directed architectural/historical surveys of over 15 Los Angeles neighborhoods. Trained numerous volunteers, and worked directly with City of Los Angeles staff.

Greenwood and Associates (1980-1988)

Large projects include a survey of *Edwards Air Force Base* in 1980. This involved historical research, an aerial survey, and the subsequent location of a percentage of the sites identified on the ground. In this manner Mr. Hatheway personally identified 130+ previously unknown historic archaeological sites under the direction of Greenwood and Associates Principal Investigators for archaeology. Sites included homesteads, historic trails, roadways, an historic townsite, an abandoned railway alignment, and many military associated activity areas.

Houston Transit Consultants (1981-1983)

Surveys conducted in Houston, Texas were conducted under the authority of the *Texas State Historical Commission*, and under the direction of *Urban Mass Transit Association* officials. Approximately 200 miles of transportation corridor were surveyed in accordance with all appropriate Section 106/4(f) guidelines. Mr. Hatheway served as the Principal Investigator for this project, and directed all cultural resource related studies (field and archival) including history, architecture, and archaeology.

Chambers Consultants and Planners (1980-1981)

As Principal Investigator for history and architecture Mr. Hatheway worked on several projects for Chambers Consultants and Planners during the early 1980s, including a survey of the entire *San Clemente Island Naval Air Station* facility. This involved historical research, an aerial survey, and the subsequent location of a percentage of the sites thereby identified on the ground. He personally identified 20+ previously unknown historic archaeological sites under the direction of Chambers Principal Investigators for archaeology. In addition, Mr. Hatheway relocated and remapped 10+ coastal archaeological sites that had been “lost” due to original surveyor mapping errors.

ADDITIONAL SIGNIFICANT ACCOMPLISHMENTS

Author (Books)

Mr. Hatheway is the author of two popular local histories including *Lake Arrowhead*, a Postcard History Series publication by Arcadia, and *Rim of the World Drive*, an Arcadia Images of America publication.

Teaching Experience at UCLA

Mr. Hatheway taught a class from 1981 to 1993 at U.C.L.A. Extension entitled *Introduction to Historic Preservation*. This was the first such class ever taught in Southern California, and it continues to be taught today in a modified format. The fully accredited class introduced both undergraduate and graduate students from throughout southern California to the research skills necessary to complete both California State architectural inventory forms, and National Register applications.

Weekly Newspaper Column

From 1993 to 2003 Mr. Hatheway wrote a weekly column focusing on history for the *Mountain News* and the *Crestline Courier News*, both San Bernardino Mountain newspapers, with a combined circulation of over 11,000 subscribers.

Civic Involvement - MAC Member

Mr. Hatheway served as a Municipal Advisory Council member for the Crest Forest Area from 1995 until 2004. As a council member, Mr. Hatheway served in an advisory capacity on planning, environmental and quality of life issues for the greater Crestline area as an appointee of two consecutive County Supervisors.

Rim of the World Historical Society President/Board Member

Mr. Hatheway served as a board member of the Rim of the World Historical Society from 1995 until 2005. He held the office of president of the Society from 1997 through 1999, and he also acted as co-president for the years 2000 and 2001. In 2004, Mr. Hatheway was the recipient of the Society's prestigious "Wagon Wheel" award for his outstanding support and generosity.

PROFESSIONAL REFERENCES

References are available upon request.

APPENDIX D

PHOTOGRAPHS *AMETHYST BASIN PROJECT*

PHOTOGRAPH #1

Amended Archaeological Survey Report for the Amethyst Basin Project
APE Overall Looking Southwesterly From Amethyst Rd. - North End of Project

PHOTOGRAPH #2

Amended Archaeological Survey Report for the Amethyst Basin Project
APE Overall Looking Northeasterly From Golden Poppy Ln. - South End of Project

PHOTOGRAPH #3

Amended Archaeological Survey Report for the Amethyst Basin Project
Overall South End of APE: Looking SW Depicting Historic Power Lines

PHOTOGRAPH #4

Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View NW of New APE Survey Area "A" (See Also Figure #3)

PHOTOGRAPH #5

Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View NE of New APE Survey Area "B" (See Also Figure #3)

PHOTOGRAPH #6

Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View Southerly New APE Survey Area "C" (See Also Figure #3)

PHOTOGRAPH #7

Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View NE of New APE Survey Area "D" (See Also Figure #3)

PHOTOGRAPH #8

Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View to North of New APE Survey Area "E" (See Also Figure #3)

PHOTOGRAPH #1



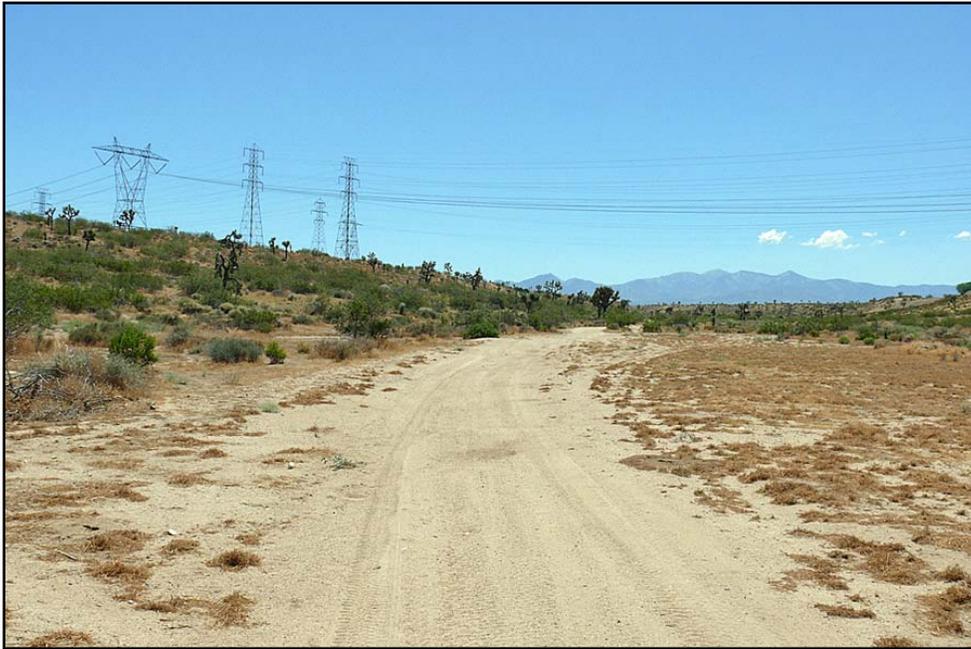
Amended Archaeological Survey Report for the Amethyst Basin Project
APE Overall Looking Southwesterly From Amethyst Rd. - North End of Project

PHOTOGRAPH #2



Amended Archaeological Survey Report for the Amethyst Basin Project
APE Overall Looking Northeasterly From Golden Poppy Ln. - South End of Project

PHOTOGRAPH #3



Amended Archaeological Survey Report for the Amethyst Basin Project
Overall South End of APE: Looking SW Depicting Historic Power Lines

PHOTOGRAPH #4



Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View NW of New APE Survey Area "A" (See Also Figure #3)

PHOTOGRAPH #5



Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View NE of New APE Survey Area "B" (See Also Figure #3)

PHOTOGRAPH #6



Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View Southerly New APE Survey Area "C" (See Also Figure #3)

PHOTOGRAPH #7



Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View NE of New APE Survey Area "D" (See Also Figure #3)

PHOTOGRAPH #8



Amended Archaeological Survey Report for the Amethyst Basin Project
Overall View to North of New APE Survey Area "E" (See Also Figure #3)

APPENDIX E

FIGURES

AMETHYST BASIN PROJECT

Figure 1: Vicinity Map

Figure 2: Project Area/Location Map

Figure 3: New Amethyst Basin APE Map

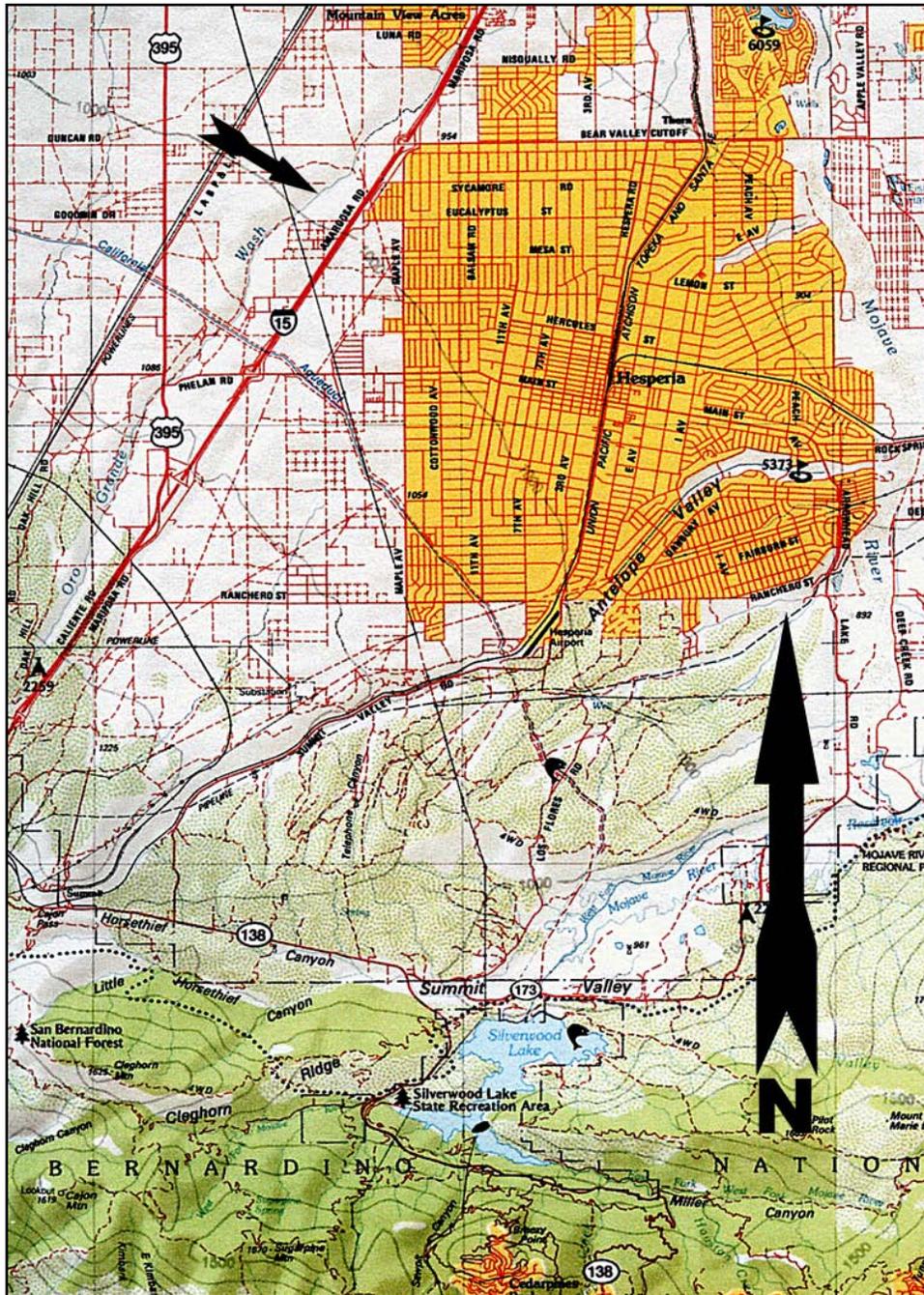


FIGURE #1
VICINITY MAP

Amended Archaeological Survey Report for the Amethyst Basin Project
VICINITY OF VICTORVILLE, CALIFORNIA
Small Black Arrow Points to Approximate Center of Project Area
Scale 1:150,000
North Arrow Added



FIGURE #2

USGS LOCATION MAP

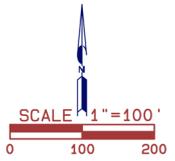
Amended Archaeological Survey Report for the Amethyst Basin Project
Hesperia Quadrangle, California, 7.5-Minute Series, 1956 (Photo Rev. 1980)

T4N; R5W: SE ¼ of Section 2; SB B.M.

Small Black Arrow Points to Approximate Center of Project APE

NORTH ARROW ADDED

Scale: 1: 24,000



307219104

307219105

307219107

307219108

ORO GRANDE BASIN #9
 Bearings & Distances are GRID
 CGS Zone 5, NAD 83, EPOCH '92.6

- = Monument Found
- = Monument Set
- △ = HVC control point

307219106

307219113

D

307219114

307219112

C

307219110

S 1/16 S.2/1

B

307220102

S 1/16 S.2

PE 4438B

ORIGINAL APE

307220104

307220103

307220105

307220106

LS 4614

LS 4614

307220107

307220110

307220111

307220109

307220108

A

307220112

E 1/16 S.2/11

SE COR S.2

FIGURE#3

LEGEND

Original APE boundary

New Amended/Archeological Survey Areas

A-E = New Survey Areas
 See Also Report Photographs

COUNTY OF SAN BERNARDINO FLOOD CONTROL DISTRICT			
AREA OF POTENTIAL EFFECTS MAP AMETHYST BASIN ORIGINALLY KNOWN AS ORO GRANDE DETENTION BASIN #9			
FACILITY NO	M.O. NO	Scale	DATE
2-104-	F01328	1:100	1/23/2012

ATTACHMENT 3-C

Submitted Applications:

- 401 Permit
- 402 Permit
- 1602 Permit

**APPLICATION FOR
CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION
AND/OR WASTE DISCHARGE REQUIREMENTS FOR
PROJECTS INVOLVING DISCHARGE OF DREDGED AND/OR FILL MATERIAL
TO WATERS OF THE U.S. AND/OR WATERS OF THE STATE**

California Regional Water Quality Control Board, Lahontan Region (Water Board)

IMPORTANT: Complete this form if you are proposing dredge and/or fill activities in (1) waters of the U.S. subject to a Clean Water Act (CWA) section 404 permit from the U.S. Army Corps of Engineers (Corps) and a state section 401 water quality certification (WQC), or (2) waters of the State, subject to State issuance of Porter-Cologne Water Quality Control Act Waste Discharge Requirements (WDRs)¹. If the project involves a Federal Energy Regulatory Commission (FERC) license or amendment to a FERC license, a 401 WQC application should be sent to the State Water Resources Control Board's Division of Water Rights. Please use the *Instructions for Completing the Application (Instructions)* for guidance in filling out this form (see http://www.waterboards.ca.gov/lahontan/water_issues/programs/clean_water_act_401/index.shtml). **If this application form is not complete, action on your application may be delayed and/or certification may be denied.** When attaching additional sheets to supplement information provided within the form, the **supplemental documents must be specifically referenced (by page number) within the application.**

1. OWNER AND AGENT INFORMATION

a) Applicant name and/or organization: County of San Bernardino Department of Public Works	b) Agent Name and/or Organization (if applicable): Noel Davis, Ph.D., Chambers Group Inc.
Address: 825 E. Third St., Room 201, San Bernardino, CA 92415	Address: 5 Hutton Centre Dr., Suite 750 Santa Ana 92707
Phone No.909-387-1865	Phone No.(949) 261-5414 ext. 7208
Fax No.909-387-7876	Fax No. (714) 545-2255
E-mail address:patrick.egle@dpw.sbcounty.gov	E-mail address:ndavis@chambersgroupinc.com 825 E. Third St.,
Have you previously contacted the Water Board staff regarding this project? <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	
Staff contacted Jan Zimmerman Date(s) contacted	

STATEMENT OF AUTHORIZATION

I hereby authorize Noel Davis to act in my behalf as my agent in the processing of this Clean Water Act Section 401, or other proposed dredge/fill activity, Application (Application), and to furnish upon request, supplemental information in support of this Application.

Applicant's Title and Name

Applicant's Signature

Date

¹ In some cases where a CWA section 404 permit will not be issued by the Corps for the project, coverage under General WDRs (GWDRs) may be appropriate. This application can be used to apply for coverage under the following GWDRs:

- Lahontan Water Board Order No. R6T-2003-0004, *GWDRs for Minor Streambed/Lakebed Alteration Projects Excluding the Lake Tahoe Hydrologic Unit*, for soil disturbing work within the high water mark of water bodies (excluding the Tahoe basin) in the Lahontan Region or the 100-year floodplain areas in the Truckee and Little Truckee River Hydrologic Units, and is not regulated by the Army Corps of Engineers under Clean Water Act section 404.
- State Water Resources Control Board Order No. 2004-0004-DWQ, *Statewide GWDRs for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction*, for projects with proposed dredged and/or fill discharges to waters of the State that do not exceed two-tenths of an acre, 400 linear feet of stream bank or shoreline, and 50 cubic yards of dredged material. ("Waters of the State" is defined pursuant to Water Code section 13050, subdivision (e) as "any surface water or groundwater, including saline waters, within the boundaries of the state.") Additional information and applications for the above-cited Orders can be found at the Water Board's website (<http://www.waterboards.ca.gov/lahontan/>) under links to Permitting Questions/General Permits.

2. PROJECT INFORMATION

Project Name or Title: Amethyst Basin Project	
Project Location Information The site is located in the City of Victorville in San Bernardino County (Attachment 1). It is about 0.5 miles west of I15, 1.7 miles north of the California aqueduct and 0.7 miles east of Highway 395.	
Street Address (if applicable):	N/A
City, Town or Place Name:	Victorville
County:	San Bernardino
Latitude and Longitude (in decimal format) for center of project, <u>and</u> either end of project for linear projects <u>or</u> at least 3 locations for non-linear projects	Latitude 34 27'34.482" Longitude 117 22'1.356" (center) Latitude Longitude Latitude Longitude Latitude Longitude Latitude Longitude
Directions to access site:	From Interstate 15 North, exit Bear Valley Road and head west. Turn left onto Amethyst Road. The project site is within Oro Grande Wash south of the intersection of Amethyst Road and Sycamore Street.
Parcel No.(s) (if applicable):	3072-191-08, 3072-191-10, 3072-191-13, 3072-191-14, 3072-201-02, 3072-201-04 to 06, 3072-201-11 and 12 (See Attachment 2)
Other locating information:	Hesperia Quad Township 4N Range 5W Sections 2 and 1
<input checked="" type="checkbox"/> Attach topographic maps and site plans of required quality and detail that clearly indicate the (1) regional location of the project area, (2) existing pre-project conditions, and (3) proposed post-project conditions and the location existing waters on-site or in proximity to the site. See Attachment 1 for map and drawing recommendations.	
Overall Project scope, purpose(s) and final goal (for example: development, stabilization, restoration, replacement, etc.): The purpose of the project is to provide additional flood protection for existing downstream structures, residences, businesses and, in general, to increase public safety. The outlet system will be designed to meet Q100 and Q1000 flows per DSOD and County of San Bernardino Department of Public Works Standards. The secondary purpose is for groundwater recharge.	
Project Description (Provide a complete detailed description of entire activity. Refer to the checklist in Section 2 of the <i>Instructions</i> for assistance on what information to include. Attach additional pages as necessary.) The proposed project would include combined detention and recharge capabilities, including construction of associated inlet and outlet structures, channels and/or closed conduits, transition structures, wingwalls, headwalls, cutoff walls, basin embankments, emergency spillways, and access roadways along tops of the embankments and around the basins, and access ramps to the basin floor. The proposed detention/recharge basin footprint is approximately 30 acres in the northeast direction (see Attachment 3). Two weakened dikes each measuring 8-feet high are proposed within this basin to enhance groundwater recharge. These dikes subdivide this basin into three sub-basins. Basin embankment slope will be constructed at a 3:1 ratio (3H: 1V) for both the interior and exterior slopes, with a minimum top width of 20 feet. A 20-foot wide access road will be located at the top of the embankment and around the basin. Three access ramps to the basin floors will be provided at each sub-basin for maintenance purposes. The access ramps shall also have a minimum width of 20 feet. The embankments will have a maximum height of approximately 28 feet at the northern end and 27 feet at the southern end. The southern embankment is connected to the upstream natural flow path via a 125-foot wide spillway; while the northern embankment will discharge into the natural streambed via a double-reinforced 7-foot by 6-foot concrete box. The maximum depth of excavation would be 28 feet at the basin's southern end. The three sub-basins will be connected to each other via two 24-inch reinforced concrete pipes at the two weakened dikes. See Attachment 3 for the project plan.	

<p>Total Project Size (area within the boundaries of the project in square feet and/or acres): 24 acres</p>
<p>Site description of the entire project area (including areas outside jurisdictional waters): The project site is located in Oro Grande Wash, an ephemeral drainage that receives water from the Cajon Pass area of the San Bernardino Mountains as well as desert floor run-off. Oro Grande Wash flows in a northeast direction and terminates at the Mojave River. The elevation range at the site is between about 3,240 and 3,300 feet amsl. Oro Grande Wash is sparsely vegetated with desert scrub plants. Dirt roads and OHV trails traverse the wash at several locations. The project site is surrounded by vacant land characterized by desert scrub vegetation, unimproved roadways and residential uses.</p>
<p>Area and linear feet of waterbodies present within the Project area: Total Area: 28927 square feet 0 acres; Total Linear Feet: 3463 feet Type (stream, wetland, lake, playa, riparian): ephemeral wash</p>
<p>Proposed Schedule (proposed start date, duration, inactive periods, and completion dates): Winter 2012 to summer 2013 for 120 working days</p>

3. WATERBODY IMPACT: (The following must be completed for each proposed action where fill or other material will be temporarily or permanently discharged to a wetland or other waters of the U.S. or State, and/or where material will be excavated from a waters of the U.S or State. Include any temporary disturbance to wetland or other waters.)

a) Waterbody Name(s) Clearly indicate on a published (for example, USGS) map of suitable detail, quality, and scale to allow the certifying agency to easily identify the area(s) and waterbody(ies) receiving any discharge. Information below should be included on the map. **See Attachment 1 for map and drawing recommendations.**

b) Photos: Original, dated photographs clearly illustrating impact area (location of photo views should be noted on plans; for repairs include photos of existing structures).

c) Fill and Excavation Information: Indicate in ACRES and/or LINEAR FEET the proposed waters to be impacted, and identify the impact(s) as permanent and/or temporary for each waterbody type listed below:

i. Fill-related Impacts (for definition of fill, see <i>Instructions</i>)						
Waterbody Type	Permanent			Temporary		
	Acres	Linear Feet	Fill Volume	Acres	Linear Feet	Fill Volume
Wetland	0	0	0	0	0	0
Lak	0	0	0	0	0	0
St eam	0	472	29188	0	2990	0
Rive	0	0	0	0	0	0
Ri arian	0	0	0	0	0	0
Pla a	0	0	0	0	0	0
O her	0	0	0	0	0	0

Mark with X all wetland and/or other waters that would be impacted by proposed project:

Riverine	Lacustrine (assoc. w/ lakes)	Palustrine (wet areas – either connected or isolated)	
<input type="checkbox"/> Intermittent Stream	<input type="checkbox"/> Lake	<input type="checkbox"/> Freshwater Marsh	<input type="checkbox"/> Spring
<input checked="" type="checkbox"/> Ephemeral Stream	<input type="checkbox"/> Pond	<input type="checkbox"/> Salt Marsh (non-tidal)	<input type="checkbox"/> Bog
<input type="checkbox"/> Creek	<input type="checkbox"/> Lagoon	<input type="checkbox"/> Seasonal Wetland	<input type="checkbox"/> Fen
<input type="checkbox"/> Swale	<input type="checkbox"/> Reservoir	<input type="checkbox"/> Vernal Pool	
<input type="checkbox"/> River	<input type="checkbox"/> Playa	<input type="checkbox"/> Seep	<input type="checkbox"/> Other ()
<input type="checkbox"/> floodplain	<input type="checkbox"/> Other ()	<input type="checkbox"/> Wet Meadow/Pasture	

If the proposed Project is in flowing waters:

- (a) Describe how water will be diverted around work area (include Water Diversion Plan, if applicable). The plans for the diversion of water will be provided by the Contractor.
- (b) Flow rates and volumes for the two-, ten-, fifty- and 100-year storm events (Q_2 , Q_{10} , Q_{50} , Q_{100}), or any other recurrent interval determined to be necessary for the full evaluation of effects of the proposed activity, may be required for the completion of the application, at the discretion of the Water Board. If the applicant has knowledge indicating that flow rates and volumes or other pertinent hydrological data would be necessary for the full evaluation of the project, the applicant should provide that information with the application.

See attachment 4 - hydrology report

- (c) If the proposed Project includes bank hardening, hydraulic constrictions (e.g.; undersized culverts, bridges, etc.) or other potentially channel destabilizing influences, describe how the Project proposes to mitigate these influences.

The basins will slow flows but will not constrict them.

Indicate all type(s) of material, including earthen, proposed to be discharged to wetlands and/or other waters of State or U.S.:
earth for the berms and basin sides, concrete for the spillway

ii. Dredge/Excavation Impacts (for definition of dredge, see *Instructions*)

Purpose: N/A
 Is this new dredging or maintenance dredging?
 Type of material to be dredged: N/A
 Dredging Method: N/A
 Depth below ordinary high water (OHW): 0 Area in acres or square feet: 0
 Cubic Yards: above OHW: N/A, below OHW: N/A
 Method of Transfer and Containment: N/A
 Method and location of spoil disposal: N/A
 Results of analyses conducted on dredged material composition: N/A

Mark with X all wetland and/or other waters that would be impacted by proposed dredging project:

Riverine	Lacustrine (assoc. w/ lakes)	Palustrine (wet areas – either connected or isolated)	
<input type="checkbox"/> Intermittent Stream	<input type="checkbox"/> Lake	<input type="checkbox"/> Freshwater Marsh	<input type="checkbox"/> Spring
<input type="checkbox"/> Ephemeral Stream	<input type="checkbox"/> Pond	<input type="checkbox"/> Brackish Marsh	<input type="checkbox"/> Bog
<input type="checkbox"/> Creek	<input type="checkbox"/> Lagoon	<input type="checkbox"/> Seasonal Wetland	<input type="checkbox"/> Fen
<input type="checkbox"/> Swale	<input type="checkbox"/> Reservoir	<input type="checkbox"/> Vernal Pool	
<input type="checkbox"/> Riparian	<input type="checkbox"/> Playa	<input type="checkbox"/> Seep	<input type="checkbox"/> Other ()
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Other ()	<input type="checkbox"/> Wet Meadow/Pasture	

d) Is the water body “isolated” (excluded from CWA regulation per Court decisions or CWA exemptions – see *Instructions* for definition of “isolated”)? Yes No If yes, provide U.S. Army Corps of Engineers (Corps) disclaimer letter or other source of disclaimer information.

e) Does the proposed project involve in-channel hydromodification, floodplain modification, stream restoration, or bank stabilization? Yes No

If yes, completing the checklist in Attachment 2 may be required. If the applicant has knowledge sufficient to complete the checklist, the applicant should provide that information with the application. See *Instructions* for more information.

f) Is any portion of the proposed project in a Stream Environment Zone (Lake Tahoe watershed only) or 100-year floodplain of Lake Tahoe or its tributaries (see *Instructions* for definitions)?

Yes No If yes, see Basin Plan prohibition requirements in Attachment 3 for the Lake Tahoe basin. Attach information to support the Water Board findings required to consider exempting the Project from applicable Basin Plan prohibitions.

g) Is any portion of the proposed project in the 100-year floodplain of the Truckee River or its tributaries (see *Instructions* for definitions)? Yes No

If yes, see Basin Plan prohibition requirements in Attachment 4 for Truckee or Little Truckee River watersheds. Attach information to support the Water Board findings required to consider exempting the Project from applicable Basin Plan prohibitions.

4. DELINEATION INFORMATION for WETLANDS AND OTHER WATERS:

Name of person delineating extent of waters of U.S. and/or waters of the State: Rebecca Alvidrez and Saraiah Skidmore	Date(s) of delineation (attach delineation worksheets): September 12, 2011
Title: Staff Biologist Affiliation and Statement of Qualifications: Chambers Group, Inc.	
Was the delineation performed according to the Corps' Supplemental Guidelines? a) Arid West Supplement: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No b) Western Mountains, Valleys and Coast Supplement: <input type="checkbox"/> Yes <input type="checkbox"/> No Has the delineation been verified by the Corps? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, provide delineation map sent to Corps for verification. If yes, provide date of verification The delineation report is included as Attachment 5. Provide a copy of the verification letter from Corps <input type="checkbox"/> and verified delineation map <input type="checkbox"/>.	

5. IMPACT AVOIDANCE

AVOIDANCE OF DIRECT IMPACTS Describe alternatives considered, including alternative sites to <u>avoid impacts</u> to waterbodies within the project area, including, but not limited to, redesigning the project to completely avoid all impacts to waters. See checklist within <i>Instructions</i> for assistance on what information to include. The proposed site avoids placing the project in higher quality habitat within Oro Grande Wash. The proposed site is in a portion of Oro Grande Wash that has been heavily disturbed by OHV use and, thus, contains relatively poor habitat quality. In addition, other portions of the wash have more irregular contours and would have required a larger area of construction activity.

6. IMPACT MINIMIZATION

MINIMIZATION OF DIRECT IMPACTS a) If project impacts are unavoidable, describe alternatives analyzed to <u>minimize impacts</u> to water bodies within the project area. Examples include, but are not limited to, bridge or arch culvert instead of round culvert, bioengineering stabilization practices instead of riprap alone. Discuss both in terms of temporary (for example, land disturbance by grading) and permanent impacts (for example, new paving). See <i>Instructions</i> for assistance on what information to include. The project plans minimize the amount of artificial hard surface to be used. The basin bottom, sides, and access roads will all be earthen. Hardened areas will be limited to the spillways at the basin inlet and outlet and the culverts in the berms for water flow between basins.
b) List ALL Best Management Practices (BMPs) proposed to minimize impacts during project implementation and post-project to ensure water quality impacts are minimized. See the checklist in the <i>Instructions</i> for assistance on what information to include.) 1. Construction BMPs All staging and storage areas will be outside of Waters of the United States on the upper perimeter of the basin. <ul style="list-style-type: none">○ Summary of Erosion and Sediment Control and Stormwater Treatment Measures Sediment control measures such as silt fences, gravel bags, and hay bales will be used to keep loose sediment from washing into Waters of the U.S. during construction. General good housekeeping measures will be implemented to prevent storm water contact with construction materials.○ Summary of Source Control Measures Equipment will be maintained and fueled at the staging area on the upper perimeter of the basin well away from Waters of the U.S. Vehicles used for refueling will be equipped with absorbent spill clean-up materials. Drip pans will be used for all mobile fueling. Materials will be stored in the staging area away from waterbodies. Watertight shipping containers will be used to store items such as fuel cans, solvents, and grease. Spill clean-up materials, material safety data sheets, a material inventory, and emergency contact numbers will be maintained and stored at the staging area. 2. Post-Construction BMPs Post-construction, the project would enhance the waterbody functions of the Oro Grande Wash site by slowing down storm flows and enhancing groundwater recharge. The amount of hard surface

would be limited to the spillways and would not significantly increase runoff.

7. COMPENSATORY MITIGATION

This section must be completed if there are unavoidable impacts.

a) Goals of Mitigation:

b) Describe the mitigation area and mitigation site characteristics in a Draft Compensatory Mitigation Plan using the Minimum Requirements for a Draft Compensatory Mitigation Plan in Attachment 5.

c) Proposed Mitigation Site:

Does mitigation involve OFFSITE (outside project area) temporary or permanent impacts not included in this application? Yes No

If yes, has an Application been provided for dredge and fill impacts at the site used for mitigation?
 Yes No

If not, explain:

d) Indicate in **ACRES** and **LINEAR FEET** (where appropriate) the total quantity of wetlands or other **waters** proposed to be created, restored and/or enhanced for purposes of providing compensatory mitigation (see *Instructions* for the terms created, restored, enhanced, preserved):

Water Body Type	Created (acres, linear feet)	Restored (acres, linear feet)	Enhanced (acres, linear feet)	Preserved (acres, linear feet)
Wetland				
Stream				
Lake/Reservoir				
Riparian				
Other				
Isolated Waters				

Is the mitigation site owned by the applicant? Yes No

If no, provide the name(s), address(es), and phone number(s) of the land owner and evidence (e.g., agreements, contracts, etc.) that the applicant has the necessary approvals to implement mitigation at this location. If the land is to be purchased, provide the expected date that the purchase will be complete.

e) Provide the location of the Compensatory Mitigation:

Street Address

County City

Assessor's Parcel Number(s)

Hydrologic Unit, Area, and Subarea

Latitude	Longitude	(Center Reading)
Latitude	Longitude	
f) Expected Construction Completion Date for Mitigation:		
g) Contact information for person or organization monitoring:		
Name:	Phone:	
Address:	Fax:	Email:
h) MITIGATION BANK/IN-LIEU FEE PROGRAM (If proposed, See <i>Instructions</i>.)		
Mitigation Bank/In-Lieu Fee Name:		
Name of Mitigation Bank/In-Lieu Fee Operator:		
Office Address of Operator/Phone Number:		
Mitigation Bank/In-Lieu Fee Location: Latitude:		Longitude:
County:	City:	
Mitigation Bank/In-Lieu Fee Water Body type(s):		
Mitigation Area Purchased (acres or linear feet) and cost (dollar):		

8. THREATENED/ENDANGERED SPECIES

Attach any Biological Assessments, Surveys, Formal Consultation Determination letters, and Mitigation Proposals as necessary, completed or available.

Is coordination with the US Fish and Wildlife Service required for this project according to the Federal Endangered Species Act? Yes No
 If yes, list species that could be impacted: Desert tortoise, and provide Biological Report or Assessment. Yes (provide copy of Biological Report) No (explain basis of determination below)
 If you have attached additional documentation, cite here and index them within the application package: **Attachment 6 is the biology report**

Is coordination with the State of California Department of Fish and Game required for this project according to the California Endangered Species Act?
 Yes (provide copy of Biological Report) No (explain basis of determination below)
 CDFG has sent a letter saying that based on negative trapping results no incidental take permit for Mojave ground squirrel is needed for work done before July 2012 (Attachment 7)

9. FEDERAL PERMIT(S) APPLIED FOR OR ISSUED (e.g., Army Corps of Engineers Clean Water Act Section 404 Permit – Individual or Nationwide) Provide copies of the permit application(s) and name(s) of staff contacts within each agency.

AGENCY & CONTACT INFO	PERMIT TITLE	FILE DATE	FILE NUMBER (if known)	Issuance Date (if issued):	PERMIT TYPE (if known, i.e. Nationwide Permit Number(s), Regional General Permit No.(s), or Individual Permit)
Gerry Salas USACE (213) 452-3517	Clean Water Act 404				Nationwide 43 Stormwater Management Facilities

Does the project require a Federal Energy Regulatory Commission (FERC) license or amendment to a FERC license? Yes No If yes, please submit 401 WQC application to State Water Resources Control Board.

10. STATE LICENSE(S), PERMIT(S) OR AGREEMENT(S) APPLIED FOR OR ISSUED

(Please list all other required license(s), permit(s), or agreement(s), including local regulatory approvals, and submit a final or draft copy if available. Include information on any de-watering, NPDES permit, storm water construction permits, or Streambed or Lakebed Alteration Agreements).

AGENCY & CONTACT INFORMATION	LICENSE, PERMIT, or AGREEMENT	PERMIT NUMBER	APPROVAL DATE
Jeff Brand CDFG (909) 987-7161t	1602 Streambed Slteration Agreement		

Does the project involve more than one acre of land disturbance and thus require an NPDES Storm Water Construction Permit? Yes No
 Has a Storm Water Pollution Prevention Plan been prepared? Yes (attach copy) No
 If no, explain why no copy has been prepared:

11. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE

(California Public Resources Code section 21000 et seq.)

CEQA Document Type: (Environmental Impact Report, Negative Declaration, etc.) IS/MND
CEQA Project Title: Amethyst Basin Project
 Lead Agency and Contact Information:

Agency: County of San Bernardino Contact Name: Patrick Egle Phone No.: 909-387-1865

Address: 825 East Third St., Room 201, San Bernardino, CA 92415

State Clearinghouse No.:

Has the document been certified/approved by the Lead Agency and/or has a Notice of Exemption been filed? Yes No

If yes, include a copy of the certification. If no, provide the expected approval date and document type.

12. APPLICATION FEE

Provide an initial fee deposit of **\$640.00** with the application per Title 23, Division 3, Chapter 9, Article 1, Sections 2200, 2200.4, 2200.5 And 2200.6 of the California Code of Regulations. Additional fees, based on the extent of impacts, may be due upon certification. A fee schedule and calculator can be found at: http://www.waterboards.ca.gov/water_issues/programs/cwa401, but if additional fees are required, you will be notified in writing. **Make the check for \$640.00 payable to: State Water Resources Control Board.**

Is a check enclosed?

Yes: Check Number: _____, Amount: \$640 No (explain why)

13. PAST/FUTURE PROPOSALS BY THE APPLICANT

Briefly list/describe any projects carried out in the last five years or planned for implementation in the next five years that are in any way related to the proposed activity or that impact the same receiving body of water.

The County of San Bernardino has no other projects in Oro Grande Wash. The Mojave Water Agency has proposed a recharge site in Oro Grande Wash in the same area as the Oro Grande Basin Project. It is anticipated that the Mojave Water Agency will enter into an agreement to continue to recharge into the new basin once it is constructed.

14. HAS ANY PORTION OF THE WORK BEEN INITIATED?

- No work within waters of the State and or U.S. has occurred.
 Yes. Describe the initiated work within waters of the State and/or U.S., and explain why it was initiated prior to obtaining a permit. Indicate whether any enforcement action has been taken by any government agency (federal, state, or local agency). Attach additional pages as necessary.

15. CERTIFICATION

The person certifying this application must meet one of the following descriptions and be acting on behalf of the applicant listed in Item 1:

- I certify that I am the owner of property on which proposed project would occur.
 I certify that as a municipal agency, I am a principal executive officer or ranking elected official.
 I certify that as a state agency or other non-federal public agency, I am a principal executive officer or ranking elected official.
 I certify that for a federal agency, I am the chief executive officer of the agency, or I am the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
 I certify that I am a general partner for a partnership.
 I certify that I am the proprietor for a sole proprietorship.
 I certify that for a corporation or association, I am the President, Vice President, Secretary, or Treasurer of the corporation or association and in charge of a principal business function, or I perform similar policy or decision making functions for the corporation or association.
 I certify that for a corporation, I am the Manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), and authority to sign documents has been assigned or delegated to me in accordance with corporate procedures.
 I certify that for a trust, I am a trustee.

This application and/or discharge report is filed for proposed work impacting waters of the State and/or waters of the U.S. described in this application. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that I possess the authority to undertake the work described herein. In addition, if impacts to waters deemed by the US Army Corps of Engineers to be outside federal jurisdiction are proposed, I certify that the provisions of Water Board Order R6T-2003-0004 or State Water Board Order No. 2004-0004-DWQ will be complied with.

Signature of Applicant

Date

Print Name & Title of Applicant

Mail the completed application package to the appropriate office based on project location:

For projects north of Conway Summit:

Lahontan Regional Water Quality Control Board
Water Quality Certification Program
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96151

For projects south of Conway Summit:

Lahontan Regional Water Quality Control Board
Water Quality Certification Program
14440 Civic Drive, Suite 200
Victorville, CA 92392

Is your application complete? Did you:

- Include the \$640 application fee?
- Complete all fields within this application, and refer to the *Instructions* for additional guidance on what information is required?

Attachments:

- 1) Minimum Requirements for Maps and Drawings
- 2) Stream Hydrology Checklist
- 3) Exemption criteria for Basin Plan Prohibition for Lake Tahoe and its tributaries
- 4) Exemption criteria for Basin Plan Prohibition for Truckee and Little Truckee Rivers and its tributaries
- 5) Minimum Requirements for a Draft Compensatory Mitigation Plan

U.S. Army Corps of Engineers South Pacific Division



Nationwide Permit Pre-Construction Notification (PCN) Form

This form integrates requirements of the Nationwide Permit Program within SPD, including General and Regional Conditions. Please consult instructions prior to completing this form.

Box 1 Project Name Amethyst Basin Project			
Applicant Name Patrick Egle		Applicant Title Associate Planner	
Applicant Company, Agency, etc. County of San Bernardino Dept. of Public Works		Applicant's internal tracking number (if any)	
Mailing Address 825 East Third Street, Room 201, San Bernardino, CA 92415			
Work Phone with area code (909) 387-1865	Home Phone with area code	Fax # with area code (909) 387-7876	E-mail Address patrick.egle@dpw.sbcounty.gov
Relationship of applicant to property: <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Purchaser <input type="checkbox"/> Lessee <input type="checkbox"/> Other: A portion of the proposed basin has other owners			
Application is hereby made for verification that subject regulated activities associated with subject project qualify for authorization under a Corps nationwide permit or permits as described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agency to which this application is made, the right to enter the above-described location to inspect the proposed, in-progress or completed work. I agree to start work <u>only</u> after all necessary permits have been received.			
Signature of applicant			Date (m/d/yyyy)

Box 2 Authorized Agent/Operator Name <i>(If an agent is acting for the applicant during the permit process)</i> Noel Davis, Ph.D.			
Agent/Operator Title Project Manager		Agent/Operator Company, Agency, etc. Chambers Group, Inc.	
Mailing Address 5 HUTTON CENTRE DR., SUITE 750			
Work Phone with area code (949) 261-5414	Home Phone with area code N/A	Fax # with area code (714) 545-2255	E-mail Address ndavis@chambersgroupinc.com
I hereby authorize the above named authorized agent to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. I understand that I am bound by the actions of my agent and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.			
Signature of applicant			Date (m/d/yyyy)
I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and			

belief, such information is true, complete, and accurate.	
Signature of authorized agent	Date (m/d/yyyy)

BOX 3 NAME OF PROPERTY OWNER(S), IF OTHER THAN APPLICANT:	
SEE ATTACHMENT 1 FOR ADDITIONAL PROPERTY OWNERS IN AMETHYST BASIN AREA	
Owner Title	Owner Company, Agency, etc.
Mailing Address	
Work Phone with area code	Home Phone with area code

BOX 4 NAME OF CONTRACTOR(S) (IF KNOWN):	
NOT KNOWN	
Contractor Title	Contractor Company, Agency, etc.
Mailing Address	
Work Phone with area code	Home Phone with area code

Box 5 Site Number <u>1</u> of <u>1</u>. Project location(s), including street address, city, county, state, zip code where proposed activity will occur:	
THE SITE IS LOCATED IN THE CITY OF VICTORVILLE IN SAN BERNARDINO COUNTY (ATTACHMENT 2). IT IS ABOUT 0.5 MILES WEST OF I15, 1.7 MILES NORTH OF THE CALIFORNIA AQUEDUCT AND 0.7 MILES EAST OF HIGHWAY 395.	
Waterbody (if known, otherwise enter "an unnamed tributary to"): Oro Grande Wash	
Tributary to what known, downstream waterbody: Mojave River	
Latitude & Longitude (D/M/S, DD, or UTM): 34 27'34.482"/117 22"1.356"	Zoning Designation (no codes or abbreviations): The City of Victorville has the land zoned as Single-Family Transitional (R-1T); and in the City of Victorville General Plan, the land has a land use designation of Low Density Residential (5 du/ac).
Assessors Parcel Number: 3072-191-08, 3072-191-10, 3072-191-13, 3072-191-14, 3072-201-02, 3072-201-04 to 06, 3072-201-11 and 12 (See Attachment 1)	Section, Township, Range: S 1 and 2, T 4N, R 5W
USGS Quadrangle map name: Hesperia	
Watershed and other location descriptions, if known: Mojave River watershed	

Directions to the project location:

From Interstate 15 North, exit Bear Valley Road and head west. Turn left onto Amethyst Road. The project site is within Oro Grande Wash south of the intersection of Amethyst Road and Sycamore Street.

Nature of Activity (Description of project, include all features, see instructions):

THE PROPOSED PROJECT WOULD INCLUDE COMBINED DETENTION AND RECHARGE CAPABILITIES, INCLUDING CONSTRUCTION OF ASSOCIATED INLET AND OUTLET STRUCTURES, CHANNELS AND/OR CLOSED CONDUITS, TRANSITION STRUCTURES, WINGWALLS, HEADWALLS, CUTOFF WALLS, BASIN EMBANKMENTS, EMERGENCY SPILLWAYS, AND ACCESS ROADWAYS ALONG TOPS OF THE EMBANKMENTS AND AROUND THE BASINS, AND ACCESS RAMPS TO THE BASIN FLOOR.

THE PROPOSED DETENTION/RECHARGE BASIN FOOTPRINT IS APPROXIMATELY 30 ACRES IN THE NORTHEAST DIRECTION (SEE ATTACHMENT 3). TWO WEAKENED DIKES EACH MEASURING 8- FEET HIGH ARE PROPOSED WITHIN THIS BASIN TO ENHANCE GROUNDWATER RECHARGE. THESE DIKES SUBDIVIDE THIS BASIN INTO THREE SUB-BASINS. BASIN EMBANKMENT SLOPE WILL BE CONSTRUCTED AT A 3:1 RATIO (3H: 1V) FOR BOTH THE INTERIOR AND EXTERIOR SLOPES, WITH A MINIMUM TOP WIDTH OF 20 FEET. A 20-FOOT WIDE ACCESS ROAD WILL BE LOCATED AT THE TOP OF THE EMBANKMENT AND AROUND THE BASIN. THREE ACCESS RAMPS TO THE BASIN FLOORS WILL BE PROVIDED AT EACH SUB-BASIN FOR MAINTENANCE PURPOSES. THE ACCESS RAMPS SHALL ALSO HAVE A MINIMUM WIDTH OF 20 FEET.

THE EMBANKMENTS WILL HAVE A MAXIMUM HEIGHT OF APPROXIMATELY 28 FEET AT THE NORTHERN END AND 27 FEET AT THE SOUTHERN END. THE SOUTHERN EMBANKMENT IS CONNECTED TO THE UPSTREAM NATURAL FLOW PATH VIA A 125-FOOT WIDE SPILLWAY; WHILE THE NORTHERN EMBANKMENT WILL DISCHARGE INTO THE NATURAL STREAMBED VIA A DOUBLE-REINFORCED 7-FOOT BY 6-FOOT CONCRETE BOX. THE MAXIMUM DEPTH OF EXCAVATION WOULD BE 28 FEET AT THE BASIN'S SOUTHERN END. THE THREE SUB-BASINS WILL BE CONNECTED TO EACH OTHER VIA TWO 24-INCH REINFORCED CONCRETE PIPES AT THE TWO WEAKENED DIKES. SEE ATTACHMENT 3 FOR THE PROJECT PLAN.

Project Purpose (Description the reason or purpose of the project, see instructions):

THE PURPOSE OF THE PROJECT IS TO PROVIDE ADDITIONAL FLOOD PROTECTION FOR EXISTING DOWNSTREAM STRUCTURES, RESIDENCES, BUSINESSES AND, IN GENERAL, TO INCREASE PUBLIC SAFETY. THE OUTLET SYSTEM WILL BE DESIGNED TO MEET Q100 AND Q1000 FLOWS PER DSOD AND COUNTY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS STANDARDS. THE SECONDARY PURPOSE IS FOR GROUNDWATER RECHARGE.

Use Box 6 if dredged and/or fill material is to be discharged:

Box 6 Reason(s) for Discharge into waters of the United States:

CONSTRUCTION OF DIKES AND SIDES TO FORM BASINS AND CONSTRUCTION OF INLET AND OUTLET STRUCTURES.

Type(s) of material being discharged and the amount of each type in cubic yards:

concrete for spillway = 25723 cubic yards

earthen berms = 3465.2 cubic yards

Total surface area in acres of wetlands or other waters of the U.S. filled (see instructions):

0.66

Indicate in ACRES and LINEAR FEET (where appropriate) the proposed impacts to **waters of the United States**, and identify the impact(s) as permanent and/or temporary for each water body type listed below:

Water Body Type	Permanent		Temporary	
	Acres	Linear feet	Acres	Linear feet
Wetland	0	0	0	0
Riparian streambed	0	0	0	0
Unveg. streambed	0.24	472.65	0.42	2990.84
Lake	0	0	0	0
Ocean	0	0	0	0
Other	0	0	0	0
Total:	0.24	472.65	0.42	2990.84

Potential indirect and/or cumulative impacts of proposed discharge (if any):

Activity, noise, and emissions during construction may disturb temporarily humans and wildlife in the vicinity of construction activities. When completed the Amethyst Basin Project will increase the functional value of Oro Grande Wash and improve the quality of discharges by slowing flood flows allowing pollutants to settle and groundwater to recharge.

Required drawings (see instructions):

Vicinity map: Attached (or mail copy separately if applying electronically)

To-scale Plan view drawing(s): Attached (or mail copy separately if applying electronically)

To-scale elevation and/or Cross Section drawing(s): Attached (or mail copy separately if applying electronically)

Has a wetlands/waters of the U.S. delineation been completed?

Yes, Attached (or mail copy separately if applying electronically) No

If a delineation has been completed, has it been verified in writing by the Corps?

Yes, Date of approved jurisdictional determination (m/d/yyyy): _____ Corps file number: _____ No

Please attach¹ one or more color photographs of the existing conditions (aerials, if possible).

¹or mail copy separately if applying electronically

Dredge Volume: Indicate in CUBIC YARDS the quantity of material to be dredged or used as fill: N/A

Indicate type(s) of material proposed to be discharged in waters of the United States:
N/A

For proposed discharges of dredged material into waters of the U.S. (including beach nourishment), please attach² a proposed Sampling and Analysis Plan (SAP) prepared according to Inland Testing Manual (ITM) guidelines (including Tier I information, if available).

²or mail copy separately if applying electronically

Is any portion of the work already complete? YES NO

If yes, describe the work:

Box 7 Intended NWP number (1st)³: 43

Intended NWP number (2nd):

Intended NWP number (3rd):

³Enter the intended permit type(s). See NWP regulations for permit types and qualification information (http://www.usace.army.mil/inet/functions/cw/cecwo/reg/nationwide_permits.htm).

Box 8 Authority:

Is Section 10 of the Rivers and Harbors Act applicable?: YES NO

Is Section 404 of the Clean Water Act applicable?: YES NO

Box 9 Is the discharge of fill or dredged material for which Section 10/404 authorization is sought part of a larger plan of development?: YES NO

If discharge of fill or dredged material is part of development, name and proposed schedule for that larger development (start-up, duration, and completion dates):

The Amethyst Basin Project is not part of a larger development.

Location of larger development (If discharge of fill or dredged material is part of a plan of development, a map of suitable quality and detail of the entire project site should be included):

N/A

Total area in acres of entire project area (including larger plan of development, where applicable):

N/A

Box 10 Threatened or Endangered Species

Please list any federally-listed (or proposed) threatened or endangered species or critical habitat within the project area (use scientific names (e.g., Genus species), if known):

- a. Gopherus agassizii - low potential
- b.
- c.
- d.
- e.
- f.

Have surveys, using U.S. Fish and Wildlife Service/NOAA Fisheries protocols, been conducted?

Yes, Report attached (or mail copy separately if applying electronically) No

If a federally-listed species would be impacted, please provide a description and a biological evaluation.

Yes, Report attached (or mail copy separately if applying electronically) Not attached

Has the USFWS/NOAA Fisheries issued a Biological Opinion?

Yes, Attached (or mail copy separately if applying electronically) No

If yes, list date Opinion was issued (m/d/yyyy):

Has Section 7 consultation been initiated by another federal agency?

Yes, Initiation letter attached (or mail copy separately if applying electronically) No

Has Section 10 consultation been initiated for the proposed project?

Yes, Initiation letter attached (or mail copy separately if applying electronically) No

Box 11 Historic properties and cultural resources:

Please list any historic properties listed (or eligible to be listed) on the National Register of Historic Places:

- a. none
- b.
- c.
- d.
- e.
- f.

Are any cultural resources of any type known to exist on-site?

Yes No

Has an archaeological records search been conducted?

Yes, Report attached (or mail copy separately if applying electronically) No

Has a archaeological pedestrian survey been conducted for the site?

Yes, Report attached (or mail copy separately if applying electronically) No

Has a Section 106 MOA been signed by another federal agency and the SHPO?

Yes, Attached (or mail copy separately if applying electronically) No

If yes, list date MOA was signed (m/d/yyyy):

Has Section 106 consultation been initiated by another federal agency?

Yes, Initiation letter attached (or mail copy separately if applying electronically) No

Box 12 Measures taken to avoid and minimize impacts to waters of the United States (if any):

The proposed site avoids placing the project in higher quality habitat within Oro Grande Wash. The proposed site is in a portion of Oro Grande Wash that has been heavily disturbed by OHV use and, thus, contains relatively poor habitat quality. In addition, other portions of the wash have more irregular contours and would have required a larger area of construction activity. The project plans minimize the amount of artificial hard surface to be used. The basin bottom, sides, and access roads will all be earthen. Hardened areas will be limited to the spillways at the basin inlet and outlet and the culverts in the berms for water flow between basins. Standard BMP's will be used during construction to avoid introducing pollutants or sediment to Waters of the U.S. All staging and storage areas will be outside of Waters of the United States on the upper perimeter of the basin. Equipment will be maintained and fueled at the staging area on the upper perimeter of the basin well away from Waters of the U.S. Vehicles used for refueling will be equipped with absorbent spill clean-up materials. Drip pans will be used for all mobile fueling. Materials will be stored in the staging area away from waterbodies. Watertight shipping containers will be used to store items such as fuel cans, solvents, and grease. Spill clean-up materials, material safety data sheets, a material inventory, and emergency contact numbers will be maintained and stored at the staging area. Sediment control measures such as silt fences, gravel bags and hay bales will be used to keep loose sediment from washing into Waters of the U.S. during construction. General good house keeping measures will be implemented to prevent storm water contact with construction materials. Hard surfaces will be limited to the spillways and will not increase run off.

Include multiple copies of Box 13 for separate sites.

Box 13 Proposed Compensatory Mitigation (site __ of __) related to fill/excavation and dredge activities. Indicate in ACRES and LINEAR FEET (where appropriate) the total quantity of waters of the United States proposed to be created, restored, enhanced and/or preserved for purposes of providing compensatory mitigation. Indicate water body type (wetland, riparian streambed, unvegetated streambed, lake, ocean, other) or non-jurisdictional (uplands⁵). Indicate mitigation type (on- or off-site by applicant, mitigation bank, in-lieu fee program):

Water Body Type	Created	Restored	Enhanced	Preserved	Mitigation type
Example: wetland	0.8 acre	0.2 acre	-	-	On-site by app
Example: riparian stream	-	-	3.0 acres/1300 lf	-	ILFP
Totals:					

⁵ For uplands, please indicate if designed as an upland buffer.

If no mitigation is proposed, provide detailed explanation of why no mitigation would be necessary:

The project would not impede the ephemeral flow of water through Oro Grande Wash. The impacts of excavating the basins would be temporary. Fill would be limited to the sacrificial dikes and the inlet and outlet structures. When construction is completed the Amethyst Basin Project would enhance the functions of the wash. The basins would slow flood flows and, thus, protect downstream structures from flooding. By slowing flood flows, sediment and associated pollutants would settle in the basins and improve downstream water quality. Slowing of flood flows in the basins would enhance groundwater recharge.

Has a draft/conceptual mitigation plan been prepared in accordance with the Army Corps of Engineers District guidelines? Yes, Attached (or mail copy separately if applying electronically) No

Mitigation site Latitude & Longitude (D/M/S, DD, or UTM):

USGS Quadrangle map name:

Assessors Parcel Number:

Section, Township, Range:

Other location descriptions, if known:

Directions to the mitigation location:

Box 14 Water Quality Certification (see instructions):

Applying for certification? Yes, Attached (or mail copy separately if applying electronically) No

Certification issued? Yes, Attached (or mail copy separately if applying electronically) No

Exempt? Yes No

If exempt, state why: Agency concurrence? Yes, Attached No

Box 15 Coastal Zone Management Act (see instructions):

Is the project located within the Coastal Zone? Yes No

If yes, applying for a coastal commission-approved Coastal Development Permit?

Yes, Attached (or mail copy separately if applying electronically) No

If no, applying for separate CZMA-consistency certification?

Yes, Attached (or mail copy separately if applying electronically) No

Permit/Consistency issued? Yes, Attached (or mail copy separately if applying electronically) No

Exempt? Yes No

If exempt, state why: The project is not in the Coastal Zone

Box 16 List of other certifications or approvals/denials received from other federal, state, or local agencies for work described in this application:

Agency	Type Approval ⁴	Identification No.	Date Applied	Date Approved	Date Denied
CDFG	1602 Agreement	Not issued yet	Concurrently submitted	Not available yet	

County of San Bernardino	CEQA IS/MND	Not issued yet
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⁴ Would include but is not restricted to zoning, building, and flood plain permits

NWP General Conditions (GC) checklist:

1. Navigation:

Project would be in compliance with GC? Yes No

2. Aquatic Life Movements:

Project would be in compliance with GC? Yes No

3. Spawning Areas:

Spawning areas present? Yes No

Project would be in compliance with GC? Yes No

4. Migratory Bird Breeding Areas:

Migratory bird breeding areas present? Yes No

Project would be in compliance with GC? Yes No

If construction is scheduled during nesting season (February 15 through August 31), pre-construction nest surveys would be done to ensure that impacts to any nesting birds are avoided. The last survey day would be conducted within five days prior to start of work. If there are negative survey results for nesting birds, construction can take place during nesting season.

5. Shellfish Beds:

Shellfish beds present? Yes No

Project would be in compliance with GC? Yes No

6. Suitable Material:

Project would be in compliance with GC? Yes No

7. Water Supply Intakes:

Project would be in compliance with GC? Yes No

8. Adverse Effects From Impoundments:

Project would be in compliance with GC? Yes No

9. Management of Water Flows:

Project would be in compliance with GC? Yes No

10. Fills Within 100-Year Floodplains:

Project would be within 100-year floodplains? Yes No

If yes, project would be in compliance with GC? Yes No

11. Equipment:

Project would be in compliance with GC? Yes No

12. Soil Erosion and Sediment Controls:

Project would be in compliance with GC? Yes No

13. Removal of Temporary Fills:

Project would be in compliance with GC? Yes No

14. Proper Maintenance:

Project would be in compliance with GC? Yes No

15. Wild and Scenic Rivers:

Project would be within a National Wild and Scenic River System (including proposed system)?

Yes No

Project would be in compliance with GC? Yes No

16. Tribal Rights:

Project would be in compliance with GC? Yes No

17. Endangered Species: see Box 10 above.

18. Historic Properties: see Box 11 above.

19. Designated Critical Waters (*check those that apply*)

Includes:

- 1) NOAA-designated marine sanctuaries,
- 2) National Estuarine Research Reserves,
- 3) State natural heritage sites,
- 4) Officially designated waters

Applicant is aware of the restrictions a) and b) below? Yes No

a) NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50: No NWP can be authorized.

b) NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38: Notification is required.

20. Mitigation: see Box 13 above.

21. Water Quality (401 Certification): see Box 14 above.

22. Coastal Zone Permit: see Box 15 above.

23. Regional and Case-By-Case Conditions:

Complete the Regional Conditions checklist below.

Project would be in compliance with any Case-by-case conditions? Yes No

24. Use of Multiple Nationwide Permits:

Applicant is aware that if total proposed acreage of impact exceeds acreage limit of NWP with highest specified acreage, no NWP can be issued? Yes No

25. Transfer of Nationwide Permit Verifications:

Applicant is aware of this permit transfer requirement? Yes No

26. Compliance Certification:

Applicant is aware of this post-construction requirement? Yes No

27. Pre-Construction Notification:

If a PCN is required, the PCN includes: *(check those that apply)*

Delineation of wetlands and other waters of the U.S.

If project results in the loss of greater than 1/10 acre of wetlands, a compensatory mitigation plan or statement describing how the mitigation requirement will be satisfied

For non-Federal applicants, a list of threatened or endangered species or designated critical habitat that might be affected by the proposed work

For Federal applicants, documentation demonstrating compliance with the Endangered Species Act

For non-Federal applicants, a list of historic properties listed on, or determined eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places that may be affected by the proposed work; or a vicinity map indicating the location of the historic property

For Federal applicants, documentation demonstrating compliance with the National Historic Preservation Act

28. Single and Complete Project:

Project would be in compliance with GC? Yes No

NWP Regional Conditions (RC) checklist:

I. Los Angeles District (SPL) in Arizona and California:

1. Is the project located within a coastal watershed from the southern reach of the Santa Monica Mountains in Los Angeles County to the San Luis Obispo County/Monterey County boundary? Yes No

If yes, will all road crossings employ a bridge crossing design to ensure passage and/or spawning of steelhead is not hindered? Yes No Not Applicable

2. Is the project located within the State of Arizona or the Mojave and Sonoran (Colorado) desert regions of California in the Los Angeles District (generally north and east of the San Gabriel, San Bernardino, San Jacinto, and Santa Rosa mountain ranges, and south of Little Lake, Inyo County)? Yes No

If yes, is applicant aware of restriction below? Yes No

No NWPs, except 1, 2, 3, 4, 5, 6, 9, 10, 11, 20, 22, 27, 30, 31, 32, 35, 37, 38 and 47 (or other nationwide or regional general permits that specifically authorize maintenance of previously authorized structures or fill), can be used to authorize the discharge of dredged or fill material into a jurisdictional special aquatic site (as defined by 40 CFR 230.40-45).

3. Is prior notification (PCN) to the District Engineer required for a NWP or Regional General Permit? Yes No

If yes, are required color photographs or color photocopies of the project area taken from representative points documented on a site map included? Yes, Attached No

4. Is the project located in a special aquatic site (as defined by 40 CFR 230.40-45) or in a perennial waterbody in the State of Arizona or in the Mojave or Sonoran (Colorado) desert regions of California in the Los Angeles District (generally north and east of the San Gabriel, San Bernardino, San Jacinto, and Santa Rosa mountain ranges, and south of Little Lake, Inyo County), excluding the Colorado River from Davis Dam downstream to the north end of Topock and downstream of Imperial Dam? Yes No

If yes, notification pursuant to General Condition 27 is required (not applicable to NWP 47).

5. Is project located in an area designated as Essential Fish Habitat? Yes No

If yes, notification pursuant to General Condition 27 is required (not applicable to NWP 47).

6. Is the project located within a watershed in the Santa Monica Mountains in Los Angeles and Ventura counties bounded by Calleguas Creek on the west, by Highway 101 on the north and east, and by Sunset Boulevard and the Pacific Ocean on the south? Yes No

If yes, notification pursuant to General Condition 27 is required (not applicable to NWP 47).

7. Would project discharge fill material in jurisdictional vernal pools? Yes No

If yes, then an Individual Permit is required.

8. a) Is project within the Murrieta Creek and Temecula Creek watersheds in Riverside County? Yes No
b) Will the project require new permanent fill in perennial and intermittent watercourses? Yes No

If yes to a and b, then projects which would otherwise be authorized under NWPs 29, 39, 42, or 43 (including cases where NWP 14 would be used in conjunction with above NWPs), will require an Individual Permit.

- c) Is the project located in an ephemeral watercourse? Yes No
d) Will the project impact greater than 0.1 acre of waters of the U.S.? Yes No

If yes to a, c, and d, then projects which would otherwise be authorized under NWPs 29, 39, 42, or 43 (including cases where NWP 14 would be used in conjunction with above NWPs), will require an Individual Permit.

9. Is the project a bank stabilization project in San Luis Obispo Creek or Santa Rosa Creek in San Luis Obispo County or a bank stabilization or grade control structure in Gaviota Creek, Mission Creek or Carpinteria Creek in Santa Barbara County? Yes No

If yes, then an Individual Permit is required.

10. Is the project in the Santa Clara River watershed in Los Angeles County or Ventura County? Yes No

If yes, notification pursuant to General Condition 27 is required (not applicable to NWP 47).

FOR DEPARTMENT USE ONLY

Date Received	Amount Received	Amount Due	Date Complete	Notification No.
	\$	\$		



STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME
NOTIFICATION OF LAKE OR STREAMBED ALTERATION



Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

Name			
Business/Agency	☺		
Street Address			
City, State, Zip			
Telephone	☺	Fax	☺
Email			

2. CONTACT PERSON (Complete only if different from applicant)

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

3. PROPERTY OWNER (Complete only if different from applicant)

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name				
B. Agreement Term Requested		<input type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	
			☺	

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.		
A.	<input type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)	
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A)	Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (Attachment B)	THP Number: _____
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C)	SWRCB Number: _____
E.	<input type="checkbox"/> Routine Maintenance (Attachment D)	
F.	<input type="checkbox"/> DFG Fisheries Restoration Grant Program (FRGP)	FRGP Contract Number: _____
G.	<input type="checkbox"/> Master	
H.	<input type="checkbox"/> Master Timber Harvesting	

6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. **Note: The Department may not process this notification until the correct fee has been received.**

	A. Project	B. Project Cost	C. Project Fee
1			
2			
3			
4			
5			
		D. Base Fee (if applicable)	
		E. TOTAL FEE ENCLOSED	

7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?
<input type="checkbox"/> Yes (Provide the information below) <input type="checkbox"/> No
Applicant: _____ Notification Number: _____ Date: _____
B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?
<input type="checkbox"/> No <input type="checkbox"/> Yes (Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.)
<input type="checkbox"/> Continued on additional page(s)

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

9. PROJECT CATEGORY AND WORK TYPE (Check each box that applies)

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diversion structure – weir or pump intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal – pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing : Horizontal Directional Drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

10. PROJECT DESCRIPTION

A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.



Continued on additional page(s)

B. Specify the equipment and machinery that will be used to complete the project.

Continued on additional page(s)

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).

Yes No (*Skip to box 11*)

D. Will the proposed project require work in the wetted portion of the channel?

Yes (*Enclose a plan to divert water around work site*)
 No

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Continued on additional page(s)

B. Will the project affect any vegetation?

Yes (Complete the tables below) No

Vegetation Type	Temporary Impact	Permanent Impact
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)

Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

Yes (List each species and/or describe the habitat below) No Unknown

Continued on additional page(s)

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

Continued on additional page(s)

E. Has a biological study been completed for the project site?

Yes (Enclose the biological study) No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.

F. Has a hydrological study been completed for the project or project site?

Yes (Enclose the hydrological study) No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Continued on additional page(s)

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Continued on additional page(s)

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

Continued on additional page(s)

13. PERMITS

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A. _____ Applied Issued

B. _____ Applied Issued

C. _____ Applied Issued

D. Unknown whether local, state, or federal permit is needed for the project. (Check each box that applies)

Continued on additional page(s)

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?			
<input type="checkbox"/> Yes (Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each) <input type="checkbox"/> No (Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared)			
<input type="checkbox"/> Notice of Exemption <input type="checkbox"/> Initial Study <input type="checkbox"/> Negative Declaration <input type="checkbox"/> THP/ NTMP	<input type="checkbox"/> Mitigated Negative Declaration <input type="checkbox"/> Environmental Impact Report <input type="checkbox"/> Notice of Determination (Enclose) <input type="checkbox"/> Mitigation, Monitoring, Reporting Plan	<input type="checkbox"/> NEPA document (type): _____ <input type="checkbox"/> CESA document (type): _____ <input type="checkbox"/> ESA document (type): _____	
B. State Clearinghouse Number (if applicable)			
C. Has a CEQA lead agency been determined?		<input type="checkbox"/> Yes (Complete boxes D, E, and F) <input type="checkbox"/> No (Skip to box 14.G)	
D. CEQA Lead Agency			
E. Contact Person		F. Telephone Number	
G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.			
<input type="checkbox"/> Continued on additional page(s)			
H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?			
<input type="checkbox"/> Yes (Enclose proof of payment) <input type="checkbox"/> No (Briefly explain below the reason a filing fee has not been paid)			
<p><i>Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.</i></p>			

15. SITE INSPECTION

Check one box only.
<input type="checkbox"/> In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.
<input type="checkbox"/> I request the Department to first contact (insert name) _____ at (insert telephone number) _____ to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

- Yes (Please enclose the information via digital media with the completed notification form)
- No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

Signature of Applicant or Applicant's Authorized Representative

Date

Print Name