INITIAL STUDY

FOR THE

MISSION SPRINGS WATER DISTRICT
VISTA RESERVOIR PROJECT

Prepared for:

Mission Springs Water District
66575 Second Street
Desert Hot Springs, California 92240

Prepared by:

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LIST OF ABBREVIATIONS AND ACROYNMS

AB	Assembly Bill
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
BRA	Biological Resources Assessment
BUOW	Burrowing Owl
C&D	Construction and Demolition
CAAA	Clean Air Act Amendment
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CCAR	California Climate Action Registry (now called Climate Action Reserve)
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act

CNEL	Community Noise Equivalent Level
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVPA	Coachella Valley Planning Area
CWA	Clean Water Act
dBA	A-weighted decibel
DTS	Department of Toxic Substances
DWR	Department of Water Resources
EI	Expansion Index
EO	Executive Orders
ESA	Endangered Species Act
FGC	Fish & Game Code
FTA	Federal Transit Association
GHG	Greenhouse Gas
HAS	Hydrologic Sub-Area
LST	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
MSWD	Mission Springs Water District
NAAQS	National Ambient Air Quality Standards
NPDES	National Pollutant Discharge Elimination System
OS	Open Space
RCFD	Riverside County Fire Department
RCP	Reinforced Concrete Pipe
R-L	Residential Low
R-RD	Residential Rural Desert
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SRA	State Responsibility Area
SSAB	Salton Sea Air Basin
SWPPP	Storm Water Pollution Prevention Plan
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VdB	vibration-velocity decibel
WoUS	Waters of the United States
WQMP	Water Quality Management Plan

ENVIRONMENTAL CHECKLIST

INTRODUCTION

1. Project Title: Vista Reservoir No. 2 Project

2. Lead Agency Name: Mission Springs Water District
   Address: 66575 Second Street, Desert Hot Springs, CA 92240

3. Contact Person: Danny Friend, Director of Engineering and Operations
   Phone Number: (760) 329-6448

4. Project Location: The project is located along Valencia Drive in the City of Desert Hot Springs. The project is located within the USGS Topo 7.5-minute map for Seven Palms Valley, CA, and is located in Section 19, Township 2 South and Range 5 East. The approximate GPS coordinates of the project site are 33.983003°, -116.493301°. Refer to Figures 1 and 2 for the regional and site location maps.

5. Project Sponsor Name: Mission Springs Water District
   Address: 66575 Second Street, Desert Hot Springs, CA 92240

6. General Plan Designation: Public/Institutional

7. Zoning: Public/Institutional

8. Project Description:

Introduction

Mission Springs Water District (MSWD or District) provides water and sewer services to the communities of Desert Hot Springs, West Garnet, North Palm Springs, and various portions of unincorporated Riverside County. MSWD, as the Lead Agency pursuant to California Environmental Quality Act (CEQA), is proposing to develop a second reservoir at the exiting Vista Reservoir site.

Project Description

The existing Vista Reservoir site is approximately 1.23 acres located in the northern portion of the District's service area; more specifically, at the northern end of Valencia Drive. The site is surrounded by mountain terrain and consists of mild to steep slopes and an earthen driveway up to the existing 300,000-gallon reservoir pad at 1,609 feet in elevation. The existing reservoir is connected to two different pressure zones via a 10-inch waterline and a hydropneumatic station with a 4-inch waterline.

The proposed Vista Reservoir No. 2 Project includes a new 300,000-gallon reservoir approximately 30 feet northwest of the existing reservoir, see Figure 3. Due to its close proximity to the existing reservoir, the existing hydropneumatic station and the electrical cabinet will require relocation. This includes a minimum of 15-foot horizontal clearance between the proposed reservoir and proposed retaining walls, slope, and proposed relocated facilities. Development of

the new reservoir at the Vista Reservoir site will require the construction of a retaining wall along the east side of the reservoir pad with heights ranging from 2-feet to 11-feet. The proposed retaining wall will include a concrete v-ditch approximately 1-foot to 2-feet below the top of wall to intercept and transport stormwater runoff from the adjacent hills. This concrete v-ditch will intercept flows from the existing southerly erosional feature and direct them through and out of the site with the northerly drainage course. Any flows that are collected along the proposed retaining wall go through a rip-rap energy dissipater, then storm drain pipes to Valencia Drive. The flows are released through an under-sidewalk drain which will reduce velocities and keep flows within the existing street as they are today. In order to mitigate the potential for runoff to the adjacent southerly property, a v-ditch will extend to the existing tank area to pick up additional runoff from the adjacent southeasterly hills and minimize stormwater runoff to adjacent properties. Note that the v-ditch would not result in capturing and concentrating flows, it would redirect onsite flows to enable flows to exit the site in a similar manner to that which occurs at present.

The new access road will maintain a maximum slope of 10% and includes additional retaining walls and concrete v-ditches to provide slope stability and protection from stormwater runoff. Additionally, the area between the access road and the proposed reservoir pad includes anticipated improvements such that this area would be covered with jute netting to reduce erosion of the existing and proposed 2:1 slopes. On-site stormwater flows will be directed onto Valencia Drive via an under sidewalk drain, enabling flows to exit the site in a similar manner to that which occurs at present. Additional stormwater management best management practices (BMPs) may be required, though these will be determined upon final design. The District will install a wrought iron fence and gate along Valencia Drive along the western property line to mitigate the amount of vehicle and civilian traffic entering and crossing the site. The remainder of the site will be protected by a chain link fence.

Ultimately the installation of the new 300,000-gallon reservoir at the Vista Reservoir site will require installation of the following: retaining walls and hillside slope stabilization, stormwater management BMPs, installation of a new access road, relocation of the existing hydropneumatic station and the electrical cabinet, grading, wrought iron and chain link fence, and a new 300,000-gallon welded steel water storage reservoir and related piping.

Clearing and Grubbing: The site will be cleared of any debris and vegetation in preparation for the project construction. During this phase a portion of the existing fence surrounding the existing 300,000-gallon tank will be removed as needed and a temporary security fence will be constructed around the larger site area. It is assumed that a maximum of 5 workers will be on the site during clearing and grubbing. Due to the compact nature of the site only small to medium sized tractors will be utilized during this phase.

Fencing: Two new fences will be installed. The first fence, a new wrought iron fence, will be constructed along the Valencia Drive right-of-way. The fencing will be approximately 170 feet in length and will include a 20 foot wide access gate at driveway. In addition, a new chain-line fence will enclose the remaining site, tying into the existing chain link fence and proposed wrought iron fence. The chain link fencing will be approximately 485 feet in length and will include a 6 foot wide access gate.

Retaining Walls and Earthwork: The existing tank pad will be expanded to accommodate the proposed 300,000-gallon tank. A new retaining wall will be constructed along the east side of the site to hold up the existing slopes and provide access around the proposed reservoir. The wall length will reach approximately 160 feet, with heights ranging from 2 feet to 11 feet. Two additional

retaining walls will be required to hold up slopes along the proposed drive approach, beginning at the site entrance on Valencia Road and continuing northeast to southwest up to the proposed tank pad. The additional wall lengths are approximately 85 feet and 110 feet, respectively, with heights ranging from 2 feet to 8 feet. The retaining walls will include drain provisions and include a concrete v-ditch along the perimeter to collect any sheet flow from the adjacent slopes and convey it safely through the site. As the walls are constructed, dirt and engineered fill material will be placed behind the walls in compacted lifts. It is assumed that a maximum of 7 workers will be on the site during the retaining walls and earthwork phase. This phase of construction will most likely utilize small to medium sized tractors, along with hand operated power equipment.

Storm Drain Culverts: The construction of culverts onsite will proceed upon completion of earthwork and retaining walls. Storm Drain Culverts will consist of 18-inch High Density Poly Ethylene (HDPE) and 2-foot-wide by 1-foot-deep reinforced concrete v-ditches. As described, approximately 245 feet of concrete v-ditch will be added along the top of the retaining walls to collect any sheet flow from the adjacent slopes. Additionally, 110 feet of concrete v-ditch and 170 feet of HDPE storm drain are needed to safely convey flows through the site. It is assumed that a maximum of 5 workers will be on the site during the construction of storm drain culverts. This phase of construction will most likely be utilizing small to medium tractors, along with hand operated power equipment.

Foundation Construction: The tank foundation construction will be constructed following the completion of the retaining wall and mass earthwork. The tank foundation around the perimeter will consist of an approximately 8-feet-wide by 6-feet-deep reinforced concrete foundation, known as a ring wall. In the center, the tank will rest on 3 layers of material. The top layer will typically consist of 3 inches of an oil sand mixture, followed by 12 inches of Class II base material, over 24 inches of over 95% compacted earthen materials. It is assumed that a maximum of 5 employees will be on the site during foundation construction. This phase of construction will most likely be utilizing small to medium sized tractors, concrete delivery trucks, concrete pumping equipment, along with hand operate power equipment.

Tank Construction: The proposed welded steel reservoir will be 34 feet in height and 40 feet in diameter. It will be constructed in a bottom up fashion. First will be the floor construction, followed by the exterior shell/walls, interior supports, interior piping, roof and appurtenances. Following construction, the tank will be sand blasted, coated, and lined to prevent corrosion. It is assumed that a maximum of 5 employees will be on the site during tank construction. This phase of construction will most likely be utilizing cranes, man lifts, welders, grinders, cutting equipment, sand blasting equipment and painting equipment.

Hydro Pneumatic Tank and Pumps: The existing on-site hydro pneumatic tank and pumps will require relocation to accommodate the proposed reservoir. The equipment will be relocated from the southeast side of the proposed reservoir to the northeastern side, including all associated piping and electrical. It is assumed that a maximum of 5 employees will be on site during this phase of work. This phase of construction will most likely be utilizing small to medium tractors, cranes, welding equipment, compaction equipment, and cutting equipment.

On-Site Piping: The on-site piping phase will involve constructing the reservoir inflow/outflow piping along with the drain/overflow piping. Additionally, a catch basin for the drain/overflow piping will be constructed. It is assumed that a maximum of 5 employees will be on the site during the on-site piping phase. This phase of construction will most likely be utilizing small to medium tractors, cranes, welding equipment, compaction equipment, and cutting equipment.

Finish Surfaces: The areas around the existing tank and the proposed tank will be finished with a 3/4-inch rock and weed barrier. Additionally, the proposed access road will be paved with asphalt. The rock area is approximately 6,700 square feet and the paved area is approximately 5,600 square feet. It is assumed that a maximum of 5 employees will be on the site during the completion of finish surfaces. This phase of construction will most likely be utilizing small to medium tractors, compaction equipment, and paving equipment.

Design and construction of the Project is anticipated to be completed in approximately 6 months. Construction is anticipated to start in the third quarter of 2021.

9. Surrounding land uses and setting: (Briefly describe the project's surroundings)

North:	Open Space (OS): north of the project is open space, leading to the foothills of the Little San Bernardino Mountains.
South:	Residential Low (R-L): south of the project are single family residences.
East:	Residential Rural Desert (R-RD), further east Open Space (OS): no development exists at present to the east of the project.
West:	Residential Low (R-L): west of the project are single family residences.

10. Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

The site is currently owned by MSWD. MSWD will serve as the CEQA lead agency for this Project. The whole of the project exceeds the threshold for a General Construction National Pollutant Discharge Elimination System (NPDES) permit. This requires notification to the State Water Board and preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). When MSWD integrates the new reservoir into its system it is likely that a permit will be required from the State Division of Drinking Water. No other permits are known to be required. Because State responsible or trustee agencies have been identified for this project, MSWD will implement a 30-day review period for this Initial Study and proposed Mitigated Negative Declaration.

11. Have California Native American tribes traditionally and cultural affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Only one tribe has requested consultation with the District under AB 52, the Agua Caliente Band of Cahuilla Indians. Consultation letters were sent to the Agua Caliente Band of Cahuilla Indians on October 19, 2020. No response was received within the 30-day consultation period, as such no further action is required. Consultation is deemed complete as of November 17, 2020.

> Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

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.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Energy
☒ Geology / Soils	☐ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials
☒ Hydrology & Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☒ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☒ Utilities / Service Systems	☒ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency)

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

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

Tom Dodson & Associates — April 2021
Prepared by Tom Dodson & Associates — Date

April 28, 2021
Lead Agency (signature) — Date

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 in the parentheses following each question. 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 off-site as well as on-site, 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 there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries 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," as described in (5) below, 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) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) 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 significance.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

SUBSTANTIATION

a. *Less Than Significant Impact* – The dominant landscape feature of the project site are the Little San Bernardino Mountains that surround the project site to the north and east. Additionally, middle and background views within the City of Desert Hot Springs include the San Bernardino Mountains to the west, and the San Jacinto and Santa Rosa Mountains to the southwest and south, which also provide dramatic and valuable viewsheds. The proposed project site is located adjacent to the foothills of the Little San Bernardino Mountains and contains an existing 300,000 gallon reservoir.

Adverse impacts to scenic vistas can occur in one of two ways. First, an area itself may contain existing scenic vistas that would be altered by new development. The proposed project site currently contains an existing reservoir; construction of a second reservoir will not impact any scenic vistas or visual resources within the site itself. The site is located adjacent to the foothills of the Little San Bernardino Mountains, but the site itself doesn't contain any important scenic vistas which could be impacted by implementing the proposed new 300,000-gallon reservoir. A scenic vista or visual resource impact can also occur when a scenic vista can be viewed from the project area or immediate vicinity and a proposed development may interfere with the view to a scenic vista. The proposed new reservoir is planned to be located adjacent to the existing reservoir. The new 300,000-gallon reservoir will be 34 feet in height and 40 feet in diameter. Views to the north and east, as stated above, include the Little San Bernardino Mountains, which are visible throughout the City of Desert Hot Springs, the City's Sphere of Influence, and to nearby residences to the south at a lower elevation than the project site. However, the location of the reservoir is set back into the hills, which prevents most of the nearby residents from visual access to the reservoir. However, three residences are able to view the existing reservoir (which is partially shielded by trees), though the views to the mountains to the north/northwest are not obscured by the existing reservoir and would not be obscured by the new reservoir because the reservoir site is set back at an angle at the foothills of the Little San Bernardino Mountains. Therefore, the development of a new reservoir at this site will not substantially impact scenic vistas to residents within the project area. Furthermore, construction of a second reservoir will introduce a similar structure at this site and therefore, would be similar to that which exists in this vista of the Little San Bernardino Mountains foothills at present. Therefore, implementation of the proposed new reservoir is not expected to cause any substantial effects on any important scenic vistas. Impacts are considered a less than significant adverse aesthetic impact. No mitigation is required.

b. *Less Than Significant Impact* – The nearest officially designated State scenic highway is State Highway 62 located approximately five miles west of the project site. Highway 62 is the main corridor gateway to Joshua Tree National Park and the main arterial roadway for the communities of Yucca Valley, Joshua Tree and Twenty-Nine Palms. The project site would not be visible from Highway 62 and no impacts to the State Scenic Highway are anticipated. The project site is adjacent to the Little San Bernardino Mountain foothills, and contains an existing 300,000-gallon reservoir. No rock outcroppings or historic buildings exist on site and the trees that are located on site that are intended to provide a screen between the existing reservoir and nearby residences will remain in place under the proposed project. Based on the lack of any intrinsic onsite scenic resources, the proposed project will not cause substantial project-specific damage to any such resources. No mitigation is required.

c. *Less Than Significant Impact* – The project site is located in a relatively urbanized area surrounded by residential homes to the south and west and the Little San Bernardino Mountains to the north and east. The project site currently contains a 300,000-gallon reservoir, while the proposed project will install a second 300,000-gallon reservoir adjacent to the existing reservoir. The site consists of dirt and hillside vegetation. The site is currently designated and zoned for Public/Institutional use and because it contains existing water facilities, the construction of the new reservoir would be visually consistent with the existing viewscape at the site. The existing reservoir is set back into the hills at an angle that prevents many residents from viewing the site due to the angle of the adjacent hillside. Thus, while a small number of residents may be able to see the reservoir from their properties, the addition of the new reservoir would not be visible to a majority of nearby residents. Furthermore, the project is located within a site designated for and classified as Public/Institutional under the City's General Plan and Zoning Code (§17.24.030), respectively, which allows for a maximum height limit of 30 feet. The proposed reservoir will be 34 feet in height and as such will be over this height limit; however, Government Code Section 53091 (e) states that "Zoning ordinances of a county or city shall not apply to the location of facilities for the production, generation, storage, treatment, or transmission of water…", and as the proposed project would allow for the storage of water, the height limit in the zoning code does not apply to this project as the proposed reservoir installation project is considered land use independent, and therefore, the proposed development of a second reservoir and associated site improvements would not have a significant potential to substantially degrade the existing visual character or to conflict with applicable zoning or other regulations governing scenic quality. Impacts under this issue are considered less than significant, and no mitigation is required.

d. *Less Than Significant Impact* – The existing reservoir utilizes lighting on an as-need basis. It is assumed that the new reservoir would not require additional lighting in order to operate; however, the existing lighting will be relocated to the northeast area of the site near the relocated hydropneumatics station and electrical panel. Should MSWD elect to include additional lighting, it is anticipated that new lighting would be limited to a few light posts at, for example, the top of the driveway and between the two tanks. Existing sources of light in the project area include the residences that surround the project site to the west and south. The construction activities are limited to daylight hours unless an emergency occurs, and the amount of security lighting needed during construction will be limited. Therefore, given that the proposed project would not require additional lighting during operation, the proposed project is not anticipated to introduce a new source of light and glare into the project area over previous uses. No impacts are anticipated to occur under this issue and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
II. AGRICULTURE AND FORESTRY 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 Dept. 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:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) 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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

SUBSTANTIATION

a. *No Impact* – The proposed reservoir is located adjacent to the foothills of the Little San Bernardino Mountains. The area to the south and west of the project site is urbanized, and neither the project site nor the adjacent and surrounding properties are designated for agricultural use; no agricultural activities exist in the project area; and there is no potential for impact to any agricultural uses or values as a result of project implementation. According to the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, no prime farmland, unique farmland, or farmland of statewide importance exists within the vicinity of the proposed project (Figure II-1). No adverse impact to any agricultural resources would occur from implementing the proposed Project. No mitigation is required.

b. *No Impact* – The project site is not now nor has it been included in a Williamson Act contract or an Agricultural Preserve. Based on these facts, the proposed project will not cause a significant direct

impact or conflict with the Williamson Act or an existing agricultural use. The site is not currently being farmed and the land use designations (general plan and zoning) support Public/Institutional uses and is surrounded by residential and open space uses, which are not agricultural in nature. Furthermore, the City of Desert Hot Springs does not have any current land use designations or zoning classifications for agricultural use. According to the Riverside County Williamson Act Lands Map from the Williamson Act Program (2007), there are no sites within the project footprint under a Williamson Act Land Conservation Contract. Therefore, no potential for indirect effects on agricultural resources or values would occur due to implementation of the Vista Reservoir No. 2 Project.

c. *No Impact* – There are no existing zoning ordinances that pertain to forest land, timberland, or timberland zoned Timberland Production. The site does not currently contain forestry resources, and the land use designations (general plan and zoning) support Public/Institutional uses. The site is surrounded by residential and open space uses, which are not related to forestry uses. Additionally, according to the City of Desert Hot Springs General Plan, there are no land use designations that pertain to forest land, timberland, or timberland zoned Timberland Production. Therefore, the no potential for indirect effects to existing zoning for forest land, timberland, or timberland zoned Timberland Production would occur due to implementation of the Vista Reservoir No. 2 Project.

d. *No Impact* – As described in the preceding evaluation, there are no forest lands within the project area, which is because the project area is located in a desert and is urbanized. No potential for loss of forest land would occur if the project is implemented. No mitigation is required.

e. *No Impact* – Because the project site and surrounding area do not support either agricultural or forestry uses and, furthermore, because the project site and environs are not designated for such uses, implementation of the proposed project would not cause or result in the conversion of farmland or forest land to alternative use. No adverse impact would occur. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) 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?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

SUBSTANTIATION: The following information utilized in this section of the Initial Study was obtained from the following technical study: *Air Quality and GHG Impact Analyses, Mission Springs Water District, Vista Reservoir No. 2 Project, Desert Hot Springs, California"* dated September 22, 2020 prepared by Giroux & Associates. This technical study is provided as Appendix 1 to this document.

Background

Climate
The proposed project site is in the Coachella Valley Planning Area (CVPA) of the Salton Sea Air Basin (SSAB). The SSAB was part of the Southeast Desert Air Basin (SEDAB) until May, 1996 when the SSAB was created. The project site is in one of the hottest and driest parts of California. The climate is characterized by hot, dry summers and relatively mild winters. Rainfall is scant in all seasons, so differences between the seasons are characterized principally by differences in temperature. Average annual precipitation in the air basin ranges from 2 to 6 inches per year.

Seasonal temperature differences in the basin are large, confirming the absence of marine influences due to the blocking action of the mountains to the west. Average monthly maximum temperatures in the project vicinity range from 108ºF in July to 57ºF in January. The average monthly minima range from about 40ºF in January to about 80ºF in July.

During much of the year, California is covered by a moderately intense high-pressure system. In winter, the Pacific High retreats to the south, so that frontal systems from the North Pacific can move onto the California coast. On average, 20 to 30 frontal systems pass through California each winter. The first front usually arrives around the middle of October, and the average period of frontal activity is five to six months. Most of these systems are relatively weak by the time they reach the SSAB, however, and they become more diffuse as they move southeastward.

Air Quality Standards
Existing air quality is measured at established South Coast Air Quality Management District (SCAQMD) air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table III-1. Because the State of

California had established Ambient Air Quality Standards (AAQS) several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table III-1. Sources and health effects of various pollutants are shown in Table III-2.

Table III-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Average Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		–		
Fine Particulate Matter (PM2.5)[9]	24 Hour	–	–	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15.0 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	–	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	–	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	–	Ultraviolet Flourescense; Spectrophotometry (Paraosaniline Method)
	3 Hour	–		–	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[11]	–	
Lead 8[12,13]	30-Day Average	1.5 µg/m^3	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Avg	–		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No Federal Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Footnotes

1 California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM10, PM2.5, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year, with a 24-hour average concentration above 150 $\mu g/m^3$, is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7 Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.

8 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9 On December 14, 2012, the national PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primarily and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primarily and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10 To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11 On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12 The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 j.tg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14 In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table III-2
HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO2)	• Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	• Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.	• Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Baseline Air Quality

In the CVPA portion of the SSAB, air quality planning, enforcement and monitoring responsibilities are carried out by the SCAQMD. Existing and probable future levels of air quality around the project area can be best inferred from ambient air quality measurements conducted by the SCAQMD at the Indio and Palm Springs air quality monitoring stations. In Indio, ozone and particulate 10 microns or less in diameter (respirable particulates called PM-10) are monitored. These two pollutants are the main air pollution problems in the CVPA portion of the SSAB. Vehicular pollution levels such as carbon monoxide (CO) and nitrogen dioxide (NO_2) are monitored at Palm Springs. Levels of CO and NO_2 at the project site are likely lower than those monitored in Palm Springs. However, because CO and NO_2 levels in Palm Springs are well within acceptable limits, their use to characterize the project site introduces no complications. The last

four years of published data from Indio and Palm Springs stations are summarized in Table III-3. The following conclusions can be drawn from these data:

- Photochemical smog (ozone) levels periodically exceed standards. The 1-hour state standard was violated less than one percent of all days in the last four years near Indio. The 8-hour state ozone standard has been exceeded an average of 11 percent of all days per year in the same time. The Federal eight-hour ozone standard is violated on around eight percent of all days per year. Ozone levels are much lower than 10 to 20 years ago. Attainment of all clean air standards in the project vicinity is not likely to occur soon, but the severity and frequency of violations is expected to continue to slowly decline during the current decade.
- Carbon monoxide (CO) measurements near the project site have declined throughout the last decade, and 8-hour CO levels were at their lowest in 2017. Federal and state CO standards have not been exceeded in the last 10+ years. Despite continued basin-wide growth, maximum CO levels at the closest air monitoring station are less than 25 percent of their most stringent standards because of continued vehicular improvements.
- PM-10 levels as measured at Indio, have exceeded the state 24-hour standard on 12 percent of all measurement days in the last four years, but the national 24-hour particulate standard has not been exceeded during the same period. The state standard is considerably more restrictive.
- A fraction of PM-10 is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). There have no violations of the 24-hour federal PM-2.5 standard in recent years.

Table III-3
AIR QUALITY MONITORING SUMMARY
(Days Standards were Exceeded and Maximum Observed Concentrations 2015-2018)

Pollutant/Standard	2015	2016	2017	2018
Ozone[a]				
1-Hour > 0.09 ppm (S)	2	8	4	4
8-Hour > 0.07 ppm (S)	27	44	49	43
8- Hour > 0.075 ppm (F)	12	27	28	43
Max. 1-Hour Conc. (ppm)	0.099	0.107	0.106	0.103
Max. 8-Hour Conc. (ppm)	0.089	0.093	0.091	0.087
Carbon Monoxide[b]				
1-hour > 20. ppm (S)	0	0	0	0
8- Hour > 9. ppm (S,F)	0	0	0	0
Max 8-hour Conc. (ppm)	1.5	0.5	1.1	0.7
Nitrogen Dioxide[b]				
1-Hour > 0.18 ppm (S)	0	0	0	0
Max 1-hour Conc. (ppm)	0.04	0.04	0.04	0.04
Respirable Particulates (PM-10)[a]				
24-hour > 50 $\mu g/m^3$ (S)	56/313	43/363	43/353	27/361
24-hour > 150 $\mu g/m^3$ (F)	0/313	0/363	0/363	0/361
Max. 24-Hr. Conc. ($\mu g/m^3$)	137.	128.	146.	41.
Ultra-Fine Particulates (PM-2.5)[a]				
24-Hour > 35 $\mu g/m^3$ (F)	0/115	0/110	0/122	0/118
Max. 24-Hr. Conc. ($\mu g/m^3$)	25.8	18.8	28.7	15.0

(S) = state standard, (F) = federal standard
[a]Data from Indio monitoring station; [b]Data from Palm Springs air monitoring station.
Source: SCAQMD Air Monitoring Summaries.

Air Quality Planning

The U.S. EPA is responsible for setting and enforcing the NAAQS for O3, CO, NOx, SO2, PM10, PM2.5, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards. The SCAB could not meet the deadlines for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times as earlier attainment forecasts were shown to be overly optimistic.

The 1990 Federal Clean Air Act Amendment (CAAA) required that all states with air-sheds with "serious" or worse ozone problems submit a revision to the State Implementation Plan (SIP). The most current regional attainment emissions forecast for ozone precursors (ROG and NOx) and for carbon monoxide (CO) and for particulate matter are shown in Table III-4. Substantial reductions in emissions of ROG, NOx and CO are forecast to continue throughout the next several decades. Unless new particulate control programs are implemented, PM-10 and PM-2.5 are forecast to slightly increase.

The Air Quality Management District (AQMD) adopted an updated clean air "blueprint" in August 2003. The 2003 AQMP was based upon the federal one-hour ozone standard which was revoked late in 2005 and replaced by an 8-hour federal standard. Because of the revocation of the hourly standard, a new air quality planning cycle was initiated. With re-designation of the air basin as non-attainment for the 8-hour ozone standard, a new attainment plan was developed. This plan shifted most of the one-hour ozone standard attainment strategies to the 8-hour standard. The attainment date was to "slip" from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the federal PM-2.5 standard.

Because projected attainment by 2021 required control technologies that did not exist yet, the SCAQMD requested a voluntary "bump-up" from a "severe non-attainment" area to an "extreme non-attainment" designation for ozone. The extreme designation was to allow a longer time period for these technologies to develop. If attainment cannot be demonstrated within the specified deadline without relying on "black-box" measures, EPA would have been required to impose sanctions on the region had the bump-up request not been approved. In April 2010, the EPA approved the change in the non-attainment designation from "severe-17" to "extreme." This reclassification set a later attainment deadline (2024), but also required the air basin to adopt even more stringent emissions controls.

Table III-4
SOUTH COAST AIR BASIN EMISSIONS FORECASTS (Emissions in tons/day)

Pollutant	2015[a]	2020[b]	2025[b]	2030[b]
NOx	357	289	266	257
VOC	400	393	393	391
PM-10	161	165	170	172
PM-2.5	67	68	70	71

[a]2015 Base Year.; [b]With current emissions reduction programs and adopted growth forecasts.
Source: California Air Resources Board, 2013 Almanac of Air Quality

AQMPs are required to be updated every three years. The 2012 AQMP was adopted in early 2013. An updated AQMP was required for completion in 2016. The 2016 AQMP was adopted by the SCAQMD Board

in March, 2017, and has been submitted the California Air Resources Board for forwarding to the EPA. The 2016 AQMP acknowledges that motor vehicle emissions have been effectively controlled and that reductions in NOx, the continuing ozone problem pollutant, may need to come from major stationary sources (power plants, refineries, landfill flares, etc.). The current attainment deadlines for all federal non-attainment pollutants are now as follows:

8-hour ozone (70 ppb)	2032
Annual PM-2.5 (12 $\mu g/m^3$)	2025
8-hour ozone (75 ppb)	2024 (old standard)
1-hour ozone (120 ppb)	2023 (rescinded standard)
24-hour PM-2.5 (35 $\mu g/m^3$)	2019

The key challenge is that NOx emission levels, as a critical ozone precursor pollutant, are forecast to continue to exceed the levels that would allow the above deadlines to be met. Unless additional stringent NOx control measures are adopted and implemented, ozone attainment goals may not be met.

The proposed project does not directly relate to the AQMP in that there are no specific air quality programs or regulations governing reservoir projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

Significance Thresholds Used in This Document

Air quality impacts are considered "significant" if they cause clean air standards to be violated where they are currently met, or if they "substantially" contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Appendix G of the California CEQA Guidelines offers the following four tests of air quality impact significance. A project would have a potentially significant impact if it:

a) Conflict with or obstruct implementation of the applicable air quality plan?
b) 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?
c) Expose sensitive receptors to substantial pollutant concentrations?
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Primary Pollutants
Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Secondary Pollutants
Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects in the Coachella Valley portion of the SCAQMD with daily emissions that exceed any of the following emission thresholds are to be considered significant under CEQA guidelines.

Table III-5
DAILY EMISSIONS THRESHOLDS

Pollutant	Construction[1]	Operations[2]
ROG	75	75
NOx	100	100
CO	550	550
PM-10	150	150
PM-2.5	55	55
Sox	150	150
Lead	3	3

[1] Construction thresholds apply to both the SCAB and the Coachella Valley (Salton Sea and Mojave Desert Air Basins.
[2] For Coachella Valley the mass daily emissions thresholds for operation are the same as the construction daily emissions thresholds.
Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Sensitive Uses
There are single family residential uses to the south and southwest of the proposed reservoir site. These homes are accessed via Puesta Del Sol and Valencia Drive. The closest sensitive use is approximately 175 feet to the south and 350 feet to the southwest.

Impact Analysis

a. *Less Than Significant Impact* – Projects such as the proposed development of a new 300,000 gallon water storage reservoir do not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development. This makes sense since, once installed, the reservoirs do not generate new emissions. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use are the primary yardsticks by which impact significance of planned growth is determined. Based on the analysis of the City's General Plan Land Use section, the proposed project is consistent with the adopted City's General Plan. Thus, the proposed project is consistent with regional planning forecasts maintained by the Southern California Association of Governments (SCAG) regional plans. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less than significant only because of consistency with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis. As the analysis of project-related emissions provided below indicates, the proposed project will not cause or be exposed to significant air pollution, and is, therefore, consistent with the applicable air quality plan.

b. *Less Than Significant With Mitigation Incorporated* – Air pollution emissions associated with the proposed project would occur over both a short and long-term time period. Short-term emissions include fugitive dust from construction activities (i.e., site prep, demolition, grading, and exhaust emission) at the project site. Long-term emissions generated by future operation of the proposed reservoir are negligible as additional energy is anticipated to be required.

Construction Emissions
CalEEMod was developed by the SCAQMD to provide a model by which to calculate both construction emissions and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions.

The proposed project includes a new 300,000-gallon reservoir approximately 30' northwest of the existing reservoir. Construction is anticipated to require 6 months and will start in the third quarter of 2021. Estimated construction emissions were modeled using CalEEMod2016.3.2 to identify maximum daily emissions for each pollutant during project construction. Construction was modeled using default construction equipment and schedule for a project of this size using input from the project engineer as shown in Table III-6.

Table III-6
CONSTRUCTION ACTIVITY EQUIPMENT FLEET

Phase Name and Duration	Equipment
Clear and Grub (2 days)	2 Bobcats
Earthworks (10 days)	2 Bobcats
	2 Loader/Backhoes
Storm Drain and Culverts (10 days)	2 Bobcats
	1 Loader/Backhoe
Foundation (10 days)	1 Pump
	1 Mixer
	2 Bobcats
	1 Loader/Backhoe
Tank Construction (3 months)	1 Crane
	1 Aerial Lift
	1 Forklift
	1 Generator Set
	2 Air Compressors
	1 Loader/Backhoe
Equipment Install (1 month)	1 Crane
	1 Loader/Backhoe
	1 Generator Set
	1 Forklift
	3 Welders
Finish Work (10 days)	1 Paver
	1 Roller
	1 Compactor

*bobcats modeled as skid steer loaders

Utilizing this indicated equipment fleet and durations shown in Table III-6 the following worst-case daily construction emissions are calculated by CalEEMod and are listed in Table III-7.

Table III-7
CONSTRUCTION ACTIVITY EMISSIONS
MAXIMUM DAILY EMISSIONS (pounds/day)

Maximal Construction Emissions	ROG	NOx	CO	SO_2	PM-10	PM-2.5
2021	1.9	13.8	13.3	0.0	6.0	3.1
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**

Peak daily construction activity emissions are estimated to be below SCAQMD CEQA thresholds without the need for added mitigation. However, though construction activities are not anticipated to cause dust emissions to exceed SCAQMD CEQA thresholds, emissions minimization through enhanced dust control measures is recommended for use because of the non-attainment status of the air basin. As such, the following mitigation measure shall be implemented:

AIR-1 ***Fugitive Dust Control. The following measures shall be incorporated into project plans and specifications for implementation during construction:***

- ***Apply soil stabilizers to inactive areas.***
- ***Prepare a high wind dust control plan and implement plan elements and terminate soil disturbance when winds exceed 25 mph.***
- ***Stabilize previously disturbed areas if subsequent construction is delayed.***
- ***Apply water to disturbed surfaces and haul roads 3 times/day.***
- ***Replace ground cover in disturbed areas quickly.***
- ***Reduce speeds on unpaved roads to less than 15 mph.***
- ***Trenches shall be left exposed for as short a time as possible.***
- ***Identify proper compaction for backfilled soils in construction specifications.***

This measure shall be implemented during construction, and shall be included in the construction contract as a contract specification.

Similarly, ozone precursor emissions (ROG and NOx) are calculated to be below SCAQMD CEQA thresholds. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. Combustion emissions control options include:

AIR-2 ***Exhaust Emissions Control. The following measures shall be incorporated into Project plans and specifications for implementation:***

- ***Utilize off-road construction equipment that has met or exceeded the maker's recommendations for vehicle/equipment maintenance schedule.***
- ***Contactors shall utilize Tier 4 or better heavy equipment.***
- ***Enforce 5-minute idling limits for both on-road trucks and off-road equipment.***

With the above mitigation measures, any impacts related to construction emissions are considered less than significant. No further mitigation is required.

Operational Emissions
The project will not require additional operational energy. The proposed tank operates by gravity and is fed by an existing off-site booster station. The existing booster will not be running more frequently to fill the new reservoir (only once for the initial filing). The second tank is for back up and is used in

place of the existing tank, for a net zero energy increase. The existing hydropneumatic station is being relocated not expanded or up-sized.

Conclusion
With the incorporation of mitigation measures **AIR-1** and **AIR-2**, the development of the Vista Reservoir No. 2 Project would have a less than significant potential to 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.

c. *Less Than Significant Impact* – The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005.

Use of an LST analysis for a project is optional. For the proposed project, the primary source of possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility.

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NOx), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LST screening tables are available for 25, 50, 100, 200 and 500 meter source-receptor distances. For this project, the closest receptor is 175 feet from the site and therefore the 50-meter distance was used.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for 1, 2 and 5 acre sites for varying distances. For this site (1.2 acres), the most stringent thresholds for a one-acre site were utilized.

The following thresholds and emissions in Table III-8 are therefore determined (pounds per day):

Table III-8
LST AND PROJECT EMISSIONS (pounds/day)

LST Coachella Valley	CO	NOx	PM-10	PM-2.5
LST Threshold	1,387	166	13	5
Max On-Site Emissions	13	14	6	3
Exceeds Threshold?	**No**	**No**	**No**	**No**

CalEEMod Output in Appendix

LSTs were compared to the maximum daily construction activities.

As seen in Table III-8, LST impacts are less than significant.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of

construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure. Therefore, the proposed project would have a less than significant potential to expose sensitive receptors to substantial pollutant concentrations.

d. *Less Than Significant Impact* – Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills or various heavy industrial uses. The project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Project operations (pumping and storage) are an essentially closed system with negligible odor potential. Odors will be briefly detectable during application of the interior epoxy coating and outdoor paint application on the reservoir shell during construction. Good painting practice (low wind speeds and high efficiency sprayers) will minimize odor or overspray and paint transport. Impacts under this issue are considered less than significant. No mitigation is required.

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

SUBSTANTIATION: The following information is provided based on a Biological Resources Assessment, Jurisdictional Delineation, and Land Use Consistency of the project site. The assessment was conducted by Jacobs Engineering Group, Inc. dated January 2021 and is titled "Biological Resources Assessment, Jurisdictional Delineation and Land Use Consistency Analysis for the Mission Springs Water District's Vista Reservoir Expansion." The following information is abstracted from the Biological Resources Assessment (BRA) provided as Appendix 2.

General Site Conditions

The project site is within the City of Desert Hot Springs and adjacent unincorporated areas of Riverside County. The Desert Hot Springs area is situated in the northwestern portion of the Coachella Valley and is bordered on the north and northeast by the Little San Bernardino Mountains, on the east/southeast by the Seven Palms Valley and Edom Hills and on the west by the San Bernardino Mountain foothills.

Hydrologically, the project area is located within the Mission Creek Hydrologic Sub-Area (HSA 719.42) which comprises a 73,873-acre drainage area within the larger Whitewater River Watershed (HUC 18100201). The Whitewater River is the major hydrogeomorphic feature within the Whitewater Watershed.

The primary soil types within the project area are Ironlung-Rock outcrop complex 30-75 percent slopes, and Chuckawalla very gravelly sandy clay loam 5-15 percent slopes. These soil types consist of fine to

gravelly loam that are comprised of alluvium derived from granitoid parent material as well as granite outcrops. Both soil types are excessively drained soils with very low to negligible runoff classes.

The general project vicinity consists of residential development and disturbed undeveloped land, and existing paved and unpaved roads.

Conclusion

Sensitive Biological Resources
A BRA and focused protocol-level desert tortoise and burrowing owl (BUOW) surveys were conducted by Lisa Patterson of Jacobs Engineering on November 2, 2020, to identify potential suitable habitat for special status species that have been documented within the project vicinity. Due to the environmental conditions within the Project area and surrounding land uses, the Project site is not likely to support any of the state- or federally-listed species that have been documented in the Project vicinity.

The project is not located within any United States Fish and Wildlife Service (USFWS) designated Critical Habitat for threatened or endangered species and will not impact any Critical Habitat, or otherwise sensitive habitats.

Coachella Valley milk-vetch
The proposed 1.23-acre reservoir site is does not contain suitable habitat to support the federally endangered Coachella Valley milk-vetch. Further, the sandy soils within the project area are stabilized due to a moderately-dense vegetation cover, including several non-native, invasive species and Coachella Valley milk-vetch typically occurs on loose aeolian or alluvial sands located on dunes or flats, and along disturbed margins of sandy washes. Furthermore, the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) has modeled suitable Coachella Valley milk-vetch habitat within the Plan area and the project site is completely outside of any areas of modeled Coachella Valley milk-vetch habitat. Therefore, it is unlikely this species occurs within the project area in any significant numbers and any potential project-related impacts would be considered less than significant.

Additionally, the project will not impact any MSHCP Conservation Areas or USFWS designated Critical Habitat for Coachella Valley milk-vetch and this species is one of the CVMSHCP Covered Species. The CVMSHCP provides “take” authorization for Covered Species during otherwise lawful activities, by providing for the conservation of the Covered Species. The District is a signatory to the CVMSHCP. Since the Coachella Valley milk-vetch is a Covered Species under the CVMSHCP and the project will not impact any MSHCP Conservation Areas or USFWS designated Critical Habitat for Coachella Valley milk-vetch, “take” authorization is provided for any potential project-related impacts to this species.

Desert tortoise
The habitat within and adjacent the proposed 1.23-acre reservoir site consists of disturbed Sonoran mixed woody scrub habitat that is marginally-suitable for desert tortoise and this species has not been documented in the project vicinity. Additionally, the result of focused protocol-level desert tortoise surveys conducted in 2020, within the project impact area and surrounding buffer area, was that no evidence of desert tortoise presence was found in the survey area. No desert tortoise individuals or sign including other desert tortoise burrows or scat were observed. Therefore, desert tortoises are considered absent from the project area at the time of survey and the project is not likely to impact this species.

Burrowing owl
There is suitable BUOW habitat within and adjacent the proposed 1.23-acre reservoir site. The result of focused non-breeding season BUOW surveys conducted in 2020, was that no BUOW individuals or sign were observed within the survey area. Therefore, BUOW are considered absent from the Project area at the time of survey and the Project is not likely to impact this species. However, given that there is suitable BUOW habitat within the Project area and this species has been documented in the near Project vicinity, it is recommended that:

- A **30-day** preconstruction **BUOW survey** be conducted by a qualified biologist prior to commencement of Project activities, to avoid any potential Project-related impacts to BUOW that may move onto the site in the future.

According to protocol and standard practices, the results of the habitat assessment surveys will remain valid for the period of one year. After which time, if the site has not been disturbed in the interim, another survey may be required to determine the persisting absence of desert tortoise, BUOW and other sensitive flora and fauna on-site. Regardless of survey results and conclusions given herein, desert tortoise and BUOW are protected by applicable state and/or federal laws, including but not exclusive to the CESA and Federal ESA. As such, if a desert tortoise or BUOW are found on-site during work activities, all activities likely to affect the animal(s) should cease immediately and regulatory agencies should be contacted to determine appropriate management actions. Additionally, it should be noted that desert tortoise may be handled only by a qualified biologist who has been given authorization by the appropriate agencies (i.e. USFWS and CDFW).

Nesting Birds
The project site and surrounding area consists of Sonoran mixed woody scrub habitat that is suitable to support nesting birds. Most birds are protected by the Migratory Bird Treaty Act (MBTA). In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season, which is generally February 1st through August 31st. However, if all work cannot be conducted outside of nesting season, mitigation is recommended.

Jurisdictional Waters
No intermittent or ephemeral dry washes that would meet the definitions of State and federal jurisdictional waters as defined by Section 1600 of the State of California Fish and Game Code (FGC) or "Waters of the United States" (WoUS) as defined by Section 404 of the Clean Water Act (CWA) occur on the reservoir site. Therefore, no regulatory permits from these agencies will be required for this project.

Land Use Designations
The project is within the CVMSHCP boundary. The proposed 1.23-acre reservoir site is entirely outside any Conservation Areas and will not impact any Biological Corridors and Linkages or Essential Ecological Processes. Finally, the project is not adjacent to a Conservation Area. Therefore, no conservation or avoidance measures are expected, and the project as described, would be consistent with the Conservation Goals and Objectives set forth in the CVMSHCP.

Impact Analysis

a. *Less Than Significant With Mitigation Incorporated* – Implementation of the proposed project may have a potential for an adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). The project area lies within the range of several sensitive species including several that have been documented in the project vicinity (approximately 3 miles), namely: Coachella Valley milk-vetch *(Astragalus lentiginosus var. coachellae),* desert tortoise *(Gopherus agassizii),* Coachella Valley fringe-toed lizard *(Uma inornata),* Least Bell's vireo *(Vireo bellii pusillus),* and Southwestern willow flycatcher *(Empidonax traillii extimus)*. The BRA determined that there is no suitable habitat to support the federally endangered Coachella Valley milk-vetch. Additionally, the result of focused protocol-level desert tortoise surveys conducted in 2020 indicated that no evidence of desert tortoise presence was found in the survey area. Therefore, desert tortoises are considered absent from the project area at the time of survey and the project is not anticipated to impact this species. The BRA determined that there is suitable BUOW habitat within and adjacent the proposed 1.23-acre reservoir site. Given that there is suitable BUOW habitat within the project area and this species has been documented in the near project vicinity, the following mitigation measure shall be implemented:

BIO-1 ***Preconstruction presence/absence surveys for burrowing owl shall be conducted no less than 14 days prior to any onsite ground disturbing activity by a qualified biologist. The burrowing owl surveys shall be conducted pursuant to the recommendations and guidelines established by the California Department of Fish and Wildlife in the "California Department of Fish and Wildlife 2012 Staff Report on Burrowing Owl Mitigation." In the event this species is not identified within the Project limits, no further mitigation is required, and a letter shall be prepared by the qualified biologist documenting the results of the survey. The letter shall be submitted to CDFW prior to commencement of Project activities. If during the preconstruction survey, the burrowing owl is found to occupy the site, Mitigation Measure BIO-2 shall be required.***

BIO-2 ***If burrowing owls are identified during the survey period, the District shall take the following actions to offset impacts prior to ground disturbance:***

Active nests within the areas scheduled for disturbance or degradation shall be avoided until fledging has occurred, as confirmed by a qualified biologist. Following fledging, owls may be passively relocated by a qualified biologist, as described below.

If impacts on occupied burrows are unavoidable, onsite passive relocation techniques may be used if approved by the CDFW to encourage owls to move to alternative burrows provided by the District outside of the impact area.

If relocation of the owls is approved for the site by CDFW, CDFW shall require the District to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site and conduct an impact assessment. A qualified biologist shall prepare and submit a passive relocation program in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012) to the CDFW for review/approval prior to the commencement of disturbance activities onsite.

The relocation plan must include all of the following and as indicated in Appendix E:

- ***The location of the nest and owls proposed for relocation.***
- ***The location of the proposed relocation site.***
- ***The number of owls involved and the time of year when the relocation is proposed to take place.***
- ***The name and credentials of the biologist who will be retained to supervise the relocation.***
- ***The proposed method of capture and transport for the owls to the new site.***
- ***A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control).***

The applicant shall conduct an impact assessment, in accordance with the Staff Report on Burrowing Owl Mitigation prior to commencing Project activities to determine appropriate mitigation, including the acquisition and conservation of occupied replacement habitat at no less than a 2:1 ratio.

Prior to passive relocation, suitable replacement burrows site(s) shall be provided at a ratio of 2:1 and permanent conservation and management of burrowing owl habitat such that the habitat acreage, number of burrows and

burrowing owl impacts are replaced consistent with the Staff Report on Burrowing Owl Mitigation including its Appendix A within designated adjacent conserved lands identified through coordination with CDFW and the District. A qualified biologist shall confirm the natural or artificial burrows on the conservation lands are suitable for use by the owls. Monitoring and management of the replacement burrow site(s) shall be conducted and a reporting plan shall be prepared. The objective shall be to manage the replacement burrow sites for the benefit of burrowing owls (e.g., minimizing weed cover), with the specific goal of maintaining the functionality of the burrows for a minimum of 2 years.

A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW.

No other species have been identified as having a potential to exist within or be impacted by the proposed project. With the implementation of mitigation measures (MMs) **BIO-1** and **BIO-2** above, the proposed project would 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 Wildlife or U.S. Fish and Wildlife Service.

b. *Less Than Significant Impact* – Implementation of the proposed project has a potential to have an adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Habitat that exists within and adjacent to the 1.23-acre reservoir site consists primarily unvegetated disturbed lands. The vegetated areas that do exist on slopes and the margins of the site are characterized by Sonoran mixed woody scrub habitat. No intermittent or ephemeral dry washes that would meet the definitions of State and federal jurisdictional waters as defined by Section 1600 of the State of California Fish and Game Code (FGC) or "Waters of the United States" (WoUS) as defined by Section 404 of the Clean Water Act (CWA) occur on the reservoir site. Therefore, no regulatory permits from these agencies will be required for this project. Furthermore, the BRA concluded that project is not located within any USFWS designated Critical Habitat for threatened or endangered species and will not impact any Critical Habitat, or otherwise sensitive habitats. Based on the field survey conducted by Jacobs and the information contained in Appendix 2, no significant impacts to riparian habitat or other sensitive communities are anticipated to occur as a result of implementation of the proposed project.

c. *No Impact* – According to the data gathered by Jacobs in Appendix 2, no federally protected wetlands occur within the project footprint. Therefore, implementation of the proposed project will have no potential to impact state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. No mitigation is required.

d. *Less Than Significant With Mitigation Incorporated* – Based on the field survey of the project site, the project will not substantially interfere with the movement of any native resident or migratory species or with established native or migratory wildlife corridors, or impede the use of native nursery sites. Once constructed, much of the project area will be enhanced, but will remain similar to that which exists at present. However, the State does protect all migratory and nesting native birds. Avian species observed in the Project area include common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), Say's phoebe (*Sayornis saya*), bushtit (*Psaltriparus minimus*) and mourning dove (*Zenaida macroura*). Further, the project site and surrounding area consists of Sonoran mixed woody scrub habitat that is suitable to support nesting birds. Thus, the project area may include locations that function as nesting locations for native birds. To avoid impacting nesting birds as required by the MBTA and California FGC, the following mitigation measure shall be implemented:

BIO-3 ***Nesting bird surveys shall be conducted by a qualified avian biologist no more than three (3) days prior to vegetation clearing or ground disturbance activities. Preconstruction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the preconstruction nesting bird surveys, a Nesting Bird Plan (NBP) shall be prepared and implemented by the qualified avian biologist. At a minimum, the NBP shall include guidelines for addressing active nests, establishing buffers, ongoing monitoring, establishment of avoidance and minimization measures, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, individual/pair's behavior, nesting stage, nest location, its sensitivity to disturbance, and intensity and duration of the disturbance activity. To avoid impacts to nesting birds, any grubbing or vegetation removal should occur outside peak breeding season (typically February 1 through September 1).***

Thus, with implementation of the above measure, any effects on wildlife movement or the use of wildlife nursery sites can be reduced to a less than significant impact.

e. *Less Than Significant Impact* – Development of the proposed project would have a less than significant potential to conflict with any local policies or ordinances protecting biological resources. Impacts to biological resources have been addressed above under issues IV(a-d). Past site disturbance on the existing reservoir site has eliminated any trees or other biological resources that might be protected. Therefore, the potential for the project to conflict with local policies or ordinances pertaining to biological resources would be considered less than significant.

f. *Less Than Significant Impact* – Please refer to the discussion under Conclusion, above. The BRA provided as Appendix 2 concluded that the project, though located within the boundaries of the CVMSHCP, the proposed Vista Reservoir site is entirely outside any Conservation Areas and will not impact any Biological Corridors and Linkages or Essential Ecological Processes. Finally, the project is not adjacent to a Conservation Area. Therefore, no conservation or avoidance measures are expected, and the project as described would be consistent with the Conservation Goals and Objectives set forth in the CVMSHCP. Therefore, the project does not have a significant potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

SUBSTANTIATION: A cultural resources report has been prepared to evaluate the potential for cultural resources to occur within the project area of potential effect entitled "Historical/Archaeological Resources Survey Report: Mission Springs Water District Vista Reservoir No. 2 Project, Assessor's Parcel No. 638-233-005, City of Desert Hot Springs, Riverside County, California" prepared by CRM TECH dated February 9, 2021 (Appendix 3). The following information is abstracted from this report. It provides an overview and findings regarding the cultural resources found within the project area.

Background

The purpose of the Cultural Resources study is to provide the District with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any "historical resources" or "tribal cultural resources," as defined by CEQA, that may exist in or around the project area.

In order to identify such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, contacted Native American representatives, and carried out an intensive-level field survey of the entire project area. The research results indicate that the existing steel reservoir in the project area dates to 1966 and therefore meets the age threshold to be considered historical in origin (i.e., more than 50 years of age). The reservoir was recorded into the California Historical Resources Inventory as a site and is designated temporarily as CRM TECH 3655-1H, pending the assignment of an official site number. As a late-historic-period infrastructure component of standard design and construction, the reservoir is utilitarian in character and demonstrates no notable historical, architectural, archaeological, engineering, artistic, or aesthetic merits. As such, it does not appear to meet any of the criteria for listing in the California Register of Historical Resources and does not qualify as a "historical resource" under CEQA provisions.

No other potential "historical resources" were encountered within or adjacent to the project area. Based on these findings, a finding of No Impact has been made regarding cultural resources. No further cultural resources investigation is recommended for the project unless construction plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are encountered during any earth-moving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

Impact Analysis

a&b. *Less Than Significant With Mitigation Incorporated* – CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

Per the above discussion and definition, no archaeological sites or isolates were recorded within the project boundaries; thus, none of them requires further consideration during this study. In light of this information and pursuant to PRC §21084.1, the following conclusions have been reached for the project:

- No historical resources within or adjacent to the project area have any potential to be disturbed as they are not within the proposed area in which the facilities will be constructed and developed, and thus, the project as it is currently proposed will not cause a substantial adverse change to any known historical resources.
- No further cultural resources investigation is necessary for the proposed project unless construction plans undergo such changes as to include areas not covered by this study.

However, if buried cultural materials are discovered during any earth-moving operations associated with the project, the following mitigation measure shall be implemented:

CUL-1 Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the District's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

With the above mitigation measure, the potential for impacts to cultural resources will be reduced to a less than significant level. No additional mitigation is required.

c. *Less Than Significant With Mitigation Incorporated* – As noted in the discussion above, no available information suggests that human remains may occur within the Area of Potential Effect (APE) and the potential for such an occurrence is considered very low. Human remains discovered during the project will need to be treated in accordance with the provisions of HSC §7050.5 and PRC §5097.98, which is mandatory. State law (Section 7050.5 of the Health and Safety Code) as well as local laws requires that the Police Department, County Sheriff and Coroner's Office receive notification if human remains are encountered. Compliance with these laws is considered adequate mitigation for potential impacts, the following mitigation measure shall be implemented in relation to discovery and treatment of human remains:

CUL-2 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

With the incorporation of the above mitigation measure, potential for impact to discovery and treatment of human remains will be reduced to a less than significant level. No additional mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VI. ENERGY: Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operations?	☐	☒	☐	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☒	☐	☐

SUBSTANTIATION

a&b. *Less Than Significant With Mitigation Incorporated* – During construction, the proposed project will utilize construction equipment that is CARB approved, minimizing emissions generated and electricity required to the extent feasible (as enforced through MM **AQ-2**, outlined under Section III, Air Quality, above). As stated in Section III, Air Quality, the construction of the proposed Vista Reservoir No. 2 Project would require mitigation measures to minimize emissions impacts from construction equipment use. This mitigation measure also applies to energy resources as they require equipment not in use for 5 minutes to be turned off, and for electrical construction equipment to be used where available. This measure would prevent a significant impact during construction due to wasteful, inefficient, or unnecessary consumption of energy resources, and would also conform to the CARB regulations regarding energy efficiency.

Southern California Edison Company (SCE) is the primary provider of electricity in the project area. According to the City of Desert Hot Springs General Plan Environmental Impact Report (General Plan EIR), in the 2018 fiscal year, SCE sold approximately 87,143 million kilowatt hours (kWh) of electricity; approximately 46% of the electricity that SCE delivered to customers came from carbon-free resources, including solar energy (approximately 13%), wind energy (approximately 13%), and geothermal energy (approximately 8%). The City's General Plan EIR provides the following analysis related to new development under Chapter 4.6, Energy:

"New development and land use turn over would be required to comply with statewide mandatory energy requirements outlined in Title 24, Part 6, of the California Code of Regulations (the CalGreen Code), which would decrease estimated electricity consumption in new and/or retrofitted structures. Additional electricity reductions would be achieved through the implementation of Mitigation Measure GHG-1C, which requires the adoption of a Zero Net Energy (ZNE) ordinance. The adoption and implementation of a ZNE ordinance would require increased building efficiency and the installation of renewable energy infrastructure (e.g., photovoltaic (PV) systems and/or windmills) to offset the building/structure's energy consumption."

A ZNE ordinance has not yet been adopted by the City; however, should it be adopted by the City prior to the development of this project, the development of the Vista Reservoir No. 2 Project would be required to comply with the provision pursuant to the adopted ordinance. The development of the reservoir would be required to comply with Title 24, Part 6, of the California Code of Regulations (the CalGreen Code). Additionally, in July 2013, the City of Desert Hot Springs adopted an Energy Action Plan (EAP), to which the project will be required to adhere. However, the operation of the new reservoir would not require additional energy beyond that which the site currently requires to operate. The existing tank operates by gravity and is fed by an existing off-site booster station. The existing booster pump will not be running more frequently to fill the new reservoir, with the exception of the energy required to facilitate the initial fill of water within the reservoir once in operation. The purpose of the proposed reservoir is for back up; as such, any time that it is used, it will be used in place of the existing tank. Therefore, the required energy to operate the project represents a net zero increase.

Additionally, the existing hydropneumatic station is only being relocated, it won't be expanded/up-sized, so it will result in no additional power consumption either. Furthermore, no natural gas would be required to operate the proposed project, and trips to the project site would occur only on an as needed basis for routine or emergency maintenance purposes after construction. As such, petroleum consumption associated with implementation of the Vista Reservoir No. 2 Project would not be considered unnecessary, inefficient, or wasteful.

According to SCE's website[1], SCE is committed to delivering power reliably and to meet demand; SCE is expanding and upgrading the transmission and distribution networks to meet the region's growing demand for electricity, and improve grid performance, while meeting California's ambitious renewable-power goals. As such, it is anticipated that SCE will continue to have ample power supply to serve the project without the need for additional electrical capacity. As such, with implementation of MM **AQ-2** to minimize construction energy impacts, it is not anticipated that the project would either result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operations, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts under these issues are considered less than significant.

[1]https://www.sce.com/about-us/reliability/meeting-demand

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VII. GEOLOGY AND SOILS: Would the project:				
a) Directly or indirectly cause 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.	☐	☒	☐	☐
(ii) Strong seismic ground shaking?	☐	☒	☐	☐
(iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
(iv) Landslides?	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
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 onsite or offsite land-slide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

SUBSTANTIATION: The following section has been prepared based on a geotechnical report entitled "Geotechnical Exploration, MSWD Vista Reservoir Tank Site, Valencia Drive, Desert Hot Springs, County of Riverside, California" prepared by TKE Engineering, Inc. dated September 18, 2020 and is attached as Appendix 4.

a. Ground Rupture

Less Than Significant With Mitigation Incorporated – The project site is located in the City of Desert Hot Springs within the County of Riverside, which is situated near several active faults, including the North and South Branches of the San Andreas fault, which are considered to be Alquist-Priolo fault zones. Figure VII-1 shows where these faults are located as depicted in the City of Desert Hot Springs General Plan, which depicts faults within the City boundary as well as within and around its Sphere of Influence (SOI). According to Figure VII-1, the site is not located within any Alquist-Priolo fault zone; however, the project site is delineated as being located within a Riverside County

Designated Fault Zone. The Alquist-Priolo fault zone is approximately 1.5 miles southwest of the project site. According to the Geotechnical Exploration provided as Appendix 4 to this Initial Study, the proposed reservoir is located approximately 150 feet northeast of a mapped fault. a fault or ground rupture can presumably occur anywhere within the mapped zones unless proven otherwise. No evidence of site faulting was observed during the field exploration. Based on this information, the risk for ground rupture at the site location is considered to be moderate. The project does not propose any human occupancy structures or other structures that will place people on the site for long periods of time or pose a significant threat to people or property from ground rupture. All structures will be built to meet earthquake building standards, particularly for water storage reservoirs. However, to protect future structures from severe damage from ground shaking, and potential ground rupture the following mitigation measure will be implemented by MSWD for construction of the reservoir to prevent a catastrophic failure of this facility during a future regional seismic event.

GEO-1 Based upon the geotechnical investigation (Appendix 4 of this document), all of the recommended seismic design measures identified in Appendix 4 (listed on pages 7-17) shall be implemented by MSWD. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including seismic related hazards on the proposed water storage reservoir.

With the implementation of the above mitigation measure, the proposed project would have a less than significant potential to directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault.

Strong Seismic Ground Shaking

Less Than Significant With Mitigation Incorporated – As stated in the discussion above, several faults run through the City, and as with much of southern California, the proposed structures will be subject to strong seismic ground shaking impacts should any major earthquakes occur in the future, particularly due to the site's location within a fault zone designated by Riverside County, and due to the site's proximity to an Alquist-Priolo fault zone, as shown in Figure VII-2. As a result, and like all other development projects in the City and throughout the southern California region, the proposed project will be required to comply with all applicable seismic design standards contained in the 2019 California Building Code (CBC). Compliance with the CBC and the use of best management design practices will ensure that structural integrity will be maintained in the event of an earthquake. Additionally, the project will be required to comply with the recommendations contained within the 2018 Geotechnical Investigation Report and summarized above, which includes developing the project in accordance with the 2016 CBC, Section 1805.5.11 and 1803.5.12. Even though the project will be subject to strong seismic ground shaking, with the incorporation of these design recommendations into future structures, the exposure of people or structures to potential substantial adverse effects (including the risk of loss, injury, or death), will be greatly minimized. The potential for significant impacts to occur due to strong seismic shaking can be reduced to a less than significant level with implementation of standard seismic design requirements appropriate for the expected level of seismic shaking as summarized in the text above. As such, mitigation measure (MM) **GEO-1** will ensure that the seismic-related geotechnical recommendations are enforced as requirements for the proposed project, which will ensure that impacts associated with strong ground shaking will be less than significant.

Seismic-Related Ground Failure Including Liquefaction

Less Than Significant Impact – The three factors determining whether a site is likely to be subject to liquefaction include seismic shaking, type and consistency of earth materials, and groundwater level. Liquefaction of saturated cohesionless soils can be caused by strong ground motion resulting from earthquakes. Soil liquefaction is a phenomenon in which saturated, cohesionless soils lose their strength due to the build-up of excess pore water pressure during cyclic loading such as that induced

by earthquakes. According to the City of Desert Hot Springs General Plan Seismic Hazards Map (Figure VII-2), the project site is located within a general area known to be susceptible to liquefaction. However, according to the Geotechnical Evaluation, due to the absence of shallow groundwater, potential for liquefaction is considered non-existent. Furthermore, dynamic settlement can also exist if loose sandy soils are subjected to ground shaking. However, due to the dense nature of underlying materials dynamic dry settlement within the project site is expected to be negligible and not a significant design concern. Therefore, the proposed project would have a less than significant potential to directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction.

Landslide

Less Than Significant With Mitigation Incorporated – According to the City of Desert Hot Springs General Plan EIR, Landslides are found along the perimeter of the City on properties abutting the surrounding hills and mountains. The proposed project site is located along the foothills of the Little San Bernardino Mountains, and is therefore assumed to be located within an area of moderate susceptibility to landslides. The site design includes a retaining walls, which are designed to stabilize the slopes and minimize erosion within the project site. With construction of the proposed retaining wall, and compliance with recommended design and construction measures outlined in the Geotechnical Investigation (Appendix 4), which are enforced by MM **GEO-1** above, the project would have a less than significant potential to expose people or structures to potential substantial adverse landslide effects, including the risk of loss, injury, or death involving landslides. Any impacts under this issue are considered less than significant with implementation of MM **GEO-1**. No further mitigation is required.

b. *Less Than Significant With Mitigation Incorporated* – During construction and operation, the project has a potential for soil erosion. Due to the area of disturbance associated with site clearing and grading, and the retaining walls necessary to stabilize the hillside, there is a potential for soil erosion to occur. Stabilization of the hillside upon which the reservoir will be constructed is incorporated into the site design, as stabilization measures are necessary to ensure that the reservoir is placed on engineered fill. Once the level surface has been manufactured, the potential for soil erosion will be minimal. However, during project constructed when soils are exposed, temporary soil erosion may occur, which could be exacerbated by rainfall. Project grading would be managed through the implementation of best management practices to achieve concurrent water quality controls during and after construction is completed and the 300,000-gallon reservoir is in operation. Additionally, recommended design and construction measures outlined in the Geotechnical Investigation (Appendix 4) and enforced through implementation of MM **GEO-1** above will ensure that soil erosion is managed during operation of the new reservoirs. Additionally, the following mitigation measures shall also be implemented to address these issues:

GEO-2 Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. Where covering is not possible, measures such as the use of straw bales or sand bags shall be used to capture and hold eroded material on the project site for future cleanup such that erosion does not occur.

GEO-3 All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the 300,000-gallon supplemental reservoir with associated water improvements is being constructed.

With implementation of the above mitigation measures, as well as MM **GEO-1**, and the mandatory erosion control measures incorporated in the site design (i.e. retaining walls and extensive

compacted fill), the project will not result in substantial soil erosion or the loss of topsoil. No further mitigation is necessary.

c. *Less Than Significant With Mitigation Incorporated* – As previously stated, the proposed project will develop a new reservoir that will be 34' in height and 40' in diameter with a physical capacity of 300,000 gallons. Through implementation of the site design, and implementation of the design measures outlined in the Geotechnical Evaluation, which shall be implemented through the following measure, implementation of the project would not result in a significant impact from occurring under this issue:

GEO-4 Based upon the geotechnical investigation (Appendix 4 of this document), all of the recommended design measures identified in Appendix 4 (listed on pages 7-17) shall be implemented by MSWD. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site.

The recommended measures outlined in the Geotechnical Study will ensure that any potential impacts regarding soil stability will be mitigated to a level of less than significant. Therefore, with implementation of the stabilizing measures identified in the site plan, the project would not 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse.

d. *Less Than Significant With Mitigation Incorporated* – According to the Geotechnical Report (Appendix 4), the field exploration indicated that the subsurface conditions at the tank facility are primarily underlain by minor amounts of artificial fill underlain by dense Fanglomerate which is turn underlain (unconformably) by gneissic and mafic igneous rocks. The dense Fanglomerate is expected to be less than 21 on the Expansion Index (EI), which is considered low to very-low.[2] Expansive soils are characterized by the ability to undergo significant volume change (shrink and swell) as a result of variation in soil moisture content. The Geotechnical Report included measures that will be enforced through MM **GEO-4** to prevent any fill used in development of the project site from including any expansive soils. Therefore, with implementation of MM **GEO-4**, the development of the new reservoir will have a less than significant potential to create a substantial risk to life or property by being placed on expansive soils because none exist on the site. No further mitigation is required.

e. *No Impact* – The project does not propose any septic tanks or alternative wastewater disposal systems. Therefore, determining if the project site soils are incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater does not apply. No impacts are anticipated. No mitigation is required.

f. *Less Than Significant With Mitigation Incorporated* – The potential for discovering paleontological resources during development of the project is considered highly unlikely based on the fact that the site has been previously engineered and disturbed at depth. No unique geologic features are known or suspected to occur on or beneath the sites. However, because these resources are located beneath the surface and can only be exposed as a result of ground disturbance activities, the following measure shall be implemented:

GEO-5 Should any paleontological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with MSWD's onsite inspector. The paleontological professional shall assess the find, determine its significance, and determine appropriate mitigation measures within the guidelines of the California

[2] https://www.fema.gov/media-library-data/20130726-1825-25045-8152/expansive_soils_explanations.txt

Environmental Quality Act that shall be implemented to minimize any impacts to a paleontological resource.

With incorporation of this contingency mitigation, the potential for impact to paleontological resources will be reduces to a less than significant level. No additional mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

SUBSTANTIATION: The following information utilized in this section of the Initial Study was obtained from the following technical study: *Air Quality and GHG Impact Analyses, Mission Springs Water District, Vista Reservoir No. 2 Project, Desert Hot Springs, California"* dated September 22, 2020 prepared by Giroux & Associates. This technical study is provided as Appendix 1 to this document.

a&b. *Less Than Significant Impact –*

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statues and executive orders (EO) include AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07. AB 32 is one of the most significant pieces of environmental legislation that California has adopted. Among other things, it is designed to maintain California's reputation as a "national and international leader on energy conservation and environmental stewardship." A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic GHG reductions, are the short time frames within which it must be implemented. Major components of the AB 32 include:

- Require the monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions.
- Requires immediate "early action" control programs on the most readily controlled GHG sources.
- Mandates that by 2020, California's GHG emissions be reduced to 1990 levels.
- Forces an overall reduction of GHG gases in California by 25-40%, from business as usual, to be achieved by 2020.
- Must complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy and from increased structural energy efficiency. Additionally, through the California Climate Action Registry (CCAR now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been developed. GHG sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned).

Thresholds of Significance

In response to the requirements of SB 97, the State Resources Agency developed guidelines for the treatment of GHG emissions under CEQA. These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March 2010. The CEQA Appendix G guidelines were modified to include GHG as a required analysis element. A project would have a potentially significant impact if it:

- Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment, or,
- Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions.

Section 15064.4 of the Code specifies how significance of GHG emissions is to be evaluated. The process is broken down into quantification of Project-related GHG emissions, making a determination of significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. At each of these steps, the new GHG guidelines afford the lead agency with substantial flexibility.

Emissions identification may be quantitative, qualitative or based on performance standards. CEQA guidelines allow the lead agency to "select the model or methodology it considers most appropriate." The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, as was used in the ensuing analysis.

The significance of those emissions then must be evaluated; the selection of a threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The guidelines are clear that they do not support a zero net emissions threshold. If the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise.

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO_2 equivalent/year. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT CO_2e for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an adopted numerical threshold of significance, Project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

Construction Activity GHG Emissions

The project is assumed to require less than one year to complete construction. The CalEEMod2016.3.2 computer model predicts that the construction activities will generate the annual CO_2e emissions identified in Table VIII-1.

Table VIII-1
CONSTRUCTION EMISSIONS (Metric Tons CO_2e)

	CO_2e
Year 2021	96.1
Amortized	**3.2**

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are considered individually less than significant.

Consistency with GHG Plans, Programs, and Policies

The City of Desert Hot Springs adopted an Initial Study, Negative Declaration for a Climate Action Plan in 2013. The plan identifies 80 specific actions to reduce GHG emissions. However, the proposed project is GHG neutral and will not increase electrical consumption or require additional personnel or maintenance.

Since the project results in GHG emissions below the recommended SCAQMD 3,000 metric ton threshold for any land use project, the project would not conflict with any applicable plan, policy, or regulation to reduce GHG emissions.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

SUBSTANTIATION

a&b. *Less Than Significant With Mitigation Incorporated* – The proposed project consists of constructing a new 300,000-gallon reservoir, retaining wall, and associated site improvements. During construction of the proposed new reservoir and associated improvements, there are activities that can expose the public to significant hazards from accidental circumstances. The first pathway occurs when petroleum products are accidentally released from construction equipment or storage facilities. For example, vandalism can cause a release from stored fuels, or a hydraulic hose may break on a large piece of construction equipment. This type of impact is readily mitigated by immediately stopping the construction activity; controlling the accidental release; and carrying out remediation of the area contaminated by the spill. The following mitigation measure addresses this circumstance, and with implementation of this measure, no residual contamination will remain.

HAZ-1 ***Prior to and during grading and construction, should an accidental release of a hazardous material occur, the following actions will be implemented: construction activities in the immediate area will be immediately stopped; appropriate regulatory agencies will be notified; immediate actions will be implemented to limit the volume and area impacted by the contaminant; the contaminated material, primarily soil, shall be collected and removed to a***

location where it can be treated or disposed of in accordance with the regulations in place at the time of the event; any transport of hazardous waste from the property shall be carried out by a registered hazardous waste transporter; and testing shall be conducted to verify that any residual concentrations of the accidentally released material are below the regulatory remediation goal at the time of the event. All of the above sampling or remediation activities related to the contamination will be conducted under the oversight of City Building & Safety Department, and Riverside County Site Cleanup Program. All of the above actions shall be documented and made available to the appropriate regulatory agencies prior to closure (a determination of the regulatory agency that a site has been remediated to a threshold that poses no hazard to humans) of the contaminated area.

Roadways adjacent to the project site are public roads that can be used by any common carrier to or from the local area. For such transporters, the existing regulatory mandates ensure that the hazardous materials and any hazardous wastes transported to and from the Project site will be properly managed. These regulations are codified in Titles 8, 22, and 26 of the California Code of Regulations. For example, maintenance trucks for construction equipment must transport their hazardous materials in appropriate containers, such as tanks or other storage devices. In addition, the haulers must comply with all existing applicable federal, state and local laws and regulations regarding transport, use, disposal, handling and storage of hazardous wastes and material, including storage, collection and disposal. Compliance with these laws and regulations related to transportation will minimize potential exposure of humans or the environment to significant hazards from transport of such materials and wastes.

Operation of the proposed reservoir will not involve potential for routine transport or use of hazardous materials or routine generation of hazardous wastes. Compliance with all federal, state and local regulations, as well as compliance with MM **HAZ-1**, above, will ensure that the project operates and is constructed in a manner that poses no substantial hazards to the public or the environment. Therefore, impacts under these issues are considered less than significant with mitigation incorporated.

c. *No Impact* – The nearest schools are located at a distance greater than one quarter mile from the proposed project site. Bella Vista Elementary School, located at 65750 Avenida Jalisco and Painted Hills Middle School, located at 9250 Sonora Drive within the City of Desert Hot Springs are more than one quarter mile to the west of the proposed project site. Furthermore, the operations of this project do not include any new use of hazardous materials, and thus will not pose a significant risk to any nearby schools. No impacts are anticipated. No mitigation is required.

d. *No Impact* – The proposed project is not located in an area that has been included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result it will not create a significant hazard to the public or environment. According to the California State Waterboard's GeoTracker, which provides information regarding Leaking Underground Storage Tanks, there are no locations within a 2,500-foot radius of any of the proposed Project facilities that is identified as Leaking Underground Storage Tank (LUST) site or Department of Toxic Substances (DTS) site (Figure IX-1, see GeoTracker figure), nor are there any remediated LUST or DTS cleanup sites. Furthermore, the nature of the proposed project is not such that persons working or residing in the area would be exposed to any hazards from any nearby contaminated sites. Thus, the proposed construction and operation of the site with a new reservoir, will not create a significant hazard to the population or to the environment from their implementation. No impacts are anticipated. No mitigation is required.

e. *No Impact* – The Palm Springs International Airport is the closest airport to the proposed project site is located approximately 9.5 miles south of the proposed project. The proposed reservoir site is not located within an Influence Area identified in the Palm Springs International Airport section of the

Riverside County Airport Land Use Commission's Compatibility Plan.[3] Given the large distance between the proposed project and nearby airports, project implementation would not result in a safety hazard for people residing or working in the project area. Furthermore, there are no private airstrips/public use airports located within two miles of the project site. Therefore, the development of the proposed Vista Reservoir No. 2 Project would have no potential to result in a safety hazard or excessive noise for people residing or working in the project area.

f. *Less Than Significant Impact* – The proposed project will be confined to the project site, with minimal potential to interfere with the adjacent roadway. The project includes the following components: retaining wall and hillside stabilization, stormwater management BMPs, installation of a new access road relocation of the existing hydropneumatics station and the electrical cabinet, grading, wrought iron and chain link fence, and a new 300,000 gallon water storage reservoir and related piping. Within the proposed reservoir site, the proposed facilities are not anticipated to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, particularly given that the project includes a new, improved access road. Ingress and egress of maintenance trucks and construction vehicles would come from Valencia Drive, which is a residential street that terminates at the project site, and also leads to a hiking trail, which is the rationale for the development of the proposed boundary fence. The project site is located within a residential area with limited traffic in the vicinity of the project. Additionally, the project site is located at the terminus of the adjacent roadway. The construction activities would not have a significant impact on the flow of traffic, and therefore no mitigation will be required to address any traffic disruption, as none will occur. Therefore, the project will not significantly impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Any impacts under this issue are considered less than significant.

g. *Less Than Significant Impact* – The proposed project is located against a hillside with residences located south and west of the site. There is a large amount of open space in the adjacent hills that could be susceptible to wildfires should one occur; however, the vegetation along the hillside is typical of desert vegetation, which is generally low to the ground consisting of the following types of vegetation: creosote bush (*Larrea tridentata*), catclaw acacia (*Acacia greggii*), white bursage (*Ambrosia dumosa*), brittlebush (*Encelia farinosa*), desert trumpet (*Eriogonum inflatum*), hairy desert sunflower (*Geraea canescens*), , desert dandelion (*Malacothrix glabrate*), and Ferocactus (*Ferocactus sp*),. Non-native, invasive plant species identified within the Project area include Saharan mustard (*Brassica tournefortii*), foxtail brome (*Bromus madritensis* ssp. *rubens*), Russian thistle (*Salsola tragus*), Mediterranean grass (*Schismus* ssp.), and planted Eucalyptus trees around the existing reservoir (*Eucalyptus spp*). According to the City's General Plan, the project is located adjacent to a high fire hazard zone within a State Responsibility Area (SRA) (Figure IX-2). The project does not include the use of flammable or explosive materials. Based on the type of uses proposed, this project has no identifiable potential to expose people or property to wildland fires. Additionally, it should be noted that this project will increase the area's water supply capabilities and is viewed as a benefit to fire protection. Therefore, any impacts are considered less than significant. No mitigation is required.

[3] http://www.rcaluc.org/Portals/13/PDFGeneral/plan/newplan/18-%20Vol.%201%20Palm%20Springs%20International.pdf

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation onsite or offsite?	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?	☐	☐	☒	☐
(iii) 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?; or,	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

SUBSTANTIATION

a. *Less That Significant With Mitigation Incorporated* – The proposed reservoir will be located in a residential area adjacent to a hillside that will require earthwork to stabilize the surface upon which the new reservoir will be placed, as well as the area surrounding the existing reservoir. The site contains an existing reservoir that will remain in use once the new reservoir is constructed and connected to MSWD's water distribution system. Therefore, the addition of the new reservoir would be comparable to that which exists on site at present. The surface of the site as it presently exists is located adjacent to the foothills of the Little San Bernardino Mountains, and contains some natural vegetation, characterized mostly by shrubs that are similar to that which populates the surrounding hillside. The majority of the site will require removal of existing vegetation and, as previously stated, a retaining wall will be installed to enable the development of a compacted level surface adjacent to the existing reservoir. Three sources of potential violation of water quality standards or waste discharge requirements are from generation of municipal wastewater; from stormwater runoff; and potential discharges of pollutants, such as accidental spills. MSWD is the wastewater collection agency in the area, though no connection to wastewater is necessary to serve the proposed Project. The project is located within the Colorado River Basin Regional Water Quality Control Board

(RWQCB) jurisdiction. To address stormwater and accidental spills within this environment, any new project must ensure that site development implements a Storm Water Pollution Prevention Plan (SWPPP) to control potential sources of water pollution that could violate any standards or discharge requirements during construction. In the short term, construction activities will have some potential to affect the quality of stormwater discharged from the project site. Land disturbance activities could result in potential erosion and sedimentation immediately adjacent to the project site. Spills or leaks of petroleum products used by construction equipment could also potentially affect the quality of surface water. The project will be required to obtain a general construction National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit prior to the start of construction. Obtaining coverage under the General Construction NPDES permit requires the preparation and implementation of a SWPPP, which specifies Best Management Practices (BMPs) that must be implemented during construction. Compliance with the terms and conditions of the NPDES and the SWPPP, , is mandatory and is judged adequate mitigation by the regulatory agencies for potential impacts to stormwater during construction activities. Implementation of the following mitigation measure is also considered adequate to reduce potential impacts to stormwater runoff to a less than significant level.

HYD-1 ***MSWD shall require that the construction contractor prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters. The SWPPP shall include a Spill Prevention and Cleanup Plan that identifies the methods of containing, cleanup, transport and proper disposal of hazardous chemicals or materials released during construction activities that are compatible with applicable laws and regulations. BMPs to be implemented in the SWPPP may include but not be limited to:***

- ***The use of silt fences;***
- ***The use of temporary stormwater desilting or retention basins;***
- ***The use of water bars to reduce the velocity of stormwater runoff;***
- ***The use of wheel washers on construction equipment leaving the site;***
- ***The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;***
- ***The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water; and***
- ***Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.***

With implementation of these mandatory Plans and their BMPs, as well as MM **HYD-1** above, the development of a new 300,000 gallon water storage reservoir will not cause a violation of any water quality standards or waste discharge requirements.

b. *Less Than Significant Impact* – The project does not propose the installation of any water wells that would directly extract groundwater. The proposed project will connect to existing water connections, though some of the onsite piping will be relocated as part of the proposed project, at the Vista Reservoir site. The proposed reservoir will be filled to store additional water, and will operate only when the existing reservoir is not in service. The amount of pervious surface on the site after construction will decrease by about 6,900 square feet (SF), which reflects the new amount of paved area containing either foundation for the new reservoir or asphalt to develop the proposed new access road. Runoff generated by the increase in paved area will be directed by the new storm drain culverts designed to convey flows through and around the site. The development of the new reservoir itself will allow MSWD to store a larger volume of water through the addition of a 300,000 gallon storage tank, which will ultimately provide additional storage capacity for MSWD's customers. Thus, the

operation of the new reservoir will require minimal new outside water sources to supply water to the project site. Thus, because of the size and nature of the proposed project, there is a less than significant potential to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin as a result of the proposed project.

c(i). *Less Than Significant Impact* – Impacts to the existing drainage pattern of the site or area could occur if development of the project results in substantial on- or off- site erosion or siltation. The project site currently contains an existing reservoir and will require construction of a retaining wall on the adjacent hillside to develop a level surface upon which to construct the new reservoir (refer to Figure 3, Site Plan). Construction of the proposed reservoir includes the installation of three retaining walls that would enable the construction of the extended tank pad, and to collect sheet flow from the adjacent slopes and convey sheet flow safely through and around the site. The existing reservoir site is located at the foothills of the Little San Bernardino Mountains hillside. Onsite drainage within the site was recently discovered to flow across the reservoir site and onto said adjacent southerly property rather flowing to the existing V-Ditch. The retaining wall will improve conditions by reducing the tributary area of surface flows to the reservoir. The proposed retaining wall will provide new drainage management through a concrete v-ditch along the perimeter to collect any sheet flow from the adjacent slopes and convey it safely through the site. Additionally, the proposed project will install several storm drain culverts to manage runoff at this site, which will therefore improve the existing drainage patterns at this site. The addition of the engineered fill upon which the new reservoir will be placed, stabilized by the installation of the proposed retaining walls, will not result in a significant increase in runoff to this storm drain due to the downhill trajectory and capacity of the storm drain. The project will require the implementation of a SWPPP and implementation of hazardous material best management practices, which will ensure that any potential discharge of polluted material does not occur or is remediated in the event of an accidental spill. Therefore, with the implementation of the site drainage plan as defined by the site design, and the limited amount of pervious surface onsite that will become impervious as a result of the project, implementation of the project will not substantially alter the drainage pattern of the site in a manner that would result in substantial erosion or siltation onsite or offsite due to the construction of onsite drainage. In fact, part of the purpose for the proposed project is to improve erosion and drainage management onsite. Any impacts under this issue are considered less than significant based on the project design. No mitigation is required.

c(ii). *Less Than Significant Impact* – Please refer to response IX(c[i]) above. Impacts to the existing drainage pattern of the site or area could occur if the development of the project results in an increased amount of flooding onsite or offsite. As stated above, the project site's surface currently consists of compacted and loose soils adjacent to a hillside that requires stabilization through the installation of retaining walls as part of the proposed project actions. All on-site flows will be directed toward the street via new storm drain culverts and drain pipes. This drainage trajectory will prevent any on- and off-site flooding; based on the project drainage plans, no offsite flooding is anticipated, particularly because a purpose of the proposed project is to improve the flow of on- and off-site drainage at the site. Therefore, implementation of the project will not substantially increase the rate or amount of surface runoff resulting in flooding onsite or offsite, and any impacts under this issue are considered less than significant. No mitigation is required.

c(iii). *Less Than Significant Impact* – Please refer to response IX(c[i]) and IX(c[ii]) above. The project will not substantially create or contribute runoff water that would exceed the capacity of existing or planned stormwater capacity, or provide substantial additional sources of polluted water. At present, the site consists mostly of compacted dirt and hillside with vegetation that will be developed into a level surface upon which to construct the new reservoir, related piping, retaining walls and other proposed site improvements. The project will require the implementation of a SWPPP, and will implement BMPs to ensure that discharge of polluted material does not occur or is remediated in the event of an accidental spill. Additionally, the project will install several storm drain culverts to manage runoff at this site, which will therefore improve the existing drainage patterns at this site. In most cases onsite surface flows will be directed to Valencia Drive, which collects stormwater. Therefore, given that the proposed project includes drainage improvements and drainage management, the

proposed project will have a less than significant potential to 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. No mitigation is required.

c(iv). *No Impact* – According to the City of Desert Hot Springs General Plan Flood Hazard Map (Figure X-1), the proposed project is not located within a mapped flood zone. Therefore, the proposed project site is not located in a 100-year flood hazard area. Furthermore, the proposed project includes drainage improvements and drainage management through the installation of retaining walls and stormwater culverts to direct flows away from adjacent properties to Valencia Drive, which collects and transports area stormwater. This is considered a benefit to the site that would further manage any onsite flood hazards. Figure X-1 illustrates that the project site is not located within a 100-Year floodplain, and therefore development of the site with the new reservoir would not impede or redirect flood flows as none would occur at the project site. No impacts under this issue are anticipated, and no mitigation is required.

d. *Less Than Significant With Mitigation Incorporated* – As stated above under issue X(c[iv]), according to the City of Desert Hot Springs General Plan Flood Hazard Map (Figure X-1), the proposed project is not located within a mapped flood zone. Therefore, the proposed Project site is not located in a flood hazard area. The project site is not located near any large bodies of water, so impacts associated with seiche or tsunami are not anticipated to occur. Mudflow typically occurs on hillsides, and though the project is located on a hillside, the project site will be stabilized through retaining walls and again further through the implementation of recommendations made within the Geotechnical Study, enforced through MMs **GEO-1** and **GEO-4** above, which would prevent a significant impact from occurring due to mudflow. Therefore, the development of the new reservoir would not risk release of pollutants due to project inundation. No impacts are anticipated to occur under this issue. No mitigation is required.

e. *Less Than Significant Impact* – The proposed project is located within the Desert Hot Springs subbasin of the Coachella Valley Groundwater Basin. The Desert Hot Springs subbasin is has been designated as very low-priority, by the Department of Water Resources (DWR).[4] The Sustainable Groundwater Management Act (SGMA) "requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline."[5] Given that the project is located within a subbasin that is considered very low priority, no conflict or obstruction of a water quality control plan or sustainable groundwater management plan is anticipated. Furthermore, the proposed project is designed to enable MSWD greater storage of water, but will not result in greater demand for water supply. This second reservoir will provide system redundancy and is anticipated to only operate in the event that the existing reservoir on the site is not in operation. Because the project is a water storage project, it is anticipated that with conservative construction practices (outlined under Hazards and Hazardous Materials above, and above in this Subchapter), the proposed project would have a less than significant potential to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

[4] https://www.cvwd.org/357/Sustainable-Groundwater-Management-Act
[5] https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XI. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

SUBSTANTIATION

a. *No Impact* – The proposed new reservoir with associated site improvements will be constructed on land that contains an existing reservoir that is designated for Public/Institutional use, with a Zoning Classification of Public/Institutional (see Figure XI-1, City of Desert Hot Springs General Plan Land Use Policy Plan Map). Essential infrastructure improvements, such as water storage reservoirs, can be constructed within any land use designation; however, this project is located within a land use designation that is appropriate for the proposed reservoir development. The uses surrounding the project are generally Residential in nature or Open Space uses. Given that the proposed new reservoir would be developed within a site already containing an existing reservoir, the project would have no potential to physically divide an established community, and as such, no impacts are anticipated under this issue and no mitigation is required.

b. *No Impact* – Please refer to the discussion under issue XI(a) above. As previously stated, the Project site is zoned by the City of Desert Hot Springs as Public/Institutional, and the Land Use Designation of the Project site is Public/Institutional. In general, water production facilities are zone independent because they are needed to support all types of development. The area immediately surrounding the project is generally residential in nature or supports open space use. The project site currently contains one reservoir and associated infrastructure. The addition of a second reservoir at this location will not result in a 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 or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, no impacts are anticipated under issue and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XII. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SUBSTANTIATION

a&b. *No Impact* – The proposed reservoir is located in the City of Desert Hot Springs within a site containing an existing reservoir. The project is located adjacent to the Little San Bernardino Mountains to the north and east, and residences to the south and west. According to the Mineral Resources map prepared for the City of Desert Hot Springs General Plan (Figure XII-1), no known mines or mineral resources are known to occur on or in the vicinity of the project site. As no current mining operations exist at the project site or have been identified by the City, implementation of the proposed project will not result in in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. No impacts are anticipated under this issue and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIII. NOISE: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

SUBSTANTIATION

Background

Noise is generally described as unwanted sound. The proposed project will include the development of a reservoir with associated water system connections and site improvements. The site is located in a residential area adjacent to the Little San Bernardino Mountains. The nearest resident to the area in which the reservoir will be constructed is between 60 and 150 feet away. The property boundary is about 60 feet from the nearest residential home, while the area in which the majority of the construction will occur is about 150 feet from this same residential home.

The unit of sound pressure ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB). Sound or noise can vary in intensity by over one million times within the range of human hearing. A logarithmic loudness scale, similar to the Richter scale for earthquake magnitude, is therefore used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity from around 500 to 2,000 cycles per second are factored more heavily into sound descriptions in a process called “A-weighting,” written as “dBA.”

Leq is a time-averaged sound level; a single-number value that expresses the time-varying sound level for the specified period as though it were a constant sound level with the same total sound energy as the time-varying level. Its unit is the decibel (dB). The most common averaging period for Leq is hourly.

Because community receptors are more sensitive to unwanted noise intrusion during more sensitive evening and nighttime hours, state law requires that an artificial dBA increment be added to quiet time noise levels. The State of California has established guidelines for acceptable community noise levels that are based on the Community Noise Equivalent Level (CNEL) rating scale (a 24-hour integrated noise measurement scale). The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," and "clearly unacceptable" noise levels for various land use types. The State Guidelines, Land Use Compatibility for Community Noise Exposure, single-family homes are "normally acceptable" in exterior noise environments up to 60 dB CNEL and "conditionally acceptable" up to 70 dB CNEL based on this scale. Multiple family residential uses are "normally acceptable" up to 65 dB CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries and churches are "normally acceptable" up to 70 dB CNEL, as are office buildings and business, commercial and professional uses with some structural noise attenuation.

City of Desert Hot Springs Noise Regulations and Standards
The City of Desert Hot Springs noise standards are found in Section 17-040.180 of the Municipal Code which states:

- In residential areas, no exterior noise level shall exceed 65 dBA and no interior noise level shall exceed 45 dBA.

Construction noise is exempt from these standards as long as work is limited to the hours of 7 am to 5 pm Monday through Saturday. During daylight savings time the permissible hours are 6 am to 6 pm. Construction is not permitted on Sundays or holidays.

a. *Less Than Significant With Mitigation Incorporated* – Implementation of the proposed project will not generate substantial noise. As stated above, the nearest sensitive receptor from the property boundary is about 60 feet from the nearest residential home, while the area in which the majority of the construction will occur is about 150 feet from this same residential home. The background noise at the project site is low because it is in a residential area that abuts the Little San Bernardino Mountains. Roadway noise is therefore limited as the adjacent roadways are residential in nature.

Short Term Construction Noise
Short-term construction noise impacts associated with the proposed project will occur over a period of six months. The earth-moving sources are the noisiest type of equipment typically ranging from 82 to 85 dB at 50 feet from the source. Temporary construction noise is exempt from the City's noise standards as long as work is limited to the hours of limited to the hours of 7 am to 5 pm Monday through Saturday. During daylight savings time the permissible hours are 6 am to 6 pm. Construction is not permitted on Sundays or holidays. The proposed project would be constructed in compliance with the City's noise standards, and therefore construction of the project would be less than significant. However, to minimize the noise generated on the site to the extent feasible, the following mitigation measures shall be implemented:

NOI-1 All construction vehicles and fixed or mobile equipment shall be equipped with operating and maintained mufflers.

NOI-2 All employees that will be exposed to noise levels greater than 75 dB over an 8-hour period shall be provided adequate hearing protection devices to ensure no hearing damage will result from construction activities.

NOI-3 No construction activities shall occur during the hours of 5 PM through 7 AM, or 6 PM to 6 AM during daylight savings time Monday through Saturday; at no time shall construction activities occur on Sundays or holidays, unless a declared emergency exists.

NOI-4 Equipment not in use for five minutes shall be shut off.

NOI-5 Equipment shall be maintained and operated such that loads are secured from rattling or banging.

NOI-6 Construction employees shall be trained in the proper operation and use of equipment consistent with these mitigation measures, including no unnecessary revving of equipment.

NOI-7 MSWD will require that all construction equipment be operated with mandated noise control equipment (mufflers or silencers). Enforcement will be accomplished by random field inspections by MSWD.

NOI-8 Construction staging areas shall be located as far from adjacent sensitive receptor locations as possible, as determined by MSWD.

Long-Term Operational Noise

The proposed project will not cause any measurable permanent increase in ambient noise levels in the vicinity of the project above levels existing without the project, in particular because this project will construct a second reservoir at a location containing an existing reservoir. The operation of the new reservoir will not require an introduction of new noise generating equipment at this site. Additionally, reservoirs typically do not generate substantial noise because they do not require a motor to store or convey water. Existing noise onsite is limited to the residential background noise generated by the surrounding residences and residential roadway noise from Valencia Drive. Therefore, through the implementation of the mitigation measures identified above, neither operation or construction of the proposed project would violate noise standards outlined in the City's Municipal Code. Impacts under this issue are considered less than significant with mitigation incorporated.

b. *Less Than Significant With Mitigation Incorporated* – Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by vibration of room surfaces is called structure borne noises. Sources of groundborne vibrations include natural phenomena (e.g. earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g. explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous or transient. Vibration is often described in units of velocity (inches per second), and discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts related to human development are generally associated with activities such as train operations, construction, and heavy truck movements.

The background vibration-velocity level in residential areas is generally 50 VdB; levels would generally be considered even less in rural areas such as the area surrounding the project footprint. Groundborne vibration is normally perceptible to humans at approximately 65 VdB, while 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible. Construction activity can result in varying degrees of groundborne vibration, but is generally associated with pile driving and rock blasting. Other construction equipment, such as air compressors, light trucks, hydraulic loaders, etc. generates little or no ground vibration. While no enforceable regulations for vibration exist within Riverside County, the Federal Transit Association (FTA) guidelines identify a level of 80 VdB for sensitive land uses. This threshold provides a basis for determining the relative significance of potential project related vibration impacts.

In the short term, it is possible that groundbreaking construction equipment and other equipment required to construct the whole of the project—including: retaining wall and hillside stabilization, stormwater management BMPs, installation of a new access road, relocation of the existing hydropneumatics station and the electrical cabinet, grading, wrought iron fence, and a new 300,000 gallon water storage reservoir and related piping—may have some potential to create some vibration to the nearest sensitive receptors at some sites within the project footprint. However, any short-term impacts to the nearest sensitive receptors would be considered less than significant through implementing the following mitigation measure:

NOI-9 MSWD shall require the construction contractor(s) to implement the following measures:

- ***Ensure that the operation of construction equipment that generates high levels of vibration including, but not limited to, large bulldozers, loaded trucks, pile-drivers, vibratory compactors, and drilling rigs, is minimized to below 72 vibration decibels (VdB), within 45 feet of existing residential structures and 35 feet of institutional structures (e.g., schools) during construction. Use of small rubber-tired bulldozers shall be enforced within these areas during grading operations to reduce vibration effects.***

- ***The construction contractor shall provide signs along the roadway identifying a phone number for adjacent property owners to contact with any complaint. During future construction activities with heavy equipment within 300 feet of occupied residences, vibration field tests shall be conducted at the property line near the nearest occupied residences., If vibrations exceed 72 VdB, the construction activities shall be revised to reduce vibration below this threshold. These measures may include, but are not limited to the following: use different construction methods, slow down construction activity, or other mitigating measures to reduce vibration at the property from where the complaint was received.***

With implementation of the above mitigation measure, impacts from project related vibration would be considered less than significant. No further mitigation is required.

c. *Less Than Significant Impact* – According to the City of Desert Hot Springs General Plan, aircraft noise impacting the community emanates from commercial and general aviation operations at the Palm Springs International Airport, located about 9 miles south of the project site. The Palm Springs International Airport: Airport Master Plan and Part 150 Noise Compatibility Study indicates that flight tracks and patterns that aircraft are assumed to follow outlined in the Airport Noise Study indicate limited over flights in Desert Hot Springs. Ultimately, the Airport Master Plan concluded that existing and future noise levels associated with Airport operations will have no significant impact on the City of Desert Hot Springs or its Sphere of Influence (SOI). Given that the proposed Vista Reservoir site is located within the City of Desert Hot Springs, it is not anticipated that persons working in the project area would be exposed to excessive noise levels generated by the nearby Airport. No private airstrips are located in close proximity to the proposed project; therefore, impacts under this issue is considered less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SUBSTANTIATION

a. *Less Than Significant Impact* – The type of use planned for the project site is not of a type that would induce substantial population growth in the area. No housing is proposed as part of the project. Though construction of a new 300,000-gallon reservoir with associated site improvements will require a temporary work force, this is short-term and with about 5-10 employees onsite during construction, it will not induce population growth. Additionally, the number of employees needed to operate the new reservoir with water improvement facilities will not be increased; MSWD employees will visit the site on an as needed or planned maintenance basis, which may involve one or two employees per visit. Therefore, impacts under this issue are considered less than significant and no mitigation is required.

b. *No Impact* – The proposed project will occur on a site that currently contains an existing 300,000-gallon reservoir; implementation of the project will require development of retaining walls to manufacture a level surface upon which the new reservoir will be constructed, as well as drainage improvements and other related site improvements. No housing is proposed as part of the project and no persons reside within the project site. Therefore, implementation of the project as a whole—which consists of a reservoir and relocation of the existing onsite hydropneumatics station and the electrical cabinet and site improvements—will not displace any existing housing or displace a substantial number of people that would necessitate the construction of replacement housing elsewhere. No impacts will occur as a result of project implementation. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XV. PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

SUBSTANTIATION

a. *Less Than Significant Impact* – The City of Desert Hot Springs is currently served by the Riverside County Fire Department (RCFD). The RCFD currently has two fire stations: Station #36 and Station #37, which, together, responded to approximately 5,746 calls in FY15.[6] These calls included medical emergencies, vegetation and structure fires, vehicle accidents, public assistance and false alarms. Station #37 is the fire station located closest to the project at about 2 miles southwest of the proposed project along Pierson Boulevard. The project will not include the use or storage of highly flammable materials. The project will develop a new reservoir and water infrastructure improvements that could benefit fire protection services by providing greater water storage to the MSWD customers. The 300,000 gallon water storage reservoir does not present a fire hazard, though it is located just south of a high fire hazard severity zone within a State Responsibility Area, and therefore, there may be a potential for wildfires at this site (see Figure IX-2). The reservoir will be made of steel and concrete, which are considered fire-resistant. Thus, with no greater potential for fire risk at this project site, no new or altered fire protection facilities will be required to serve this project. Any impact to the existing fire protection system is considered less than significant. No additional mitigation is required.

b. *Less Than Significant Impact* – The proposed project site is located on the outskirts of the City of Desert Hot Springs in a residential area adjacent to the Little San Bernardino Mountains. The City of Desert Hot Springs Police Department provides the citizens of the Planning Area with police services and protection. According to the City's General Plan EIR, Service is primarily provided from the Police Department Office at 65-950 Pierson Blvd, which is about 2 miles south/southwest of the project site. Additional personnel are provided at a satellite office at the Police Neighborhood Office at 66140 West Arroyo located in Tedesco Park. Police services are dispatched from the Police Department Office, but the satellite office is centrally located for greater police presence in the neighborhood and efficient response. Installation of a second reservoir at the site, which currently contains an existing reservoir, will require development of a retaining wall and hillside stabilization to ensure that the surface upon which the new reservoir is constructed is stable. The proposed project is not the kind of use that would likely attract criminal activity, except for random trespass and theft; however, any random trespass is unlikely given the new security fence that will enclose the property. The proposed facility would not be readily accessible to the public as the project site is currently fenced and the whole of the new project footprint will be fenced, so a less than significant potential exists for demand for police protection or expansion of police infrastructure. Due to the project's location within an

[6] City of Desert Hot Springs General Plan EIR (pg. 4.15-1)

existing facility, and the lack of new people associated with operation of the proposed facilities, implementation of the proposed project would not substantially increase the demand for law enforcement services beyond that already existing at the Project site.

c. *Less Than Significant Impact* – The proposed project is located within the Palm Springs Unified School District. Within the City and SOI, there are five elementary schools, two middle schools, and one high school, as well as the Wenzlaff Education Center, a continuation school. Bella Vista Elementary School, located at 65750 Avenida Jalisco and Painted Hills Middle School, located at 9250 Sonora Drive within the City of Desert Hot Springs are the closest schools to the project site, located less than a mile to the west. As discussed under Chapter XIV, Population and Housing, above, the project would not induce population growth within the City, as it will neither construct housing, nor result in a growth in employment opportunities within the area. Thus, the proposed project will not generate an increase in elementary, middle, or high school population. Therefore, any impacts under this issue are considered less than significant. No mitigation is required.

d. *No Impact* – Because the project would develop infrastructure through the development of a 300,000-gallon reservoir adjacent to an existing reservoir and would not develop any commercial, residential, or industrial facilities, the proposed project is not required to pay any fees to offset impacts to school facilities. As stated in the preceding sections, the proposed project is not anticipated to create a substantial increase in population because it does not require additional MSWD staff to operate this second reservoir. The nearest park is Veteran's Memorial Park, which is located about a half-mile south of the project site. Implementation of the proposed project will not impact any current or planned park use, as it will be constructed on land containing and adjacent to an existing reservoir. Thus, implementation of the proposed project would not cause a substantial adverse physical impact to any parks within the City. No impacts are anticipated, and no mitigation is required.

e. *No Impact* – Other public facilities include library and general municipal services. The library system in the City of Desert Hot Springs is operated by the Riverside County Library System. Since the project will not directly induce substantial population growth, it is not forecast that the use of such facilities will increase as a result of the proposed project. As a result, the implementation of the project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for public services to include other public facilities. Thus, no impacts are anticipated under this issue and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

SUBSTANTIATION

a. *No Impact* – As previously discussed in Section XIV, Population and Housing and Section XV, Public Services, this project will not contribute to an increase in the population beyond that already allowed or planned for by local and regional planning documents. Therefore, this project will not result in an increase in the demand for parks and other recreational facilities. It should be noted that the provision of water storage facilities (such as the proposed 300,000-gallon reservoir) is generally considered a benefit to parks and recreational uses. No impacts are anticipated. No mitigation is required.

b. *No Impact* – The proposed project consists of the construction of a 300,000-gallon reservoir adjacent to MSWD's existing reservoir at the Vista Reservoir site. This reservoir will connect to MSWD's system and will be used when the existing reservoir is not in use. The project will not include any recreational facilities, nor will it require the construction of new recreational facilities or expansion of new recreational facilities because the proposed project is not anticipated to substantially induce any population growth. The use of the site as the location for the second reservoir is not forecast to require a substantial short- or long-term labor force. As a result, no recreational facilities—existing or new—are required to serve the project, thus no impacts are anticipated under this issue. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVII. TRANSPORTATION: Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous inter-sections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

SUBSTANTIATION

a. *Less Than Significant Impact* – This project does not propose any new roads. The operation of the proposed water facility has no potential to conflict with alternative transportation plans, policies or programs. The project operations in the long term will not generate significant additional traffic and no new public roads or alterations to any existing public roads will result. The proposed reservoir will be constructed entirely within the project site and will therefore not impact or otherwise decrease performance or safety of public transit, bicycle, or pedestrian facilities during this phase. Thus, the project would not conflict with any adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. The project is not anticipated to result in a substantial number of trips such that levels of service or other State and local measures of performance would be violated, particularly given that the proposed project is located at the terminus of Valencia Avenue at the foothills of the Little San Bernardino Mountains. Therefore, based on the availability of roadways and the developed area in which the project is located, the proposed project has a less than significant potential to conflict with a program, plan, ordinance or policy addressing the circulation system.

b. *Less Than Significant Impact* – The proposed Project would develop a new 300,000-gallon welded steel reservoir that will connect to MSWD's existing water system on a site containing an existing 300,000-gallon reservoir. The City of Desert Hot Springs has not developed a threshold for vehicle miles travelled; however, the proposed project will require minimal vehicle miles traveled to operate once constructed. In the short term, construction of the proposed facilities will result in the generation of up to about 30-50 roundtrips per day on the adjacent roadways by construction personnel and trucks removing any excavated materials and remains of the structures on site. The total number of truck roundtrips per day is estimated to be 20 trips, plus 10-20 employee roundtrips per day. The vehicle miles traveled in these instances would likely average less than 50 miles round trip. The number of temporary truck trips will be minimized by using 15 cubic yard material haulers instead of smaller 10 cubic yard trucks to haul material onto and off of the site. Additionally, the same trucks that haul material onto the site would also carry material off of the site. Once constructed, the only traffic that would be generated by this project would be the continued occasional visits to the project site by MSWD personnel to inspect and maintain facilities, resulting in minimal vehicle miles traveled once the reservoir is in operation. As such, development of the Vista Reservoir No. 2 Project is not anticipated to result in a significant impact related to vehicle miles travelled, and thus would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts under this issue are considered less than significant.

c. *Less Than Significant Impact* – The proposed project will occur entirely within the project site boundaries. Construction activities will not occur within the adjacent roadways to the project site.

Access to nearby residences on the roadways adjacent to the proposed project will not be disrupted by construction equipment or construction trips. Large trucks delivering equipment, fill material, or removing small quantities of excavated dirt or debris can enter the site without major conflicts with the flow of traffic on the roadways used to access the site. Primary access to the site will be provided along Valencia Drive, where the entrance to the site is located. The project site is located at the terminus of the adjacent roadway. The proposed project will install a new access road and new access gates to accommodate access to both the existing and proposed reservoir. This new access road will be designed such that the project would not increase hazards due to a geometric design feature or incompatible uses. Furthermore, access to the site must comply with City design standards and would be reviewed by the City to ensure that inadequate design features or incompatible uses do not occur. Additionally, the proposed project would be required to comply with all applicable fire code and ordinance requirements for construction and access to the site. Emergency response and evacuation procedures would be coordinated with the City, as well as the police and fire departments. Therefore, the proposed Vista Reservoir No. 2 Project will have a less than significant potential to substantially increase hazards due to a geometric design feature or incompatible uses. No mitigation is required.

d. *Less Than Significant Impact* – The Project site includes direct access on public roadways and an access road on Valencia Drive, which is a residential roadway that terminates at the project site. According to the City's General Plan, Interstate-10 is considered an emergency access route. The City has a detailed Emergency Operations Plan, with which the proposed project will have no conflicts. No known emergency access plans or emergency response or evacuation plans will be affected by this project in the short- or long-term. Construction activities will not occur within the roadways adjacent to the project site boundaries. Large trucks delivering equipment will be removing materials, as well as hauling materials off of the site. These construction activities are not likely to cause conflicts to the flow of traffic based on the location of the proposed project site at the terminus of a residential roadway with ample clearance that would prevent traffic from conflicting with residential traffic or driveways of nearby residences. As such, it is not anticipated that a traffic management plan will be required to ensure adequate emergency access. No mitigation will be required to address any traffic disruption, as none is anticipated to occur. Therefore, the project would provide adequate emergency access during construction. Any impacts under this issue are considered less than significant. No further mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVIII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial change in the significance of tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to the California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in sub-division (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

SUBSTANTIATION

a&b. *Less Than Significant With Mitigation Incorporated* – Only one tribe has requested consultation with the District under AB 52, the Agua Caliente Band of Cahuilla Indians. The District contacted the tribe to initiate the AB-52 process on October 19, 2020. As stated under the Cultural Resources section above, the project site contains an existing reservoir, and as such as been previously disturbed. There is a potential to unearth tribal cultural resources of importance during the earth moving activities, which includes site clearing and grading, relocation of some underground piping, and development of retaining walls necessary to stabilize the hillside. During the 30-day consultation period that concluded on November 17, 2020, the tribe did not submit a response. As such, AB-52 concluded with no tribal input, and as such, with the implementation of the mitigation measure **CUL-1**, the project has a less than significant potential to cause a substantial change in the significance of tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to the California Native American tribe and that is either **a)** Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or **b)** A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. No further mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) 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?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☒	☐	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☒	☐	☐

SUBSTANTIATION

a. Water

Less Than Significant Impact – The proposed project will construct new water facilities—a new 300,000-gallon water storage reservoir and support facilities—to store additional water within MSWD's jurisdiction and to create a backup water system should the existing reservoir need to be taken out of service for maintenance, etc. The proposed project will occur on a site that currently contains an existing 300,000-gallon reservoir; implementation of the project will require development of retaining walls to manufacture a level surface upon which the new reservoir will be constructed, as well as drainage improvements and other related site improvements. The project will not require any additional water to operate, other than the water proposed to be stored in the proposed reservoir, which will contribute to the existing water infrastructure within MSWD's service area boundary. With no demand for water as a result of implementing the proposed project, the development of the new 300,000 gallon water storage reservoir, connection to MSWD's existing water system, and site improvements are not forecast to result in a significant impact pertaining to the construction of new water facilities or expansion of existing facilities.

Wastewater

No Impact – The proposed project will not develop any housing or human-occupied structures that would require connection to the wastewater collection system. The only structure proposed at this time is the 300,000 gallon water storage reservoir. Therefore, no connections to MSWD's wastewater collection system and wastewater treatment plant are required, and with no generation of wastewater at the site, site improvements are not forecast to require or result in the construction of new wastewater facilities or expansion of existing facilities in order to serve the project.

Stormwater

Less Than Significant Impact – As stated under issue X(c[i-iv]), implementation the proposed project is not forecast to significantly alter the volume of surface/stormwater runoff that will be generated from the project site. The project site is located at the foothills of the Little San Bernardino Mountains on a hillside, which means that much of the flow of water in the vicinity runs downhill from the project area. Onsite drainage within the site was recently discovered to flow across the reservoir site and onto said adjacent southerly property rather flowing to the existing V-Ditch. The retaining walls will improve conditions by reducing the tributary area of surface flows to the reservoir. The proposed retaining wall will provide new drainage management through a concrete v-ditch along the perimeter to collect any sheet flow from the adjacent slopes and convey it safely through the site. Additionally, the proposed project will install several storm drain culverts to manage runoff at this site, which will therefore improve the existing drainage patterns at this site. The addition of the engineered fill upon which the new reservoir will be placed, stabilized by the installation of the proposed retaining walls, will not result in a significant increase in runoff to this storm drain due to the downhill trajectory and capacity of the storm drain. The project will require the implementation of a SWPPP and hazardous material BMPs during construction, which will ensure that any potential discharge of polluted material does not occur or is remediated in the event of an accidental spill. Thus, the development of the project will not result in a significant impact pertaining to the construction of new or expansion of existing stormwater drainage facilities. Any impacts under this issue are considered less than significant. No mitigation is required.

Electric Power

No Impact – Development of the Vista Reservoir No. 2 Project would not require the installation of electrical services or additional energy beyond that which the site currently requires to operate. The proposed tank operates by gravity and is fed by an existing off-site booster station. The existing off-site booster will not be running more frequently to fill the new reservoir, with the exception of the energy required to facilitate the initial fill of water within the reservoir once in operation. The purpose of the proposed reservoir is for back up; as such, any time that it is used, it will be in place of the existing tank. Therefore, the required energy to operate the project represents a net zero increase. Additionally, the existing hydropneumatic station is only being relocated, it won't be expanded/up-sized, so no additional power consumption is forecast. Therefore, the project would not result in a significant environmental effect related to the relocation or construction of new or expanded electric power facilities. No impacts are anticipated.

Natural Gas

No Impact – Development of the Vista Reservoir No. 2 Project would not require installation of natural gas. Therefore, the project would not result in a significant environmental effect related to the relocation or construction of new or expanded natural gas facilities. No impacts are anticipated.

Telecommunications

No Impact – Development of the Vista Reservoir No. 2 Project would not require installation of wireless internet service or phone serve. Therefore, the project would not result in a significant environmental effect related to the relocation or construction of new or expanded telecommunication facilities. No impacts are anticipated.

b. *Less Than Significant Impact* – Please refer to the discussion under X(b) and XIX(a) above. The proposed project will construct new water facilities—a new 300,000 gallon water storage reservoir—to store additional water within MSWD's jurisdiction and to allow existing water storage reservoirs to be taken out of service for maintenance when required. The construction and operation of the new water storage reservoir will not create a greater demand for water at this site than that which presently exists, as the reservoir will connect to the existing MSWD water distribution system and store water for future use. The new reservoir will allow better overall management of water distribution within the MSWD's service area. Thus, implementation of the proposed project will have access to sufficient water supplies available to serve the project from existing entitlements and resources. Any impacts under is issue is considered less than significant. No mitigation is required.

c. *No Impact* – Please refer to the discussion under issues XIX(a). The proposed 300,000 gallon water storage reservoir will not generate any wastewater, as there are no connections to the wastewater treatment plant because no human occupied structures are proposed as part of this project. Therefore, implementation of the project will not create a demand for wastewater treatment services that would impact the provider's ability to serve their existing commitments. No impacts are anticipated under this issue, and no mitigation is required.

d&e. *Less Than Significant With Mitigation Incorporated* – The project is not anticipated to generate a large amount of waste as a result of construction or operation of the new 300,000-gallon reservoir. Any construction and demolition (C&D) waste will be recycled to the maximum extent feasible and any residual materials will be delivered to one of several C & D disposal sites in the area surrounding the project site. Many of these C&D materials can be reused or recycled, thus prolonging the supply of natural resources and potentially saving money in the process.

In accordance with CALGreen code 5.408.4, 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing must be reused or recycled. As this is a mandatory requirement, no mitigation is required to ensure compliance by MSWD for this project.

While the existing hydropneumatic station and the electrical cabinet will require relocation, demolition is not anticipated to be required as part of the proposed project, construction waste reduction/diversion would be the focus of recycling/reuse. Because of increased construction recycling efforts resulting from CalGreen and other regulations, opportunities for construction recycling are becoming easier to find, such as one in Palm Desert that accepts a wide range of construction and demolition debris materials: asphalt, concrete, drywall, gravel, reusable/ deconstructed material, pallets, sand, soil, and wood. There are additional facilities that accept C&D materials located in the surrounding areas[7] including facilities in Coachella, Thousand Palms, Indio, Palm Springs, and Cathedral City that accept a wide range of materials including the following: appliances, cardboard, metals, wood, asphalt, concrete, soil, block rock, brick, carpet and padding, concrete with rebar, drywall, gravel, rock, roof tile, and tile.

The facilities that accept C&D materials, combined with the landfills in the surrounding area, have adequate capacity to serve the proposed project. Solid waste will be disposed of in accordance with existing regulations at an existing licensed landfill. The Lamb Canyon Sanitary Landfill and Badlands Landfill serve the project area. The Lamb Canyon Sanitary Landfill has a maximum permitted daily capacity of 5,500 tons per day, with a permitted capacity of 38,935,653 cubic yards (CY), with 19,242,950 CY of capacity remaining. The Badlands landfill has a maximum permitted daily capacity of 4,800 tons per day, with a permitted capacity of 34,400,000 CY, with 15,748,799 CY of capacity remaining. Both landfills permit thousands of tons of waste per day, which is beyond what the expected amount of waste would be generated by the proposed facilities during construction of the proposed reservoir. Furthermore, the proposed project is not anticipated to generate a substantial amount of operational waste as the project will only be visited on an as needed maintenance basis. Additionally, should the project require import or export of soil to accommodate the proposed retaining wall, all excavated soil would be hauled offsite by truck to an appropriately permitted solid waste facility. The daily amount of soil to be disposed per day would not exceed the maximum permitted throughput for each waste type (i.e., non-hazardous and hazardous). It is estimated that 15 CY trucks will be utilized to transport an export off site. For planning purposes, it is assumed that daily truck trips will be limited to 50 trucks per day and that a maximum of 75 miles per trip will occur. As such, the proposed project would comply with all federal, State, and local statues related to solid waste disposal.

Any hazardous materials collected on the project site during either construction or operation of the project will be transported and disposed of by a permitted and licensed hazardous materials service provider. Therefore, the project is expected to comply with all regulations related to solid waste under federal, state, and local statutes. To further reduce potential impacts to solid waste facilities due to

[7] http://cms.sbcounty.gov/portals/50/solidwaste/CandD_Recycling_Guide.pdf

the large scale of the materials that may require disposal or recycling, the following mitigation measure will be implemented:

UTIL-1 ***The contract with demolition and construction contractors shall include the requirement that all materials that can be recycled shall be salvaged and recycled. This includes, but is not limited to, wood, metals, concrete, road base, and asphalt. The contractor shall submit a recycling plan to MSWD for review and approval prior to the start of demolition/construction activities to accomplish this objective.***

Therefore, with the above mitigation measure, the project is expected to comply with all regulations related to solid waste under federal, state, and local statutes and be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs. No further mitigation is necessary.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XX. WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☒	☐	☐

SUBSTANTIATION

a. *Less Than Significant Impact* – The proposed project is located adjacent to a High Fire Hazard Severity Zone in a State Responsibility Area (SRA), shown on Figure XX-1. Given that the project itself is not located within a very high fire hazard severity zone, it is not anticipated that this project will impair an adopted emergency response plan or emergency evacuation plan. Please review the discussion of wildfire under Subchapter IX, Hazards and Hazardous Materials. Within the proposed reservoir site, the proposed facilities are not anticipated to impair implementation of an adopted emergency response plan or emergency evacuation plan. Ingress and egress of maintenance trucks and construction vehicles would come from Valencia Drive, which is a residential street that terminates at/adjacent to the project site. The project site is located within a residential area with limited traffic in the vicinity of the project. The reservoir would be developed in such a way that emergency response would have access in the area around the new reservoir, should access be required. Therefore, the project will not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts under this issue are considered less than significant and no mitigation is required.

b. *Less Than Significant Impact* – The proposed project includes the development of a new water storage reservoir at a site in which an existing water storage reservoir is located. The project does not propose any human occupancy structures or other structures that will place people on the site for long periods of time or pose a significant threat to people or property from wildfire risk. The project site is located adjacent to a hillside and therefore has a potential to be exposed to wildfire as there is not a significant amount of development located at this location. Because the proposed project would develop a water storage reservoir within a site containing an existing water storage reservoir, and because the provision of water storage is considered a benefit to the prevention of the spreading of wildfire in high risk areas, it is not anticipated that development at this site would expose occupants to pollutant concentrations from a wildfire. Therefore, given that the proposed project does not contain any human occupancy structures, it is not anticipated that the project would exacerbate fire risks thereby exposing project occupants to pollutant concentrations from a wildfire or uncontrolled spread of wildfire. Impacts under this issue are considered less than significant and no mitigation is required.

c. *Less Than Significant Impact* – The proposed project is a water storage reservoir construction project on a site that currently contains an existing reservoir. The site does not contain vegetation or other fuel load that would exacerbate fire risk during construction at this site located adjacent to a high fire hazard zone. The project does not include any new uses, such as power lines, that would have a potential to result in random fire risk under accidental circumstances (such as a downed wire, etc.). As such, though the proposed project would construct a water storage reservoir, it is not anticipated that the construction of the reservoir at this site would exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Impacts under this issue are considered less than significant and no mitigation is required.

d. *Less Than Significant With Mitigation Incorporated* – The project will install retaining walls to ensure that the adjacent hillside is stabilized. Onsite drainage within the site was recently discovered to flow across the reservoir site and onto adjacent southerly property rather flowing to the existing V-Ditch. The retaining walls will improve conditions by reducing the tributary area of surface flows to the reservoir. The proposed retaining wall will provide new drainage management through a concrete v-ditch along the perimeter to collect any sheet flow from the adjacent slopes and convey it safely through the site. Additionally, the proposed project will install several storm drain culverts to manage runoff at this site, which will therefore improve the existing drainage patterns at this site. The project would construct a retaining wall and recommended design measures, which would minimize downslope landslides as a result of post-fire slope instability. Furthermore, the project does not propose any habitable structures and thus the exposure of persons to such an event is minimal. As stated under the Hydrology Subchapter, flood risks at the project site are minimal, and therefore downslope flooding is not anticipated to occur as a result of post-fire slope instability or drainage changes. Additionally, with implementation of specific measures outlined in the geotechnical study (enforced by MMs **GEO-1** and **GEO-4**), the project would construct a retaining wall and recommended design measures, which would minimize downslope landslides as a result of post-fire slope instability. Based on the discussion above, with MMs **GEO-1** and **GEO-4**, the project would have a less than significant potential to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XXI. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have 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)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

SUBSTANTIATION

The analysis in this Initial Study and the findings reached indicate that the proposed project can be implemented without causing any new project specific or cumulatively considerable unavoidable significant adverse environmental impacts. Mitigation is required to control certain potential environmental impacts of the proposed project to a less than significant impact level. The following findings are based on the detailed analysis contained within this Initial Study of all environmental topics and the implementation of the mitigation measures identified in the previous text and summarized following this section.

a. *Less Than Significant With Mitigation Incorporated* – The project has no potential to cause a significant impact on any biological or cultural resources. The project has been identified as having no potential to degrade the quality of the natural environment, substantially reduce 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, or reduce the number or restrict the range of a rare or endangered plant or animal. The project requires mitigation to prevent significant impacts from occurring as a result of implementation of the project. Based on the historic disturbance of the site, and its current disturbed condition, the potential for impacting cultural resources is low. The Cultural Resources Report determined that no cultural resources of importance were found at the project site, so it is not anticipated that any resources could be affected by the project because no cultural resources exist. However, because it is not known what could be accidentally unearthed upon any excavation activities, contingency mitigation measures are provided to ensure that, in the unlikely event that any resources are found, they are protected from any potential impacts. Please see biological and cultural sections of this Initial Study.

b. *Less Than Significant With Mitigation Incorporated* – Based on the analysis in this Initial Study, the proposed Vista Reservoir No. 2 Project has the potential to cause impacts that are individually or cumulatively considerable. There are no other projects in the vicinity to which this project would make a cumulatively considerable impact, furthermore the provision of water storage is generally viewed as a benefit to the community. The issues of Air Quality, Biology, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Tribal

Cultural Resources, Utilities and Service Systems, and Wildfire require the implementation of mitigation measures to reduce impacts to a less than significant level and ensure that cumulative effects are not cumulatively considerable. All other environmental issues were found to have no significant impacts without implementation of mitigation. The potential cumulative environmental effects of implementing the proposed project have been determined to be less than considerable and thus, less than significant impacts.

c. *Less Than Significant With Mitigation Incorporated* – The proposed project includes activities that have a potential to cause direct substantial adverse effects on humans. The issues of Air Quality, Geology and Soils, Hazards and Hazardous Materials, Noise, and Wildfire require the implementation of mitigation measures to reduce human impacts to a less than significant level. All other environmental issues were found to have no significant impacts on humans without implementation of mitigation. The potential for direct human effects from implementing the proposed project have been determined to be less than significant with mitigation.

Conclusion

This document evaluated all CEQA issues contained in the current Initial Study Checklist Form. The evaluation determined that either no impact or less than significant impacts would be associated with the issues of Aesthetics, Agricultural and Forestry Resources, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Population/Housing, Public Services, Recreation, and Transportation. The issues of Aesthetics, Air Quality, Biology, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Tribal Cultural Resources, Utilities and Service Systems, Wildfire require the implementation of mitigation measures to reduce impacts to a less than significant level. The required mitigation has been proposed in this Initial Study to reduce impacts for these issues to a less than significant impact.

Based on the findings in this Initial Study, the MSWD proposes to adopt a Mitigated Negative Declaration (MND) for the Mission Springs Water District Vista Reservoir No. 2 Project. A Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) will be issued for this project by the MSWD. The Initial Study and NOI will be circulated for 30 days of public comment. At the end of the 30-day review period, a final MND package will be prepared and it will be reviewed by MSWD for possible adoption at a future Board meeting, the date for which has yet to be determined. If you or your agency comments on the MND/NOI for this project, you will be notified about the meeting dates in accordance with the requirements in Section 21092.5 of CEQA (statute).

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Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino*,(1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors*, (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; San *Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

Revised 2019
Authority: Public Resources Code sections 21083 and 21083.09
Reference: Public Resources Code sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3/ 21084.2 and 21084.3

SUMMARY OF MITIGATION MEASURES

Air Quality

AIR-1 Fugitive Dust Control. The following measures shall be incorporated into project plans and specifications for implementation during construction:

- Apply soil stabilizers to inactive areas.
- Prepare a high wind dust control plan and implement plan elements and terminate soil disturbance when winds exceed 25 mph.
- Stabilize previously disturbed areas if subsequent construction is delayed.
- Apply water to disturbed surfaces and haul roads 3 times/day.
- Replace ground cover in disturbed areas quickly.
- Reduce speeds on unpaved roads to less than 15 mph.
- Trenches shall be left exposed for as short a time as possible.
- Identify proper compaction for backfilled soils in construction specifications.

This measure shall be implemented during construction, and shall be included in the construction contract as a contract specification.

AIR-2 Exhaust Emissions Control. The following measures shall be incorporated into Project plans and specifications for implementation:

- Utilize off-road construction equipment that has met or exceeded the maker's recommendations for vehicle/equipment maintenance schedule.
- Contactors shall utilize Tier 4 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

Biological Resources

BIO-1 Preconstruction presence/absence surveys for burrowing owl shall be conducted no less than 14 days prior to any onsite ground disturbing activity by a qualified biologist. The burrowing owl surveys shall be conducted pursuant to the recommendations and guidelines established by the California Department of Fish and Wildlife in the "California Department of Fish and Wildlife 2012 Staff Report on Burrowing Owl Mitigation." In the event this species is not identified within the Project limits, no further mitigation is required, and a letter shall be prepared by the qualified biologist documenting the results of the survey. The letter shall be submitted to CDFW prior to commencement of Project activities. If during the preconstruction survey, the burrowing owl is found to occupy the site, Mitigation Measure BIO-2 shall be required.

BIO-2 If burrowing owls are identified during the survey period, the District shall take the following actions to offset impacts prior to ground disturbance:

Active nests within the areas scheduled for disturbance or degradation shall be avoided until fledging has occurred, as confirmed by a qualified biologist. Following fledging, owls may be passively relocated by a qualified biologist, as described below.

If impacts on occupied burrows are unavoidable, onsite passive relocation techniques may be used if approved by the CDFW to encourage owls to move to alternative burrows provided by the District outside of the impact area.

If relocation of the owls is approved for the site by CDFW, CDFW shall require the District to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site and conduct an impact assessment. A qualified biologist shall prepare and submit a passive relocation program in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012) to the CDFW for review/approval prior to the commencement of disturbance activities onsite.

The relocation plan must include all of the following and as indicated in Appendix E:

- The location of the nest and owls proposed for relocation.
- The location of the proposed relocation site.
- The number of owls involved and the time of year when the relocation is proposed to take place.
- The name and credentials of the biologist who will be retained to supervise the relocation.
- The proposed method of capture and transport for the owls to the new site.
- A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control).

The applicant shall conduct an impact assessment, in accordance with the Staff Report on Burrowing Owl Mitigation prior to commencing Project activities to determine appropriate mitigation, including the acquisition and conservation of occupied replacement habitat at no less than a 2:1 ratio.

Prior to passive relocation, suitable replacement burrows site(s) shall be provided at a ratio of 2:1 and permanent conservation and management of burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owl impacts are replaced consistent with the Staff Report on Burrowing Owl Mitigation including its Appendix A within designated adjacent conserved lands identified through coordination with CDFW and the District. A qualified biologist shall confirm the natural or artificial burrows on the conservation lands are suitable for use by the owls. Monitoring and management of the replacement burrow site(s) shall be conducted and a reporting plan shall be prepared. The objective shall be to manage the replacement burrow sites for the benefit of burrowing owls (e.g., minimizing weed cover), with the specific goal of maintaining the functionality of the burrows for a minimum of 2 years.

A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW.

BIO-3 Nesting bird surveys shall be conducted by a qualified avian biologist no more than three (3) days prior to vegetation clearing or ground disturbance activities. Preconstruction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the preconstruction nesting bird surveys, a Nesting Bird Plan (NBP) shall be prepared and implemented by the qualified avian biologist. At a minimum, the NBP shall include guidelines for addressing active nests, establishing buffers, ongoing monitoring, establishment of avoidance and minimization measures, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, individual/pair's behavior, nesting stage, nest location, its sensitivity to disturbance, and intensity and duration of the disturbance activity. To avoid impacts to nesting birds, any grubbing or vegetation removal should occur outside peak breeding season (typically February 1 through September 1).

Cultural Resources

CUL-1 Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the District's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

CUL-2 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the

County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

Geology and Soils

GEO-1 Based upon the geotechnical investigation (Appendix 4 of this document), all of the recommended seismic design measures identified in Appendix 4 (listed on pages 7-17) shall be implemented by MSWD. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including seismic related hazards on the proposed water storage reservoir.

GEO-2 Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. Where covering is not possible, measures such as the use of straw bales or sand bags shall be used to capture and hold eroded material on the project site for future cleanup such that erosion does not occur.

GEO-3 All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the 100,000-gallon replacement reservoir with associated water improvements is being constructed.

GEO-4 Based upon the geotechnical investigation (Appendix 4 of this document), all of the recommended design measures identified in Appendix 4 (listed on pages 7-17) shall be implemented by MSWD. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site.

GEO-5 Should any paleontological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with MSWD's onsite inspector. The paleontological professional shall assess the find, determine its significance, and determine appropriate mitigation measures within the guidelines of the California Environmental Quality Act that shall be implemented to minimize any impacts to a paleontological resource.

Hazards and Hazardous Materials

HAZ-1 Prior to and during grading and construction, should an accidental release of a hazardous material occur, the following actions will be implemented: construction activities in the immediate area will be immediately stopped; appropriate regulatory agencies will be notified; immediate actions will be implemented to limit the volume and area impacted by the contaminant; the contaminated material, primarily soil, shall be collected and removed to a location where it can be treated or disposed of in accordance with the regulations in place at the time of the event; any transport of hazardous waste from the property shall be carried out by a registered hazardous waste transporter; and testing shall be conducted to verify that any residual concentrations of the accidentally released material are below the regulatory remediation goal at the time of the event. All of the above sampling or remediation activities related to the contamination will be conducted under the oversight of City Building & Safety Department, and Riverside County Site Cleanup Program. All of the above actions shall be documented and made available to the appropriate regulatory agencies prior to closure (a determination of the regulatory agency that a site has been remediated to a threshold that poses no hazard to humans) of the contaminated area.

Hydrology and Water Quality

HYD-1 MSWD shall require that the construction contractor prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will

prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters. The SWPPP shall include a Spill Prevention and Cleanup Plan that identifies the methods of containing, cleanup, transport and proper disposal of hazardous chemicals or materials released during construction activities that are compatible with applicable laws and regulations. BMPs to be implemented in the SWPPP may include but not be limited to:

- The use of silt fences;
- The use of temporary stormwater desilting or retention basins;
- The use of water bars to reduce the velocity of stormwater runoff;
- The use of wheel washers on construction equipment leaving the site;
- The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;
- The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water; and
- Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.

Noise

NOI-1 All construction vehicles and fixed or mobile equipment shall be equipped with operating and maintained mufflers.

NOI-2 All employees that will be exposed to noise levels greater than 75 dB over an 8-hour period shall be provided adequate hearing protection devices to ensure no hearing damage will result from construction activities.

NOI-3 No construction activities shall occur during the hours of 5 PM through 7 AM, Monday through Saturday; at no time shall construction activities occur on Sundays or holidays, unless a declared emergency exists.

NOI-4 Equipment not in use for five minutes shall be shut off.

NOI-5 Equipment shall be maintained and operated such that loads are secured from rattling or banging.

NOI-6 Construction employees shall be trained in the proper operation and use of equipment consistent with these mitigation measures, including no unnecessary revving of equipment.

NOI-7 MSWD will require that all construction equipment be operated with mandated noise control equipment (mufflers or silencers). Enforcement will be accomplished by random field inspections by MSWD.

NOI-8 Construction staging areas shall be located as far from adjacent sensitive receptor locations as possible, as determined by MSWD.

NOI-9 MSWD shall require the construction contractor(s) to implement the following measures:

- Ensure that the operation of construction equipment that generates high levels of vibration including, but not limited to, large bulldozers, loaded trucks, pile-drivers, vibratory compactors, and drilling rigs, is minimized to below 72 vibration decibels (VdB), within 45 feet of existing residential structures and 35 feet of institutional structures (e.g., schools) during construction. Use of small rubber-tired bulldozers shall be enforced within these areas during grading operations to reduce vibration effects.
- The construction contractor shall provide signs along the roadway identifying a phone number for adjacent property owners to contact with any complaint. During future construction activities with heavy equipment within 300 feet of occupied residences, vibration

field tests shall be conducted at the property line near the nearest occupied residences., If vibrations exceed 72 VdB, the construction activities shall be revised to reduce vibration below this threshold. These measures may include, but are not limited to the following: use different construction methods, slow down construction activity, or other mitigating measures to reduce vibration at the property from where the complaint was received.

Utilities and Service Systems

UTIL-1 The contract with demolition and construction contractors shall include the requirement that all materials that can be recycled shall be salvaged and recycled. This includes, but is not limited to, wood, metals, concrete, road base, and asphalt. The contractor shall submit a recycling plan to MSWD for review and approval prior to the start of demolition/construction activities to accomplish this objective.

REFERENCES

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City of Desert Hot Springs General Plan dated May 2020

City of Desert Hot Springs General Plan Environmental Impact Report dated May 2020

Giroux & Associates, *"Air Quality and GHG Impact Analyses, Mission Springs Water District, Vista Reservoir No. 2 Project, Desert Hot Springs, California"* dated September 22, 2020

Jacobs Engineering Group, Inc., "Biological Resources Assessment, Jurisdictional Delineation and Land Use Consistency Analysis for the Mission Springs Water District's Vista Reservoir Expansion" dated January 2021

Leighton Consulting, Inc., "Geotechnical Exploration, MSWD Vista Reservoir Tank Site, Valencia Drive, Desert Hot Springs, County of Riverside, California" dated September 18, 2020

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https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management

http://cms.sbcounty.gov/portals/50/solidwaste/CandD_Recycling_Guide.pdf

FIGURES

FIGURE 1

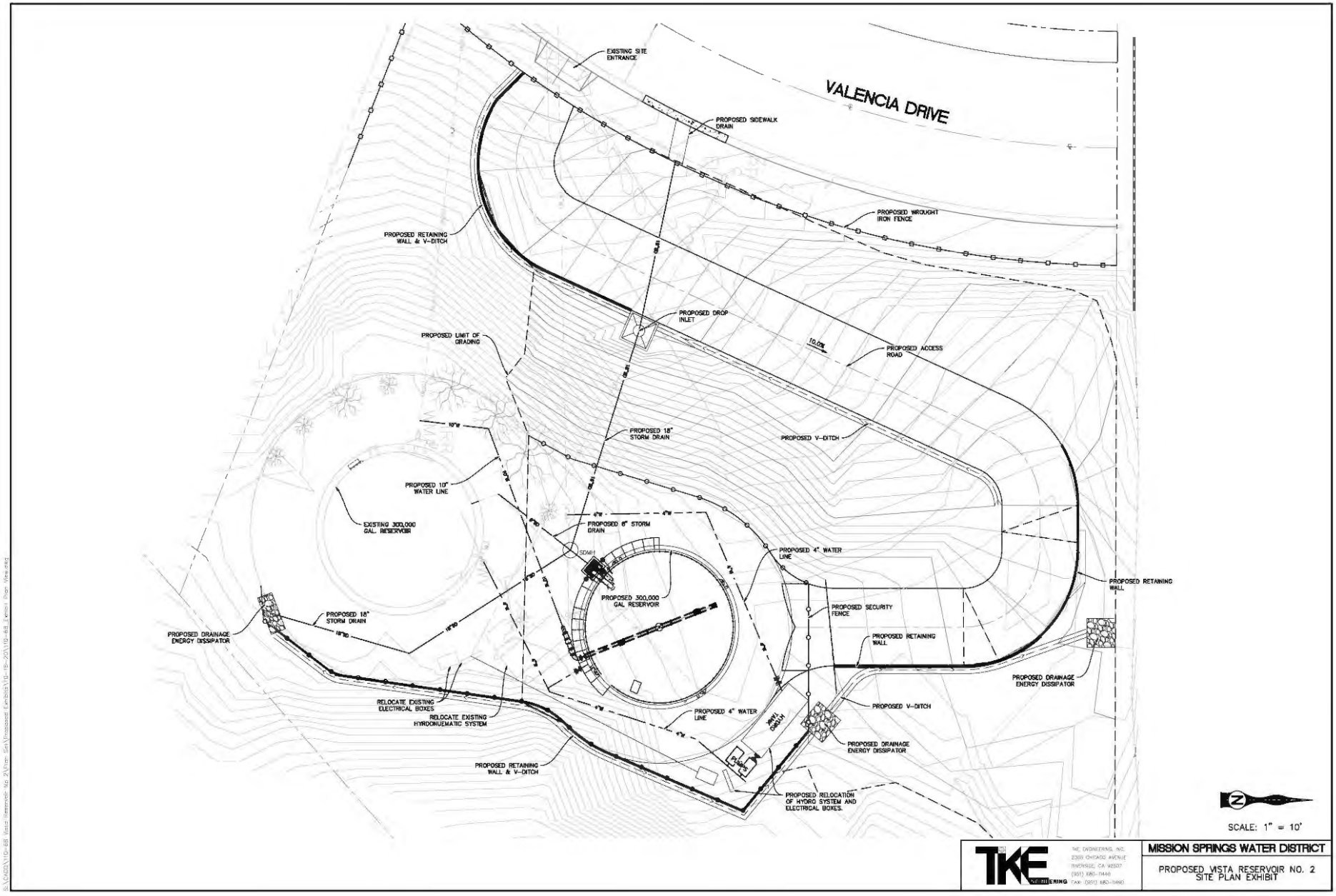
Tom Dodson & Associates
Environmental Consultants

Regional Map

FIGURE 2

Tom Dodson & Associates
Environmental Consultants

Site Location Map



SOURCE: TKE Engineering

FIGURE 3

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Site Plan

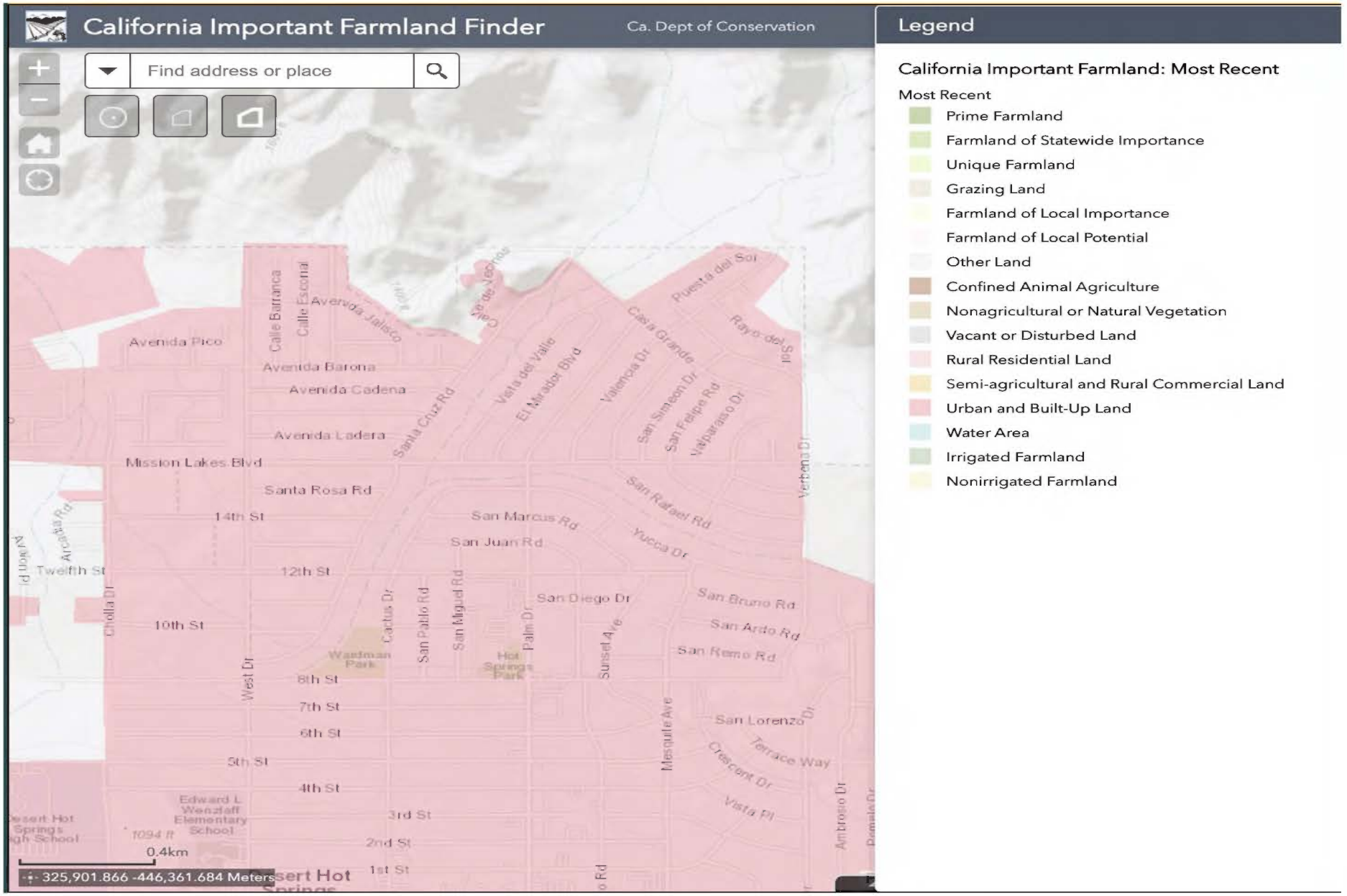

FIGURE II-1

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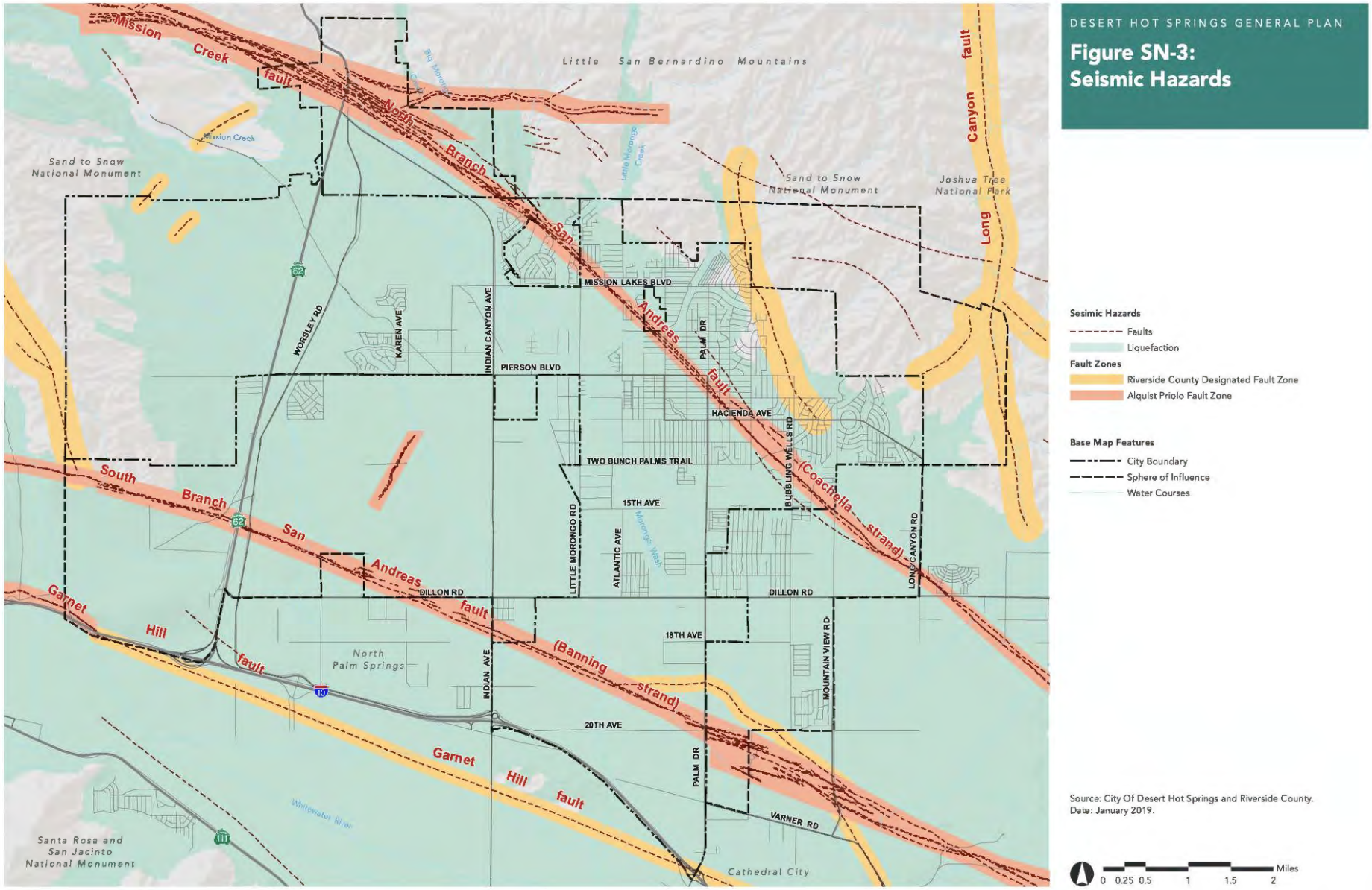
Farmland Map



SOURCE: City of Desert Hot Springs General Plan

FIGURE VII-1

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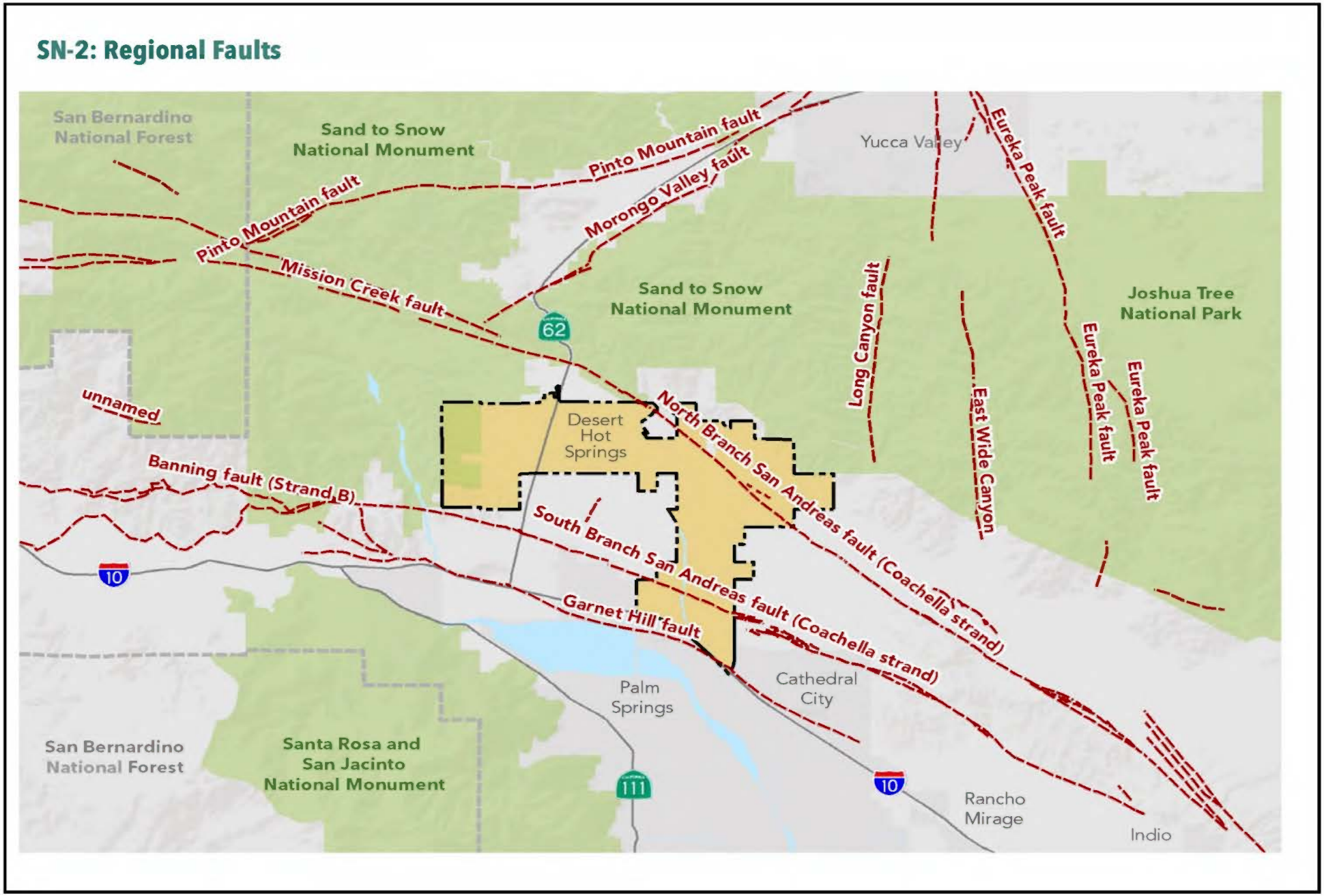
Seismic Hazards



SOURCE: City of Desert Hot Springs General Plan

FIGURE VII-2

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Regional Faults

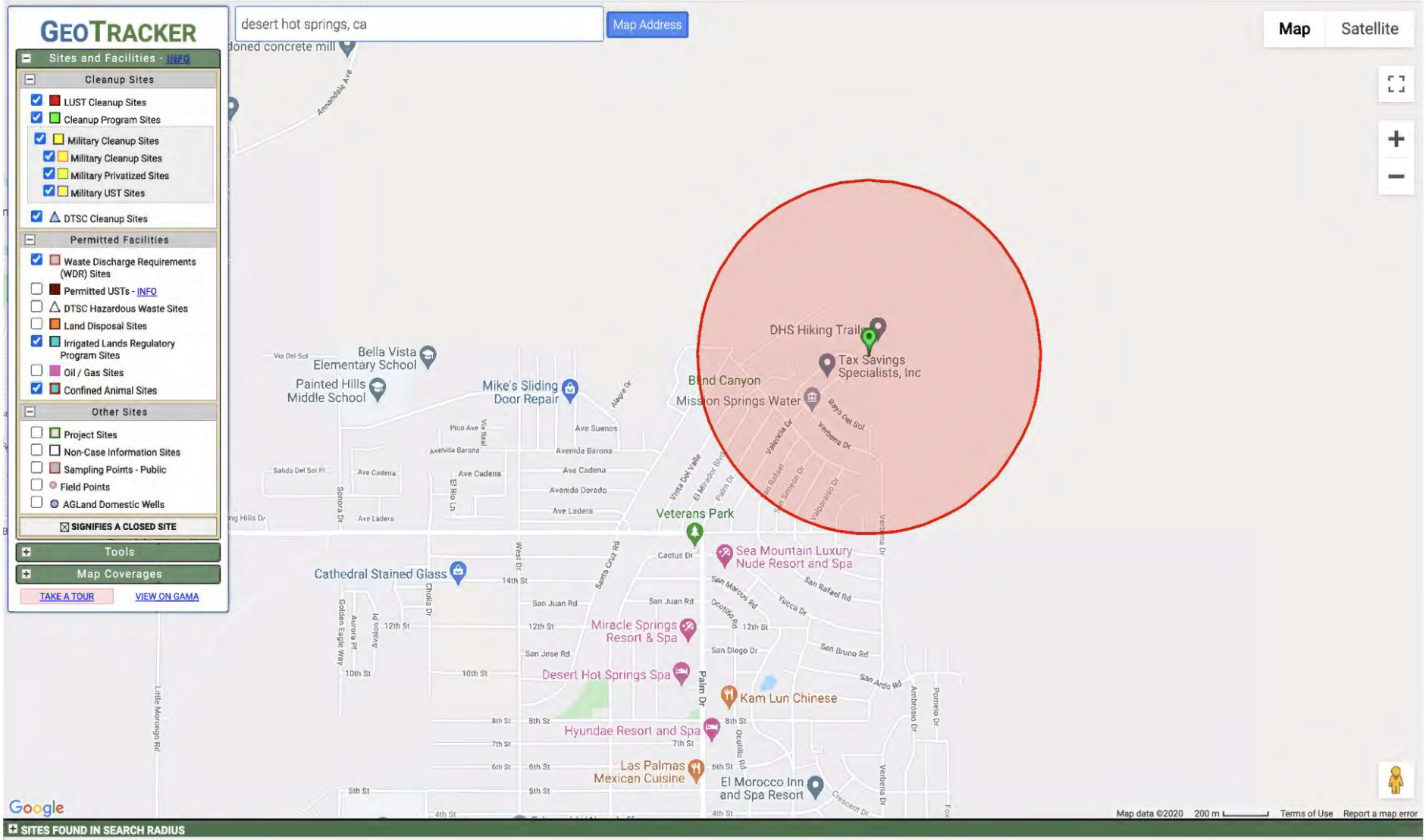

FIGURE IX-1

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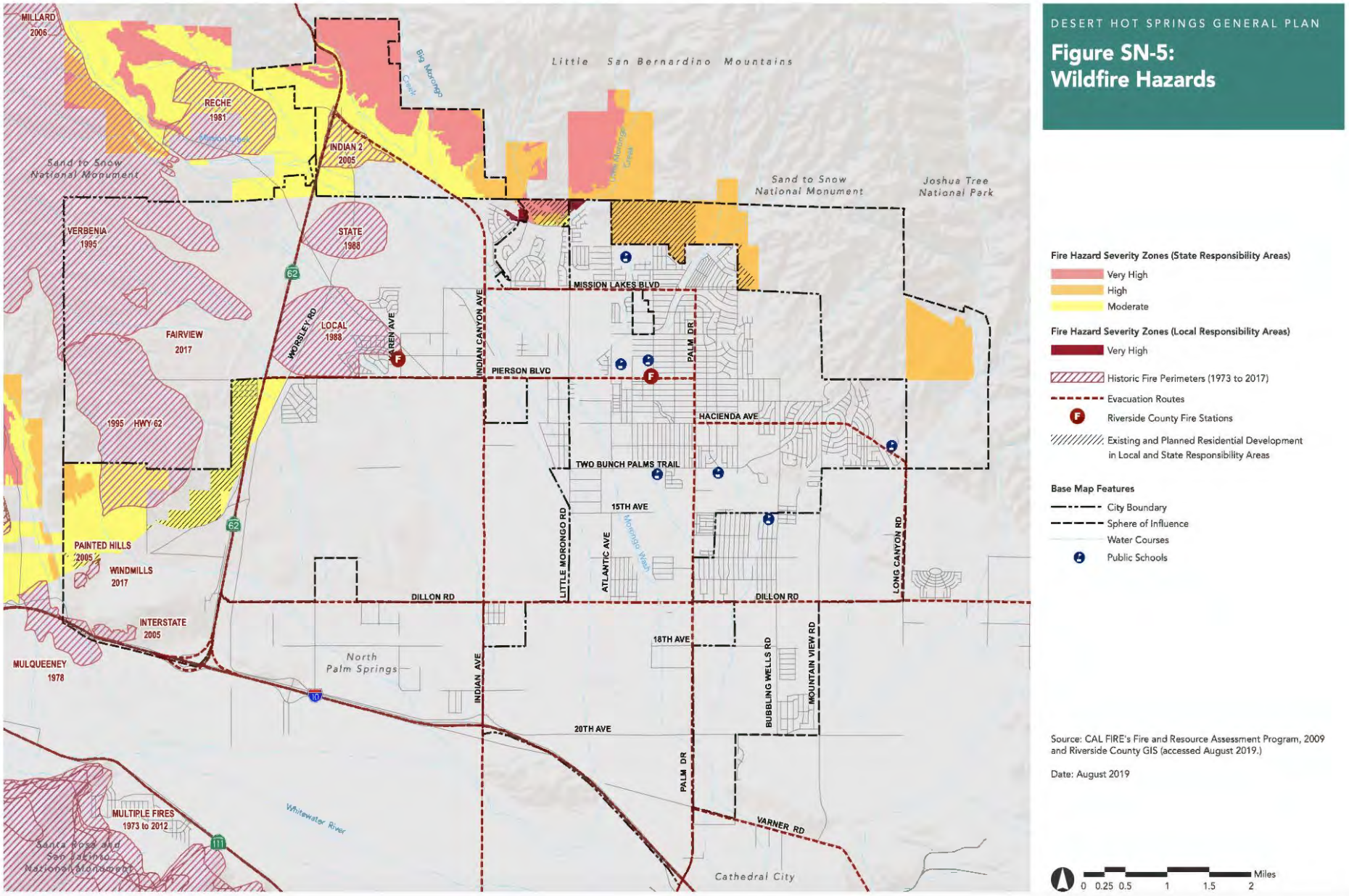
GeoTracker



SOURCE: City of Desert Hot Springs General Plan

FIGURE IX-2

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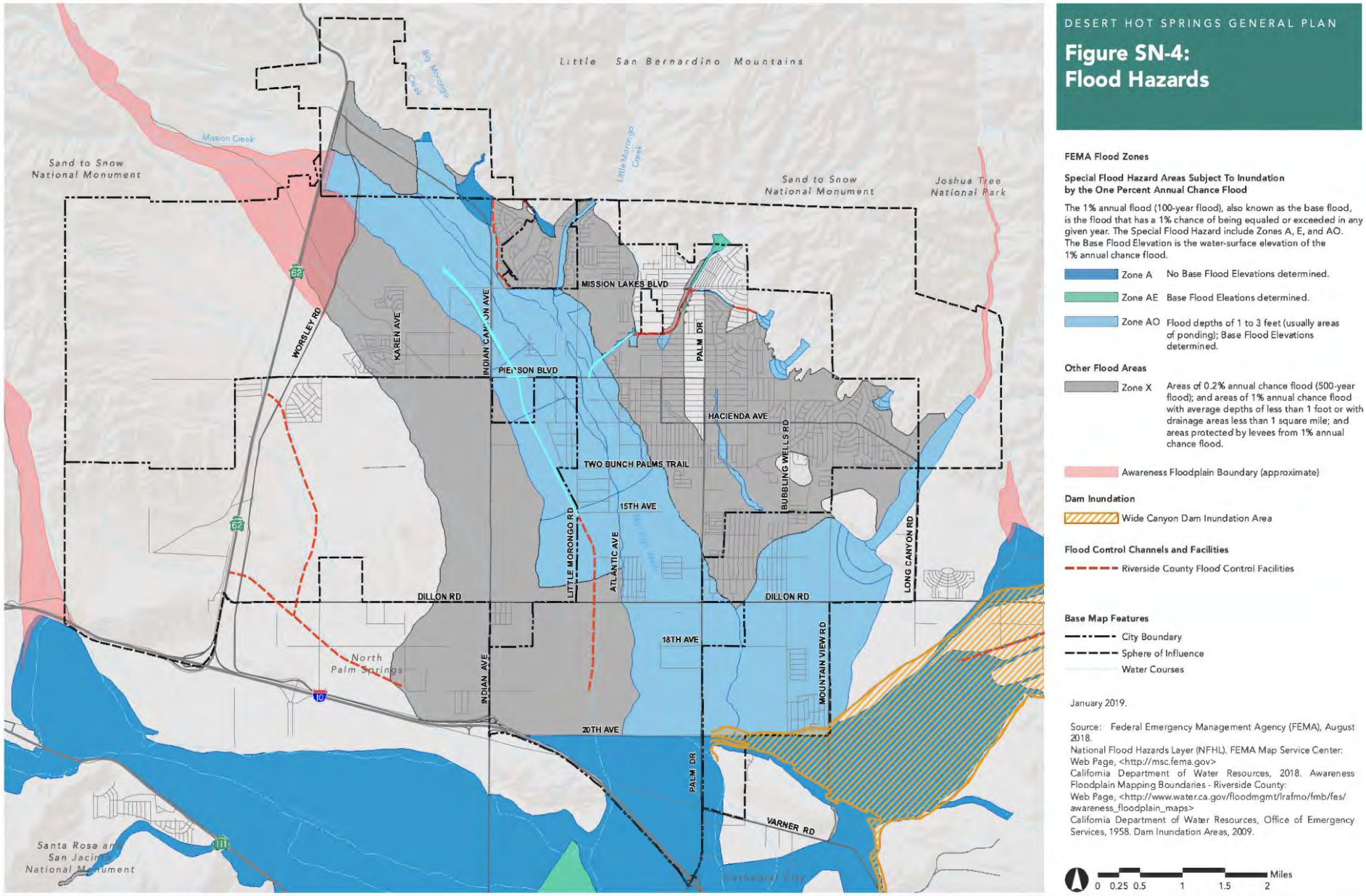
Wildfire Hazards



SOURCE: City of Desert Hot Springs General Plan

FIGURE X-1

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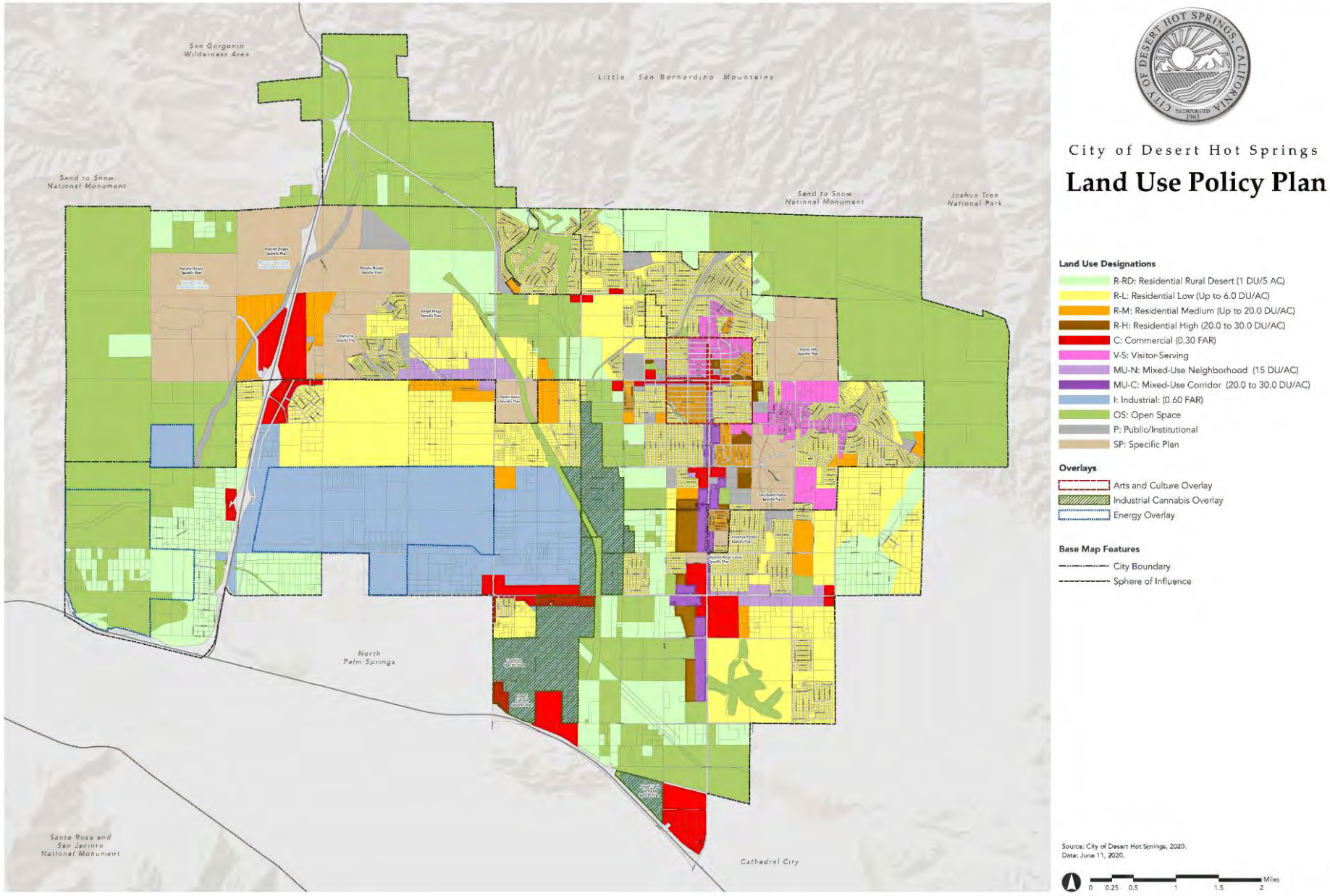
Flood Hazards Map



SOURCE: City of Desert Hot Springs General Plan

FIGURE XI-1

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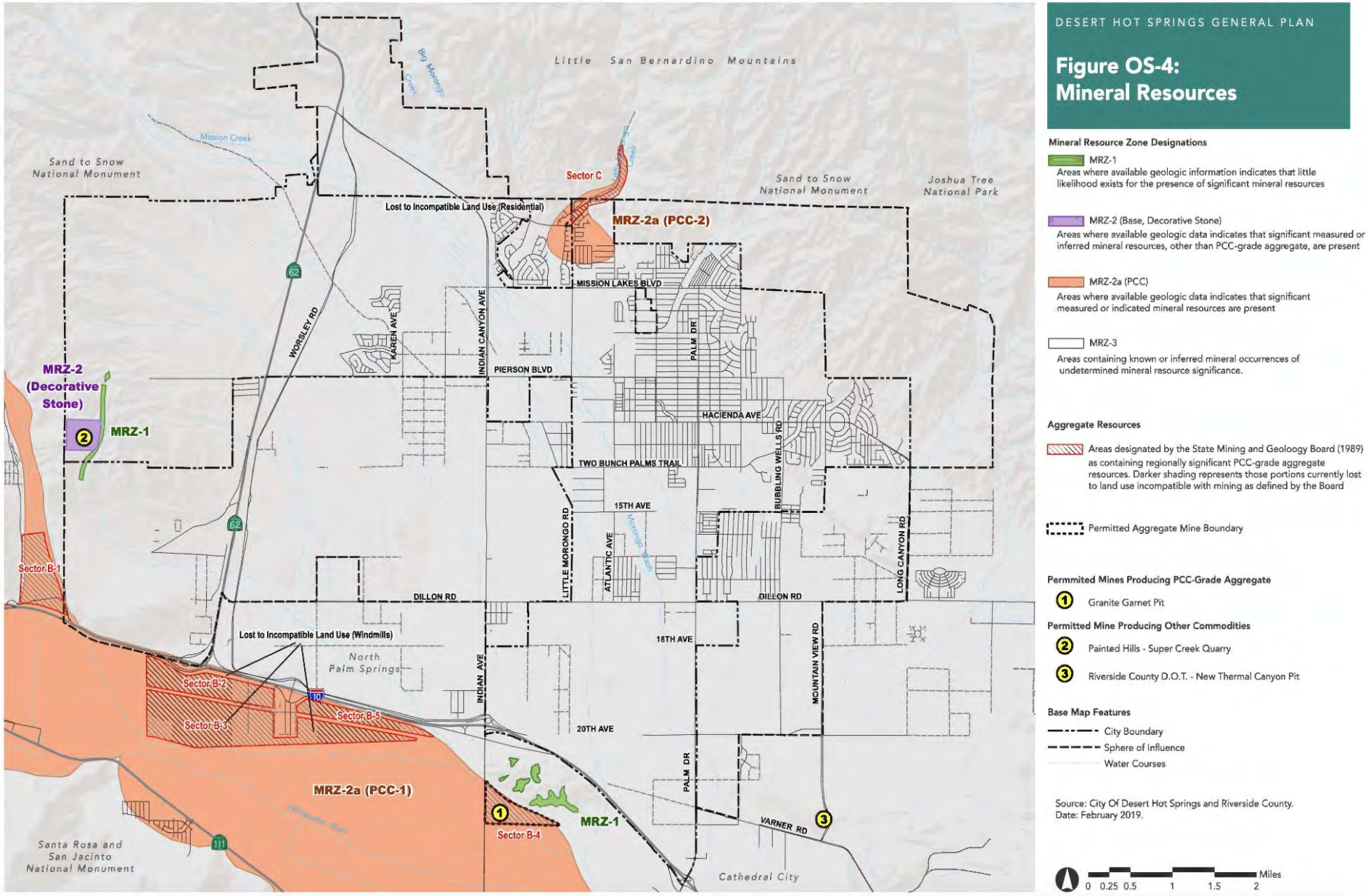
Land Use Policy Plan



SOURCE: City of Desert Hot Springs General Plan

FIGURE XII-1

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Mineral Resources Map

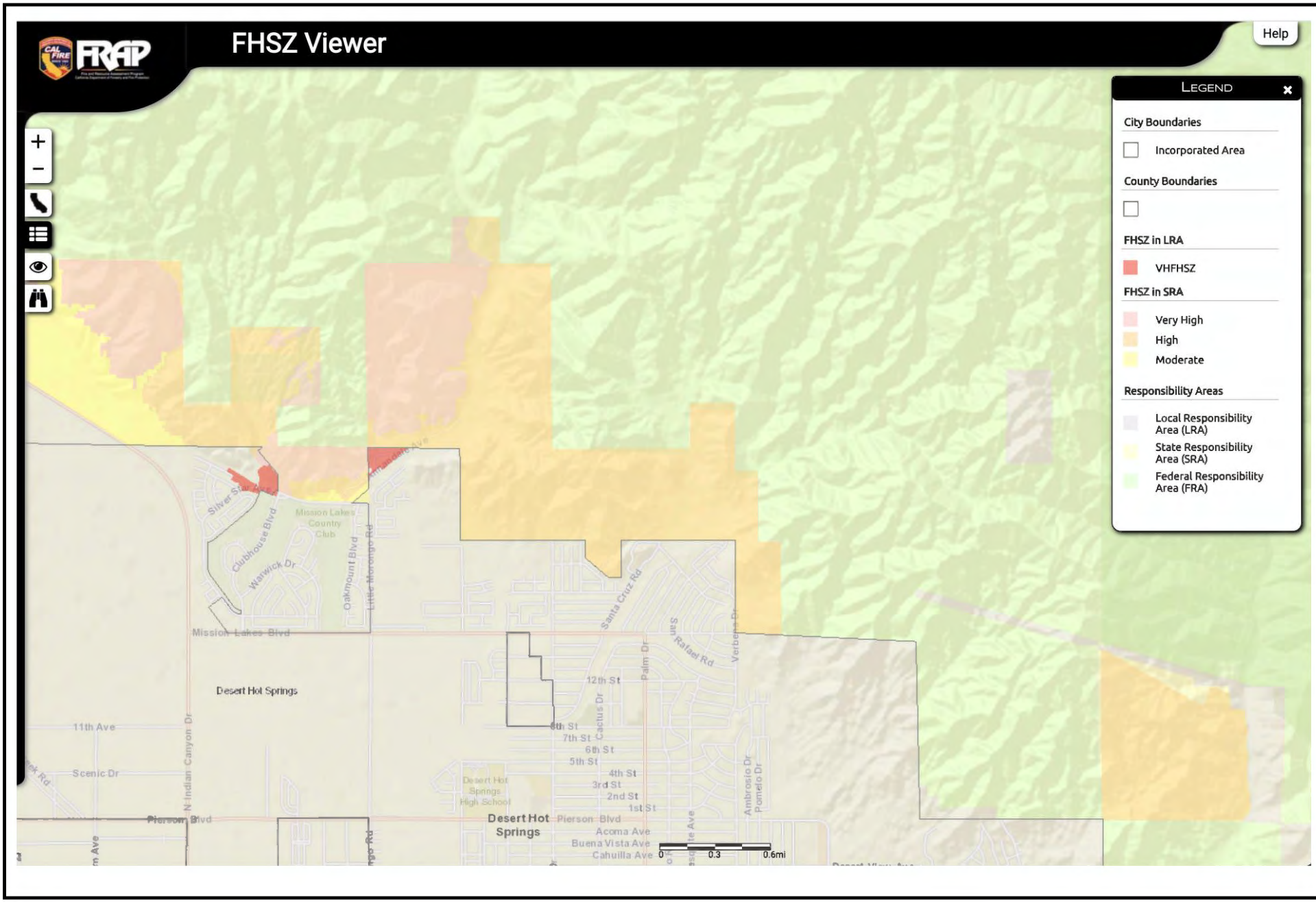

FIGURE XX-1

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High Fire Hazard Severity Zone in a SRA