

# FOLSOM JOINT FEDERAL PROJECT ROCK REUSE PROJECT

Initial Study/Mitigated Negative Declaration

Prepared for  
California Department of Water  
Resources

October 2016





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Prepared for:

California Department of Water  
Resources  
Division of Flood Management  
Flood Management Office  
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## **DRAFT NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION**

**Project Title:** Joint Federal Project (JFP) Rock Reuse Project

**Lead Agency:** California Department of Water Resources (DWR), Division of Flood Management (DFM)

**Project Location:** The proposed project is located at Folsom JFP construction site in Sacramento County, and at the following rock storage sites: near the Tisdale Weir and Reclamation District (RD) 1000 Howsley Road (Rd.) in Sutter County, at the City of Sacramento (City) North Corporation (Corp) Yard and the RD 1000 Corp Yard rock storage sites in Sacramento County, and at the City Freeport Water Treatment Plant (WTP) Corp Yard.

**Project Description:**

### **MITIGATION MEASURES**

The following mitigation measures would be implemented by DWR to avoid, minimize and mitigate potential environmental impacts of the proposed project. Implementation of these mitigation measures would reduce the environmental impacts of the proposed project to a less than significant level.

#### **Air Quality**

##### **Mitigation Measure AQ-1 – Measure to Reduce Fugitive Dust Emissions**

- All exposed surfaces shall be watered two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Limit vehicle speeds on unpaved roads to 15 miles per hour. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment shall be checked by a certified mechanic and determine to be running in proper condition before it is operated.

##### **Mitigation Measure AQ-2 – Measure to Reduce Exhaust Emissions**

- Provide a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the proposed project to the SMAQMD. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the

anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment. The inventory shall be updated and submitted monthly throughout the duration of the Proposed Project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.

- Provide a plan in conjunction with the equipment inventory, approved by the SMAQMD, demonstrating that the heavy-duty (50 horsepower or more) off-road vehicles to be used by the proposed project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOx reduction and 45% particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after treatment products, and/or other options as they become available.
- Emissions from all off-road diesel powered equipment used on the project site shall not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this measure shall supersede other SMAQMD or state rules or regulations.

## **Biological Resources**

### **Mitigation Measure BIO-1a: Pre-Project Activity Nesting Bird Surveys. (Tisdale, City Freeport WTP Corp Yard, City North Corp Yard, and Howsley Rd. storage sites)**

If project-related activities are scheduled during the avian nesting season (February 1 to September 30) a nesting bird survey prior to project activities shall be conducted by a qualified wildlife biologist. During surveys, a qualified biologist shall identify Swainson's hawk nests within 0.5-mile of the project site, nests of all other raptors, within 500 feet of the project site, and nests for all other bird species within 250 feet of the project site following CDFW-approved survey protocols. The survey shall be conducted no more than two weeks prior to the beginning of project-related activities. If project activities temporarily stop for more than 14 days, surveys for nesting birds shall be repeated by a qualified biologist, as described above, prior to resuming project activities.

For Swainson's hawk, to the extent feasible, survey methodology shall follow guidelines provided in the *Recommended Timing and Methodologies for Swainson's hawk Nesting Survey in the Central Valley* (Swainson's hawk Technical Advisory Committee, 2000).

If nesting bird surveys do not identify any nesting raptors or other nesting bird species, no further mitigation will be required. If nesting birds are observed in the search areas defined above, Mitigation Measure BIO-1b, shall be implemented.

**Mitigation Measure BIO-1b: Conduct Nesting Bird Avoidance, and/or Monitoring. (Tisdale, City Freeport WTP Corp Yard, City North Corp Yard, and Howsley Rd. storage sites)**

If active nests are found within survey areas defined in Mitigation Measure BIO-1a, project-related activities shall be delayed to be conducted outside the nesting season (February 1 through September 30), or no-disturbance buffer zones shall be established to prohibit project-related activities near the nest. If nesting individuals are observed, appropriate no-disturbance buffers around the nest site shall be determined by a qualified biologist and implemented to avoid disturbance to the nest resulting from project activities. If Swainson's hawk nests are observed within 0.5 miles of the project, CDFW shall be contacted to determine appropriate no-disturbance buffer. No-disturbance buffers shall be delineated by highly visible temporary fencing and shall remain in place until the young have fledged. No project-related activity shall occur within the no-disturbance buffer until a wildlife biologist confirms that the nest is no longer active, or unless otherwise permitted by CDFW. If an appropriate no-disturbance buffer is infeasible, a qualified biologist shall be present during construction activities for the entire duration of activities within the buffer to monitor the behavior of the potentially affected nesting bird. The biologist shall have the authority to stop-work within the buffer area if the bird(s) exhibit distress and/or abnormal nesting behavior (swooping/stooping, excessive vocalization [distress calls], agitation, failure to remain on nest, failure to deliver prey items for an extended time period, failure to maintain nest, etc.) which may cause reproductive failure (nest abandonment and loss of eggs or young). Work shall not resume in the buffer area until bird's behavior has normalized.

**Mitigation Measure BIO-1c: Conduct GGS Pre-Project Activity Survey and Avoidance (Tisdale and Howsley Rd. storage sites)**

If work must occur within 200 feet of potentially suitable aquatic habitat (e.g., ditch along Howsley Rd. and the agricultural ditch around the Tisdale site), the following mitigation measures shall be implemented:

- (1) If giant garter snakes are observed in the project area, work shall stop within 200 feet of the snake until the snake is out of the project area and a qualified biological monitor shall be notified immediately (see Measure BIO-1h). If possible, snake shall be allowed to leave on its own, and the biological monitor shall remain in the area for the remainder of the workday to ensure that the snake is not harmed. Alternatively, with prior CDFW and USFWS approval and appropriate handling permits, the biological monitor may capture and relocate the snake unharmed to suitable habitat at least 200 feet from the project site.

CDFW and USFWS shall be notified by telephone or email within 24 hours of a giant garter snake observation during project activities. If the snake does not voluntarily leave the project area and cannot be captured and relocated unharmed, project activities within approximately 200 feet of the snake shall stop to prevent harm to the snake, and CDFW and USFWS shall be consulted to identify next steps. In that case, the measures recommended by CDFW and USFWS shall be implemented prior to resuming project activities in the area. If needed, DWR shall implement the applicable measures recommended for the Tisdale project site and RD 1000 shall implement the applicable measures for the Howsley Rd. project site.

- (2) When possible, project activities in terrestrial habitats that are potentially supporting giant garter snakes shall be completed between May 1 and October 1. Work in giant garter snake upland habitat may also occur between October 2 and November 1 or April 1 through April 30 provided ambient air temperatures exceed approximately 75°F during work and maximum daily air temperatures have exceeded approximately 75°F for at least 3 consecutive days immediately preceding work. During these periods, giant garter snakes are more likely to be active in aquatic habitats and less likely to be found in upland habitats.
- (3) For work areas at the Tisdale and Howsley Rd. site, giant garter snake exclusion fencing shall be installed entirely around planned project areas during periods when giant garter snakes are active. DWR shall be responsible for the Tisdale site and RD 1000 shall be responsible for the Howsley Rd. site. Exclusionary fencing shall be constructed 5 days prior to beginning project activities, and shall be equipped with one-way exit funnels, and constructed consistent with USFWS and CDFW guidance. Exclusionary fencing shall be inspected and maintained daily by staff while project activities are being conducted to verify the condition and function of the fence and to verify that giant garter snakes do not get trapped in the excluded area.
- (4) If implementing BIO-1c(3) is not feasible, a qualified biologist shall survey project areas for burrows, soil cracks, and crevices that may be suitable for use by giant garter snakes when within suitable terrestrial habitat. Surveys shall be completed no more than 7 days before conducting any project activities in terrestrial habitat potentially supporting giant garter snakes. Any identified burrows, soil cracks, crevices, or other habitat features shall be flagged or marked by the qualified biologist or otherwise identified as biologically sensitive areas (BSAs). These BSAs shall be avoided during subsequent project activities to the maximum extent feasible. If project activities temporarily stop for more than 14 days, surveys for soil cracks and similar features shall be repeated by a qualified biologist, as described above, prior to resuming project activities.
- (5) Before project activities occur in potentially suitable terrestrial giant garter snake habitat during periods when snakes are active (between May 1 and

October 1 when ambient air temperatures exceed 75°F), areas of herbaceous vegetation surrounding planned work areas shall be mowed to a height of no less than 6 inches where and when feasible in order to increase visibility and the probability of giant garter snake detection during surveys as described for BIO-1c(3) and BIO-1c(4).

- (6) DWR and RD 1000 shall obtain take authorization under CESA if rock is placed within 200 feet of GGS aquatic habitat at the Tisdale and Howsley Rd. sites, respectively, and the placement of rock results in the potential incidental take of GGS. All measures developed through consultation with CDFW shall be implemented by DWR to mitigate for authorized take.

**Mitigation Measure BIO-1d: Conduct Pre-Project Activity Survey and Avoidance and/or Relocation for American Badger (Tisdale site)**

An American badger survey shall be conducted by a qualified wildlife biologist to identify the presence of American badgers. If this species, or potential burrows for this species, are not identified, no further mitigation shall be required. If American badger is identified, they shall be passively relocated using burrow exclusion (e.g., installing one-way doors on burrows) or similar CDFW-approved passive exclusion methods. All relocation activities shall be performed with CDFW coordination and concurrence.

**Mitigation Measure BIO-1e: Conduct Avoidance of Special-Status Bat Maternity Roosts (Tisdale site)**

Conduct a pre-activity survey for roost sites in mature trees within 100 feet of riparian vegetation along the Tisdale Bypass during the bat pupping season (April 1 through July 31). This survey shall be conducted by a wildlife biologist qualified to identify bat species. If no special status species bats are roosting, then no further mitigation is required.

If a special-status bat maternity roost is identified, appropriate buffers around the roost site shall be determined by a qualified biologist and implemented to avoid destruction or abandonment of the roost resulting from project activities.

**Mitigation Measure BIO-1f: Minimize Disturbance within Project Sites (All storage sites)**

To minimize disturbance within proposed storage sites the following shall be implemented:

- (1) Use existing staging sites and roadways to the extent practicable for staging and access to avoid affecting previously undisturbed areas.
- (2) Limit the number of access routes and the size of staging and work areas to the minimum necessary to conduct the activity.
- (3) Where feasible and practicable (e.g., based on the size of the project area and project activities to be performed), clearly mark work area limits (e.g., with flagging or fencing), including access roads; staging and equipment storage

areas; fueling areas; and equipment exclusion zones. Work will only occur within the marked limits.

- (4) Inspect under all vehicles and heavy equipment for the presence of wildlife before the start of each workday when equipment is staged overnight.
- (5) Ensure project related trash items, such as wrappers, can, bottles, and food scraps are collected in closed containers, removed from project sites each day, and disposed of at an appropriate off-site location to minimize attracting wildlife to work areas.
- (6) Keep the clearing of vegetation to the minimum necessary to the extent practicable.
- (7) If erosion control fabrics are used, products will not be used with plastic monofilament or cross-joints in the netting that are bound/stitched (such as straw wattles, fiber rolls, or erosion control blankets), which could trap giant garter snake and other wildlife.
- (8) Remove construction debris, and refuse, and properly dispose of these materials following completion of project.

**Mitigation Measure BIO-1g: WEAP Training for All Project Sites (All storage sites)**

Environmental awareness training shall be provided by a qualified biologist to all DWR Maintenance personnel. Environmental awareness training shall include descriptions of all special-status wildlife species potentially occurring in the project area, their habitats, and methods of identification. The training shall also describe activity-specific measures that will be followed to avoid impacts. These measures shall be provided to the project construction supervisor, crew leader, and any contractors participating in project activities.

**Mitigation Measure BIO-1h: Biological Monitoring (All storage sites)**

A qualified biological monitor shall be available on an on-call basis during all project-related activities. If needed, a qualified biologist shall be maintained on-site during project activities to ensure the protection of special-status species, as required.

**Cultural Resources**

**Mitigation Measure CULT-1:** If historical or unique archaeological resources are accidentally discovered during proposed project activities, all work shall temporarily cease in the immediate area until the findings can be assessed by a qualified archaeologist and/or paleontologist and an appropriate course of action can be determined, if necessary, in consultation with the State Historic Preservation Officer. Work may continue on other parts of the project sites while evaluation and mitigation takes place (CEQA Guidelines §15064.5 [f]). If the find is determined to be an historical or unique archaeological resource, sufficient time allotment will be allowed for

implementation of avoidance measures or appropriate mitigation such as implementation of an archaeological treatment plan.

**Mitigation Measure CULT-2:** If human remains are found, such remains would be subject to the provisions of California Public Resources Health and Safety Code Section 7050.5-7055. The requirements and procedures would be implemented, including immediately stopping work in the vicinity of the find and notifying the County Coroner. A DWR archaeologist would also need to be contacted immediately. The process for notification of the California Native American Heritage Commission (NAHC) and consultation with the individual(s) identified by the NAHC as the “most likely descendent” is set forth in Section 5097.98 of the California Public Resources Code. Work in the vicinity of the find can restart after the remains have been investigated and appropriate recommendations have been made for their treatment and disposition.

### **Hazards and Hazardous Waste**

**Mitigation Measure HAZ-1:** Prior to project activities, DWR will prepare a Hazardous Materials Management Plan that will be implemented to ensure that all staff transport, store, handle and dispose of construction-related hazardous materials in a manner consistent with the relevant local, State, and federal regulations and guidelines. At minimum, these include those recommended and enforced by the Department of Transportation, the Regional Water Quality Control Board, and the applicable local fire departments and environmental health departments. DWR will ensure that staff immediately control the source of any leak and immediately contain any spill using appropriate spill containment and countermeasures identified within the plan. If required by a city or county fire department, department of environmental health, or any other regulatory agency, containment media shall be collected and disposed of at an off-site facility approved to accept such media.

### **Noise**

**Mitigation Measure NOI-1: Implement Noise-Reducing Construction Practices:** DWR shall implement the following measures during construction activities when noise-sensitive receptors are located nearby and could be subject to substantial construction noise in excess of applicable standards or substantially greater than existing conditions.

- a) All equipment used to load or unload rocks shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers’ recommendations. Equipment engines shall be closed during equipment operations.
- b) All motorized construction equipment shall be shut down when not in use to prevent excessive idling.

**Mitigation Measure NOI-2: Request Hours of Construction Work Extension:** Prior to transportation of rock from the Folsom JFP site to the rock storage sites located within the jurisdiction of City of Sacramento and Sutter County, DWR shall coordinate

with the City of Sacramento and Sutter County to work beyond the exempt construction hours provided in the City of Sacramento Municipal Code 8.68.080(D) and Sutter County's General Plan Policy N 1.6.

### **BEST MANAGEMENT PRACTICES**

As an environmental commitment, the proposed project would incorporate the following Best Management Practices (BMPs) from DWR's Climate Action Plan - Phase I: Greenhouse Gas Emissions Reduction Plan (GGERP) to avoid and minimize impacts related to greenhouse gas emissions:

- BMP 1. Evaluate project characteristics, including location, project work flow, site conditions, and equipment performance requirements, to determine whether specifications of the use of equipment with repowered engines, electric drive trains, or other high efficiency technologies are appropriate and feasible for the project or specific elements of the project.
- BMP 2. Limit deliveries of materials and equipment to the site to off peak traffic congestion hours (BMP 6 in GGERP).
- BMP 3. Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement (BMP 7 in GGERP).
- BMP 4. Maintain all construction equipment in proper working condition and perform all preventative maintenance. Required maintenance includes compliance with all manufacturer's recommendations, proper upkeep and replacement of filters and mufflers, and maintenance of all engine and emissions systems in proper operating condition. Maintenance schedules shall be detailed in an Air Quality Control Plan prior to commencement of construction (BMP 8 in GGERP).
- BMP 5. Implement tire inflation program on jobsite to ensure that equipment tires are correctly inflated. Check tire inflation when equipment arrives on-site and every two weeks for equipment that remains on-site. Check vehicles used for hauling materials off-site weekly for correct tire inflation. Procedures for the tire inflation program shall be documented in an Air Quality Management Plan prior to commencement of construction (BMP 9 in GGERP).

**STATEMENT OF NO SIGNIFICANT EFFECT:**

DWR prepared an Initial Study (IS) that included the California Environmental Quality Act (CEQA) Appendix G Environmental Checklist in support of this Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration (MND). Copies of the IS/MND were provided to the State Clearinghouse on October 24, 2016, initiating the 30-day public review period, which will end on November 23, 2016.

Pursuant to Section 21082 of CEQA (California Public Resources Code 21000-21189), DWR has independently reviewed and analyzed the IS/MND for the proposed project and finds that the IS/MND reflects the independent judgement of DWR. As the lead agency for the project, DWR further finds that the project mitigation and BMPs will be implemented as stated in the MND. With implementation of these mitigations and BMPs, the proposed project as modified would have no significant effect on the environment.



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## ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ADT	average daily traffic
BACT	Best Available Control Technology
Bldv.	Boulevard
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
Cal/EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geological Survey
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CVFPB	Central Valley Flood Protection Board
CWHR	California Wildlife Habitat Relationships System
cy	cubic yards
dB	decibels
dBA	A-weighted decibels
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement

EPA	Environmental Protection Agency
ESA	Federal Endangered Species Act
Farmland	Farmland of Statewide Importance
FCAA	federal Clean Air Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMO	Flood Maintenance Office
FRAQMD	Feather River Air Quality Management District
GGERP	Greenhouse Gas Emissions Reduction Plan
GGG	Giant Garter Snake
GHG	Greenhouse Gas
HCP	Habitat Conservation Plan
I-5	Interstate 5
I-80	Interstate 80
in/sec	inches per second
IS	Initial Study
JFP	Joint Federal Project
LOS	Levels of Service
MBTA	Migratory Bird Treaty Act
MIAD	Mormon Island Auxiliary Dam
MND	Mitigated Negative Declaration
mph	miles per hour
MRZ	Mineral Resources Zone
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NSVPA	Northern Sacramento Valley Planning Area

OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
PCAPCD	Placer County Air Pollution Control District
PM <sub>2.5</sub>	particulate matter less than 2.5 micrometers in diameter
PM <sub>10</sub>	particulate matter less than 10 micrometers in diameter
ppd	pounds per day
PPV	peak particle velocity
proposed project	DWR – Rock Reuse Project
RD	Reclamation District
ROG	Reactive Organic Gas
SAFCA	Sacramento Area Flood Control Agency
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO <sub>2</sub>	sulfur dioxide
SR	State Route
SVAB	Sacramento Valley Air Basin
TAC	toxic air contaminant
tpy	tons per year
USACE	United States Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Survey
WTP	Water Treatment Plant
YSAQMD	Yolo-Solano Air Quality Management District



## PROJECT INFORMATION

- a) Project Title: DWR – Folsom JFP Rock Reuse Project
- b) Lead Agency Name and Address:  
California Department of Water Resources  
Division of Flood Management  
Flood Maintenance Office  
3310 El Camino Ave.  
Sacramento, CA 95821
- c) Contact Person and Phone Number:  
Kristin Ford  
Environmental Scientist  
Phone: 916-574-0368
- d) Project Sponsor's Name and Address:  
California Department of Water Resources  
Division of Flood Management  
Flood Maintenance Office  
3310 El Camino Ave.  
Sacramento, CA 95821
- e) Project Location: See Section 2.2, Project Description.
- f) General Plan Designation: Folsom Lake is on federal property where the U.S. Bureau of Reclamation operates the Folsom Dam and reservoir and the State of California operates the Folsom Lake State Park. Folsom Lake State Park is defined as an Exclusive Agricultural (1 unit/80 acres) zoning district in the Sacramento County General Plan. The Tisdale, and Reclamation District (RD)1000 sites are all designated as Agricultural within both Sutter and Sacramento Counties' General Plans, the City North Corporation (Corp) Yard is designated Intensive Industrial, and the City Freeport Water Treatment Plant (WTP) Corp Yard is designated Public/Quasi-Public within the City's General Plan.
- g) Zoning: Folsom State Park (Folsom Dam) and the Tisdale storage site are zoned Agricultural. The City of Sacramento Freeport WTP Corp Yard is designated Agricultural, the City of Sacramento North Corp Yard is designated Light Industrial, and the both of the RD 1000 storage sites are Agricultural.
- h) Surrounding Land Uses and Setting: Surrounding land uses for the Tisdale and the RD 1000 storage sites includes agriculture and open space. Surrounding land uses for the Folsom Lake State Park location is open space, recreation, and residential. Surrounding land uses near the City North Corp Yard is industrial and urban develop. Surrounding land uses near the City Freeport WTP Corp Yard is urban and open space and recreation trail along the Sacramento River.

- i) Other Public Agencies Whose Approval is Required: Sacramento Metropolitan Air Quality Management District.

## **1 INTRODUCTION**

### **1.1 PURPOSE OF INITIAL STUDY**

Pursuant to Section 15063 of the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations, Sections 15000 et seq.), an Initial Study is a preliminary environmental analysis that is used by the lead agency as a basis for determining whether an Environmental Impact Report (EIR), a Mitigated Negative Declaration (MND), or a Negative Declaration is required for a project. The CEQA Guidelines require that an Initial Study contain a project description, description of environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project's consistency with existing, applicable land use controls, and the name of persons who prepared the study.

### **1.2 IMPACT ANALYSIS**

Impact analysis sections were guided using environmental checklists to guide questions for analyses. Each section uses the CEQA Guidelines Appendix G Environmental Checklist.

### **1.3 ANTICIPATED PERMITS, APPROVALS AND DECISIONS**

- Sacramento Metropolitan Air Quality Management District (SMAQMD) review and approval of mitigation measures to reduce emissions.

## **2 PROJECT DESCRIPTION**

This section describes the DWR – Rock Reuse Project (proposed project).

### **2.1 PROJECT LOCATION**

The proposed project includes the transportation of rock from the Folsom Dam Modification Project (the Folsom Joint Federal Project or Folsom JFP) construction site in Sacramento County to the DWR Tisdale and Reclamation District (RD) 1000 Howsley Rd. storage sites in Sutter County, and two rock storage sites in Sacramento County and one storage site located within the City of Sacramento used by RD 1000, the City of Sacramento and Sacramento Area Flood Control Agency (SAFCA). The regional location, Folsom JFP site, DWR, RD 1000, and City storage sites are shown in Figures 1 through 7.

### **2.2 PROJECT BACKGROUND**

The Folsom JFP is a cooperative effort among the U.S. Army Corps of Engineers (USACE), the DWR, the Central Valley Flood Protection Board (CVFPB), U.S. Bureau of Reclamation (USBR), and SAFCA. The Folsom JFP is designed to improve the dam safety, security, and flood damage reduction features at Folsom Dam and associated facilities, including construction of a gated auxiliary spillway southeast of the main dam. A final Supplemental Environmental Impact Statement/Environmental Impact Report (EIS/EIR) was prepared by the USBR and CVFPB to assess effects associated with the construction and operation of the Folsom JFP under the National Environmental Policy Act (NEPA) and CEQA. Since the 2007 EIS/EIR, design refinements have been evaluated in seven supplemental documents in 2008, 2009, 2010, 2012 (two supplemental documents), 2015, and 2016.<sup>1</sup>

The Folsom Dam construction was awarded in phases with the current construction under Phase IV. The current contractor is required to remove the rock and place it either on-site or in the lake for disposal. The construction contract is managed by the USACE. This rock will be removed to restore the site to near original conditions under the Folsom JFP Project. The rock was placed on the side slopes of an approximate 40-foot-wide haul road for an approximate length of ½ mile (Figure 2). This road allowed large off-road construction trucks to transport up to 25 tons per load from the blasting and excavation location of the new Folsom Dam spillway over to a rock/soil storage area almost one mile away on Federal property for use as fill material to construct improvements on the Mormon Island Auxiliary Dam (MIAD) on the south side of the lake.

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<sup>1</sup> All documents recorded with the same State Clearinghouse No. 2006022091.





SOURCE: Google Earth Pro, basemap, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

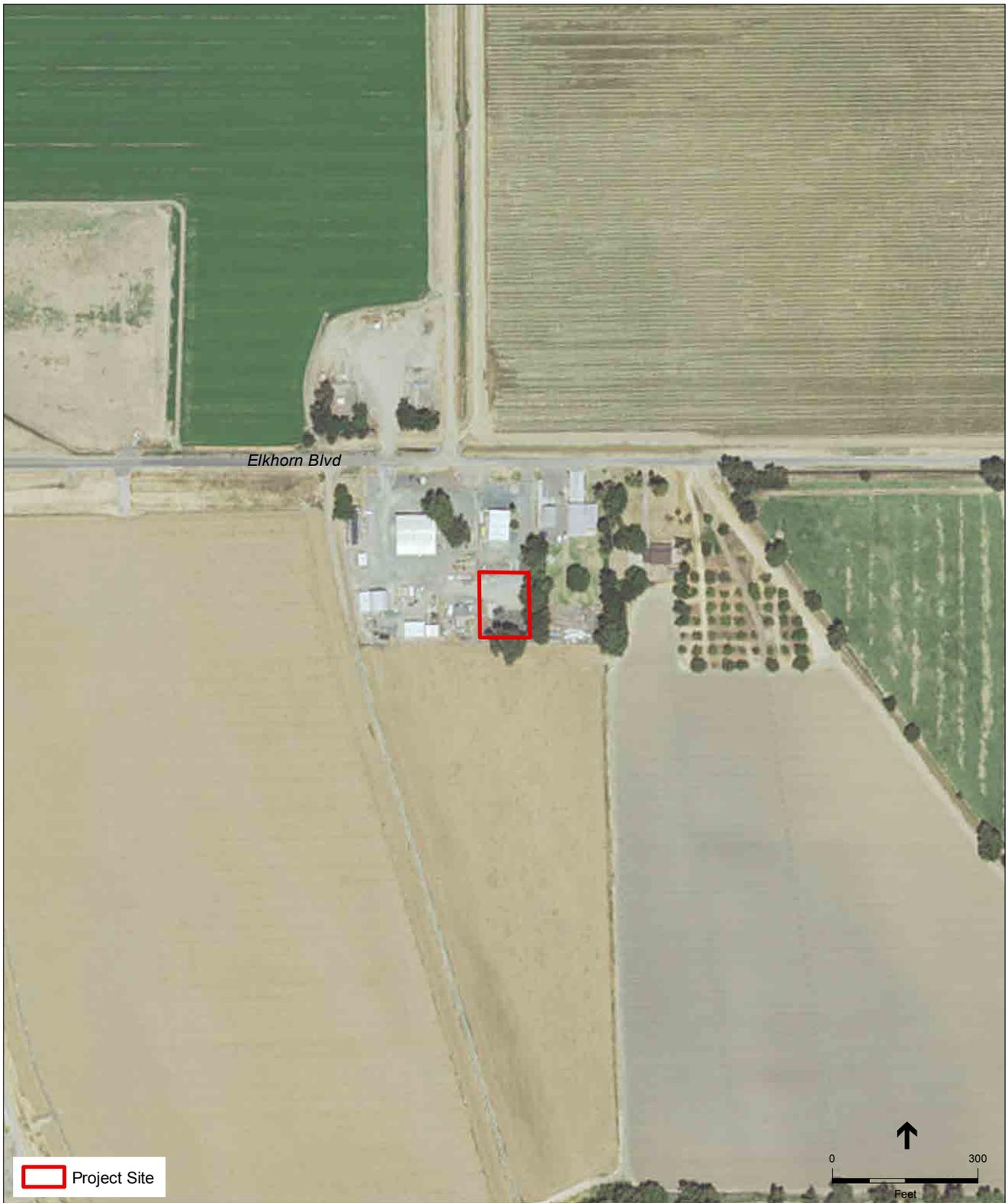
**Figure 2**  
Folsom JFP Site



SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

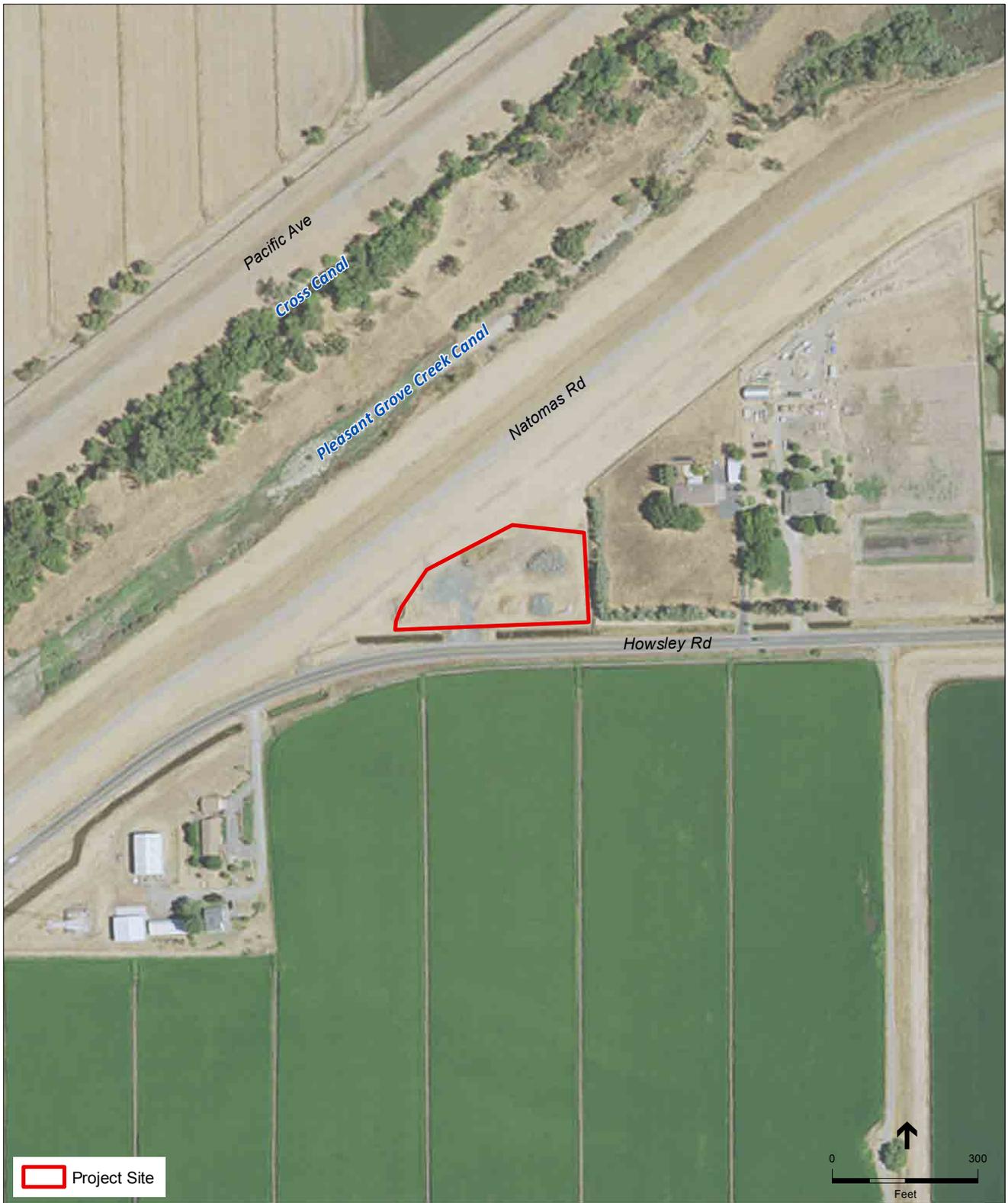
Folsom Rock Reuse Project . 130028.19

**Figure 3**  
Tisdale Site



SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

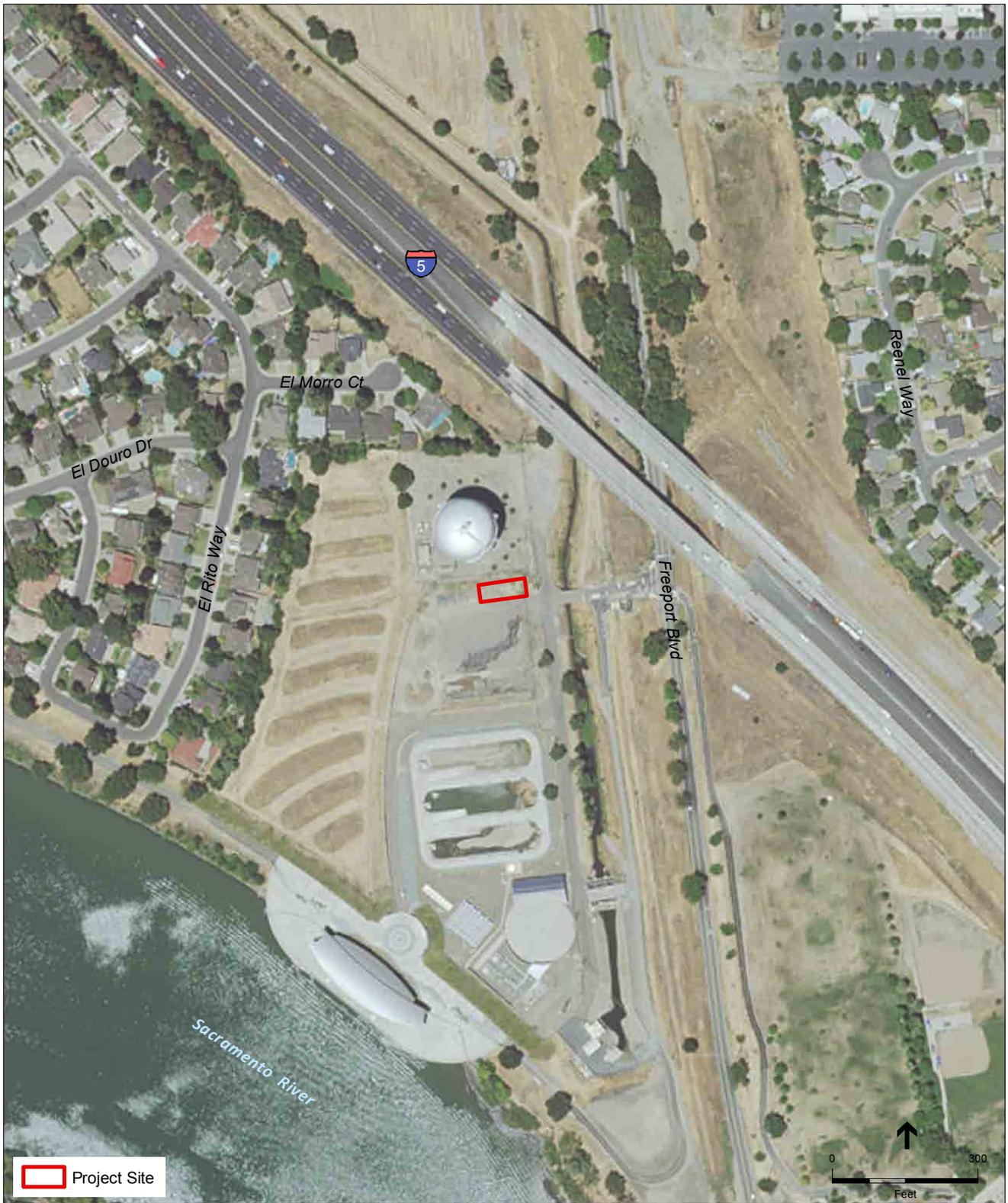
Folsom Rock Reuse Project . 130028.19  
**Figure 4**  
RD 1000 Corporation Yard Site



SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

**Figure 5**  
RD 1000 Howsley Road Site



SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

**Figure 6**  
City of Sacramento Freeport  
Water Treatment Plant Corporation Yard Site



SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

**Figure 7**  
City of Sacramento North  
Corporation Yard Site

Because the MIAD project required high volumes of soil/rock over a large area, there is limited available space to store or dispose of the approximately 200,000 cubic yards (cy)<sup>2</sup> of rock to be removed from restoration of the haul road area. Because of this, the plan is to dispose of these large granite rocks onto a 6 to 8 acre MIAD East disposal site and/or into Folsom Lake at the existing Overlook In-Lake Disposal site according to strict specifications for depth and areal extent of the mass of rock.

DWR is a cost-sharing partner to the Folsom JFP with the USACE and SAFCA and became aware of the proposed plans for disposal of the rock. The large granitic rocks are excellent materials for use in emergency response and for some types of levee repairs, such as severe erosion. As such, these rocks are a valuable commodity to DWR and are consistent with DWR's mission statement regarding emergency response, reducing the risks of flooding, reducing the impacts of flooding, and promoting sustainability. The USACE, SAFCA, and DWR recognize the utility and viability for DWR and SAFCA (in coordination with the City of Sacramento and RD 1000) to accept this resource material for future use. The proposed project would reuse a portion of this rock for flood emergency response and maintenance purposes. In addition, the proposed reuse of this rock is consistent with all three organizations' mission statements for sustainability.

### **2.3 DESCRIPTION OF PROJECT**

The proposed project would take up to approximately 126,000 cy (or about 200,000 tons) of rock from the Federal JFP site and transport to storage sites managed by DWR, the City of Sacramento, and RD 1000 (see Figure 1). Up to 80,000 cy of rock would be relocated north to an 11-acre parcel owned by DWR near the Tisdale weir/bypass in Sutter County (see Figure 3), and the remaining maximum of 46,000 cy would be relocated to four different storage locations used by the City of Sacramento and RD 1000 (see Table 1). One storage site is located at the RD 1000 Corp Yard near the intersection of Elkhorn Boulevard (Blvd.) and Garden Highway near the Sacramento River in Sacramento County (Figure 4), and another RD 1000 storage site located on Howsley Rd. off of State Route (SR) 99 in Sutter County (see Figure 5). The other two sites are located within the City of Sacramento; one at the Freeport WTP Corp Yard (Figure 6) and one at the City of Sacramento's North Corp Yard (Figure 7).

The rock would be loaded directly into haul trucks with 11 to 13 cy capacity by the Folsom JFP contractor using front loaders and/or excavators that are part of the Folsom JFP. Loading would occur at the MIAD temporary storage location (Figure 2). After loading, haul trucks would proceed north on the haul road to the Folsom JFP exit onto Folsom Lake Crossing towards Auburn-Folsom Rd. The haul trucks would then proceed directly to the each of the various storage locations to off load the rock. Loading of the haul trucks at the Folsom JFP site would be limited to the operating hours specified by

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<sup>2</sup> The conversion of cubic yards to tons is one cy of rock weighs about 1.6 tons. So, correspondingly, this mass of 200,000 cy of rock will weigh about 320,000 tons.

**TABLE 1  
 MAXIMUM VOLUME OF ROCK HAULED AND STORED AT EACH SITE**

<b>Name of Site</b>	<b>Volume</b>
Tisdale	80,000
City Freeport WTP Corp Yard	17,000
City North Corp Yard	17,000
RD 1000 Corp Yard	6,000
RD 1000 Howsley Rd.	6,000
Total	126,000

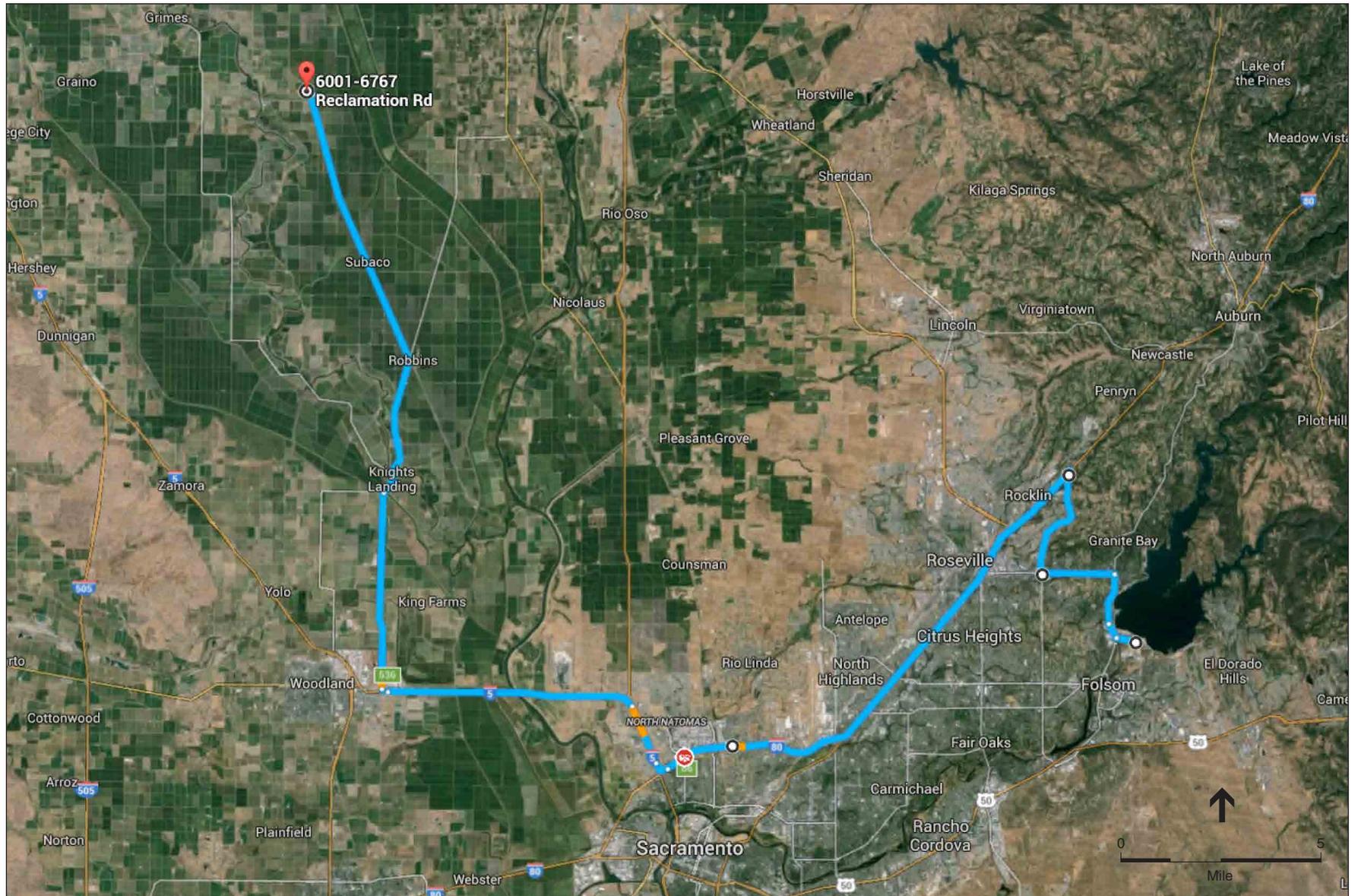
USACE and would be generally limited between the hours of 7:00 a.m. – 7:00 p.m. to meet local noise standards. Hauling from the Folsom JFP site would also be limited to the operations hours specified by USACE to avoid trucks using the haul routes during peak traffic hours.

The haul trucks would use the following main haul routes to the Tisdale site: Auburn-Folsom Rd. north to Douglas Blvd. west to Interstate 80 (I-80) south; then to I-5 north to exit 536 onto County Rd. 102 north; then continue north on SR 113; then north onto Reclamation Rd. to the Tisdale site entrance.

Haul trucks would proceed to the City’s North Corporation Yard storage site off of the I-80 exit for Northgate Blvd. using the same main haul routes for the Tisdale site. The haul route to the RD 1000 Corp Yard would be the same as for the Tisdale site to I-5 north; then would exit onto SR 99 north to West Elverta Rd.; west to Garden Highway; then south to Elkhorn Blvd. The haul route to RD 1000’s Howlsey Rd. storage site would be the same to SR 99, where the haul trucks would travel further north on SR 99 and then exit onto Howsley Rd. east to the storage site. For the City’s Freeport WTP Corp Yard storage site, haul trucks would travel south on Folsom Lake East/Natoma Street to Blue Ravine Rd.; then to Oak Avenue to the East Bidwell Street exit onto to I-50; west to I-5 south; and exit on Pocket Rd. to Freeport Blvd. south to the entrance of the yard. The various haul routes are shown on Figures 8 through 12.

Rock would be unloaded directly in place by the haul trucks at the City and RD 1000 storage locations. At the Tisdale site, the rock would be off-loaded and organized into manageable piles up to six feet in height by two rubber-tired front end loaders. A water truck would periodically spray water on the graveled entrance road and the rock storage area to manage dust during these activities. The rock would be temporarily stored at these storage sites and be used periodically for several purposes, including:

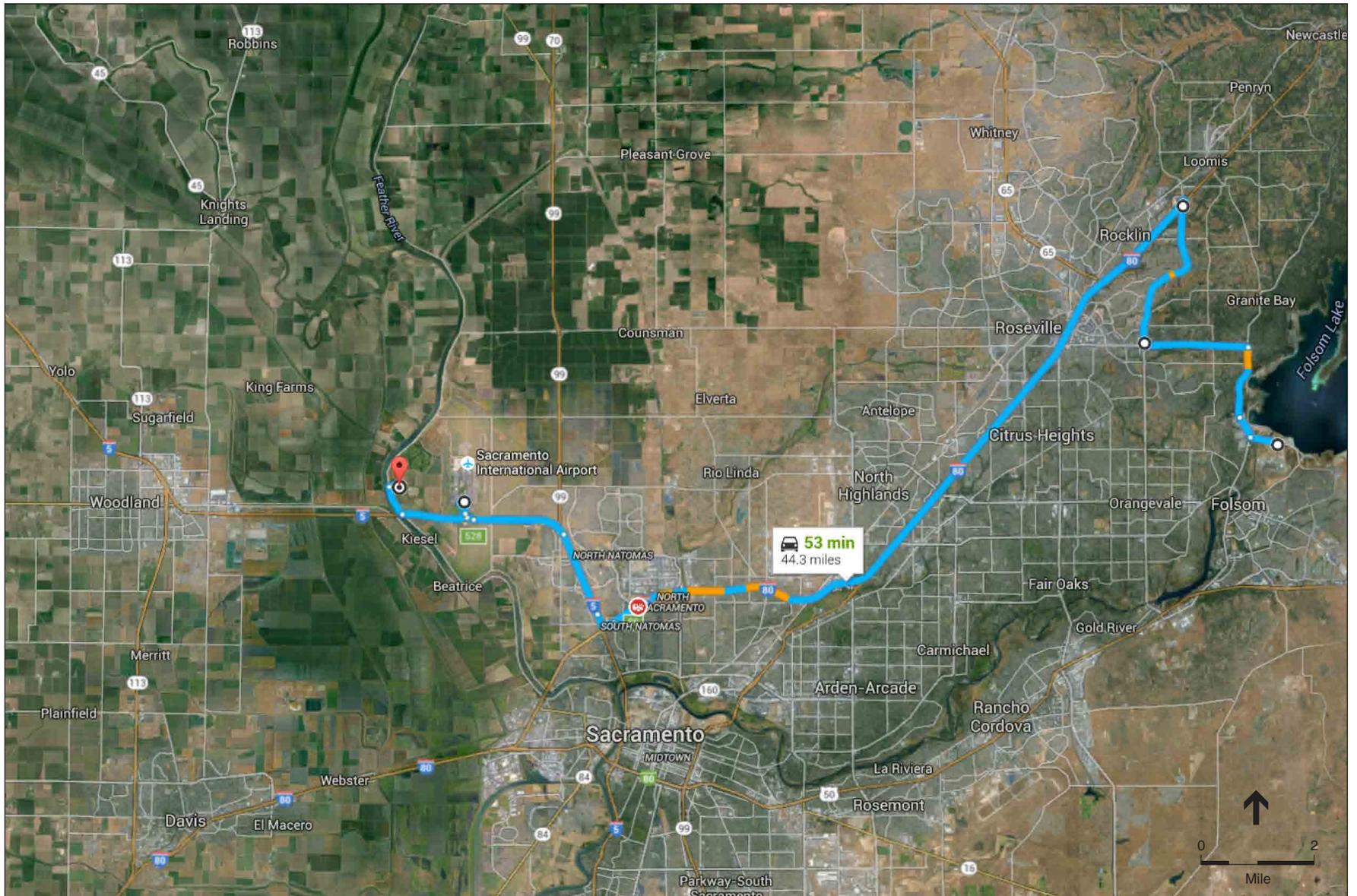
1. Emergency repairs, levee fortification, and potential breaches as a means to reduce possible damages caused by flood events;
2. Flood risk reduction tool for levee erosion repairs due to high, fast flows; and
3. Ballast material to support stressed levee sections.



SOURCE: Google Earth Pro, basemap, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

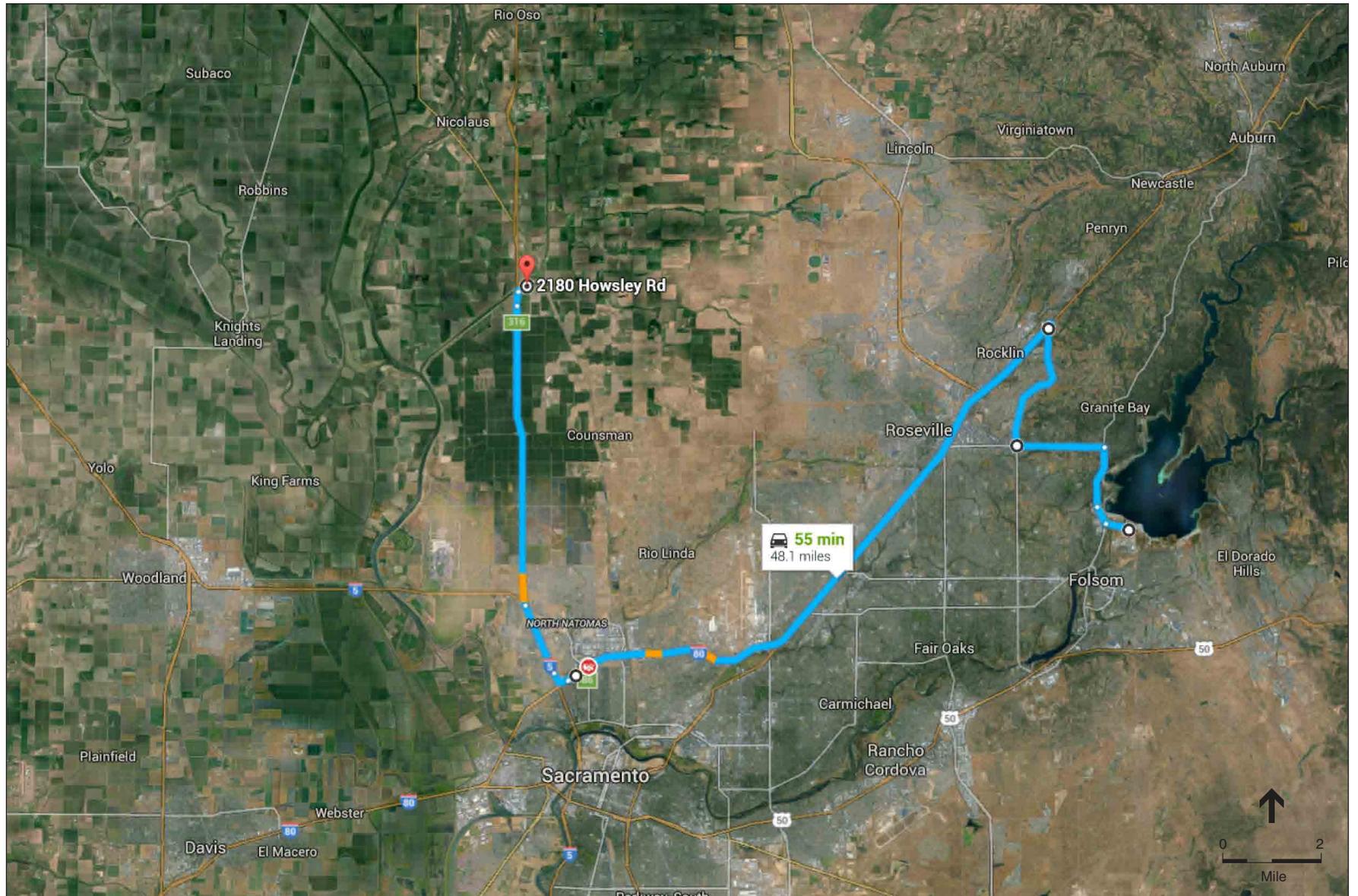
**Figure 8**  
Haul Route to Tisdale Site



SOURCE: Google Earth Pro, basemap, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

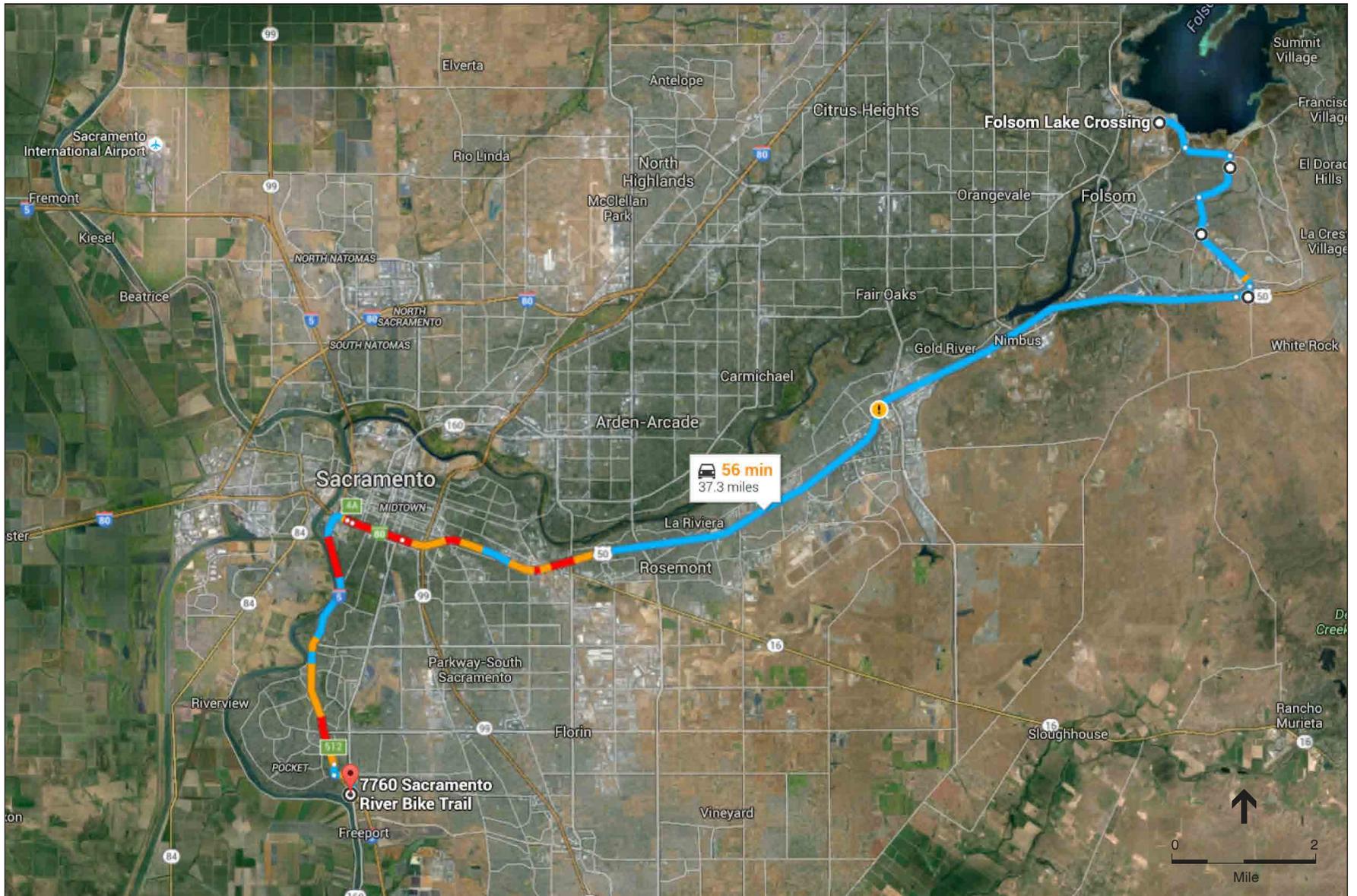
**Figure 9**  
Haul Route to RD 1000 Corporation Yard Site



SOURCE: Google Earth Pro, basemap, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

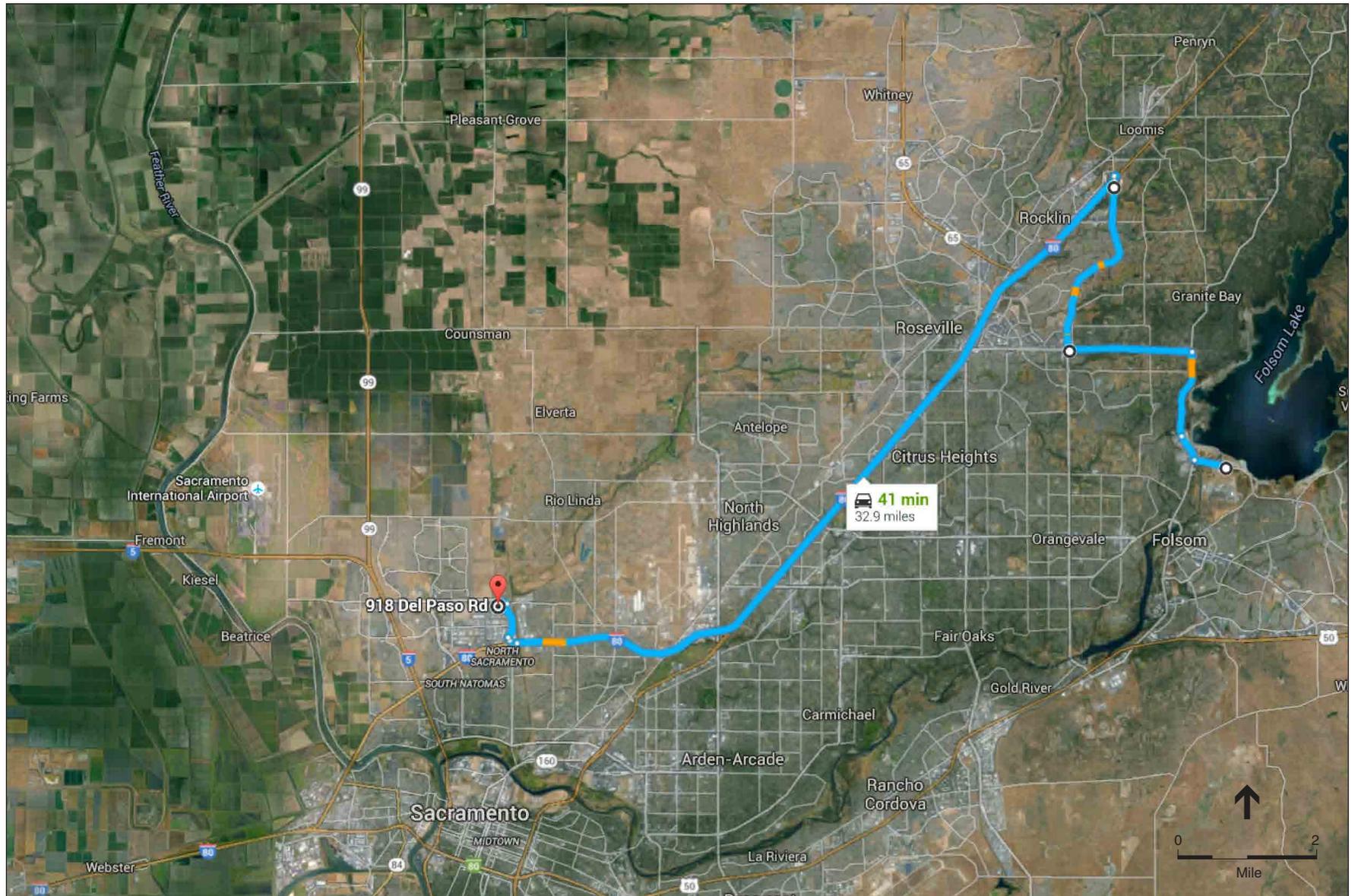
**Figure 10**  
Haul Route to RD 1000 Howsley Road Site



SOURCE: Google Earth Pro, basemap, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

**Figure 11**  
Haul Route to City of Sacramento Freeport Water Treatment Plant Corporation Yard Site



SOURCE: Google Earth Pro, basemap, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

**Figure 12**  
Haul Route to City of Sacramento North Corporation Yard Site

The Tisdale site would have a portable toilet for the drivers and operator. The Tisdale site is relatively flat with the eastern third of the site at a higher elevation due to past disposal of soil on the property. Surface water runoff generally drains to the west and north to a small drainage ditch that surround the site on the west, north, and east. The site would be inspected by DWR environmental staff prior to trucking operations and periodically monitored by these trained staff over the duration of the hauling and stockpiling operation. An exclusion/silt fence would be installed at the Tisdale site 200-feet from the drainage ditch between the ditch and the rock storage piles to prevent silt in stormwater runoff from entering the adjacent drainage ditch. The other sites are flat in topography with all but the RD 1000 Howsley Rd. site being paved with surface water runoff entering existing local stormwater collection systems. All of these other sites are currently used and maintained by the City and RD 1000 under their existing operational procedures for stormwater runoff control. The rock would be stored for use by DWR and SAFCA for emergency flood control and repairs on flood structures as needed in the foreseeable future, similar to the proposed used described previously on page 17.

### **2.3.1 Timing of Work**

The relocation and stockpiling of the rock from the Folsom JFP to the various storage sites would occur over the course of approximately 6 to 8 months starting in late 2016, depending on the progress of restoration of the Folsom JFP haul route area by USACE and its contractors. This would result in a maximum of approximately 86 truckloads per day, or 172 roundtrips, distributed proportionally between the five storage sites over the course of the six month period, dependent on the rock resource needs and agreements by these site owners' management. The volume/tonnages of rock resources for emergency response to flooding are estimated and will not exceed the total volume estimates presented herein.

### **3 PERMITS AND REGULATORY APPROVALS**

No permits are expected to be required for the proposed project. However, DWR would obtain environmental approval from the local air districts relevant to project work as needed in order to reduce and/or minimize potential project impacts from air quality emissions.

#### 4 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

## 5 DETERMINATION

On the basis of the initial evaluation that follows:

- I find that the proposed project WOULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, the project impacts were adequately addressed in an earlier document or there will not be a significant effect in this case because revisions in the project have been made that will avoid or reduce any potential significant effects to a less than significant level. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.



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Signature

10/20/2016

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Date

Acting Chief, Flood Maintenance Office  
California Department of Water Resources

## 5.1 AESTHETICS

### 5.1.1 Environmental Setting

The visual character of the proposed storage sites vary because they are located in different sites within two different counties and are individually distinct. The DWR Tisdale parcel is characterized by the surrounding agricultural land of Sutter County, while the SAFCA storage sites are characterized by undeveloped land frequently used for storage purposes surrounded by a mix of rural undeveloped, residential, and industrial land uses. The RD 1000 Howsley Rd. Stockpile site and the RD 1000 Maintenance Yard site are surrounded by undeveloped land, but within close proximity of the Sacramento River. The City North Area Corp Yard is located within an urban area and surrounded by businesses and residential houses.

### 5.1.2 Environmental Checklist and Discussion

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

#### a) Have a substantial adverse effect on a scenic vista?

*Less Than Significant Impact.* The proposed project would transport rock from Federal JFP site to the storage sites in Sutter County, Sacramento County, and the City of Sacramento. The proposed project would require equipment and materials for each site that would be used to consolidate rock and maintain silt fences around the sites to prevent sediment in runoff. The RD 1000 Howsley Rd. Stockpile, RD 1000 Maintenance Yard, City North Area Corp Yard, and Freeport WTP Corp Yard storage sites are located in areas with no access to the public and far from views of any scenic vistas. The Tisdale site is within view of the Sutter Buttes but not within an area with scenic

vistas. In addition, storage of rock on the Tisdale site would be located in an open field surrounded by agricultural land and would not obstruct view of the Sutter Buttes. Therefore, impacts would be less-than-significant.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

*No Impact.* There are no designated scenic highways within the vicinity of the proposed project haul routes or storage sites (California Department of Transportation, (Caltrans) 2015). Therefore, the proposed project would not substantially damage scenic resources such as trees, rock outcroppings, and historic buildings within a state scenic highway and no impact would occur.

**c) Substantially degrade the existing visual character or quality of the site and its surroundings?**

*Less Than Significant Impact.* The proposed project would store rock at each storage site for emergency activities on flood facilities, as needed in the foreseeable future by DWR and SAFCA. Each of the SAFCA storage sites are or have been used in the past for industrial, light industrial, or other storage purposes and the sites have no native vegetation or other landscaping. Storage of rock on the SAFCA sites would not result in degrading the existing visual character of these sites and surroundings because they would be similar to adjacent and previous land uses and views of the sites from public areas are limited. Rock would be piled up to a height of six feet on the Tisdale site, which would temporarily alter the existing visual character of the site. However, the Tisdale site is a proportionally small amount of land in comparison to the large area of agricultural land in the vicinity. Further, storage of materials used by other local and private entities are done within the same region and the use of the Tisdale site would be similar in visual character as other storage sites in the region. Therefore, the storage of rock on the Tisdale site would not substantially degrade the visual character of the site and its surroundings. The storage of the rocks would not be permanent, and all sites would be restored to pre-existing conditions following the use of the stored rocks. This impact is less than significant.

**d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

*No Impact.* The proposed project would not require nighttime work or installation of light, and, therefore the proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. There would be no impact.

## 5.2 AGRICULTURAL AND FORESTRY RESOURCES

### 5.2.1 Environmental Setting

The Tisdale site, RD 1000 Howsley Rd. Stockpile site, and the RD 1000 Corp Yard site are all located in areas designated for agriculture. The Tisdale site consists of an open field that has been previously used for storage of soil and is maintained for such use by DWR. It is designated as Agricultural in the Sutter County General Plan. None of the storage sites are designated by the California Department of Conservation (DOC) as the RD 1000 as Prime Farmland, Unique, or Farmland of Statewide Importance (DOC 2016). All other storage sites are within developed and urban areas. There are no designated forest or forestry resources in any of the storage sites.

### 5.2.2 Environmental Checklist and Discussion

<b>AGRICULTURE AND FORESTRY RESOURCES</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<hr/> Would the project... <hr/>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a,b) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Monitoring Program of the California Resources Agency, to nonagricultural use or conflict with existing zoning for agricultural use, or a Williamson Act contract?**

*No Impact.* The proposed project would store rock on the proposed storage sites for future use on sites that are not developed in rural areas. None of the proposed storage sites are not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, the proposed project would not convert Farmland to nonagricultural use and the storage of rocks on the aforementioned sites would not conflict with existing zoning for agriculture or with a Williamson Act contract (DOC 2016), and there would be no impact.

**c,d) 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))?**

*No Impact.* The proposed project would not be located within forest land or timberland. There would be no impact.

**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?**

*No Impact.* The proposed project would not require conversion of farmland to non-agricultural use. The storage of rock on the undeveloped Tisdale and RD 1000 Howsley Rd. sites is consistent with typical uses on land that is designated or zoned for agriculture, such as storage of vehicles, buildings, irrigation equipment, etc. As stated previously, the storage of rock on the Tisdale and RD 1000 Howsley Rd. sites would not result in the conversion of Farmland. Further, there is no forest land within the vicinity of the proposed project, and no impact would occur.

## 5.3 AIR QUALITY

### 5.3.1 Environmental Setting

The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by pollutant sources and the atmosphere's ability to transport, transform, and dilute such emissions. Natural factors that affect pollutant transport and fate (process by which chemicals move and are transformed in the environment) include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the proposed project area are determined by such natural factors as topography, meteorology, and climate, in addition to the types and quantities of emissions released by existing air pollutant sources.

The majority of the proposed project would be located within the Sacramento Valley Air Basin (SVAB), under the jurisdiction of four different air quality management districts: Sacramento Metropolitan Air Quality Management District (SMAQMD), Placer County Air Pollution Control District (PCAPCD), Yolo-Solano Air Quality Management District (YSAQMD) and Feather River Air Quality Management District (FRAQMD). Each district is responsible for preparing and implementing plans for the attainment of ambient air quality standards, rules and regulations, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, and an approach to determining impact significance.

The federal Clean Air Act (FCAA) requires the U.S. Environmental Protection Agency (USEPA) to identify National Ambient Air Quality Standards (NAAQS or national standards) to protect public health and welfare. National standards have been established for ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter less than 10 micrometers in diameter (PM<sub>10</sub>), particulate matter less than 2.5 micrometers in diameter (PM<sub>2.5</sub>), and lead. Pursuant to the 1990 Federal Clean Air Act Amendments, the USEPA classifies air basins (or portions thereof) as "attainment," "nonattainment," or "unclassified" for each criteria air pollutants, based on whether or not the NAAQS had been achieved. California has adopted ambient standards that are more stringent than the federal standards for the criteria air pollutants. Under the California Clean Air Act (CCAA) patterned after the FCAA, the California Air Resources Board (CARB) has designated areas as "attainment," "nonattainment," or "unclassified" with respect to the California Ambient Air Quality Standards (CAAQS). Areas that meet ambient air quality standards are classified as "attainment," areas that do not meet these standards are classified as "nonattainment," and areas that have insufficient data to support any designation are considered "unclassified."

Table 2 provides a list of air district agencies with regulatory authority in the proposed Project area, and a list of air pollutants that exceed federal and/or State standards within that jurisdiction, which has resulted in the area being classified as a nonattainment area with respect to the given air pollutant. As shown in Table 2, the proposed project area is designated as attainment or unclassified for all federal and State standards except for ozone and particulate matter.

**TABLE 2  
AIR QUALITY AGENCIES AND STANDARDS VIOLATIONS**

<b>Agency</b>	<b>Exceeds Federal Standard</b>	<b>Exceeds State Standard</b>
Feather River Air Quality Management District (FRAQMD)	Ozone; PM <sub>2.5</sub>	Ozone; PM <sub>10</sub>
Placer County Air Pollution Control District (PCAPCD)	Ozone	Ozone; PM <sub>10</sub>
Sacramento Metropolitan Air Quality Management District (SMAQMD)	Ozone; PM <sub>2.5</sub>	Ozone; PM <sub>10</sub> ; PM <sub>2.5</sub>
Yolo-Solano Air Quality Management District (YSAQMD)	Ozone; PM <sub>2.5</sub>	Ozone; PM <sub>10</sub>

SOURCE: CARB, 2014

### 5.3.2 Thresholds of Significance

As required by the CCAA, each air district must prepare a plan to improve district air quality to meet the CARB and USEPA standards. The FRAQMD, SMAQMD, PCAPCD, YSAQMD, and adjacent air districts formed the Northern Sacramento Valley Planning Area (NSVPA) to address nonattainment air quality issues through a joint NSVPA Air Quality Attainment Plan. The NSVPA Air Quality Attainment Plan is multi-year strategy that requires a tri-annual review process to assess attainment progress. As a part of the NSVPA 2012 tri-annual review, each district considered adopting CEQA Air Quality Guidelines to reduce stationary source emissions of non-attainment air pollutants by identifying potential development projects that have adverse effects on air quality and identifying measures to mitigate for those significant effects. Since the proposed project would be temporary and short-term, pollutant emissions generated during the proposed project are compared to the local air district construction thresholds of significance presented in Table 3. Other air quality impacts (e.g., local emissions of CO and toxic air contaminants (TACs)) were assessed qualitatively in accordance with methodologies recommended by CARB and local air districts.

**TABLE 3  
AIR DISTRICT CONSTRUCTION THRESHOLDS OF SIGNIFICANCE  
FOR PROPOSED PROJECT ACTIVITIES**

<b>Air District</b>	<b>Counties</b>	<b>ROG</b>	<b>NOx</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
FRAQMD	Yuba, Sutter	2.25 tpy <sup>1</sup>	2.25 tpy <sup>1</sup>	80 ppd	--
SMAQMD	Sacramento	--	85 ppd	0 ppd <sup>2</sup>	0 ppd <sup>2</sup>
PCAPCD	Placer	82 ppd	82 ppd	82 ppd	--
YSAQMD	Yolo, Solano (part)	10 tpy	10 tpy	80 ppd	--

**NOTES:**

ppd = pounds per day; tpy = tons per year

1. FRAQMD has established threshold of 25 pounds per day multiplied by project duration, not to exceed 4.5 tons per year for ROG and NOx, which would equate to approximately 2.25 tons per year assuming a six-month period.
2. SMAQMD has established threshold of zero pounds per day for PM<sub>10</sub> and PM<sub>2.5</sub>. If all feasible BACT/BMPs are applied, the District increases the PM<sub>10</sub> threshold to 80 pounds per day (14.6 tons per year) and PM<sub>2.5</sub> threshold to 82 pounds per day (15 tons per year).

SOURCE: FRAQMD, 2016; Placer County APCD, 2012; SMAQMD, 2009; YSAQMD, 2007.

### 5.3.3 Methodology

The proposed project would consist of the transportation of the rock from the JFP construction site in Sacramento County to the DWR Tisdale and RD 1000 Howsley Rd. storage sites in Sutter County, and three rock storage sites in Sacramento County used by the City of Sacramento and SAFCA. The transportation of the rock is anticipated to begin in the fall of 2016, with a duration ranging six to eight months. The primary sources of pollutant emissions generated by the proposed project would be from the use of heavy trucks transporting rocks from the JFP construction site to each of the proposed storage sites, and off-road equipment loading/unloading the rocks from the heavy trucks. The pollutants generated by these sources were modeled using mobile emission factors for heavy duty trucks from CARB’s EMFAC2014 and off-road emission factors from CARB’s Offroad 2011 emissions inventory database. All haul trucks and off-road vehicles are assumed to be equipped with a Tier 3 engine. Haul truck trips were calculated assuming each haul truck can carry an estimated 11 to 13 cy of rock. Detailed modeling results are presented in Appendix A.

### 5.3.4 Environmental Checklist and Discussion

<b>AIR QUALITY</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**a) Conflict with or obstruct implementation of the applicable air quality plan?**

*Less than Significant Impact with Mitigation.* A project could result in adverse air quality effects if emissions of criteria air pollutants or precursors would exceed the thresholds of significance established by relevant local air districts. In the case of the proposed project, no long-term operational emissions would occur and, therefore, this analysis evaluates activities associated with the transportation of rock from the Folsom JFP construction site to each rock storage site. As a result any air emissions would be temporary in duration (over a 6 to 8 month period). The proposed project would involve activities that would use heavy trucks and off-road equipment that would emit criteria pollutants. Dust generation varies as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on- and off-site. ROG and NOx are ozone precursor emissions and are primarily associated with off-road equipment and on-road vehicle exhaust.

Criteria pollutant emissions were modeled based on truck route distances, equipment specifications provided by the applicant, and emission factors for heavy duty trucks and off-road equipment. Since the haul routes would transverse through multiple air districts, the pollutant emissions from heavy truck trips were assess for each air district. The daily and annual project-related emissions are provided in Tables 4 through 7 and compared to the SMAQMD, PCAPCD, YSAQMD, and FRAQMD significance thresholds, respectively.

**TABLE 4  
PROJECT-RELATED EMISSIONS WITHIN THE SMAQMD<sup>1</sup>**

Category	NOx (ppd)	PM <sub>10</sub> (ppd)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (ppd)	PM <sub>2.5</sub> (tpy)
<b>On-Road Sources</b>					
JFP to Tisdale	5.06	<b>0.60</b>	<b>0.04</b>	<b>0.23</b>	<b>0.02</b>
JFP to City of Freeport WTP Corp Yard	1.49	<b>0.18</b>	<b>0.01</b>	<b>0.07</b>	<b>&lt;0.01</b>
JFP to City North Corp Yard	0.63	<b>0.07</b>	<b>&lt;0.01</b>	<b>0.03</b>	<b>&lt;0.01</b>
JFP to RD 1000 Corp Yard	0.38	<b>0.05</b>	<b>&lt;0.01</b>	<b>0.02</b>	<b>&lt;0.01</b>
JFP to RD 1000 Howsley Storage	0.35	<b>0.04</b>	<b>&lt;0.01</b>	<b>0.02</b>	<b>&lt;0.01</b>
<b>Off-Road Sources</b>					
Tisdale	NA	NA	NA	NA	NA
City of Freeport WTP Corp Yard	5.16	<b>0.15</b>	<b>0.01</b>	<b>0.14</b>	<b>0.01</b>
City North Corp Yard	5.16	<b>0.15</b>	<b>0.01</b>	<b>0.14</b>	<b>0.01</b>
RD 1000 Corp Yard	5.16	<b>0.15</b>	<b>0.01</b>	<b>0.14</b>	<b>0.01</b>
RD 1000 Howsley Storage	NA	NA	NA	NA	NA
JFP	4.86	<b>0.38</b>	<b>0.03</b>	<b>0.35</b>	<b>0.02</b>
<b>Total</b>	<b>28.24</b>	<b>1.78</b>	<b>0.12</b>	<b>1.13</b>	<b>0.07</b>
SMAQMD Significance Threshold <sup>2</sup>	85	0	0	0	0
Significant (Yes or No)?	No	Yes	Yes	Yes	Yes

NOTES:

ppd = pounds per day; tpy = tons per year; NA = No emissions would be generated

1. On-road and off-road emissions estimates were made using emissions factors found CARB's EMFAC2014 and Offroad2011 inventories. See Appendix A for details.
2. Values in bold are in excess of the SMAQMD significance thresholds.
3. SMAQMD has established threshold of zero pounds per day for PM10 and PM2.5. If all feasible BACT/BMPs are applied, the District increases the PM10 threshold to 80 pounds per day (14.6 tons per year) and PM2.5 threshold to 82 pounds per day (15 tons per year).

SOURCE: ESA, 2016.

**TABLE 5  
PROJECT-RELATED EMISSIONS WITHIN THE PCAPCD<sup>1</sup>**

Category	ROG Emissions (ppd)	NOx Emissions (ppd)	PM <sub>10</sub> (ppd)
<b>On-Road Sources</b>			
JFP to Tisdale	0.10	3.60	0.40
JFP to City of Freeport WTP Corp Yard	NA	NA	NA
JFP to City North Corp Yard	0.02	0.77	0.09
JFP to RD 1000 Corp Yard	0.01	0.27	0.03
JFP to RD 1000 Howsley Storage	0.01	0.27	0.03
<b>Off-Road Sources</b>			
Tisdale	NA	NA	NA
City of Freeport WTP Corp Yard	NA	NA	NA
City North Corp Yard	NA	NA	NA
RD 1000 Corp Yard	NA	NA	NA
RD 1000 Howsley Storage	NA	NA	NA
JFP	NA	NA	NA
<b>Total</b>	<b>0.14</b>	<b>4.91</b>	<b>0.55</b>
PCAPCD Significance Threshold	82	82	82
Significant (Yes or No)?	No	No	No

NOTES:

ppd = pounds per day; tpy = tons per year; NA = No emissions would be generated

1. On-road and off-road emissions estimates were made using emissions factors found CARB's EMFAC2014 and Offroad2011 inventories. See Appendix A for details.

SOURCE: ESA, 2016.

**TABLE 6  
PROJECT-RELATED EMISSIONS WITHIN THE YSAQMD<sup>1</sup>**

Category	ROG Emissions (tpy)	NOx Emissions (tpy)	PM <sub>10</sub> (ppd)
<b>On-Road Sources</b>			
JFP to Tisdale	0.01	0.25	0.43
JFP to City of Freeport WTP Corp Yard	NA	NA	NA
JFP to City North Corp Yard	NA	NA	NA
JFP to RD 1000 Corp Yard	NA	NA	NA
JFP to RD 1000 Howsley Storage	NA	NA	NA
<b>Off-Road Sources</b>			
Tisdale	NA	NA	NA
City of Freeport WTP Corp Yard	NA	NA	NA
City North Corp Yard	NA	NA	NA
RD 1000 Corp Yard	NA	NA	NA
RD 1000 Howsley Storage	NA	NA	NA
JFP	NA	NA	NA
<b>Total</b>	<b>0.01</b>	<b>0.25</b>	<b>0.43</b>
YSAQMD Significance Threshold	10	10	80
Significant (Yes or No)?	No	No	No

NOTES:

ppd = pounds per day; tpy = tons per year; NA = No emissions would be generated

1. On-road and off-road emissions estimates were made using emissions factors found CARB's EMFAC2014 and Offroad2011 inventories. See Appendix A for details.

SOURCE: ESA, 2016.

**TABLE 7  
PROJECT-RELATED EMISSIONS WITHIN THE FRAQMD<sup>1</sup>**

Category	ROG Emissions (tpy)	NOx Emissions (tpy)	PM <sub>10</sub> (ppd)
<b>On-Road Sources</b>			
JFP to Tisdale	0.01	0.25	0.03
JFP to City of Freeport WTP Corp Yard	NA	NA	NA
JFP to City North Corp Yard	NA	NA	NA
JFP to RD 1000 Corp Yard	NA	NA	NA
JFP to RD 1000 Howsley Storage	<0.01	0.01	0.01
<b>Off-Road Sources</b>			
Tisdale	0.02	0.34	0.15
City of Freeport WTP Corp Yard	NA	NA	NA
City North Corp Yard	NA	NA	NA
RD 1000 Corp Yard	NA	NA	NA
RD 1000 Howsley Storage	0.02	0.34	0.15
JFP	NA	NA	NA
<b>Total</b>	<b>0.05</b>	<b>0.93</b>	<b>0.34</b>
<b>FRAQMD Significance Threshold<sup>2</sup></b>	<b>2.25</b>	<b>2.25</b>	<b>80</b>
<b>Significant (Yes or No)?</b>	<b>No</b>	<b>No</b>	<b>No</b>

NOTES:

ppd = pounds per day; tpy = tons per year; NA = No emissions would be generated

1. On-road and off-road emissions estimates were made using emissions factors found CARB's EMFAC2014 and Offroad2011 inventories. See Appendix A for details.
2. FRAQMD has established threshold of 25 pounds per day multiplied by project duration, not to exceed 4.5 tons/year for ROG and NOx, which would equate to approximately 2.25 tons per year assuming a six-month period.

SOURCE: ESA, 2016.

In comparison to the local air district thresholds of significance depicted in Tables 4 through 7, emissions generated by the proposed project would not exceed any of the thresholds set by the PCAPCD, YSAQMD, and FRAQMD. However, the combined PM<sub>10</sub> and PM<sub>2.5</sub> emissions from haul trucks and off-road equipment within the County of Sacramento would exceed the SMAQMD significance thresholds for PM<sub>10</sub> and PM<sub>2.5</sub>. According to the SMAQMD CEQA Guidance, SMAQMD increases its PM<sub>10</sub> and PM<sub>2.5</sub> significance thresholds to 80 pounds per day (15 tons per year) for PM<sub>10</sub> and 82 pounds per day (15 tons per year) for PM<sub>2.5</sub>, respectively, when all feasible Best Available Control Technology (BACT)/BMPs have been applied. Therefore, with implementation of Mitigation Measures AQ-1 and AQ-2, this impact would be reduced to **less than significant**.

To minimize the project's PM<sub>10</sub> and PM<sub>2.5</sub>, emissions impact, DWR will apply the following appropriate SMAQMD recommended BACT/BMPs where feasible:

**Mitigation Measure AQ-1 – Measure to Reduce Fugitive Dust Emissions**

- All exposed surfaces shall be watered two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.

- Limit vehicle speeds on unpaved roads to 15 miles per hour. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment shall be checked by a certified mechanic and determine to be running in proper condition before it is operated.

### **Mitigation Measure AQ-2 – Measure to Reduce Exhaust Emissions**

- Provide a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the proposed project to the SMAQMD. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment. The inventory shall be updated and submitted monthly throughout the duration of the Proposed Project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.
- Provide a plan in conjunction with the equipment inventory, approved by the SMAQMD, demonstrating that the heavy-duty (50 horsepower or more) off-road vehicles to be used by the proposed project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOx reduction and 45% particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after treatment products, and/or other options as they become available.
- Emissions from all off-road diesel powered equipment used on the project site shall not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this measure shall supersede other SMAQMD or state rules or regulations.

**b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

*Less Than Significant Impact with Mitigation.* The proposed project is located in the SMAQMD, PCAPCD, YSAQMD, and FRAQMD. As shown in Table 2 these districts are designated as not attaining the NAAQS and CAAQS for ozone and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). Since the PM<sub>10</sub> and PM<sub>2.5</sub> emissions from heavy trucks transporting rock through Sacramento County and off-road equipment loading/unloading rock at the Folsom JFP construction site and storage sites would exceed the SMAQMD significance thresholds (see Table 4), the project's PM emissions may impede on the NSVPA Air Quality Attainment Plan. Therefore, the project may have significant impacts to air quality by contributing to a projected air quality violation, but implementation of Mitigation Measures AQ-1 and AQ-2 would reduce impacts to **less than significant** by implementing the SMAQMD BACT/BMPs measures to reduce PM emissions.

**c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

*Less Than Significant Impact with Mitigation.* The project may have significant impacts to air quality since it could potentially increase ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions, which are criteria pollutants that SMAQMD, PCAPCD, YSAQMD and FRAQMD are designated as non-attainment. However, implementation of Mitigation Measures AQ-1 and AQ-2 would reduce the impact to **less than significant** by implementing the SMAQMD BACT/BMPs measures to reduce PM emissions. Please refer to Air Quality checklist question a) discussion for more detail.

**d) Expose sensitive receptors to substantial pollutant concentrations?**

*Less Than Significant Impact.* Sensitive receptors include residences, schools, convalescent homes, and hospitals. In general, sensitive receptors near the Folsom JFP construction site, proposed rock storage sites, and truck haul routes would mainly consist of residential uses. The proposed project involves activities that would use heavy trucks and off-road equipment which would emit CO and TACs that could expose sensitive receptors to temporary elevated concentrations of these constituents.

CO is a localized pollutant of concern and would be generated by heavy trucks and off-road equipment. The transport of rock from the JFP construction site to the various proposed rock storage sites would be temporary, spatially dispersed, and are anticipated to occur at locations such that CO would dissipate significantly before reaching sensitive receptors.

Activities associated with the proposed project would also result in short-term diesel particulate matter (DPM) emissions, which are TACs from diesel fueled on-site heavy-duty equipment and on-road haul trucks. The dose to which sensitive receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that a person has with the substance. Dose is positively correlated with time,

meaning that a longer exposure period results in a higher exposure level for the maximally exposed individual. Therefore, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA, 2015), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Since the proposed project would consist of the transport of rocks, the use of heavy trucks and off-road equipment would be short-term and intermittent and would not result in extended exposure of sensitive receptors to DPM. Therefore, activities associated with the proposed project are not anticipated to result in the exposure of sensitive receptors to levels that exceed applicable standards. Therefore, dispersion modeling and associated health risk analysis was not deemed necessary on a project or cumulative level.

Because exposure to these emissions would be short-term in duration (between six to eight months) and activities would not result in a permanent increase in CO or TAC emissions, the proposed project would not expose sensitive receptors to substantial concentrations of CO and TAC and this impact would be ***less than significant***.

**e) Create objectionable odors affecting a substantial number of people?**

***Less Than Significant Impact.*** Diesel exhaust emissions would be the only anticipated source of odor created from the project. These diesel exhaust emissions would be temporary, intermittent, and dissipate over time and distance. Therefore, the short-term operation of the project would not significantly impact nearby residents. This impact would be ***less than significant***.

## 5.4 BIOLOGICAL RESOURCES

### 5.4.1 Environmental Setting

This section examines the potential impacts of the proposed project on biological resources and identifies mitigation measures to avoid or reduce those impacts, where appropriate. This analysis was based upon review of potentially occurring special-status species, wildlife habitats, and jurisdictional waters of the U.S. and of the State. The results of this assessment are based upon literature searches, and queries of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB), the U.S. Fish and Wildlife Services' (USFWS) list of federal endangered and threatened species, and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants lists. The primary sources of reference data reviewed for this evaluation included the following:

- Tisdale Weir, Verona, Clarksburg, Taylor Monument, and Rio Linda 7.5-minute topographic quadrangles (USGS, 2015a, 2015b, 2015c, 2015d);
- CNDDDB list of special-status species occurrences within the Tisdale Weir, Verona, Clarksburg, Taylor Monument, Rio Linda, and surrounding USGS 7.5-minute topographic quadrangles (Meridian, Sutter Buttes, Sutter, Grimes, Gilsizer Slough, Dunnigan, Kirkville, Sutter Causeway, Sutter, Nicolaus, Sheridan, Knights Landing, Pleasant Grove, Grays Bend, Davis, Sacramento West, Sacramento East, Saxon, Florin, Liberty Island, Courtland, Bruceville, Roseville, Citrus Heights, and Carmichael) (CNDDDB, 2016);
- CNPS list of rare and endangered plants known to occur within the Tisdale Weir, Verona, Clarksburg, Taylor Monument, and Rio Linda and surrounding USGS 7.5-minute topographic quadrangles (CNPS, 2016);
- Federal Endangered and Threatened Species that may occur in the proposed project location, and/or may be affected by the proposed project (USFWS, 2016);
- Google Earth<sup>®</sup> Aerial imagery (Google Earth, 2016a, 2016b, 2016c, 2016d); and
- Special Animals List (CDFW, 2016).

#### Wildlife Habitats

Wildlife habitats described in this section are based on CDFW's *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer, 1988) that is used in CDFW's California Wildlife Habitat Relationships System (CWHR). Descriptions of habitat types present within the storage sites are presented below. Habitat types were identified during reconnaissance surveys, as well as interpretation of aerial imagery. A discussion of specific habitat types present at each of the storage sites is presented in the following text. All elevations are referenced to mean sea level (msl).

*Annual Grassland.* Annual Grassland habitat is generally found in open areas in valleys and foothills throughout coastal and interior California. It typically occurs on soils

consisting of fine-textured loams or clays that are somewhat poorly drained. This vegetation type is dominated by non-native annual grasses and weedy annual and perennial forbs, primarily of Mediterranean origin, that have replaced native perennial grasslands, scrub, and woodland as a result of human disturbance. Common species within this habitat type include wild oats (*Avena fatua*), slender oat (*Avena barbata*), hare barley (*Hordeum murinum* var. *leporinum*), ripgut brome (*Bromus diandrus*), yellow star thistle (*Centaurea solstitialis*), field mustard (*Brassica rapa*), Italian thistle (*Carduus pycnocephalus*), foxtail fescue (*Vulpia myuros*), Russian thistle (*Salsola tragus*), sow thistle (*Sonchus oleraceus*), upright pepper grass (*Lepidium strictum*), and plantain (*Plantago lanceolata*). Common reptiles that occur in this habitat include western fence lizard (*Sceloporus occidentalis*) and common garter snake (*Thamnophis sirtalis*). Common mammals found in this habitat include black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), western harvest mouse (*Reithrodontomys megalotis*), California vole (*Microtus californicus*), and coyote (*Canis latrans*). Common birds known to breed in this habitat include horned lark (*Eremophila alpestris*) and western meadowlark (*Sturnella neglecta*). This habitat only occurs at the Tisdale site.

*Disturbed.* This habitat includes all areas that have been developed, including those areas where scraping and leveling has occurred during road construction, and clearing of staging areas, but also includes other paved areas and buildings. Vegetation in disturbed areas includes ornamental vegetation, and ruderal weeds. This habitat occurs at the Tisdale site, Freeport WTP Corp Yard, City North Corp Yard, RD 1000 Corp Yard, and the RD 1000 Howsley Rd. storage sites.

## **Storage Sites**

### Tisdale

The 11 acre Tisdale site is located in the Sutter Basin, east of the Sacramento River, north of the Tisdale Bypass and immediately west of Reclamation Rd. Elevations at the site range from 30 to 35 feet and the topography is characterized by gently sloping terrain that drains to the northwest toward a small agricultural ditch. The site is bordered to the south by the levee along the Tisdale Bypass and on all other sides by agricultural ditches.

The Tisdale site was used as a borrow site that was created as part of the Tisdale Bypass Channel Rehabilitation Project that was completed in 2007. The site is dominated by annual grassland habitat which is routinely mowed as part of DWR's maintenance activities. Adjacent habitats include annual grassland, agriculture, riverine (the Tisdale Bypass), and associated riparian woodland and riparian scrub. The agricultural ditch that is located on the west, north, and east sides of the Tisdale site are potentially jurisdictional wetland or other waters of the U.S., or state. Adjacent riparian habitat provides suitable habitat for nesting bird species. Red-tailed hawk (*Buteo jamaicensis*), great horned owl (*Bubo virginianus*), and osprey (*Pandion haliaetus*) nests were recorded along the Tisdale Bypass during the 2016 breeding season. Four Swainson's hawk (*Buteo swainsonii*) nests have been recorded within 0.5-miles of the

project site in the Tisdale Bypass, one in 1994, one in 2002, and one in 2016 (CNDDDB, 2016; Ford, pers. comm., 2016). Riparian habitat located along the Tisdale Bypass may provide suitable nesting habitat for the western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). Proposed Critical Habitat for the western yellow-billed cuckoo is located approximately two miles east of the Tisdale site within the Sutter Bypass (Federal Register, 2014).

The agricultural ditches do not support riparian vegetation, shrubby vegetation, or willow patches, but may be suitable aquatic habitat for giant-garter snake (*Thamnophis gigas*). Additionally, giant garter snake habitat suitability data reviewed by DWR determined there is potential suitable habitat for giant garter snake along the land side of the Tisdale Bypass levee in the vicinity of the Tisdale site (Halstead, 2010).

### Freeport WTP Corp Yard

The Freeport WTP Corp Yard site is located south of the intersection of Pocket Rd. and Freeport Blvd., south of the City of Sacramento. The site is located along the eastern bank of the Sacramento River, south of a large water tank. Elevations at the site range from 10 to 15 feet and the topography is characterized as flat, and the site is comprised entirely of disturbed habitat. There are no potentially jurisdictional wetlands or other waters of the U.S. within the site. Based on aerial imagery, the area in the vicinity of the site has been used for material storage since 2008 (Google Earth Pro, 2016a). There is a drainage ditch approximately 70 feet east of the site and surrounding uses to the north, east and south include urban-residential development. The Sacramento River and associated riparian vegetation is located approximately 650 feet southwest of the storage site. Vegetation in the vicinity could support nesting birds. Breeding Swainson's hawk have been recorded within 0.5 miles of the site in riparian vegetation on the west side of the Sacramento River since 1986 (CNDDDB, 2016).

### North Corp Yard

The North Corp Yard is located along Del Paso Rd. in Sacramento County in an urban-industrial area near the intersection with Kenmar Rd. The site is about 0.3 miles east of the Natomas East Main Drainage Canal (also known as Steelhead Creek). Elevation at the site is approximately 25 feet and the topography is flat. Aerial imagery shows the site has been paved since before 1994 (Google Earth Pro, 2016b), and is currently being used for material storage. There are no potentially jurisdictional wetlands or other waters of the U.S. within the site. Ornamental trees immediately adjacent to the site could support nesting birds (Google Earth, 2016b). These ornamental trees include redwood (*Sequoia sempervirens*), and London plane tree (*Platanus* sp.). White tailed kite (*Elanus leucurus*) and burrowing owl (*Athene cunicularia*) have been recorded along the Natomas East Main Drainage Canal, located approximately 0.3 miles to the east (CNDDDB, 2016). It should be noted that the North Corp Yard site is separated from the Natomas East Main Drainage Canal by an area of commercial urban development.

### RD1000 Corp Yard

The RD 1000 Corp Yard is located along the north side of Elkhorn Blvd. in the Natomas Basin, approximately 0.3 miles east of the Sacramento River. Elevation at the site is approximately 15 feet. The topography of the site is generally flat, and is comprised of disturbed habitat. The site is currently used by RD 1000 for heavy equipment and material storage and is surrounded by agricultural lands, and adjacent to an agricultural facility east of the site. There are no potentially jurisdictional wetlands or other waters of the U.S. within the site. Large oaks (*Quercus* sp.) adjacent to the RD 1000 Corp Yard site could support nesting birds (Google Earth, 2016c), including, but not limited to, common passerine species, and raptors such as red-tailed hawk or great horned owl. Breeding Swainson's hawk occurrences were recorded within 0.5 miles of the site in riparian vegetation along the Sacramento River in 1994 and are presumed extant at this location (CNDDDB, 2014).

### RD 1000 Howsley Rd.

The RD 1000 Howsley Rd. storage site is located in the Sutter Basin, north of Howsley Rd. and south of the Natomas Cross Canal and Pleasant Grove Creek Canal. Elevations at the site range from 25 to 30 feet and the topography is characterized by generally flat terrain that gently slopes from northeast to southwest. Habitat within the site is disturbed and limited due to current use of the site for storage of and retrieval of rock by RD 1000. Aerial imagery indicates that between 2008 and 2009 the site was converted from a residence to a storage yard, and has since been used for various staging and storage purposes (Google Earth Pro, 2016d). There are no potentially jurisdictional wetlands or other waters of the U.S. within the site. Habitats adjacent to the Howsley Rd. storage site include agriculture, an agricultural irrigation ditch (immediately south of the site parallel to Howsley Rd.), and riparian woodland and scrub vegetation approximately 400 to 500 feet north across Natomas Rd. inside the levees of the Natomas Cross Canal and Pleasant Grove Creek Canal to the north and west. Riparian habitat along the Natomas Cross Canal and Pleasant Grove Creek Canal provides suitable nesting habitat for various bird species, including, but not limited to, Swainson's hawk, other common raptors and passerine species. Three Swainson's hawk nests have been recorded in cottonwood trees along the Natomas Cross Canal within 0.5 mile of the Howsley Rd. storage site. One of the aforementioned nests was last reported active in 2004, and two were reported active in 2010 (CNDDDB, 2016). Swainson's hawk is presumed extant at this location. The agricultural irrigation ditch immediately south of the site provides suitable habitat for giant garter snake.

One giant garter snake was recorded approximately 600 feet east of the site in 1986 and again in 1995 (CNDDDB, 2016). Giant garter snake habitat suitability is high for giant garter snake within the Howsley Rd. site (Halstead, 2010).

### **5.4.2 Description of Special-Status Species and Their Habitat**

A list of special-status species that have the potential to occur in the vicinity of the project sites was compiled based on occurrences recorded in CDFW's CNDDDB, and the

California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants within the proposed storage sites and surrounding U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles, and the U.S. Fish and Wildlife Service’s (USFWS) list of federally endangered species. Using the information obtained from the aforementioned database searches. A list of special-status species, their general habitat requirements, and an assessment of their potential to occur within the project sites is provided in Appendix B. Recorded observations of special-status plants and animals within five miles of the storage sites are shown in Figures 13 through 17.

The potential for occurrence determination is defined as follows:

- **Unlikely:** The project site and/or immediate area do not support suitable habitat for a particular species. Project site is outside of the species known range.
- **Low Potential:** Project site and/or immediate area only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate project area.
- **Medium Potential:** The project site and/or immediate area provide suitable habitat for a particular species, and habitat for the species may be impacted.
- **High Potential:** The project site and/or immediate area provide ideal habitat conditions for a particular species and/or known populations occur in immediate area and within the potential area of impact.

Species and their status that have been determined to have a medium or high potential for occurrence at the storage sites include the following.

1. **Cooper’s hawk (*Accipiter cooperi*), SWL**
2. **Tricolored blackbird (*Agelaius tricolor*), SC**
3. **Grasshopper sparrow (*Ammodramus savannarum*), SSC**
4. **Great egret (*Ardea alba*), SAL**
5. **Great blue heron (*Ardea herodias*), SAL**
6. **Swainson’s hawk (*Buteo swainsoni*), ST**
7. **Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), FT,SE**
8. **Snowy egret (*Egretta thula*), SAL**
9. **White-tailed kite (*Elanus leucurus*), SFP**
10. **Merlin (*Falco columbarius*), SWL**
11. **Song sparrow (“Modesto” population) (*Melospiza melodia*), SSC**
12. **Osprey (*Pandion haliaetus*), SWL**
13. **Common Raptor Species.** Common raptor species, such as the red-tailed hawk, and great horned owl, are not considered special-status species, because they are not considered rare or protected under the federal or State Endangered Species Acts. However, nests of these species are still protected under the

Migratory Bird Treaty Act (MBTA) and Section 3503.5 of the California Fish and Game Code.

**14. Common Migratory Birds.** A large number of common bird species are migratory and are afforded protection under the Migratory Bird Treaty Act (MBTA). Examples of common migratory bird species that may use the project sites include killdeer (*Charadrius vociferous*), northern mockingbird, mourning dove, cliff swallow (*Petrochelidon pyrrhonota*) and western kingbird (*Tyrannus verticalis*). Occupied nests of all migratory birds are protected under the MBTA, which makes it illegal to destroy, or disturb any active migratory bird nest.

**15. Giant garter snake (*Thamnophis gigas*), FT/ST**

**16. Silver-haired bat (*Lasionycteris noctivageans*), SAL**

**17. Western red-bat (*Lasiurus blossevilli*), SSC**

**18. Hoary bat (*Lasiurus cinereus*), SAL**

**19. American badger (*Taxidea taxus*), SSC**

FT = USFWS Threatened Species

SAL=CDFW Special Animals List

SC= CDFW Candidate Species

SE = CDFW Endangered Species

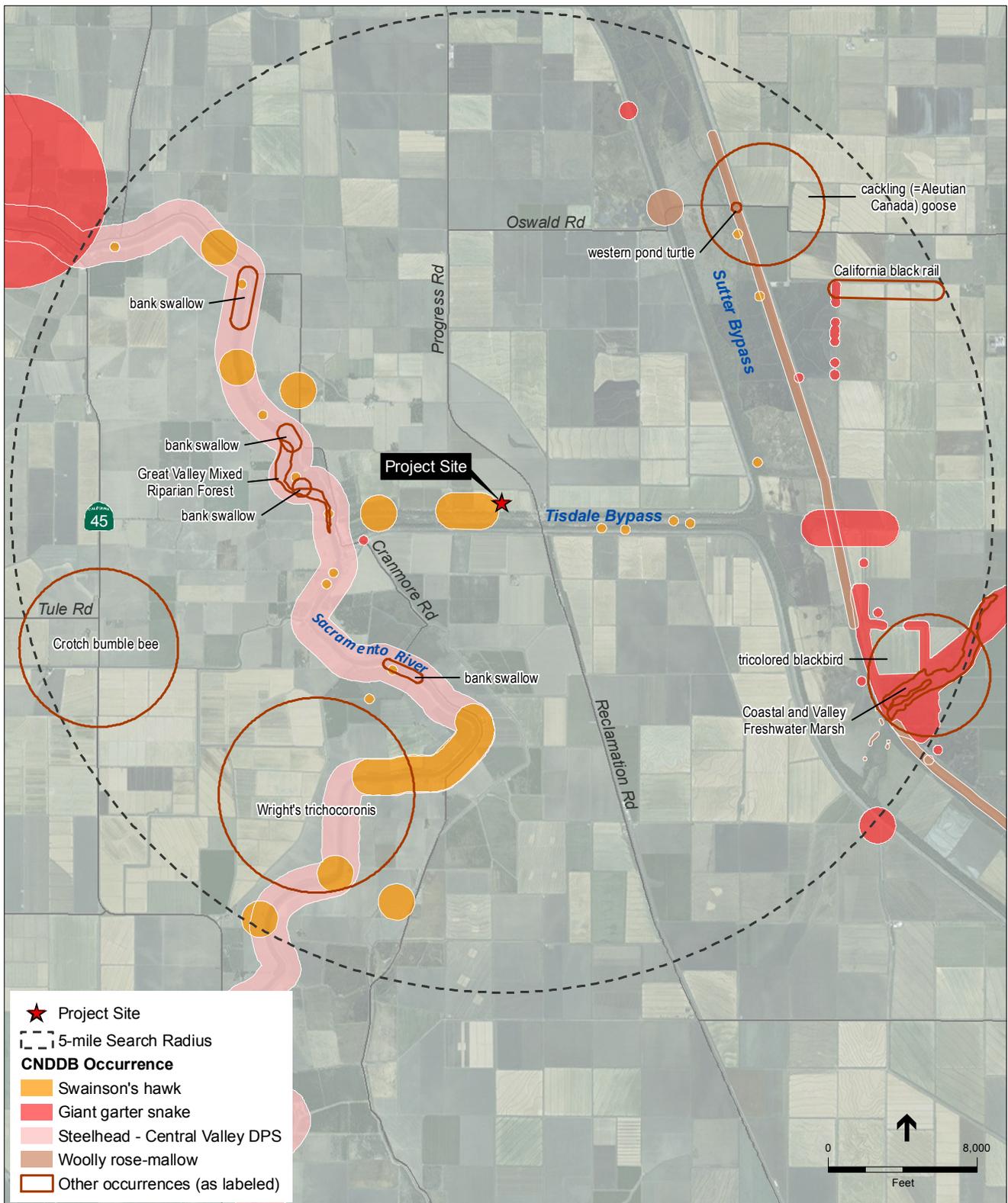
SFP= CDFW Fully Protected Species

SSC = CDFW Species of Special Concern

ST = CDFW Threatened Species

SWL = CDFW Watch List

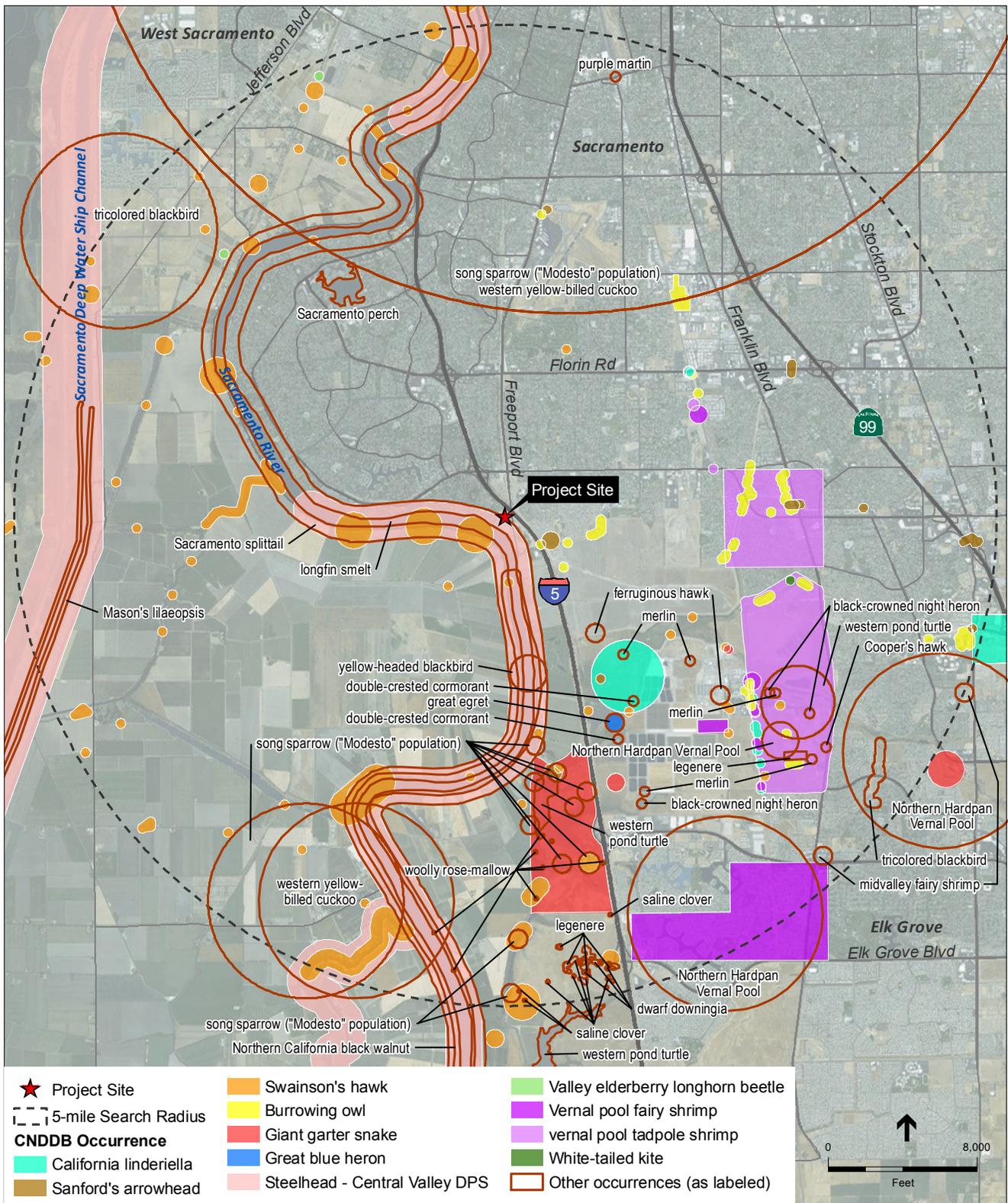
Habitats within the projects sites were evaluated for their suitability to support these special-status species. The results of these assessments are presented in Appendix B. Conclusions regarding habitat suitability and species occurrence are based on interpretation of aerial imagery, existing literature, database searches, DWR field visits, and GGS habitat suitability data conducted as a part of other planning efforts. Habitat requirements of the regionally occurring special-status species were used to determine which species have the potential to occur in or be affected by the proposed project. Based on the analysis, only species classified as having a medium or high potential for occurrence were considered in the impact analyses below.



SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

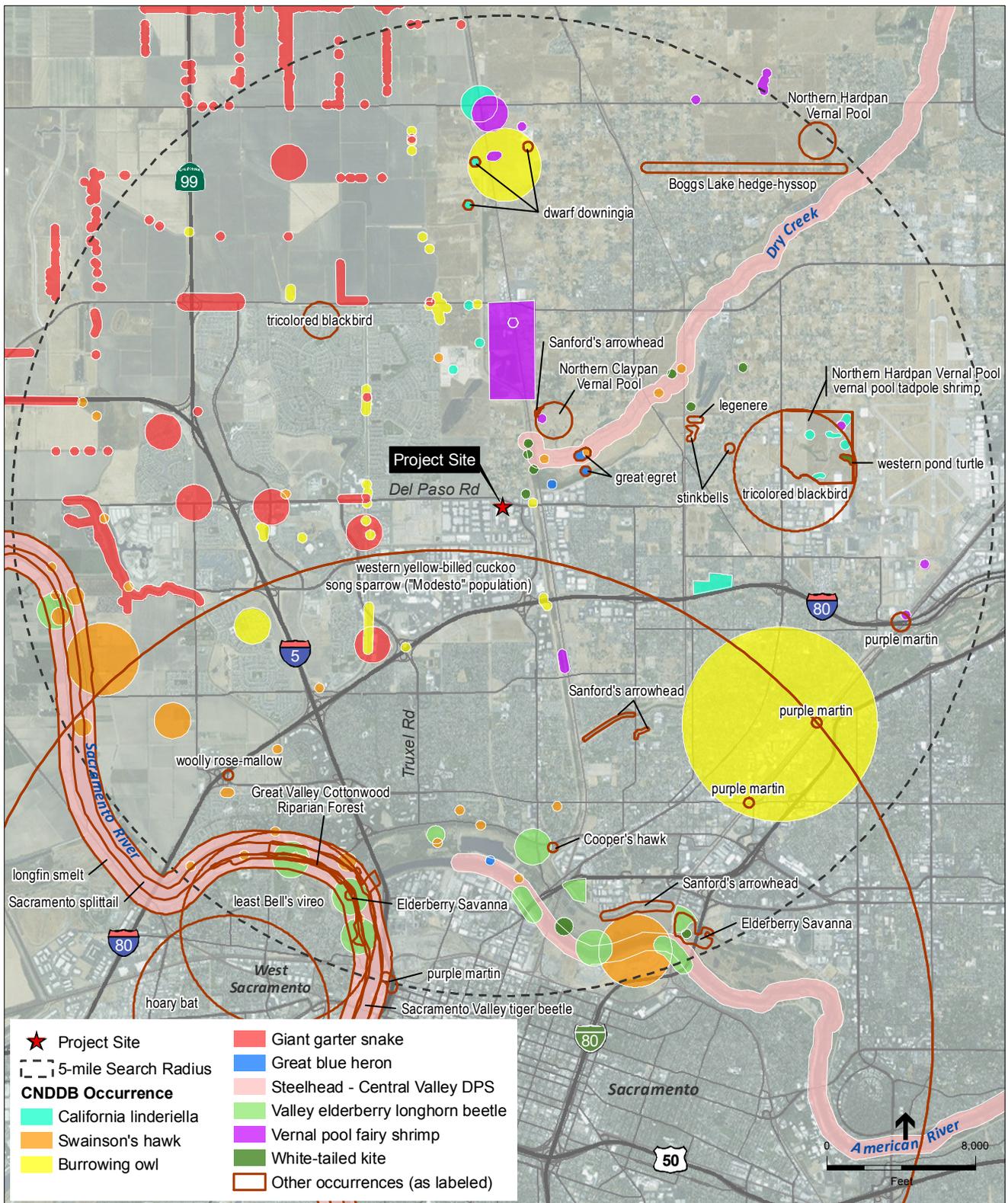
**Figure 13**  
Special-status Species Occurrences within a  
5-mile Radius of the Tisdale Site



SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

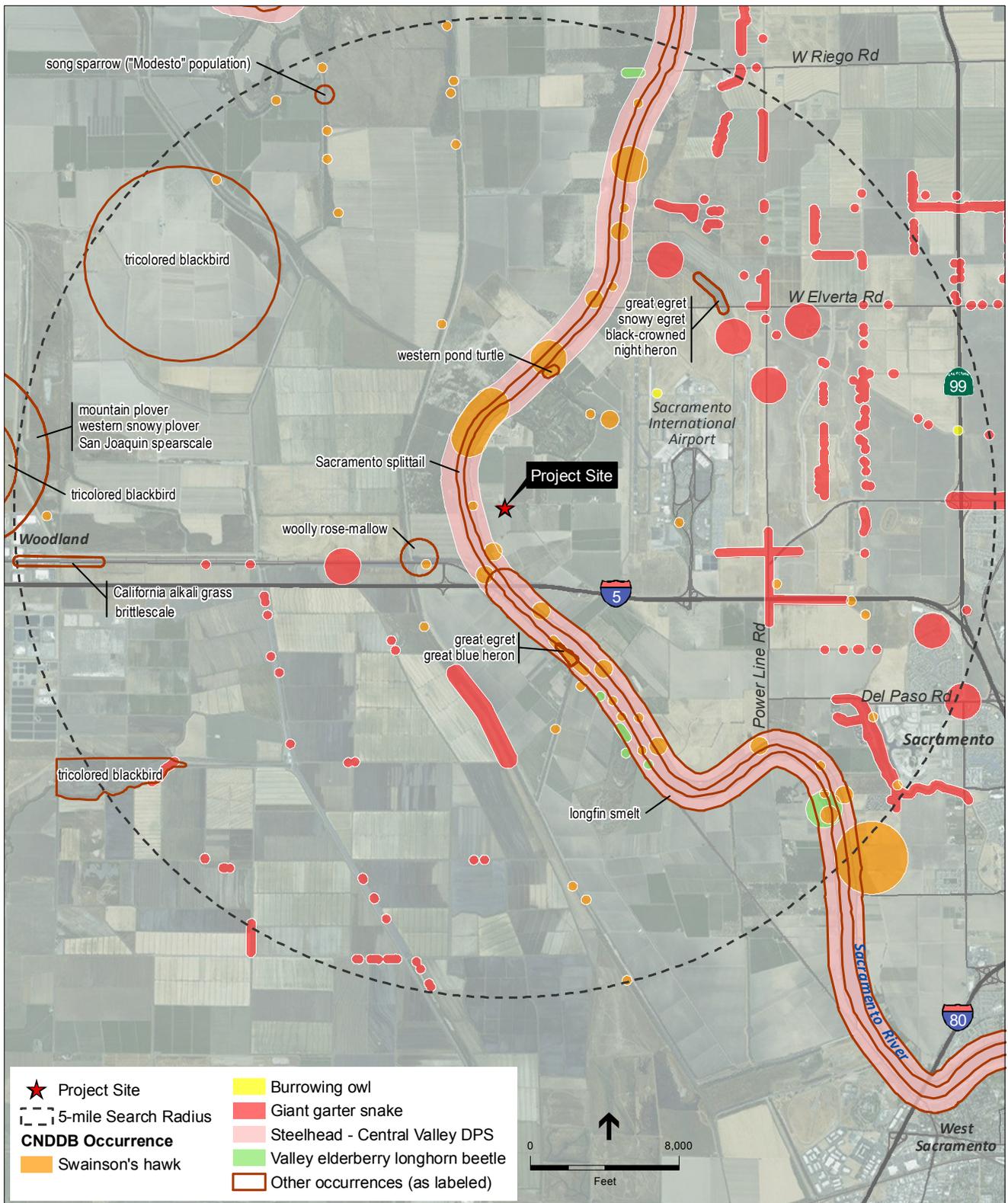
**Figure 14**  
Special-status Species Occurrences within a 5-mile Radius of the Freepoint Water Intake Corporation Yard Site



SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

**Figure 15**  
Special-status Species Occurrences within a 5-mile Radius  
of the City of Sacramento's North Corporation Yard Site

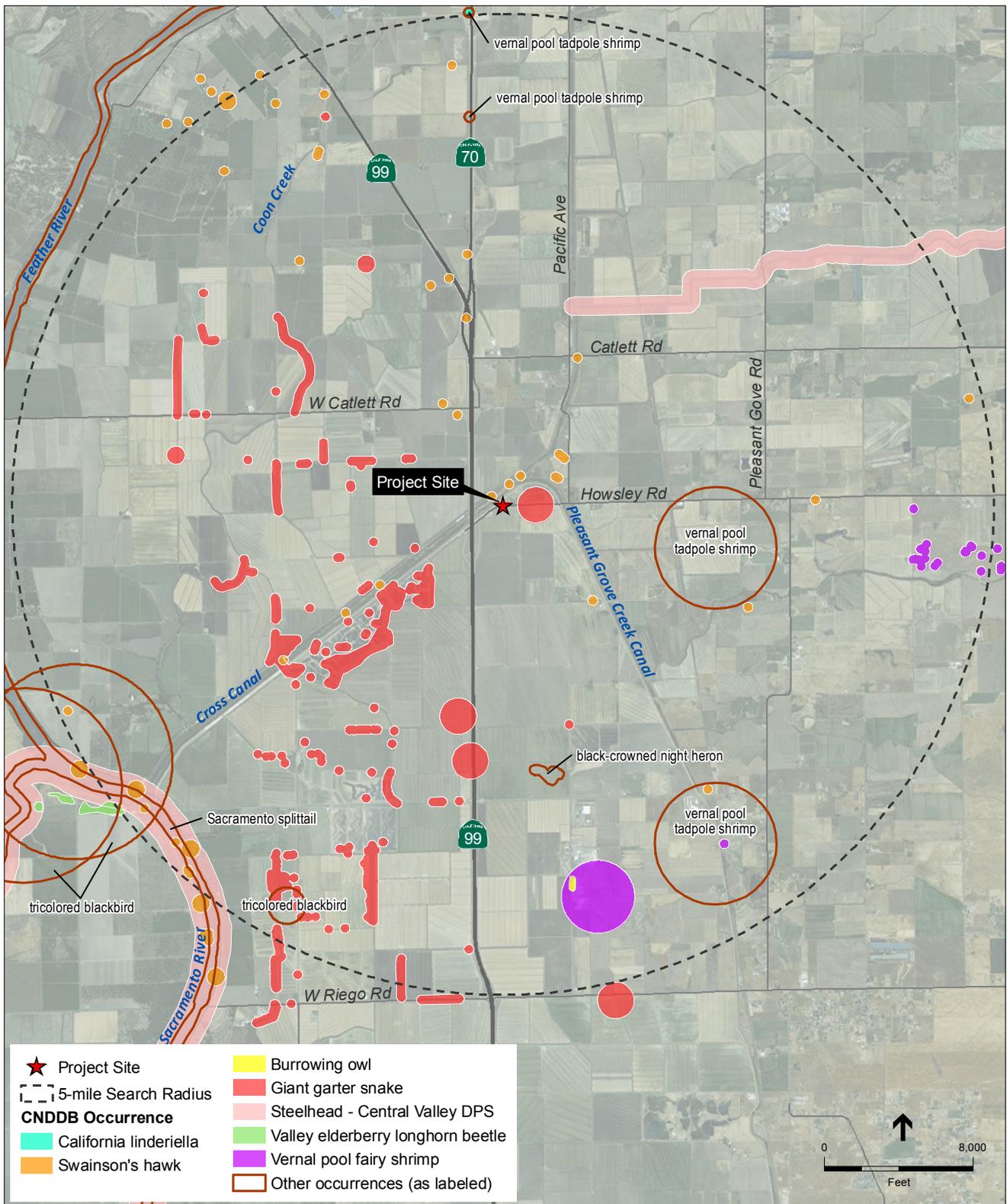


SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

**Figure 16**

Special-status Species Occurrences within a 5-mile Radius of the RD 1000 Corporation Yard Site



SOURCE: Microsoft, 2011; ESRI, 2012; CDFW, 2016; ESA, 2016

Folsom Rock Reuse Project . 130028.19

**Figure 17**  
Special-status Species Occurrences within a 5-mile Radius of the RD 1000 Storage Site Located on Howsley Road

### 5.4.3 Environmental Checklist and Discussion

<b>BIOLOGICAL RESOURCES</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<hr/> 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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

*Less Than Significant with Mitigation Incorporated.* The proposed project could potentially have significant impacts to special-status nesting birds, including, but not limited to Cooper's hawk, tricolored blackbird, grasshopper sparrow, great egret, great blue heron, Swainson's hawk, western yellow-billed cuckoo, snowy egret, white-tailed kite, merlin, song sparrow ("Modesto" population), common raptor and bird species, giant garter snake, silver-haired bat, western red-bat, hoary bat, and American badger.

### **Birds**

As shown in Appendix B, all of the project sites (Tisdale, Freeport WTP Corp Yard, North Corp Yard, and the two RD 1000 storage sites) could support nesting birds, or be located adjacent to areas that support special-status nesting birds,. Additionally, as shown in Figures 13 through 17, Swainson's hawk has been observed nesting within one miles of each of the storage sites (CNDDDB, 2014). Nesting birds and raptors are protected under California Fish and Game Code Sections 2080 (i.e., killing of a listed species), 3503, 3503.5, and 3800 (i.e., take, possession, or destruction of birds, their nests, or eggs), and Section 3513 of the MBTA (16 USC, Section 703 Supp. I, 1989).

The proposed project would include the use of haul trucks, loaders, a water truck, and other support vehicles and equipment to haul and deposit rock to the project sites. Human disturbances from construction activities have the potential to cause nest abandonment and death of young or loss of reproductive success at active nests located near project activities. Loss of reproductive success, or nest site disturbance which results in nest abandonment, loss of young, or reduced health and vigor of eggs and/or nestlings (resulting in reduced survival rates), or the direct removal of vegetation that supports nesting birds, may resulting in the killing of nestlings or fledgling bird species, and would be considered a significant impact.

Implementation of Mitigation Measure BIO-1a and BIO-1b would reduce impacts to nesting birds by requiring surveys prior to proposed project activities to identify any nesting birds, and if found, establish an appropriate no-disturbance buffer around nest sites based on observations of tolerance to disturbance and proximity to project activities, and therefore would reduce impacts to nesting birds during project activities. Implementation of Mitigation Measures BIO-1f, BIO-1g, and BIO-1h would ensure project related disturbance is kept to a minimum, would ensure workers area aware of potential nesting birds onsite, and would ensure a qualified biologist on-call to address any potential nesting bird questions. Combined, Mitigation Measures BIO-1a, BIO-1b, BIO-1f, BIO-1g, and BIO-1h would reduce impacts to nesting birds to **less-than-significant levels**.

## Reptiles

Suitable habitat for giant garter snake is located adjacent to the Tisdale and Howsley Rd. storage sites. Agricultural ditches present along the west, north, and east sides of the Tisdale site is hydrologically connected to a network of drainage channels within the Sutter Basin that are known to provide suitable habitat for giant garter snake. Multiple occurrences of giant garter snake have been documented in the Sutter Basin within five miles of the project site, including occurrences in the Tisdale Bypass, and a toe drainage along the west side of Sutter Bypass (CNDDDB, 2016). As previously stated, giant garter snake habitat suitability review by DWR determined there is potential suitable habitat for giant garter snake along the land side of the Tisdale Bypass levee in the vicinity of the Tisdale site (Halstead, 2010).

A drainage ditch adjacent and south of the Howsley Rd. storage site provides suitable habitat for giant garter snake and the species has been recorded in the ditch within 600 feet east of the site (CNDDDB, 2016). Giant garter snake habitat suitability is high within the Howsley Rd. site (Halstead, 2010).

No project activities will involve placement of rock within agricultural ditches, or other aquatic features. However, rock hauling and/or unloading activities are planned to occur within 200 feet of suitable habitat for giant garter snake. As such, these project activities may adversely affect giant garter snake through entombment and/or collapse of burrows, accidental harm or take of the species through vehicle/equipment strikes, and water quality impacts to suitable habitat. Any harassment, injury, or death of giant garter snake from the project activities would be considered a significant impact.

Implementation of Mitigation Measure BIO-1c would reduce impacts to giant garter snake by requiring proposed project activities occur farther than 200 feet from giant garter snake aquatic habitat, and where not feasible, require pre-project activity surveys, limit work to the active season, requiring giant garter snake exclusion fencing, where necessary, and allowing and if found, observing a no disturbance buffer around the individual. Implementation of Mitigation Measures BIO-1f, BIO-1g, and BIO-1h would ensure project related disturbance is kept to a minimum, would ensure workers area aware of potential giant garter snake onsite, and would ensure a qualified biologist on-call to address any potential giant garter snake questions. Combined, Mitigation Measures BIO-1c, BIO-1f, BIO-1g, and BIO-1h would reduce impacts to giant garter snake during project activities to **less-than-significant** levels.

## Mammals

### American Badger

Annual grassland within the Tisdale site provides suitable foraging and denning habitat for American badger. No suitable habitat for American badger occurs at any other proposed storage site. Suitable burrows for American badger could be removed, entombed, or disturbed during proposed project activities. Removal or disturbance of an occupied burrow, or vehicle strikes, and the subsequent harm to individual American badgers would be considered a **significant impact**.

Implementation of Mitigation Measure BIO-1d would reduce impacts to American badger by requiring a survey prior to project activities, and if found, coordinating with CDFW to passively relocate badgers to an area not effected by project activities. Implementation of Mitigation Measures BIO-1f, BIO-1g, and BIO-1h would ensure project related disturbance is kept to a minimum, would ensure workers area aware of potential American badgers onsite, and would ensure a qualified biologist on-call to address any potential questions. Combined, Mitigation Measures BIO-1d, BIO-1f, BIO-1g, and BIO-1h would reduce impacts to American badger to **less-than-significant**.

### Special-status Bats

Dense, mature riparian trees in the vicinity of the Tisdale site may provide suitable roosting habitat for foliage-roosting silver-haired bat, western red-bat, and hoary bats. Although the possibility is low, it is possible that habitats adjacent to the site could support a maternity colony. Disturbance (resulting in abandonment) of a roost containing a maternity colony (special-status or common) could result in loss of a large number of individuals, which is considered a significant impact due to the magnitude of the loss. As such, disturbance of a maternity colony would be considered a **significant impact**.

Implementation of Mitigation Measure BIO-1e would reduce impacts to maternity roosting bats by requiring surveys prior to project activities to identify any potential maternity roosts, and if found, observing a no disturbance buffer around roost sites. Mitigation Measures BIO-1f, BIO-1g, and BIO-1h would ensure project related disturbance is kept to a minimum, would ensure workers area aware of potential special-status bats onsite, and would ensure a qualified biologist on-call to address any potential questions. Combined, Mitigation Measures BIO-1e, BIO-1f, BIO-1g, and BIO-1h would reduce impacts to special-status bats to **less-than-significant**.

### **Mitigation Measure BIO-1a: Pre-Project Activity Nesting Bird Surveys. (Tisdale, City Freeport WTP Corp Yard, City North Corp Yard, and Howsley Rd. storage sites)**

If project-related activities are scheduled during the avian nesting season (February 1 to September 30) a nesting bird survey prior to project activities shall be conducted by a qualified wildlife biologist. During surveys, a qualified biologist shall identify Swainson's hawk nests within 0.5-mile of the project site, nests of all other raptors, within 500 feet of the project site, and nests for all other bird species within 250 feet of the project site following CDFW-approved survey protocols. The survey shall be conducted no more than two weeks prior to the beginning of project-related activities. If project activities temporarily stop for more than 14 days, surveys for nesting birds shall be repeated by a qualified biologist, as described above, prior to resuming project activities.

For Swainson's hawk, to the extent feasible, survey methodology shall follow guidelines provided in the *Recommended Timing and Methodologies for Swainson's hawk Nesting Survey in the Central Valley* (Swainson's hawk Technical Advisory Committee, 2000).

If nesting bird surveys do not identify any nesting raptors or other nesting bird species, no further mitigation will be required. If nesting birds are observed in the search areas defined above, Mitigation Measure BIO-1b, shall be implemented.

**Mitigation Measure BIO-1b: Conduct Nesting Bird Avoidance, and/or Monitoring. (Tisdale, City Freeport WTP Corp Yard, City North Corp Yard, and Howsley Rd. storage sites)**

If active nests are found within survey areas defined in Mitigation Measure BIO-1a, project-related activities shall be delayed to be conducted outside the nesting season (February 1 through September 30), or no-disturbance buffer zones shall be established to prohibit project-related activities near the nest. If nesting individuals are observed, appropriate no-disturbance buffers around the nest site shall be determined by a qualified biologist and implemented to avoid disturbance to the nest resulting from project activities. If Swainson's hawk nests are observed within 0.5 miles of the project, CDFW shall be contacted to determine appropriate no-disturbance buffer. No-disturbance buffers shall be delineated by highly visible temporary fencing and shall remain in place until the young have fledged. No project-related activity shall occur within the no-disturbance buffer until a wildlife biologist confirms that the nest is no longer active, or unless otherwise permitted by CDFW. If an appropriate no-disturbance buffer is infeasible, a qualified biologist shall be present during construction activities for the entire duration of activities within the buffer to monitor the behavior of the potentially affected nesting bird. The biologist shall have the authority to stop-work within the buffer area if the bird(s) exhibit distress and/or abnormal nesting behavior (swooping/stooping, excessive vocalization [distress calls], agitation, failure to remain on nest, failure to deliver prey items for an extended time period, failure to maintain nest, etc.) which may cause reproductive failure (nest abandonment and loss of eggs or young). Work shall not resume in the buffer area until bird's behavior has normalized.

**Mitigation Measure BIO-1c: Conduct GGS Pre-Project Activity Survey and Avoidance (Tisdale and Howsley Rd. storage sites)**

If work must occur within 200 feet of potentially suitable aquatic habitat (e.g., ditch along Howsley Rd. and the agricultural ditch around the Tisdale site), the following mitigation measures shall be implemented:

- (1) If giant garter snakes are observed in the project area, work shall stop within 200 feet of the snake until the snake is out of the project area and a qualified biological monitor shall be notified immediately (see Measure BIO-1h). If possible, snake shall be allowed to leave on its own, and the biological monitor shall remain in the area for the remainder of the workday to ensure that the snake is not harmed. Alternatively, with prior CDFW and USFWS approval and appropriate handling permits, the biological monitor may capture and relocate the snake unharmed to suitable habitat at least 200 feet from the project site. CDFW and USFWS shall be notified by telephone or email within 24 hours of a giant garter snake observation during project activities. If the snake does not voluntarily leave the project area and cannot be captured and relocated unharmed, project activities within approximately 200 feet of the snake shall stop

to prevent harm to the snake, and CDFW and USFWS shall be consulted to identify next steps. In that case, the measures recommended by CDFW and USFWS shall be implemented prior to resuming project activities in the area. If needed, DWR shall implement the applicable measures recommended for the Tisdale project site and RD 1000 shall implement the applicable measures for the Howsley Rd. project site.

- (2) When possible, project activities in terrestrial habitats that are potentially supporting giant garter snakes shall be completed between May 1 and October 1. Work in giant garter snake upland habitat may also occur between October 2 and November 1 or April 1 through April 30 provided ambient air temperatures exceed approximately 75°F during work and maximum daily air temperatures have exceeded approximately 75°F for at least 3 consecutive days immediately preceding work. During these periods, giant garter snakes are more likely to be active in aquatic habitats and less likely to be found in upland habitats.
- (3) For work areas at the Tisdale and Howsley Rd. site, giant garter snake exclusion fencing shall be installed entirely around planned project areas during periods when giant garter snakes are active. DWR shall be responsible for the Tisdale site and RD 1000 shall be responsible for the Howsley Rd. site. Exclusionary fencing shall be constructed 5 days prior to beginning project activities, and shall be equipped with one-way exit funnels, and constructed consistent with USFWS and CDFW guidance. Exclusionary fencing shall be inspected and maintained daily by staff while project activities are being conducted to verify the condition and function of the fence and to verify that giant garter snakes do not get trapped in the excluded area.
- (4) If implementing BIO-1c(3) is not feasible, a qualified biologist shall survey project areas for burrows, soil cracks, and crevices that may be suitable for use by giant garter snakes when within suitable terrestrial habitat. Surveys shall be completed no more than 7 days before conducting any project activities in terrestrial habitat potentially supporting giant garter snakes. Any identified burrows, soil cracks, crevices, or other habitat features shall be flagged or marked by the qualified biologist or otherwise identified as biologically sensitive areas (BSAs). These BSAs shall be avoided during subsequent project activities to the maximum extent feasible. If project activities temporarily stop for more than 14 days, surveys for soil cracks and similar features shall be repeated by a qualified biologist, as described above, prior to resuming project activities.
- (5) Before project activities occur in potentially suitable terrestrial giant garter snake habitat during periods when snakes are active (between May 1 and October 1 when ambient air temperatures exceed 75°F), areas of herbaceous vegetation surrounding planned work areas shall be mowed to a height of no less than 6 inches where and when feasible in order to increase visibility and

the probability of giant garter snake detection during surveys as described for BIO-1c(3) and BIO-1c(4).

- (6) DWR and RD 1000 shall obtain take authorization under CESA if rock is placed within 200 feet of GGS aquatic habitat at the Tisdale and Howsley Rd. sites, respectively, and the placement of rock results in the potential incidental take of GGS. All measures developed through consultation with CDFW shall be implemented by DWR to mitigate for authorized take.

**Mitigation Measure BIO-1d: Conduct Pre-Project Activity Survey and Avoidance and/or Relocation for American Badger (Tisdale site)**

An American badger survey shall be conducted by a qualified wildlife biologist to identify the presence of American badgers. If this species, or potential burrows for this species, are not identified, no further mitigation shall be required. If American badger is identified, they shall be passively relocated using burrow exclusion (e.g., installing one-way doors on burrows) or similar CDFW-approved passive exclusion methods. All relocation activities shall be performed with CDFW coordination and concurrence.

**Mitigation Measure BIO-1e: Conduct Avoidance of Special-Status Bat Maternity Roosts (Tisdale site)**

Conduct a pre-activity survey for roost sites in mature trees within 100 feet of riparian vegetation along the Tisdale Bypass during the bat pupping season (April 1 through July 31). This survey shall be conducted by a wildlife biologist qualified to identify bat species. If no special status species bats are roosting, then no further mitigation is required.

If a special-status bat maternity roost is identified, appropriate buffers around the roost site shall be determined by a qualified biologist and implemented to avoid destruction or abandonment of the roost resulting from project activities.

**Mitigation Measure BIO-1f: Minimize Disturbance within Project Sites (All storage sites)**

To minimize disturbance within proposed storage sites the following shall be implemented:

- (1) Use existing staging sites and roadways to the extent practicable for staging and access to avoid affecting previously undisturbed areas.
- (2) Limit the number of access routes and the size of staging and work areas to the minimum necessary to conduct the activity.
- (3) Where feasible and practicable (e.g., based on the size of the project area and project activities to be performed), clearly mark work area limits (e.g., with flagging or fencing), including access roads; staging and equipment storage areas; fueling areas; and equipment exclusion zones. Work will only occur within the marked limits.

- (4) Inspect under all vehicles and heavy equipment for the presence of wildlife before the start of each workday when equipment is staged overnight.
- (5) Ensure project related trash items, such as wrappers, can, bottles, and food scraps are collected in closed containers, removed from project sites each day, and disposed of at an appropriate off-site location to minimize attracting wildlife to work areas.
- (6) Keep the clearing of vegetation to the minimum necessary to the extent practicable.
- (7) If erosion control fabrics are used, products will not be used with plastic monofilament or cross-joints in the netting that are bound/stitched (such as straw wattles, fiber rolls, or erosion control blankets), which could trap giant garter snake and other wildlife.
- (8) Remove construction debris, and refuse, and properly dispose of these materials following completion of project.

**Mitigation Measure BIO-1g: WEAP Training for All Project Sites (All storage sites)**

Environmental awareness training shall be provided by a qualified biologist to all DWR Maintenance personnel. Environmental awareness training shall include descriptions of all special-status wildlife species potentially occurring in the project area, their habitats, and methods of identification. The training shall also describe activity-specific measures that will be followed to avoid impacts. These measures shall be provided to the project construction supervisor, crew leader, and any contractors participating in project activities.

**Mitigation Measure BIO-1h: Biological Monitoring (All storage sites)**

A qualified biological monitor shall be available on an on-call basis during all project-related activities. If needed, a qualified biologist shall be maintained on-site during project activities to ensure the protection of special-status species, as required.

**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 US Fish and Wildlife Service?**

*No Impact.* No riparian habitat, or other sensitive natural communities, as identified in local, or regional plans, policies, regulations, or by CDFW, or USFWS are present within the project sites, but are located within close proximity to several of the storage sites. Therefore, the proposed project activities at the storage sites would have no impact.

**c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

*No Impact.* There are no federally protected wetlands, as defined by Section 404 of the Clean Water Act present within the proposed storage sites. Further, water bodies

located in the vicinity, like the ditches located adjacent to the Tisdale site and the ditch located along Howsley Rd. would not be impacted because unloading of rock would not occur directly adjacent to the ditches, and would be kept at a distance of 200 feet from the ditches during the winter period. Thus, the proposed project would not impact federally protected wetlands.

**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?**

*No Impact.* There are no established native resident or migratory wildlife corridors, or nursery sites located within the proposed storage sites. Further, the proposed storage sites are actively maintained and otherwise used for storage of materials and equipment. Thus, the proposed project would not impact any established native resident or migratory wildlife corridors, or nursery sites.

**e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

*No Impact.* No trees are planned to be removed as part of project activities. As such, the proposed project would not result in conflicts with local tree protection regulations.

**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?**

*No Impact.* The Tisdale site is within the plan area for the Yuba-Sutter Resource Conservation Plan which is under development; however, there this plan is not fully developed or approved and in effect (Yuba and Sutter Counties, 2016). As such, there would be no conflict with the Yuba-Sutter Resource Conservation Plan.

The City North Corp Yard and RD 1000 Corp Yard and Howsley Rd. storage sites are located within the plan area of the Natomas Basin Habitat Conservation Plan (City of Sacramento, Sutter County, and The Natomas Basin Conservancy, 2003). However, there would be no change in land use as a result from the proposed project as all sites are currently being used as storage sites. As such, there would be no conflict with the Natomas Basin Habitat Conservation Plan.

## 5.5 CULTURAL RESOURCES

### 5.5.1 Environmental Setting

Review of the proposed rock storage sites determined that of the five proposed sites, only one (the Tisdale property) is currently undeveloped and not currently used for storage of rock materials. The remaining four sites (City Freeport Corp Yard, City North Corp Yard, RD 1000 Corp Yard, and RD 1000 Howsley Rd.) are all either urban, developed, and/or actively used for storage of materials. In light of the nature of the proposed project (rock relocation with no associated excavation or earth moving activities), efforts to identify potential cultural resources focused on the Tisdale site as the only possible site with undeveloped surface soils. A record search was conducted on November 12, 2013 by North Central Information Center of the California Historical Resources Information System at Sacramento State University (NCIC File #H13-4). The search encompassed the undeveloped Tisdale property as well as a ¼ mile radius around the site. No historic or prehistoric sites have been previously documented within the Tisdale site or the ¼-mile buffer. On July 7, 2016, DWR distributed certified letters to three tribes for AB 52 consultation – the United Auburn Indian Community, the Lone Band of Miwok Indians, and the Wilton Rancheria. As of writing of this Initial Study, no responses have been received.

One survey was conducted on the Tisdale site, and three more have been conducted within a quarter mile of the Tisdale site. The entire Tisdale project site was surveyed by DWR in 2007 as part of the Tisdale Bypass Channel Rehabilitation Project, and no cultural resources were identified within or adjacent to the site as part of that effort.

### 5.5.2 Environmental Checklist and Discussion

CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Cause a substantial adverse change to a Tribal Cultural Resource, pursuant to PRC to § 21074?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
e) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?**

*No Impact.* No historical resources were identified in the proposed project storage sites; therefore, no impact would occur.

**b-c) Cause a substantial adverse change in the significance of an archaeological or tribal cultural resource pursuant to § 15064.5 or PRC to § 21074?**

*Less Than Significant With Mitigation Incorporated.* No archaeological resources or tribal cultural resources are known to exist at the proposed project storage sites. The nature of the proposed project (rock relocation with no associated earth moving activities), along with the location of the majority of the storage sites within developed urban footprints, indicate that the proposed project would have a very low probability of impacts on archaeological resources beyond surficial deposits on previously minimally disturbed locations. The Tisdale site is the only undeveloped site that is not currently used, and was found, through the records search and field surveys described above, to have no resources within or adjacent to the site. In the event that activities on the proposed storage sites would expose surface soils (e.g., from excess wear from haul trucks or from moving rock around with front loaders at the Tisdale site), then implementation of Mitigation Measure CULT-1 below would mitigate potential impacts from discovery of previously unknown archaeological resources to a less-than-significant level.

**Mitigation Measure CULT-1:** If historical or unique archaeological resources are accidentally discovered during proposed project activities, all work shall temporarily cease in the immediate area until the findings can be assessed by a qualified archaeologist and/or paleontologist and an appropriate course of action can be determined, if necessary, in consultation with the State Historic Preservation Officer. Work may continue on other parts of the project sites while evaluation and mitigation takes place (CEQA Guidelines §15064.5 [f]). If the find is determined to be an historical or unique archaeological resource, sufficient time allotment will be allowed for implementation of avoidance measures or appropriate mitigation such as implementation of an archaeological treatment plan.

**d) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

*Less Than Significant With Mitigation Incorporated.* As described above, the proposed project consists of hauling and unloading rock for storage at the proposed storage site

with no proposed earth moving activities. Although project activities would not impact the older geologic units where fossils typically occur, exposure of surface soil could result from excess activity of haul trucks or from moving rock around into manageable piles on the Tisdale. In the event that activities on the proposed storage sites would expose surface soils (e.g., from excess wear from haul trucks or from moving rock around with front loaders at the Tisdale site), then implementation of Mitigation Measure CULT-1 would mitigate potential impacts from discovery of previously unknown paleontological resources to a less-than-significant levels.

**e) Disturb any human remains, including those interred outside of formal cemeteries?**

*Less Than Significant With Mitigation Incorporated.* Because the proposed project would not result in earth moving activities and no archaeological resources have been documented within or around the project storage sites, no impacts to subsurface archaeological resources, including human remains, are anticipated. Further, the previous surveys at the Tisdale site did not indicate the presence of surficial archaeological resources or human remains. It is not anticipated that proposed project would disturb any human remains, including those interred outside of formal cemeteries. In the event that activities on the proposed storage sites would expose surface soils, then implementation of Mitigation Measure CULT-2 would mitigate the potential impacts to less-than-significant levels.

**Mitigation Measure CULT-2:** If human remains are found, such remains would be subject to the provisions of California Public Resources Health and Safety Code Section 7050.5-7055. The requirements and procedures would be implemented, including immediately stopping work in the vicinity of the find and notifying the County Coroner. A DWR archaeologist would also need to be contacted immediately. The process for notification of the California Native American Heritage Commission (NAHC) and consultation with the individual(s) identified by the NAHC as the “most likely descendent” is set forth in Section 5097.98 of the California Public Resources Code. Work in the vicinity of the find can restart after the remains have been investigated and appropriate recommendations have been made for their treatment and disposition.

## **5.6 GEOLOGY AND SOILS**

### **5.6.1 Environmental Setting**

Sutter and Sacramento Counties are located in the flat surface of the Great Valley geomorphic province of California. The geology of the Great Valley is typified by thick sequences of alluvial sediments derived primarily from erosion of the mountains of the Sierra Nevada to the east, and to a lesser extent, erosion of the Klamath Mountains and Cascade Range to the north. The proposed storage sites are within an area of low seismic activity with no Alquist-Priolo Fault Zones. The nearest known active fault to the proposed project sites is the Cleveland Hill fault, located approximately 35 miles northeast from the Tisdale storage site and over 57 miles north from the nearest storage site at the City North Corp Yard (DOC 1994). The seismic groundshaking hazard for the greater Sacramento region is ranked among the lowest in the state.

Liquefaction is a soil strength and stiffness loss phenomenon that typically occurs in loose, saturated, cohesionless soils as a result of strong ground shaking during earthquakes. The potential for liquefaction at a site is usually determined based on the results of a subsurface geotechnical investigation and the groundwater conditions beneath the site. Hazards to structures associated with liquefaction at a site include bearing capacity failure, lateral spreading, and differential settlement of soils below foundations, which can contribute to structural damage or collapse.

Landslide susceptibility is a function of various combinations of factors including rainfall, rock and soil types, slope, aspect, vegetation, seismic conditions, and human activities, such as construction. Landslides are not likely to occur because the topography of the proposed storage sites is flat.

The soil in the proposed storage sites vary considerably in their specificity, but are comprised of loams, which are found on alluvial fans, sands, silts, and clays with varying degrees of permeability, runoff, and hazard of erosion (US Department of Agriculture, Natural Resources Conservation Service 2016).

## 5.6.2 Environmental Checklist and Discussion

<b>GEOLOGY AND SOILS</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<hr/>				
Would the project...				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?**

*No Impact.* Sutter and Sacramento Counties are not located within an Earthquake Fault Zone, and there are no known faults in the proposed project area. The proposed project would not result in construction of structures or locating people in areas at risk to major ground disturbance. In addition, there are no conditions (steep slopes) in the storage sites conducive to landslides and the storage of rock on the sites would not pose a risk to people. The proposed project would have no impact relative to earthquake faults, ground shaking, seismic-related ground failure, including liquefaction, or landslides.

**b) Result in substantial soil erosion or the loss of topsoil?**

*Less Than Significant Impact.* The proposed project would transport rock to the storage sites and unload rock in piles consolidated within the storage sites in single piles, except for the Tisdale site where there would be multiple piles that would be consolidated using front end loaders. Moving the rock into a consolidated pile(s) would result in minimal exposure of soil. Therefore, potential soil erosion or loss of topsoil would not be substantial and impacts would be less than significant.

**c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

*No Impact.* The proposed project has multiple soil types within the different storage sites. All of the storage sites are generally flat in topography. The proposed project would transport rock to the storage sites and unload rock in piles consolidated within the storage sites in single piles, except for the Tisdale site where there would be multiple piles that would be consolidated using front end loaders. Moving the rock into a consolidated pile(s) would result in minimal exposure of soil. The storage sites have all been used for storage of materials and operation of heavy equipment to manage those materials in the past. Further, all but the Tisdale site are currently used for storage of materials using heavy equipment. Because the proposed storage sites are not located on hillsides, or on geologic units with limitations for storage of rock, the project would not result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Further, the proposed project would not construct structures requiring stable non-expansive soils, and there would be no impact.

**e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

*No Impact.* The proposed project would not use septic tanks or alternative wastewater systems and there would be no impact.

## **5.7 GREENHOUSE GAS EMISSIONS**

### **5.7.1 GHG Emissions Analysis**

In May 2012, DWR adopted the DWR Climate Action Plan-Phase I: Greenhouse Gas Emissions Reduction Plan (GGERP), which details DWR’s efforts to reduce its greenhouse gas (GHG) emissions consistent with Executive Order S-3-05 and the Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32). DWR also adopted the Initial Study/Negative Declaration prepared for the GGERP in accordance with the CEQA Guidelines review and public process. Both the GGERP and Initial Study/Negative Declaration are incorporated herein by reference and are available at: <http://www.water.ca.gov/climatechange/CAP.cfm>. The GGERP provides estimates of historical (back to 1990), current, and future GHG emissions related to operations, construction, maintenance, and business practices (e.g. building-related energy use). The GGERP specifies aggressive 2020 and 2050 emission reduction goals and identifies a list of GHG emissions reduction measures to achieve these goals.

DWR specifically prepared its GGERP as a “Plan for the Reduction of Greenhouse Gas Emissions” for purposes of CEQA Guidelines section 15183.5. That section provides that such a document, which must meet certain specified requirements, “may be used in the cumulative impacts analysis of later projects.” Because global climate change, by its very nature, is a global cumulative impact, an individual project’s compliance with a qualifying GHG Reduction Plan may suffice to mitigate the project’s incremental contribution to that cumulative impact to a level that is not “cumulatively considerable.” (See CEQA Guidelines, § 15064, subd. (h)(3).)

More specifically, “[l]ater project-specific environmental documents may tier from and/or incorporate by reference” the “programmatic review” conducted for the GHG emissions reduction plan. “An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project.” (CEQA Guidelines § 15183.5, subd. (b)(2).)

Section 12 of the GGERP outlines the steps that each DWR project will take to demonstrate consistency with the GGERP. These steps include: 1) analysis of GHG emissions from construction of the proposed project, 2) determination that the construction emissions from the project do not exceed the levels of construction emissions analyzed in the GGERP, 3) incorporation into the design of the project DWR’s project level GHG emissions reduction strategies, 4) determination that the project does not conflict with DWR’s ability to implement any of the “Specific Action” GHG emissions reduction measures identified in the GGERP, and 5) determination that the project would not add electricity demands that could alter DWR’s emissions reduction trajectory in such a way as to impede its ability to meet its emissions reduction goals.

Consistent with these requirements, a GGERP Consistency Determination Checklist is attached (Appendix C) documenting that the project has met each of the required elements.

### 5.7.2 Determination

Based on the analysis provided in the GGERP and the demonstration that the proposed project is consistent with the GGERP (as shown in the attached Appendix C), DWR as the lead agency has determined that the proposed project’s incremental contribution to the cumulative impact of increasing atmospheric levels of GHGs is less than cumulatively considerable and, therefore, less than significant. GHG emissions will be cumulatively less than construction emissions analyzed. Additionally, post-project GHG emissions would be less because there would activities on the storage sites would be as a result of emergency flood operations of DWR and SAFCA, would be infrequent, and would be separate from the proposed project activities.

### 5.7.3 Environmental Checklist and Discussion

GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<hr/> Would the project...				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

*Less than Significant Impact.* Based on the analysis provided in the GGERP and the demonstration that the proposed project is consistent with the GGERP (as shown in the attached DWR GGERP form). DWR as the lead agency has determined that the proposed project’s incremental contribution to the cumulative impact of increasing atmospheric levels of GHGs is less than cumulatively considerable.

**b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

*No Impact.* DWR’s GGERP is in compliance with all applicable plans and policies. This project is in compliance with the GGERP and eight of the 15 Best Management Practices (BMPs) suggested in the GGERP are outlined in the Environmental

Commitments and Mitigation Measures section of the MND for the project. Below are the GGERP BMPs applicable to the proposed project:

- BMP 1. Evaluate project characteristics, including location, project work flow, site conditions, and equipment performance requirements, to determine whether specifications of the use of equipment with repowered engines, electric drive trains, or other high efficiency technologies are appropriate and feasible for the project or specific elements of the project.
- BMP 2. Evaluate the feasibility and efficacy of performing on-site material hauling with trucks equipped with on-road engines.
- BMP 6. Limit deliveries of materials and equipment to the site to off peak traffic congestion hours.
- BMP 7. Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement.
- BMP 8. Maintain all construction equipment in proper working condition and perform all preventative maintenance. Required maintenance includes compliance with all manufacturer's recommendations, proper upkeep and replacement of filters and mufflers, and maintenance of all engine and emissions systems in proper operating condition. Maintenance schedules shall be detailed in an Air Quality Control Plan prior to commencement of construction.
- BMP 9. Implement tire inflation program on jobsite to ensure that equipment tires are correctly inflated. Check tire inflation when equipment arrives on-site and every two weeks for equipment that remains on-site. Check vehicles used for hauling materials off-site weekly for correct tire inflation. Procedures for the tire inflation program shall be documented in an Air Quality Management Plan prior to commencement of construction.
- BMP 10. Develop a project specific ride share program to encourage carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.
- BMP 15. Evaluate the feasibility of restricting all material hauling on public roadways to off peak traffic congestion hours. During construction scheduling and execution minimize, to the extent possible, uses of public roadways that would increase traffic congestion.

## 5.8 HAZARDS AND HAZARDOUS WASTE

### 5.8.1 Environmental Setting

State agencies regulating hazardous materials are the California Environmental Protection Agency (Cal/EPA) and the Office of Emergency Services (OES). The California Highway Patrol and Caltrans enforce regulations for hazardous materials transport. Within the Cal/EPA, the California Department of Toxic Substances Control (DTSC) has primary regulatory authority for hazardous materials regulation enforcement. State hazardous waste regulations are contained primarily in the California Code of Regulations Title 22. The California Occupational Health and Safety Administration has developed rules and regulations regarding worker safety around hazardous and toxic substances.

The DTSC defines the Hazardous Waste and Substance Sites List (also known as the “Cortese Sites” List) as a planning document used by State, local agencies and developers to comply with the CEQA by providing information about the location of hazardous material sites. No Cortese Sites were located within or immediately adjacent to the proposed storage sites (Cal/EPA, 2016).

### 5.8.2 Environmental Checklist and Discussion

HAZARDS AND HAZARDOUS WASTE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>HAZARDS AND HAZARDOUS WASTE</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<hr/> Would the project...				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

*Less Than Significant Impact.* The proposed project would require the transportation and storage of rock and would not require transport of hazardous materials. There could be minor maintenance activities for the front-end loaders at the Tisdale site that could require the storage and use of lubricants and fuel at the storage site. However, transport, use, or disposal of these materials would follow DWR material safety storage and handling protocols and BMPs that would contain and prevent spills from occurring on the storage site. Therefore, impacts would be less than significant.

**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?**

*Less Than Significant Impact with Mitigation.* The front-loaders used at the Tisdale storage site may require emergency maintenance that may result in the release of oil, diesel, transmission fluid or other materials not acutely hazardous or hazardous used in small quantities. Accidental release of these materials could enter nearby waterways or contaminate the soil. Implementation of Mitigation Measure HAZ-1, which includes development and implementation of a plan to safely store potentially hazardous materials away from waterways and sensitive receptors, and handle them according to local, State, and federal regulations, would reduce this potential impact to less than significant.

**Mitigation Measure HAZ-1:** Prior to project activities, DWR will prepare a Hazardous Materials Management Plan that will be implemented to ensure that all staff transport, store, handle and dispose of construction-related hazardous materials in a manner consistent with the relevant local, State, and federal regulations and guidelines. At minimum, these include those recommended and enforced by the Department of Transportation, the Regional Water Quality Control Board, and the applicable local fire departments and environmental health departments. DWR will ensure that staff immediately control the source of any leak and immediately contain any spill using appropriate spill containment and countermeasures identified within the plan. If required by a city or county fire department, department of environmental health, or any other regulatory agency, containment media shall be collected and disposed of at an off-site facility approved to accept such media.

**c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

*No Impact.* No schools are located within one-quarter mile of the proposed project storage sites. The proposed project would not create hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste. No impact would occur.

**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?**

*No Impact.* The proposed project would transport rock to the storage sites and unload rock in piles consolidated within the storage sites in single piles, except for the Tisdale site where there would be multiple piles that would be consolidated using front end loaders. Moving the rock into a consolidated pile(s) would result in minimal exposure of the uppermost layer of soil. The proposed project storage sites are not included on the Cortese list and would not involve major earthwork that could uncover unknown hazardous materials (Cal/EPA, 2016). Therefore the proposed project would not result in a significant hazard to the public or the environment, and there would be no impact.

**e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

*No Impact.* The closest public airport to the proposed project is the Sacramento International Airport, located approximately one mile east of the RD 1000 Corp Yard site. Because the site is currently used for storage of materials and equipment within the airport Land Use Compatibility Plan, the proposed project would not change operations at the storage site. Therefore, there would be no impact related to hazards from people working within the airport Land Use Compatibility Plan.

**f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

*No Impact.* There are no private airstrips within the vicinity of the proposed project storage sites, and there would be no impact.

**g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

*Less Than Significant Impact.* The proposed project would involve a staging area for the trucks on the Federal JFP site, and transport rock to the storage sites with adequate and well established ingress and egress points, and would not result in blocking local roadways. Therefore, the proposed project would not impair or physically interfere with an adopted emergency response or evacuation plan in Sacramento or Sutter Counties, and impacts would be less than significant.

**h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

*Less than Significant Impact.* Several of the proposed storage sites are located in areas surrounded by grassland or agricultural land that can be susceptible to fire. However, the proposed project would result in temporary activities on the storage sites to unload haul trucks and store rock and would not expose people or structures to a significant risk of loss, injury or death due to wildland fires. As a standard DWR safety practice, all vehicles and equipment would have fire prevention equipment on site including fire extinguishers and shovels. Therefore, the proposed project would have a less-than-significant impact.

## 5.9 HYDROLOGY AND WATER QUALITY

### 5.9.1 Environmental Setting

The Federal Emergency Management Agency (FEMA) is responsible for delineating flood zones within the region. FEMA’s Flood Insurance Rate Maps (FIRMs) show that none of the proposed storage sites are located within an area with anticipated 100-year flooding, where 100-year flooding is defined as that occurring with a 1% annual chance of recurrence (FEMA, 2016). The nearest waterways are the American River at the Folsom JFP site, the Tisdale Bypass south of the Tisdale site, and Sacramento River adjacent to the Freeport WTP Corp Yard and the RD 1000 Corp Yard sites. There are no waterways present on the proposed storage sites. Water quality varies with surrounding land use categories including: agricultural, open space, industrial, residential, and public use.

### 5.9.2 Environmental Checklist and Discussion

HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>HYDROLOGY AND WATER QUALITY</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a,f) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality?**

*Less Than Significant.* The proposed project would transport rock to the five different storage sites where it would be moved into consolidated piles for future use by DWR and SAFCA in flood facilities. Movement of the rock at the Tisdale site would require the use of front end loaders that could loosen topsoil. DWR would implement its BMPs at the Tisdale site, such as the silt fence that would be installed around the perimeter of the storage site, to prevent silt and sediment from any loosened soil from entering the ditch on the west, north, and east of the site. All other sites would not require front-end loaders as the rock would be unloaded in place without the need for consolidation which would result in minimal exposure of soil. Therefore, the proposed project would result in less-than-significant impacts to water quality.

**b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

*No Impact.* The proposed project would temporarily store rock that would not result in any need to use groundwater. Further, the storage of rock at any of the sites would not interfere with groundwater recharge as rain would precipitate through the rock into the ground. Therefore, the proposed project would not deplete groundwater supplies or interfere with groundwater recharge and no impact would occur.

**c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

*Less Than Significant.* The proposed storage sites are generally flat and do not contain waterways. Further, the proposed project would not result in earthwork, and may only have minor exposure of soil on the Tisdale site due to moving the rock with front-end loaders and would not result in substantial erosion or siltation. DWR would use BMPs at the Tisdale site to prevent siltation or sediment from leaving the storage site such as sediment fencing or sediment logs. Therefore the proposed project would have a less-than-significant impact.

**d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

*Less Than Significant.* The proposed project would result in the storage of highly permeable piles of rock that would not substantially impede or otherwise alter the existing drainage patterns of the storage sites and would not result in an increase in impervious surfaces at each site. Therefore, the proposed project would not increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site and there impacts would be **less than significant**.

**e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

*No Impact.* Only two of the proposed storage sites (Tisdale and RD 1000 Howsley Rd.) are undeveloped with no impermeable surfaces; the other storage sites are developed with impervious surfaces throughout. The storage of rock on the Tisdale and RD 1000 Howsley Rd. sites would not result in an increase in impermeable surfaces that would increase runoff from either site because the precipitation would percolate through the stored rock piles and into the ground. Therefore, the proposed project would not result in an increase in surface water runoff, would not exceed the capacity of existing or planned stormwater drainage systems, and would not provide substantial additional sources of polluted runoff. There would be no impact.

**g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

*No Impact.* The proposed project would not result in the construction of housing and there would be no impact.

**h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

*No Impact.* The proposed project would not result in the construction of structures and there would be no impact. The project would provide rock for flood management.

**i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

*No Impact.* The proposed project would not result in the construction of housing or structures and there would be no impact.

**j) Inundation by seiche, tsunami, or mudflow?**

*No Impact.* The proposed project is located in topographically flat areas of Sutter County, Sacramento County, and the City of Sacramento and not located near large enclosed water bodies susceptible to seiche. The closest site to the Pacific Ocean is the Freeport WTP Corp Yard site, which is approximately 90 miles inland. Therefore, the proposed project would not be susceptible to mudflows, seiche, or tsunamis and there would be no impact.

## 5.10 LAND USE PLANNING

### 5.10.1 Environmental Setting

The proposed project storage sites are owned by DWR, the City of Sacramento, and RD 1000 and have been used for storage of equipment and materials by each entity in the past. The Sutter County General Plan land use classification for the Tisdale site is for Agriculture, which is designated for agricultural uses, low density, and open space uses. The Sacramento City General Plan land use classification for the Freeport WTP Corp Yard site and RD 1000 sites are Light Industrial, which include industrial, and storage uses. The Sacramento County General Plan classification for the City North Area Corp Yard site is Intensive Industrial, which includes industrial and storage uses. Each of the proposed storage sites are located adjacent to the same or similar land use classifications. The RD 1000 and the City North Corp Yard storage sites are located within the NBHCP boundaries. The City North Corp Yard is in an area designated as developed urban space by the NBHCP.

### 5.10.2 Environmental Checklist and Discussion

LAND USE PLANNING	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<hr/> Would the project...				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### a) Physically divide an established community?

*No Impact.* The proposed project would use designated roadways and proposed existing sites used for storage and would not physically divide an established community, resulting in no impact.

#### b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan,

**specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

*No Impact.* The proposed project use of designated roadways and storage of rock at the designated storage sites with their respective land use classifications would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted to avoid or mitigate environmental effects. Therefore, there would be no impact.

**c) Conflict with any applicable habitat conservation plan or natural community conservation plan?**

*No Impact.* The three proposed storage sites within the NBHCP are currently used for storage of materials and equipment. The proposed project would not result in changing the use or boundary of these three sites and there would be no conflict with the NBHCP, resulting in no impact.

## 5.11 MINERAL RESOURCES

### 5.11.1 Environmental Setting

The CGS has classified regions of the State according to the presence or absence of significant concrete-grade aggregate deposits into four Mineral Resource Zones (MRZs). The distinction between the MRZ-1 and the MRZ-4 categories is important for land use considerations. The MRZ-1 classification indicates areas where there is little or no likelihood for the presence of significant mineral resources. The MRZ-4 classification implies there is a lack of knowledge regarding mineral occurrence, which does not rule out the presence or absence of significant mineral resources. Further exploration of MRZ-4 areas could result in the reclassification of land to a MRZ-3 or MRZ-2 category. Mineral resources in Sutter County are not mapped or documented by the CGS and are based existing or planned mining applications with the County. There are no active mines adjacent to the Tisdale site. Mineral resources in Sacramento County include the proposed RD 1000 Howsley Rd. site where adequate information exists that no mineral deposits are present.

### 5.11.2 Environmental Checklist and Discussion

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

#### **a,b) 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?**

*No Impact.* The proposed project would transport rock that would otherwise be stored or disposed of at the Folsom JFP project site. The storage sites do not contain known mineral resources of State or local importance. The storage of rock at the proposed storage sites would not result in the loss of availability of or loss of access to known or locally-important mineral resources and there would be no impact.

## 5.12 NOISE

### 5.12.1 Environmental Setting

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude. Given that the typical human ear is not equally sensitive to all frequencies of the audible sound spectrum, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes low and extremely high frequencies, referred to as A-weighting, and is expressed in units of A-weighted decibels (dBA).<sup>3</sup>

#### Noise Exposure and Community Noise

Noise levels rarely persist consistently over a long period of time. Rather, noise levels at any one location vary with time. Specifically, community noise is the result of many distant noise sources that constitute a relatively stable background noise exposure where the individual contributors are unidentifiable. Throughout the day, short duration single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens) that are readily identifiable to the individual add to the existing background noise level. The combination of the slowly changing background noise and the single-event noise events give rise to a constantly changing community noise environment.

To legitimately characterize a community noise environment and evaluate cumulative noise impacts, community noise levels must be measured over an extended period of time. This time-varying characteristic of environmental noise is described using statistical noise descriptors, including the ones described below:

**L<sub>eq</sub>:** The equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The L<sub>eq</sub> is the constant sound level that would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).

**L<sub>max</sub>:** The instantaneous maximum noise level measured during the measurement period of interest.

**CNEL:** The Community Noise Equivalent Level (CNEL) adds a 5-dB “penalty” for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to a 10-dB penalty between the hours of 10:00 p.m. and 7:00 a.m.

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<sup>3</sup> All noise levels reported herein reflect A-weighted decibels unless otherwise stated.

In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise would be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans, 2013a):

- except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- a change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- a 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause adverse response.

These relationships occur in part because of the logarithmic nature of the decibel system. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather do so logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

## **Vibration**

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal and is expressed in term of inches per second (in/sec) (FTA, 2006). The PPV is most frequently used to describe physical vibration impacts on buildings. Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick people), and vibration-sensitive equipment.

### **5.12.2 Sensitive Receptors**

Some land uses are considered more sensitive to ambient noise levels than others, due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the populations that would be exposed, and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, and parks and other outdoor recreation areas are land uses with users that are generally more sensitive to noise than are the users of commercial (other than lodging facilities), industrial, and other non-residential land uses. Below are descriptions of the sensitive receptors in the vicinity of the project sites.

### **Folsom JFP Site**

The Folsom JFP Site is located within the jurisdiction of the City of Folsom. Noise-sensitive receptors in the vicinity of the rock storage site consist of urban residential communities. The nearest sensitive receptors to the rock storage site consist of multi-family residences located approximately 2,500 feet southwest of the site. There is also a community of single-family residences located approximately 3,200 feet southeast of the Folsom JFP site.

### **Tisdale Site**

The Tisdale site is located in an unincorporated area of Sutter County, north of the intersection of Reclamation Rd. and Tisdale Rd. The area surrounding the rock storage site consists of agricultural uses. The nearest sensitive receptor to the rock storage site consists of a single-family home located approximately 400 feet east of the site, across Reclamation Rd. There are no other sensitive receptors located within 1,000 feet of the Tisdale site.

### **City Freeport WTP Corp Yard Site**

The City Freeport WTP Corp Yard storage site is located within the City of Sacramento, south of the intersection of Freeport Blvd. and Packet Rd. The area land use surrounding the rock storage site is rural residential. The nearest sensitive receptors to the site consist of single-family homes located approximately 400 feet west and north of the rock storage site. Other sensitive receptors near the rock storage site include single-family residences located approximately 900 feet north of the site, across Interstate 5 (I-5).

### **City North Corp Yard Site**

The City North Corp Yard site is located within an unincorporated area of Sacramento County, west of the intersection of Kenmar Rd. and Del Paso Rd. The area surrounding the site consists of industrial land uses. The nearest sensitive land use to the rock storage site consists of scattered single-family residences located as close as approximately 600 feet north of the storage site.

### **RD 1000 Corp Yard Site**

The RD 1000 Corp Yard site is located within an unincorporated area of Sacramento County, east of the intersection of Garden Highway and Elkhorn Blvd. The area surrounding the site consists of agricultural land uses. The nearest sensitive receptor to the rock storage site consists of one single-family residence located approximately 1,300 feet east of the rock storage site.

### **RD 1000 Howsley Road Site**

The RD 1000 Howsley Rd. site is located within an unincorporated area of Sutter County, east of the intersection of Highway 99 and Natomas Rd. The area surrounding

the site consists of agricultural land uses. The nearest sensitive receptors to the rock storage site consist of two single-family homes located approximately 350 feet east and 800 feet southwest of the site, respectively. There are no other sensitive receptors located within 1,000 feet from the RD 1000 Howsley Rd. storage site.

### 5.12.3 Environmental Checklist and Discussion

NOISE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

*Less Than Significant with Mitigation Incorporated.* The proposed project would consist of the transport of rock from the Folsom JFP construction site to two rock storage sites in Sutter County, and three rock storage sites in Sacramento County. Loading/unloading activities and hauling at the Folsom JFP site would be limited to the operating hours specified by USACE between the hours of 7:00 a.m. and 7:00 p.m. Loaders and/or excavators would be used to load the haul trucks. Once all of the rock has been transported to the proposed storage sites, there would be no project-related noise sources or other operational noise. Consequently, the impact assessment below solely addresses the transport and loading/unloading of rock similar to construction noise.

Representative noise levels for the individual pieces of equipment are shown in Table 8. Noise generated at the Folsom JFP construction and Tisdale sites would originate from the operation of two excavators/front-end loaders that would be used to load the haul trucks at the JFP site with rock and move rock in piles at the Tisdale site. Noise generated at the rest of the rock storage sites would originate from the operation of a haul truck. Based on the construction equipment noise levels presented in Table 8, the combined noise levels generated by two excavators and one idling truck would be approximately 85 dBA  $L_{eq}$ /89 dBA  $L_{max}$  from a distance of 50 feet. Once the haul trucks are fully loaded, they would deliver the rocks to one of the five designated rock storage sites. The highest  $L_{eq}$  and  $L_{max}$  at the nearest sensitive receptor locations to each of the rock storage sites are summarized in Table 9.

**TABLE 8  
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT OPERATIONS**

Equipment	Noise Exposure Level, dBA $L_{eq}$ @ 50 Feet	Noise Exposure Level, dBA $L_{max}$ @ 50 Feet
Excavator	81	85
Loader	76	80
Dump Truck	80	84

SOURCES: FHWA Roadway Construction Noise Model User's Guide, January 2006.

**TABLE 9  
PREDICTED NOISE EXPOSURE AT NEARBY SENSITIVE RECEPTORS**

Project Sites	Distance to Nearest Sensitive Receptor (feet)	Noise Exposure Level, dBA $L_{eq}$ (dBA)	Noise Exposure Level, dBA $L_{max}$ (dBA)
Folsom JFP	2,500	43	47
Tisdale Site	400	62	66
City Freeport Corp	400	57	61
City North Corp	600	53	57
RD 1000 Corp Yard	1,300	45	49
RD 1000 Howsley Rd.	350	59	63

SOURCE: ESA, 2006

The project-related activities would occur within the jurisdictions of the City of Folsom, City of Sacramento, and unincorporated Sutter and Sacramento Counties. Each of these cities and counties have separate General Plan policies and County Codes and, therefore, this impact is addressed separately for each jurisdiction.

### **City of Folsom Noise Impacts**

According to the City of Folsom Municipal Code, noise generated during construction is exempt from the City's noise standards given they occur between the hours of 7:00 a.m. and 6:00 p.m. and weekend hours ranging between 8:00 a.m. to 5:00 p.m. Construction activities that occur beyond the City's construction exempt hours would have to comply with the City's noise standards. The City of Folsom Municipal Code does not allow exterior noise levels at a sensitive land use to exceed 50 dBA  $L_{eq}$ /70 dBA  $L_{max}$  between the hours of 7:00 a.m. to 10:00 p.m. and 45 dBA  $L_{eq}$ /65 dBA  $L_{max}$  between the hours of 10:00 p.m. to 7:00 a.m.

Project operations would be limited to the hours of 7:00 a.m. to 7:00 p.m. Since rock hauling activities at the Folsom JFP site would occur beyond the City of Folsom construction exempt hours for approximately one hour during the evening, the project would have to comply with the City of Folsom daytime exterior noise standards. As shown in Table 9, the calculated noise level at the nearest sensitive receptor during onsite haul truck loading would be approximately 43 dBA  $L_{eq}$ /47 dBA  $L_{max}$ , which is below the City of Folsom allowed exterior noise standard. Therefore, noise generated within the City of Folsom would result in a less than significant impact.

### **City of Sacramento Noise Impacts**

According to the City of Sacramento Municipal Code, noise generated during construction is exempt from the City's noise standards given they occur between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday, and between the hours of 9:00 a.m. and 6:00 p.m. on Sunday. Construction activities that occur outside of City's construction exempt hours would have to comply with the City's noise standards. The City of Sacramento Municipal Code does not allow exterior noise levels at a sensitive land use to exceed 55 dBA  $L_{eq}$ /75 dBA  $L_{max}$  between the hours of 7:00 a.m. to 10:00 p.m. and 50 dBA  $L_{eq}$ /70 dBA  $L_{max}$  between the hours of 10:00 p.m. to 7:00 a.m.

Since rock hauling activities to the City Freeport Corp Yard and North Corp Yard storage sites would occur beyond the City of Sacramento construction exempt hours for approximately one hour during the evening, the project would have to comply with the City's daytime exterior noise standards. As shown in Table 9, the calculated noise level at the nearest sensitive receptor during onsite rock unloading at the City Freeport Corp Yard and North Corp Yard storage sites would be approximately 57 dBA  $L_{eq}$ /61 dBA  $L_{max}$  and 53 dBA  $L_{eq}$ /57 dBA  $L_{max}$ , respectively. The sensitive receptors located near the North Corp Yard storage site would be exposed to noise levels that would exceed the City of Sacramento allowed exterior noise standard. Therefore, the proposed project would result in noise generated within the City of Sacramento that would be less than significant with mitigation incorporated.

## **Sacramento County Noise Impacts**

According to the Sacramento County Municipal Code, noise generated during construction is exempt from the County's noise standards given they occur between the hours of 7:00 a.m. and 7:00 p.m. on Mondays through Fridays and between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday; Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday and on each Sunday after the hour of 8:00 p.m. Project activities that occur beyond the County's construction exempt hours would have to comply with its noise standards. The Sacramento County Municipal Code does not allow exterior noise levels at a sensitive land use to exceed 55 dBA  $L_{eq}$ /75 dBA  $L_{max}$  between the hours of 7:00 a.m. to 10:00 p.m. and 50 dBA  $L_{eq}$ /70 dBA  $L_{max}$  between the hours of 10:00 p.m. to 7:00 a.m.

Since rock hauling activities at the RD 1000 Corp Yard storage site would occur within the County of Sacramento construction exempt hours, the exterior noise standards found in the County of Sacramento municipal code would not apply to onsite truck unloading activities. Therefore, the proposed project would result in noise generated within the Sacramento County that would be less than significant with mitigation incorporated.

## **Sutter County Noise Impacts**

The Sutter County Code does not address noise and contains no provisions to restrict construction noise or time limits. However, the Sutter County General Plan Noise Element, Policy N.1.6, restricts discretionary project construction within 1,000 feet of noise-sensitive land uses to between 7:00 a.m. and 6:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays. Construction is prohibited on Sundays and holidays without a variance. Since Sutter County has not established specific construction daytime or nighttime noise thresholds, any construction activities that occur beyond the allowed construction hours specified in Policy N.1.6 of the Sutter County General Plan would constitute a significant impact.

There is a sensitive receptor located approximately 400 feet east of the Tisdale site. Assuming an attenuation rate of 7.5 dBA per doubling of distance, the nearest sensitive receptor to the Tisdale site would be exposed to 62 dBA  $L_{eq}$ /66 dBA  $L_{max}$  during rock unloading activities. In addition, there is a sensitive receptor located approximately 350 feet east of the RD 1000 Howsley Rd. site. Assuming an attenuation rate of 7.5 dBA per doubling of distance, the nearest sensitive receptor to the RD1000 Corp Yard site would be exposed to 59 dBA  $L_{eq}$ /63 dBA  $L_{max}$  during rock unloading activities.

Project activities at the Tisdale and the RD 1000 Corp Yard Rock storage sites would occur beyond the Sutter County construction exempt hours. Since Sutter County does not have an adopted construction noise threshold, noise generated outside of these hours would constitute a violation of Sutter County General Plan Policy N.1.6. Therefore, the proposed project could result in potentially significant noise generated

within Sutter County. However, noise would be mitigated to less than significant levels with the following mitigation measures.

**Mitigation Measure NOI-1: Implement Noise-Reducing Construction Practices:**

DWR shall implement the following measures during construction activities when noise-sensitive receptors are located nearby and could be subject to substantial construction noise in excess of applicable standards or substantially greater than existing conditions.

- a) All equipment used to load or unload rocks shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engines shall be closed during equipment operations.
- b) All motorized construction equipment shall be shut down when not in use to prevent excessive idling.

**Mitigation Measure NOI-2: Request Hours of Construction Work Extension:**

Prior to transportation of rock from the Folsom JFP site to the rock storage sites located within the jurisdiction of City of Sacramento and Sutter County, DWR shall coordinate with the City of Sacramento and Sutter County to work beyond the exempt construction hours provided in the City of Sacramento Municipal Code 8.68.080(D) and Sutter County's General Plan Policy N 1.6.

**b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

*Less Than Significant Impact.* The proposed project would transport rock from the Folsom JFP site to two rock storage sites in Sutter County, and three rock storage sites in Sacramento County. Activities that may generate perceptible vibration would consist of loaded trucks transporting rock and off-road construction equipment (i.e., excavator, loader) that would be used to load haul trucks or consolidate rock at the Tisdale storage site. Project activities would not require the use of any equipment known to cause substantial vibration such as impact pile driving or blasting.

The Caltrans measure of the threshold of architectural damage for conventional structures is 0.5 in/sec PPV for older residential structures. Vibration levels can also result in interference or annoyance impacts at residences or other land uses where people sleep, such as residences, hotels, and hospitals. Vibration impact criteria published by Caltrans relative to these land uses are stated in terms of PPV. For adverse human reaction, this analysis applies the Caltrans "strongly perceptible" threshold of 0.1 in/sec PPV for frequent intermittent sources (Caltrans, 2013b).

The use of excavators and loaders during the loading or unloading of rocks from the haul trucks would be expected to generate the highest levels of vibration. Excavators and loaders can generate vibration levels up to 0.045 in/sec PPV at a distance of 50 feet (FTA, 2006), which would be below the 0.1 in/sec PPV threshold for human annoyance and the 0.5 in/sec PPV threshold for building damage. There are no sensitive receptors located within 50 feet from any of the rock storage sites. Consequently, existing sensitive receptors near any of the rock storage facilities would

not be affected by substantial ground-borne vibration and this impact would be considered less than significant.

**c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

*No Impact.* The proposed project would involve activities consistent with construction and would only occur over a period of 6 to 8 months. Once the rocks have been delivered to their predetermined storage sites, the project would not result in any new stationary sources or other permanent increases in operational noise. Consequently, the proposed project would have a no impact with regard to permanent increases in ambient noise levels.

**d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

*Less Than Significant.* The construction activities that would generate temporary noise level increases are largely addressed in response to CEQA Checklist item a) above with regard to exposure of persons to noise levels in excess of established noise standards. However, some project-related activities are either exempt from the standards of the noise ordinance or would not exceed the local jurisdiction construction noise thresholds. Specifically, these activities include the operation of an excavator and loader and on-road truck trips to transport and deliver rocks.

To assess the impacts related to the potential for project-related off-road equipment (i.e., excavator and loader) to result in a substantial temporary increase in ambient noise levels, this analysis employs the general assessment construction noise assessment methodology and criteria suggested by the Federal Transit Administration (FTA, 2006). This guidance identifies a 1-hour  $L_{eq}$  of 90 dBA for daytime (7:00 a.m. to 10:00 a.m.) and a 1-hour  $L_{eq}$  of 80 dBA for nighttime (10:00 p.m. to 7:00 a.m.) as construction noise exposure levels where adverse community reaction could occur. Since rock hauling and loading/unloading activities would only occur during the daytime hours between 7:00 a.m. to 7:00 p.m., the FTA daytime construction noise threshold is used to determine if the project would result in a substantial temporary or periodic increase in ambient noise levels.

As can be seen in Table 9, rock loading/unloading activities at the rock storage sites would result in noise exposures at the nearest sensitive receptors ranging between 43 to 62 dBA  $L_{eq}$ . These noise levels would be below the applied daytime criterion of 90 dBA  $L_{eq}$ . Therefore, rock loading/unloading activities at the rocks storage sites would not result in a substantial temporary or periodic increase in ambient noise levels.

The proposed project would also generate a number of haul truck trips on highways and local roadways including I-80, Folsom Auburn Rd., Douglas Blvd., Sierra College Blvd., and East Natoma Street. The haul trucks would transport a total of 126,000 cy of rock from the Folsom JFP site to the various rock storage sites listed in Table 9. The transportation of rock would occur over an approximately 6 to 8-month period. Based on this volume and assuming each haul truck can carry 11 to 13 cy of rock, it is estimated

that the project would result in a total of 15,750 truck round trips. Assuming the rock hauling activities would occur over a six month period, the combined daily truck round trips would equate to 143. The highest truck traffic would be along Douglas Blvd. and Sierra College Blvd. where approximately 123 daily round trips would occur. These truck trips would be dispersed throughout the 12-hour work day averaging about 10 round trips per hour on these local access roadways. Haul trips along the other truck routes would be less than 91 daily round trips or 8 round trips per hour.

The highest incremental contribution of these truck trips to hourly average noise levels along Douglas Blvd. and Sierra College Blvd. (50 feet from the roadway center) would be approximately 62 dBA based on the FHWA's Highway Traffic Noise Prediction Model. Based on traffic volumes published on the City of Roseville traffic count tool, peak-hour traffic volumes along the applicable segments of Douglas Blvd. and Sierra College Blvd. range from approximately 3,608 to 1,950 trips per hour, respectively (City of Roseville, 2016). Noise modeling conducted for these roadway segments indicates roadside noise levels ranging between 70 to 73 dBA  $L_{eq}$ . The addition of 62 dBA  $L_{eq}$  to the existing noise levels along Douglas Blvd. and Sierra College Blvd. would not yield a meaningful change in noise levels (i.e., the change would be less than 1 dBA). Hence, truck trips would contribute to a localized increase in noise along roadways, but the magnitude of this increase would be less than 3 dBA which, for traffic noise impact analyses, is considered a just-perceivable difference noise levels (Caltrans, 2013a). Therefore, the transport of rock along highways and local roadways would not result in a substantial temporary or periodic increase in ambient noise levels, and the associated impact would be less than significant.

**e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

*Less Than Significant.* The RD 1000 Corp Yard site is located within two miles west of the Sacramento International Airport. However, the site would be located approximately 4,900 feet from the airport's 60 dBA CNEL contour (County of Sacramento, 2004). Given the distance from the airport, people working at the RD 1000 Corp Yard site would not be exposed to aircraft noise levels exceeding 60 dBA CNEL and impacts would be less than significant.

**f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

*No Impact.* There are no private airstrips located within two miles from any of the proposed rock storage sites. Therefore, there would be no impact from aircraft noise from private airstrips.

## 5.13 POPULATION AND HOUSING

### 5.13.1 Environmental Setting

The counties that comprise of the Greater Sacramento area, El Dorado, Placer, Sacramento, Sutter, Yolo and Yuba Counties, have experienced steady growth over the past 15 years. The regional population increased a total of 24 percent, from approximately 1,936,006 in 2000 to 2,268,138 in 2012. The Sacramento Area Council of Governments (SACOG) predicts the regional population to increase to 2,472,567 in 2020 and 3,078,772 in 2036. No residences are located within the proposed project storage sites (SACOG 2016).

### 5.13.2 Environmental Checklist and Discussion

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

**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)?**

*No Impact.* The proposed project would transport rock to the storage sites for use by DWR and SAFCA for emergency repairs on existing flood protection infrastructure. The proposed project would not result in changes to existing repair activities by these agencies. Rather, the proposed project would result in access to rock material at a reduced cost from a readily available source. Therefore, the proposed project would not induce direct or indirect substantial growth in the region and would not have an effect on current and/or planned population growth patterns in Sutter County or Sacramento County and there would be no impact.

**b,c) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

*No Impact.* The proposed project storage sites are not currently designated for residential land uses and are designated to be used for storage of materials and equipment. The storage of rock would not displace, divide or disrupt an existing housing or established community, and there would be no impact.

## **5.14 PUBLIC SERVICES**

### **5.14.1 Environmental Setting**

#### **Fire Protection**

Fire protection is provided by the Sacramento Metropolitan Fire District and the Sutter County Fire District. The nearest fire station to the Tisdale site is the Oswald-Tudor Fire Department approximately nine miles to the northeast, with the next nearest fire department, the Robbins-Sutter Basin Fire Department, approximately 12 miles to the south. The Freeport WTP Corp Yard and RD 1000 Howsley Rd. Stockpile sites are both approximately nine miles away from their nearest fire departments, and the RD 1000 Corp Yard is approximately seven miles away from its nearest fire department. The City North Area Corp Yard is five miles away from Sacramento Fire Department Station 19. There are several other fire stations within 20 miles of all the proposed storage locations, except for the Tisdale site.

#### **Police Protection**

Law enforcement services would be provided by the Sacramento Police Department for the City Freeport WTP Corp Yard, City North Corp Yard, and the RD 1000 Corp Yard sites. Sutter County Sheriff's Department would provide service to the Tisdale and the RD 1000 Howsley Rd. sites. The closest police department that serves the RD 1000 Howsley Rd. site is the Sutter County Sherriff Department in Yuba City.

#### **Schools**

The closest schools to the proposed storage sites in Sacramento County include: Freeport Elementary School, located 0.8 miles northeast of the Freeport WTP Corp Yard site; Natomas Charter School, located 0.6 miles northwest of the City North Corp Yard site; and Westlake Charter School located less than five miles southeast of the RD 1000 Maintenance Yard site. The closest school to the Tisdale site is Grand Isle Elementary School approximately six miles to the northwest in the town of Grimes, and the closest school to the RD 1000 Howsley Rd. Stockpile site is Marcum-Illinois Union Elementary School, located six miles north of the parcel.

#### **Parks**

There are many parks located in Sacramento and Sutter Counties, however, no parks are located within the immediate vicinity of the storage sites.

#### **Emergency Services**

Emergency Services at the proposed project site are provided by the police and fire protection organizations listed above. In the unincorporated County, fire protection services would be provide by the California Department of Forestry and Fire Protection (CAL FIRE), the U.S. Forest Service (USFS) and several other local fire districts within Sutter County and Sacramento County.

### 5.14.2 Environmental Checklist and Discussion

<b>PUBLIC SERVICES:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<hr/>				
Would the project...				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

*No Impact.* The proposed project would result in the hauling and unloading of rock at the proposed storage sites for use by DWR and SAFCA in emergency flood operations and repairs. Therefore, the proposed project would not result in a permanent increase in local employment or residences and would not result in the increased use or demand for public services requiring construction of new facilities. There would be no impact.

## 5.15 RECREATION

### 5.15.1 Environmental Setting

Sutter County maintains and operates 20 local parks and regional parks. None are located Tisdale or RD 1000 Howsley Rd. sites. Sacramento County also operates 20 local parks and regional parks, and none are located within the vicinity of the on the project sites. A wide range of recreational opportunities in the area include wildlife viewing, biking, running, camping, hunting, hiking, and fishing.

### 5.15.2 Environmental Checklist and Discussion

RECREATION:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a, b) 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, or require construction or expansion of recreation facilities?**

*No Impact.* The proposed project would involve the transportation and storage of rock in approved sites. These activities would not increase the use of existing neighborhood and regional parks or other recreational facilities that would result in the physical deterioration of the facilities. The proposed project would also not induce population growth that could lead to an increased use in recreational facilities or expansion of recreational facilities. No recreational facilities such as city or county parks in the area would be affected by the proposed project, and no impact would occur.

## **5.16 TRANSPORTATION AND TRAFFIC**

### **5.16.1 Environmental Setting**

A detailed discussion of the Folsom JFP area's traffic and circulation was presented in the 2012 SEIS/EIR in Section 4.8 Traffic and Circulation on pages 200-209 and in Appendix G, and is summarized and incorporated in this section by reference. The main roadway and access route to the Folsom JFP project area is Folsom-Auburn Rd. This four-lane divided arterial which runs north and south, connecting Sacramento County to Placer County. The north-bound direction provides access to Granite Bay while the south-bound direction connects to the City of Folsom and Highway 50. Folsom-Auburn Rd. is used primarily by commuters, residents, and recreationists. Traffic consists mostly of private automobiles, light commercial vehicles, emergency vehicles, public buses, and bicycles.

Traffic volume on Folsom-Auburn Rd. peaks during the morning and evening rush hour and becomes a steady but lower volume during the day. The morning peak traffic hour is typically from 7:00 a.m. to 8:00 a.m. and the evening peak traffic hour is typically from 5:00 p.m. to 6:00 p.m. A traffic study completed for the 2012 SEIS/EIR compiled average daily traffic (ADT) volumes along the roadways around Folsom Dam. According to the traffic study (2012), the ADT on Folsom-Auburn Rd. between Douglas Rd. to Folsom Dam Rd. was 44,918 and was projected to increase two percent each year.

The roadway network adjacent to the Folsom JFP construction access is well developed with multiple access patterns. There are two basic categories of traffic accessing the site: 1) daily workers and staff; and, 2) material deliveries and hauling operations from earthwork activities. The daily workers access the site via the adjacent roadway network depending on their origin and destinations.

Traffic effects associated with the Folsom JFP project were evaluated based on average daily traffic and specific time periods during the day (i.e., hourly basis, as needed). The analysis was based on the following criteria:

- Material hauling activity occurs during normal work hours, from 7:00 a.m. to 7:00 p.m.
- Equipment hauling activity occurs during normal work hours, from 7:00 a.m. to 7:00 p.m.
- The construction schedule is 10 hours a day, 6 days per week, except dredging and underwater drilling for which double shifts. The 24 hours shifts schedule may be requested under special requirements to meet the schedule, or other special circumstances; double shifts schedule would be temporary and short-term.

Vehicles using the Folsom JFP site for earthwork operations and heavy materials and equipment deliveries access the site via one of two approved and pre-determined haul routes, one from I-80 and one from Highway 50; the same as for the proposed project,

as consistent with City of Folsom and Sacramento County designated truck routes. Additionally, no trucks are allowed to use Auburn-Folsom Rd. north of Douglas Blvd.

## **Roadway Network**

### Folsom Boulevard

Folsom Blvd. is functionally classified as a divided arterial and provides north-south access between the cities of Auburn to the north and Folsom to the south. Headed north from the US Highway 50 Interchange, Folsom Blvd. is a six-lane divided roadway to Iron Point Rd. At Iron Point Rd., the northbound side is reduced to two lanes while the southbound side maintains 3 lanes. At Natoma Station Drive, the southbound side of Folsom Blvd. also is reduced to two lanes. From Natoma Station Drive to Blue Ravine Rd./Auburn-Folsom Rd., Folsom Blvd. is a four lane divided roadway. The speed limit is posted at 50 miles per hour (mph). Land use along much of the roadway is predominantly commercial.

### Auburn-Folsom Road

Auburn-Folsom Rd. is functionally classified as an undivided arterial and provides north-south access between the cities of Auburn to the north and Folsom to the south. Beginning at the intersection of Greenback Lane/Riley Street/Folsom Blvd., Auburn-Folsom Rd. is a four-lane divided roadway. Heading north, Auburn-Folsom Rd. continues with two lanes in each direction, becoming an undivided roadway outside of the City of Folsom limits, to its intersection with Folsom Dam Rd. Continuing north, Auburn-Folsom Rd. narrows to one lane in each direction, crosses the Sacramento/Placer county line, and remains a two-lane undivided roadway to the Douglas Blvd. intersection. The speed limit is posted at 50 miles mph. Land use along Auburn-Folsom Rd. is mixed; commercial, residential and light industrial, however in downtown Folsom the land use becomes mainly commercial.

### Douglas Boulevard

Douglas Blvd. is an east-west roadway and is functionally classified as a divided arterial. Between Sierra College Blvd. and Auburn-Folsom Rd., Douglas Blvd. consists of two lanes in each direction. Continuing east, it further narrows to a two-lane undivided roadway. Land uses along much of the roadway are offices and commercial to Sierra College Blvd.; residential/vacant/open space with limited commercial between Sierra College Blvd. and Auburn-Folsom Rd.; and primarily residential east of Auburn-Folsom Rd. Douglas Blvd. west of I-80 is two lanes in each direction through heavily developed and densely populated areas.

### Blue Ravine Road

Natoma/Blue Ravine Rd. and continues east into El Dorado County. Within the Folsom Dam area, Green Valley Rd. is a two-lane undivided roadway and is classified as an undivided arterial. The speed limit is posted at 45 mph. Green Valley Rd. does not have sidewalks or marked bicycle facilities. The land use along much of the roadway is primarily residential/recreational.

### East Natoma Street

Natoma Street is an east-west roadway in the City of Folsom. It is classified as an undivided arterial. Natoma Street consists of one lane in each direction from Folsom Blvd. to Stafford Street. East of Stafford Street, Natoma Street widens to two lanes in each direction and continues as a four-lane undivided roadway to Fargo Way. At Fargo Way, Natoma Street becomes East Natoma Street and continues to Folsom Dam Rd. as a two-lane undivided roadway. At Folsom Dam Rd., the eastbound side of the roadway increases to two lanes; it continues as a three-lane road to Green Valley Rd./Blue Ravine Rd. Natoma Street is posted at 35 mph through the City of Folsom and then increases to 45 mph at the Prison entrance and increases again to 50 mph at Briggs Ranch Drive. Within the downtown area, land use is mixed use residential/commercial/office; east of Fargo Way the land use changes to residential/recreational.

### Green Valley Road

Green Valley Rd. is an east-west roadway that begins at the intersection with East Natoma/Blue Ravine Rd. and continues east into El Dorado County. Within the Folsom Dam area, Green Valley Rd. is a two-lane undivided roadway and is classified as an undivided arterial. The speed limit is posted at 45 mph. Green Valley Rd. does not have sidewalks or marked bicycle facilities. The land use along much of the roadway is primarily residential/recreational.

### Greenback Lane

Greenback Lane is a four-lane, divided roadway with center left turn lanes for cross street and driveway access. It runs predominantly in an east-west direction and connects the City of Folsom with I-80 and points west. Sidewalks are present intermittently on both sides of the roadway; there are marked bicycle facilities from Auburn-Folsom Rd. to Madison Avenue. It is classified as a divided arterial. The posted speed limit is 45 mph. The land use along much of the roadway within the study area is predominantly residential and small commercial/retail.

### Interstate 80

Interstate 80 is the second-longest interstate highway in the United States. The section of I-80 located within the Folsom JFP operations runs from Eureka Rd. to Sierra College Blvd. in a predominantly north-south direction within the analysis area, but, in general, is considered an east-west route. It is classified as a freeway. Interstate 80 consists of six lanes, divided by barriers, within the analysis area with acceleration/deceleration lanes at the interchanges.

### Interstate 5

Interstate 5 is the major north-south highway on the Pacific Coast linking major cities within California, and linkage with Oregon, Washington and the countries of Mexico and Canada. The section of I-5 within the proposed project haul route runs from I-80 north to the City of Woodland exit for SR 113. Classified as a freeway, I-5 consists of two lanes along most of the haul route.

### Highway 50

Highway 50 is a U.S. highway that runs from coast to coast. The section of Highway 50 located within the study area runs from Hazel Avenue to El Dorado Hills Blvd. in a predominantly east-west direction within the analysis area. Highway 50 consists of four lanes with two carpool lanes, divided by barriers, within the analysis area with acceleration/deceleration lanes at the interchanges.

### Northgate Boulevard

Northgate Blvd. is a north-south main arterial roadway connecting urban areas in the northern portion of the City of Sacramento and in Sacramento County to the I-80 corridor. This roadway begins as an eight lane divided road that narrows to a four lane roadway after passing the first major intersection north of I-80.

### Freeport Boulevard

Freeport Blvd. is a major collector street in the southern portion of the City of Sacramento. This roadway is a four lane divided roadway that reduces to two lanes near the I-5 underpass.

### State Route 99

State Route 99 is a four-to-six lane freeway extending south from Business 80 to South Sacramento, Elk Grove, and through the Central Valley. This segment of SR 99 has one HOV lane in either direction on this major commute route between Downtown Sacramento and the southern suburbs. A portion of SR 99 is co-designated with US 50 and I-5 through Downtown Sacramento and Natomas. State Route 99 separates from I-5 near the northern city limit, stretching to the north as a four-lane freeway.

### Howsley Road

Howsley Rd. is an east-west two-lane roadway that extends from SR 99 east to the Sutter/Placer County boundary where the roadway changes names to Sunset Blvd.

### West Elverta Road

West Elverta Rd. is an east-west two-lane roadway that extends from SR 99 west to connect with Garden Highway to the east at the Sacramento River. This roadway provides access to Garden Highway north of the Sacramento International Airport and is primarily used for agricultural and rural residential traffic.

### Garden Highway

Garden Highway is a north-south two-lane roadway that extends from Second Street in Yuba City and continues south joining SR 99 near Tudor. Garden Highway diverges from SR 99 near Nicolaus and extends south along the Feather River and then along the Sacramento River towards the City of Sacramento. Garden Highway serves as an alternative north-south route to SR 99 south of Yuba City.

### Elkhorn Boulevard

Elkhorn Blvd. is an east-west two-lane rural road that extends from Garden Highway on the west to a dead end at the boundary of the Sacramento International Airport. Elkhorn Blvd. in this location serves local agricultural and rural residential traffic.

### State Route 113

State Route 113 within Sutter County is a north-south road that begins in the south on the Yolo County line north of I-5 at the town of Knights Landing and extends north over the Sacramento River to SR 99 near the community of Tudor. This two-lane roadway is one of the two roadways that cross the Sacramento River in Sutter County.

### Reclamation Road

Reclamation Road is a two-lane rural roadway that extends from Karnak Road in a northwestern direction through the community of Robbins, crossing SR 113 before terminating at Progress Road near Tisdale. This roadway along with progress, McGrath and Tarke Roads serves as a direct route between SR 113/Robbins and SR 20/Meridian bypassing the urbanized Yuba City section of the county.

### *Traffic Types and Volumes*

All roadways within the proposed project vicinity are traveled by automobiles, trucks, motorcycles, emergency vehicles, trucks with trailers, and agricultural equipment (on county roadways). Traffic counts for roadways within the vicinity of proposed project sites are presented below in Table 10. Counts were not available for all local roads within the proposed project haul routes.

### *Airports/Airstrips*

The Sacramento International Airport is the only airport within the vicinity approximately two miles east of the proposed RD 1000 Corp Yard storage site. There are no other airports located in the vicinity of the other project sites.

### *Transit*

Local transit services in Sacramento County and the City of Sacramento include local and regional bus service that use portions of the same major roadways as the haul routes. Transit services in Sutter County include regional bus service that share the haul route along SR 99 only, as there is no transit services along SR 113 and Reclamation Rd.

### *Pedestrian and Bicycle System*

Pedestrian facilities include sidewalks, crosswalk, and pedestrian signals, and are generally located in the developed communities. The proposed project is located within properties owned by the State, City of Sacramento, Sacramento County, Sutter County, or RD 1000. There are numerous pedestrian and designated bicycle lanes along various sections of the haul routes on local roadways but not along the major highways or in the proposed project storage sites.

**TABLE 10  
EXISTING ADT ON PROJECT HAUL ROUTES**

Roadway	Segment	ADT
Interstate 80	Douglas Blvd. to Greenback Ln.	200,838
Highway 50	Hazel Ave to Folsom Blvd.	143,201
Interstate 5	SR 113 to I-80	39,500 to 158,000
Interstate 5	Meadowview Rd. to I-50	103,000 to 192,000
State Route 99	I-5 to SR 70	15,100 to 55,000
Greenback Lane	Natoma St. to Folsom Blvd./Folsom Auburn Rd.	57,509
Folsom Blvd.	Greenback Ln to Iron Point Rd	46,344
Auburn-Folsom Rd.	Folsom Lake Crossing to Greenback Ln	39,969
Douglas Blvd.	Barton Rd. to Folsom-Auburn Rd.	49,287
East Natoma St.	Folsom Lake Crossing to Green Valley Rd.	33,226
Green Valley Rd.	East Natoma St. to Oak Ave. Pkwy.	39,234
Oak Ave. Pkwy.	Blue Ravine Rd. to East Bidwell St.	27,218
East Bidwell St.	Clarksville Rd. to Iron Point Rd.	48,183
Blue Ravine Rd.	Oak Ave. Pkwy. To Green Valley Rd.	23,907
Northgate Blvd.	I-80 to Main Ave.	19,000 to 34,900
State Route 113	Yolo County Line to Del Monte Ave.	7,400
Reclamation Rd.	SR 113 to Progress Rd.	1,060 to 1,890
Freeport Blvd.	Pocket Rd. to South City Limits	5,600
Garden Hwy.	Elverta Rd. north	297
Howsley Rd.	SR 99 to Pleasant Grove Rd.	2,270

Source: Folsom JFP Phase IV SEIS/SEIR, 2012; City of Sacramento General Plan Background Report, 2015; Sutter County General Plan Technical Background Report, 2008; and CalTrans Traffic Data Branch Traffic Volumes for 2014 website (<http://www.dot.ca.gov/trafficops/census/2014all/>)

### 5.16.2 Environmental Checklist and Discussion

<b>TRANSPORTATION AND TRAFFIC:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>TRANSPORTATION AND TRAFFIC:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

*Less Than Significant Impact.* The proposed project would not conflict with an applicable traffic plan, ordinance or policy or impact the performance of the circulation system because hauling of the rock would use established haul routes within from the JFP site to either I-80 or I-50, and travel along major roads to each of the storage sites without the need for alterations to existing circulation systems. Equipment, rock, and personnel would be mobilized to the Tisdale storage site, and rock would be hauled and unloaded in place without the need for additional equipment or personnel at all the other storage sites. The proposed project consists of hauling and unloading rock at each

storage site, with moving the rock in manageable piles only within the Tisdale site. Transport of rock to the proposed project storage sites would be limited to the haul routes between the JFP site and the storage sites, as described in Section 2.3, Project Description. Therefore, the proposed project would be consistent with existing traffic and circulation plans, ordinances, and policies and impacts would be less than significant.

**b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

*Less Than Significant Impact.* Equipment, rock, and personnel would be mobilized to the Tisdale site, and rock would be hauled and unloaded in place without the need for additional equipment or personnel at all the other storage sites. The proposed project would result in hauling rock from the JFP project site to the five storage sites along established local roadways and highways. For this analysis, it was assumed that the maximum number of haul trips expected would occur during a six month hauling period. As stated in Section 2.3, Project Description, haul trucks would have an average 11 cy capacity and would require up to 86 truckloads per workday to deliver the maximum volume of rock (126,000 cy) from the JFP site to all the proposed storage sites. Assuming roundtrips for each truckload, this would result in 172 total daily trips distributed between the five different storage sites as follows: 1) 110 trips for the Tisdale site; 2) 23 trips each for each of the City Corp Yard sites; and, 3) eight trips for each of the RD 1000 storage sites. Haul routes to the City North Corp Yard, RD 1000 Corp Yard, RD 1000 Howsley Rd., and Tisdale storage sites all use the same route from the JFP site to I-80, resulting in a total of 149 truck trips along this route. The remaining 23 truck trips to City Freeport WTP Corp would use the haul route to I-50. As stated in Section 2.2, Project Description all truck trips from the Folsom JFP site are limited by agreement with the City of Folsom to avoid peak traffic hours.

For the truck trips that use the I-80 haul route, the proposed project would result in an approximate increase of between 0.3 and 0.4 percent ADT along the local road way system to I-80. The resulting increase in ADT along I-80 would be approximately 0.07 percent. The remaining 23 truck trips along the local roadway system to I-50 would result in an approximate increase between 0.04 and 0.1 percent increase in ADT. The resulting increase in ADT along I-50 would be approximately 0.02 percent. Haul routes from the major freeways to each of the proposed storage sites would affect both urban and rural road ADT levels. The proposed project truck trips to the Tisdale site would have the greatest increase in ADT of approximately 1.5 percent along SR 113 and six to 10 percent along Reclamation Rd. The truck trips on all other local roads to the remaining storage sites would result in increases in ADT ranging from approximately 0.07 (along Northgate Ave.) to three percent (along Garden Hwy.). Because hauling would be limited to occur during non-peak hours, the proposed project would not result in a substantial increase in ADT during off-peak traffic hours along any of the proposed haul routes, the proposed project would not conflict with an applicable congestion

management program, including level of service, travel demand measure or other established standards and impacts would be less than significant.

**c) Result in a change in air traffic patterns, including either an increase in air traffic levels or a change in location that result in substantial safety risks?**

*No Impact.* The proposed project would not require air transportation or result in a change in air traffic patterns at the Sacramento International Airport or the Sacramento Metro Airport. Hauling and unloading rock at each storage site would not result in a change in air patterns or result in substantial safety risks and there would be no impact.

**d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

*Less Than Significant Impact.* Hauling of rock to the storage sites (including the equipment needed at the Tisdale site) would be transported using highway approved trucks and trailers. Haul routes are along major roadways with little to no sharp curves or uncontrolled dangerous intersections. Further, all proposed storage sites have established ingress and egress and there would be no back up along the roads leading to the storage sites. Therefore, there would be no substantial increase in hazards due to a design feature or incompatible uses would occur and there would be no impact.

**e) Result in inadequate emergency access?**

*Less Than Significant Impact* The proposed storage sites would be located within sites that are designated and used for storage of materials and equipment, have established ingress and egress, and would not result in blocking or interfering with emergency response vehicles. The proposed project would not result in inadequate emergency access and there would be no impact.

**f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

*Less Than Significant.* The proposed project haul routes would be located along major roadways and would not significantly impacts traffic levels along those routes used by local and regional transit. The proposed project storage sites are not located adjacent or along bicycle or pedestrian routes. The proposed project would not result conflict with any adopted policies, plans or programs and impacts would be less than significant.

## 5.17 UTILITIES AND PUBLIC SERVICES

### 5.17.1 Environmental Setting

The proposed project is located in Sutter County and Sacramento County. The City of Sacramento uses surface water supplies from the American and Sacramento River to meet current demands. Stormwater and drainage in the area are supported by a Combined Sewer System. The City North Corp Yard and Freeport WTP Corp Yard sites are located near residential areas, and there are powers lines running near those parcels. There are no residential communities located within the vicinity of the Tisdale site, the RD 1000 Corp Yard and Howsley Rd. sites.

### 5.17.2 Environmental Checklist and Discussion

<b>UTILITIES AND SERVICE SYSTEMS:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>UTILITIES AND SERVICE SYSTEMS:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project...				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

*No Impact.* The proposed project consists of the transportation and storage of rock at the designated storage sites. The proposed project would not result in new urban uses (e.g., residential, commercial land, or industrial) that would directly increase the demand for wastewater treatment or exceed wastewater treatment requirements of the Regional Water Quality Control Board and there would be no impact.

**b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

*No Impact.* The proposed project consists of the transportation and storage of rock at the designated storage sites. The proposed project would not require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities and there would be no impact.

**c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

*No Impact.* The proposed project would not result in an increase in storm water runoff as discussed previously for Hydrology and Water Quality, and would not require new storm water drainage facilities or expansion of existing facilities and there would be no impact.

**d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

*No Impact.* The proposed project would not require the use of water supplies from local water suppliers, expansion of existing entitlement, or new entitlements and there would be no impact.

**e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

*No Impact.* The proposed project would not require wastewater service and there would be no impact.

**f,g) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and comply with federal, state, and local statutes and regulations related to solid waste?**

*No Impact.* The proposed project would not result in materials, trash, or other solid waste that would need to be hauled offsite for disposal. Because there would be no generation of waste, there would be no impact.

## 6 MANDATORY FINDINGS OF SIGNIFICANCE

The lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur. Where prior to commencement of the environmental analysis a project proponent agrees to mitigation measures or project modifications that would avoid any significant effect on the environment or would mitigate the significant environmental effect, a lead agency need not prepare an EIR solely because without mitigation the environmental effects would have been significant (per Section 15065 of the State CEQA Guidelines):

ISSUES	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?**

*Less Than Significant With Mitigation Incorporated.* As discussed in the Environmental Checklist, the proposed project could have potential adverse effects on biological resources, cultural resources, air quality, noise, but those temporary and short-term impacts would be reduced to less than significant by incorporating mitigation.

**b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?**

*Less Than Significant With Mitigation Incorporated.* Cumulative projects identified that are ongoing at present or anticipated in the reasonably foreseeable future include operation and maintenance of other State and Federal flood structures in the watershed, and other projects in the region that require the hauling and storage of rock materials.

The proposed project would not cause long-term impacts on the resources in the Environmental Checklist sections. However, some of the resources have the potential to incur temporary, short-term impacts during the period of hauling. An initial assessment of potential cumulative impacts indicates that air quality, biological resources, cultural resources, and traffic and circulation impacts have the potential to contribute to significant cumulative impacts. However, implementation of mitigation measures presented in Environmental Checklist Sections 5.3 (Air Quality), 5.4 (Biological Resources), 5.5 (Cultural Resources), and 5.8 (Noise) would reduce the project’s contribution to environmental impacts to less than cumulatively considerable. Therefore, cumulative impacts would be less than significant.

**c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

*Less Than Significant With Mitigation Incorporated.* Mitigation measures have been provided to reduce the project’s potential effects on air quality, biological resources, cultural resources, and noise. These mitigation measures address the short-term and temporary impacts associated with the proposed project. The long-term benefits from the project include ensuring that rock is stored in a number of locations near flood structures to be readily available for use during emergency flood operations so that public safety concerns are met. All other impacts to resources identified in the Environmental Checklist are less than significant or no impact and there would be no adverse impacts, direct or indirect, on human beings.

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# **Appendix A.**

## **Air Quality Calculations**



## Assumptions

Parameter	Amount	Unit
Haul truck Capacity	11	CY per Load
Duration of hauling	132	Work Days

## Trips

Site	Volume (cy)	Daily Round Trips
Tisdale	80,000	110
City Freeport WTP Corp Yard	17,000	23
City North Corp Yard	17,000	23
RD 1000 Corp Yard	6,000	8
RD 1000 Howsley Storage	6,000	8

## Emission Factors

### On-Road Emission Factors

District	Emission Factors (grams per mile)								
	CO	NOx	SOx	TOG	ROG	CO2	CH4	PM10	PM2.5
SMAQMD	0.15	0.85	0.01	0.03	0.02	1,548.74	0.00	0.10	0.04
PCAPCD	0.15	0.91	0.01	0.03	0.03	1,563.49	0.00	0.10	0.04
YSAQMD	0.15	0.89	0.02	0.03	0.03	1,575.60	0.00	0.10	0.04
FRAPCD	0.16	0.99	0.01	0.03	0.03	1,507.65	0.00	0.10	0.04

Source: EMFAC2014

### Off-Road Emission Factors

Type	Equipment Emission Factors (g/bhp-hr)								
	CO	NOX	SO2	TOG	ROG	CO2	CH4	PM10	PM2.5
Rubber Tired Loaders	1.21	2.98	0.00	0.22	0.19	517.77	0.15	0.09	0.08
Tractors/Loaders/Backhoes	3.83	5.58	0.00	0.69	0.58	523.02	0.15	0.44	0.40

Source: Offroad2011

## Haul Truck VMT

Site	Volume (cy)	Total Round Trip	Air District	Trip length (miles)	Daily VMT
Tisdale	80,000	110	SMAQMD	26.9	2,964
			PCAPCD	18	1,983
			YSAQMD	19	2,094
			FRAPCD	17	1,873
City of Freeport WTP Corp Yard	17,000	23	SMAQMD	37.3	873
			PCAPCD	0	0
			YSAQMD	0	0
			FRAPCD	0	0
City North Corp Yard	17,000	23	SMAQMD	15.7	368
			PCAPCD	18	421
			YSAQMD	0	0
			FRAPCD	0	0
RD 1000 Corp Yard	6,000	8	SMAQMD	27.1	224
			PCAPCD	18	149
			YSAQMD	0	0
			FRAPCD	0	0
RD 1000 Howsley Storage	6,000	8	SMAQMD	24.7	204
			PCAPCD	18	149
			YSAQMD	0	0
			FRAPCD	6.3	52

### Haul Truck Emissions

Site	Air District	Emissions (ppd)								
		CO	NOx	SOx	TOG	ROG	CO2	CH4	PM10	PM2.5
Tisdale	SMAQMD	0.87	5.06	0.09	0.17	0.15	9181.54	0.01	0.60	0.23
	PCAPCD	0.61	3.60	0.06	0.12	0.10	6202.26	0.00	0.40	0.16
	YSAQMD	0.63	3.74	0.06	0.12	0.11	6597.56	0.01	0.43	0.17
	FRAPCD	0.61	3.72	0.05	0.12	0.10	5648.49	0.00	0.38	0.15
City of Freeport WTP Corp Yard	SMAQMD	0.25	1.49	0.03	0.05	0.04	2705.40	0.00	0.18	0.07
	PCAPCD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	YSAQMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRAPCD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City North Corp Yard	SMAQMD	0.11	0.63	0.01	0.02	0.02	1138.73	0.00	0.07	0.03
	PCAPCD	0.13	0.77	0.01	0.03	0.02	1317.98	0.00	0.09	0.03
	YSAQMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRAPCD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RD 1000 Corp Yard	SMAQMD	0.07	0.38	0.01	0.01	0.01	693.74	0.00	0.05	0.02
	PCAPCD	0.05	0.27	0.00	0.01	0.01	465.17	0.00	0.03	0.01
	YSAQMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRAPCD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RD 1000 Howsley Storage	SMAQMD	0.06	0.35	0.01	0.01	0.01	632.30	0.00	0.04	0.02
	PCAPCD	0.05	0.27	0.00	0.01	0.01	465.17	0.00	0.03	0.01
	YSAQMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRAPCD	0.02	0.10	0.00	0.00	0.00	156.99	0.00	0.01	0.00

Site	Air District	Emissions (tpy)								
		CO	NOx	SOx	TOG	ROG	CO2	CH4	PM10	PM2.5
Tisdale	SMAQMD	0.06	0.33	0.01	0.01	0.01	605.98	0.00	0.04	0.02
	PCAPCD	0.04	0.24	0.00	0.01	0.01	409.35	0.00	0.03	0.01
	YSAQMD	0.04	0.25	0.00	0.01	0.01	435.44	0.00	0.03	0.01
	FRAPCD	0.04	0.25	0.00	0.01	0.01	372.80	0.00	0.03	0.01
City of Freeport WTP Corp Yard	SMAQMD	0.02	0.10	0.00	0.00	0.00	178.56	0.00	0.01	0.00
	PCAPCD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	YSAQMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRAPCD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City North Corp Yard	SMAQMD	0.01	0.04	0.00	0.00	0.00	75.16	0.00	0.00	0.00
	PCAPCD	0.01	0.05	0.00	0.00	0.00	86.99	0.00	0.01	0.00
	YSAQMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRAPCD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RD 1000 Corp Yard	SMAQMD	0.00	0.03	0.00	0.00	0.00	45.79	0.00	0.00	0.00
	PCAPCD	0.00	0.02	0.00	0.00	0.00	30.70	0.00	0.00	0.00
	YSAQMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRAPCD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RD 1000 Howsley Storage	SMAQMD	0.00	0.02	0.00	0.00	0.00	41.73	0.00	0.00	0.00
	PCAPCD	0.00	0.02	0.00	0.00	0.00	30.70	0.00	0.00	0.00
	YSAQMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRAPCD	0.00	0.01	0.00	0.00	0.00	10.36	0.00	0.00	0.00

## Offroad Emissions

Sites	Equipment Type	Quantity	Model Year	Horsepower	Load Factor	Hours per Day
All other sites	Rubber Tired Loaders	1	2014	200	0.36	12
RFP	Tractors/Loaders/Backhoes	1	2014	98	0.37	12

Site	Air District	Emissions (ppd)								
		CO	NOx	SOx	TOG	ROG	CO2	CH4	PM10	PM2.5
Tisdale	FRAQMD	2.09	5.16	0.01	0.38	0.32	894.70	0.26	0.15	0.14
City of Freeport WTP Corp Yard	SMAQMD	2.09	5.16	0.01	0.38	0.32	894.70	0.26	0.15	0.14
City North Corp Yard	SMAQMD	2.09	5.16	0.01	0.38	0.32	894.70	0.26	0.15	0.14
RD 1000 Corp Yard	SMAQMD	2.09	5.16	0.01	0.38	0.32	894.70	0.26	0.15	0.14
RD 1000 Howsley Storage	FRQMD	2.09	5.16	0.01	0.38	0.32	894.70	0.26	0.15	0.14
RFP	SMAQMD	3.33	4.86	0.00	0.60	0.51	455.15	0.13	0.38	0.35

Site	Air District	Emissions (tpy)								
		CO	NOx	SOx	TOG	ROG	CO2	CH4	PM10	PM2.5
Tisdale	FRAQMD	0.14	0.34	0.00	0.03	0.02	59.05	0.02	0.01	0.01
City of Freeport WTP Corp Yard	SMAQMD	0.14	0.34	0.00	0.03	0.02	59.05	0.02	0.01	0.01
City North Corp Yard	SMAQMD	0.14	0.34	0.00	0.03	0.02	59.05	0.02	0.01	0.01
RD 1000 Corp Yard	SMAQMD	0.14	0.34	0.00	0.03	0.02	59.05	0.02	0.01	0.01
RD 1000 Howsley Storage	FRQMD	0.14	0.34	0.00	0.03	0.02	59.05	0.02	0.01	0.01
RFP	SMAQMD	0.22	0.32	0.00	0.04	0.03	30.04	0.01	0.03	0.02

## Impact Table for SMAQMD

Category	NOx Emissions (ppd)	PM10(pppd)	PM10 (tpy)	PM2.5 (ppd)	PM2.5 (tpy)
<b>On-Road Sources</b>					
RFP to Tisdale	5.06	0.60	0.04	0.23	0.02
RFP to City of Freeport WTP Corp Yard	1.49	0.18	0.01	0.07	0.00
RFP to City North Corp Yard	0.63	0.07	0.00	0.03	0.00
RFP to RD 1000 Corp Yard	0.38	0.05	0.00	0.02	0.00
RFP to RD 1000 Howsley Storage	0.35	0.04	0.00	0.02	0.00
<b>Off-Road Sources</b>					
Tisdale	NA	NA	NA	NA	NA
City of Freeport WTP Corp Yard	5.16	0.15	0.01	0.14	0.01
City North Corp Yard	5.16	0.15	0.01	0.14	0.01
RD 1000 Corp Yard	5.16	0.15	0.01	0.14	0.01
RD 1000 Howsley Storage	NA	NA	NA	NA	NA
RFP	4.86	0.38	0.03	0.35	0.02
Total	28.24	1.78	0.12	1.13	0.07
SMAQMD Significance Threshold	85	80	14.6	82	15
Significant (Yes or No)?	No	No	No	No	No

**Impact Table for PCAPCD**

Category	ROG Emissions (ppd)	NOx Emissions (ppd)	PM10(ppd)
<b>On-Road Sources</b>			
RFP to Tisdale	0.10	3.60	0.40
RFP to City of Freeport WTP Corp Yard	NA	NA	NA
RFP to City North Corp Yard	0.02	0.77	0.09
RFP to RD 1000 Corp Yard	0.01	0.27	0.03
RFP to RD 1000 Howsley Storage	0.01	0.27	0.03
<b>Off-Road Sources</b>			
Tisdale	NA	NA	NA
City of Freeport WTP Corp Yard	NA	NA	NA
City North Corp Yard	NA	NA	NA
RD 1000 Corp Yard	NA	NA	NA
RD 1000 Howsley Storage	NA	NA	NA
RFP	NA	NA	NA
Total	0.14	4.91	0.55
PCAPCD Significance Threshold	82	82	82
Significant (Yes or No)?	No	No	No

**Impact Table for YSAQMD**

Category	ROG Emissions (tpy)	NOx Emissions (tpy)	PM10(ppd)
<b>On-Road Sources</b>			
RFP to Tisdale	0.01	0.25	0.43
RFP to City of Freeport WTP Corp Yard	NA	NA	NA
RFP to City North Corp Yard	NA	NA	NA
RFP to RD 1000 Corp Yard	NA	NA	NA
RFP to RD 1000 Howsley Storage	NA	NA	NA
<b>Off-Road Sources</b>			
Tisdale	NA	NA	NA
City of Freeport WTP Corp Yard	NA	NA	NA
City North Corp Yard	NA	NA	NA
RD 1000 Corp Yard	NA	NA	NA
RD 1000 Howsley Storage	NA	NA	NA
RFP	NA	NA	NA
Total	0.01	0.25	0.43
PCAPCD Significance Threshold	10	10	80
Significant (Yes or No)?	No	No	No

**Impact Table for FRAQMD**

Category	ROG Emissions (tpy)	NOx Emissions (tpy)	PM10(ppd)
<b>On-Road Sources</b>			
RFP to Tisdale	0.01	0.25	0.03
RFP to City of Freeport WTP Corp Yard	NA	NA	NA
RFP to City North Corp Yard	NA	NA	NA
RFP to RD 1000 Corp Yard	NA	NA	NA
RFP to RD 1000 Howsley Storage	0.00	0.01	0.01
<b>Off-Road Sources</b>			
Tisdale	0.02	0.34	0.15
City of Freeport WTP Corp Yard	NA	NA	NA
City North Corp Yard	NA	NA	NA
RD 1000 Corp Yard	NA	NA	NA
RD 1000 Howsley Storage	0.02	0.34	0.15
RFP	NA	NA	NA
Total	0.05	0.93	0.34
PCAPCD Significance Threshold	2.25	2.25	80
Significant (Yes or No)?	No	No	No

## **Appendix B.**

### **Regional Special-Status Species**



Potential for occurrence categories are defined as such:

- **Unlikely:** The project site and/or immediate area do not support suitable habitat for a particular species. Project site is outside of the species known range.
- **Low Potential:** Project site and/or immediate area only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate project area.
- **Medium Potential:** The project site and/or immediate area provide suitable habitat for a particular species, and habitat for the species may be impacted.
- **High Potential:** The project site and/or immediate area provide ideal habitat conditions for a particular species and/or known populations occur in immediate area and within the potential area of impact.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<b>Amphibians</b>				
<i>Ambystoma californiense</i>	California tiger salamander	FT/ST	Found in annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Needs underground refuges and vernal pools or other seasonal water sources.	Unlikely. No suitable foraging or breeding habitat present within or adjacent to the project site.
<i>Spea hammondi</i>	Western spadefoot	--/SSC	Found seasonally in grasslands, prairies, chaparral, and woodlands, in and around wet sites. Breeds in shallow, temporary pools formed by winter rains. Takes refuge in burrows.	Unlikely. No suitable foraging or breeding habitat present within or adjacent to the project site.
<b>Birds</b>				
<i>Accipiter cooperi</i>	Cooper's hawk	--/WL	<b>Found in woodland, chiefly of open, interrupted or marginal type. Nests mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains. Also nests in live oaks.</b>	<b>Medium. Suitable nesting habitat occurs within or in close proximity to the project site.</b>
<i>Agelaius tricolor</i>	Tricolored blackbird	--/SSC	<b>Nests near freshwater, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, and tall herb; forages in grassland and cropland habitats.</b>	<b>Medium. Potentially suitable nesting habitat occurs adjacent to the Tisdale and RD 1000 Howsley Storage sites. Potentially suitable habitats not present at City Freeport WTP Corp Yard, City North Corp Yard, or RD 1000 Corp Yard sites.</b>

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<i>Ammodramus savannarum</i>	Grasshopper sparrow	--/SSC	Found in dense grasslands on rolling hills, lowland plains, in valleys & on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs & scattered shrubs. Species is loosely colonial when nesting.	Medium. Potentially suitable nesting habitat adjacent to the Tisdale, RD 1000 Corp Yard, and Howsley Storage sites. Potentially suitable habitats not present at the City Freeport WTP Corp Yard or City North Corp Yard sites.
<i>Aquila chrysaetos</i>	Golden eagle	--/FP	Found in rolling foothills, mountain areas, sage-juniper flats, & desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Unlikely. No suitable foraging or breeding habitat present within or adjacent to the project site.
<i>Ardea alba</i>	Great egret	--/SAL	Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	Medium. Suitable foraging habitat occurs adjacent to the Tisdale and RD 1000 Howsley Storage sites within adjacent ditches, waterways, riparian areas, and wetlands. Suitable habitat not present within or adjacent to the City Freeport WTP Corp Yard, City North, or RD 1000 Corp Yard sites.
<i>Ardea herodias</i>	Great blue heron	--/SAL	Colonial nester in tall trees, cliff sides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Medium. Suitable foraging habitat occurs adjacent to the Tisdale and RD 1000 Howsley Storage sites within adjacent ditches, waterways, riparian areas, and wetlands. Suitable habitat not present within or adjacent to the City Freeport WTP Corp Yard, City North, or RD 1000 Corp Yard sites.
<i>Branta hutchinseii leucopareia</i>	Cackling (=Aleutian Canada) goose	DL/--	Inhabits lacustrine, freshwater emergent wetlands, and moist grasslands, croplands, pastures, and meadows.	Low. No suitable habitat present within or adjacent to the project site.
<i>Athene cucularia</i>	Burrowing owl	--/SSC	Forages in open plains, grasslands, and prairies; typically nests in abandoned small mammal burrows.	Low. No suitable habitat present within or adjacent to the project site.
<i>Buteo regalis</i>	Ferruginous hawk	--/WL	Open grasslands, sagebrush flats, desert scrub, low foothills & fringes of pinyon-juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles. Species is not known to breed in California.	Low. Suitable foraging habitat is present within and adjacent to the Tisdale site. Foraging habitat is located adjacent to the RD 1000 Howsley Storage and RD 1000 Corp Yard sites. No suitable foraging habitat present within or adjacent to the City Freeport WTP Corp Yard or City North Corp Yard sites.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<i>Buteo swainsoni</i>	Swainson's hawk	--/ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	High. Suitable foraging is located within the Tisdale site, and suitable nesting habitat is located adjacent to the Tisdale, RD 1000 Howsley Storage, and RD 1000 Corps Yard sites. Multiple Swainson's hawk occurrences are recorded within 0.5-mile of the Tisdale, RD 1000 Howsley Storage, RD 1000 Corps Yard, and City Freeport WTP Corp Yard sites (CNDDDB, 2016). No suitable nesting or foraging habitat present within or adjacent to the City North Corp Yard site.
<i>Charadrius alexandrinus nivosus</i>	Western snowy plover	FT/SSC	Found on sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.	Unlikely. Suitable habitat nesting or foraging habitat not present within or adjacent to the project site.
<i>Charadrius montanus</i>	Mountain plover	--/SSC	Short grasslands, plowed fields, and sagebrush areas, avoids high and dense cover. Forages on the ground. Feeds on large insects, especially grasshoppers. Does not nest in California.	Unlikely. Suitable habitat nesting or foraging habitat not present within or adjacent to the project site. Tisdale site outside of known range of this species.
<i>Coccyzus americanus occidentalis</i>	Western yellow-billed cuckoo	FT/SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, w/ lower story of blackberry, nettles, or wild grape.	Medium. Suitable nesting habitat occurs in riparian habitat along the Tisdale Bypass, south of the Tisdale site location. Proposed Critical Habitat for this species is located approximately two miles east of the Tisdale site within the Sutter Bypass (79 FR 48548, August 15, 2014). No suitable habitat present within or adjacent to the City Freeport WTP Corp Yard, City North Corp Yard, RD 1000 Corp Yard, or RD 1000 Howsley Storage sites.
<i>Egretta thula</i>	Snowy egret	--/SAL	Colonial nester, with nest sites situated in protected beds of dense tule. Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.	Medium. Suitable foraging habitat occurs adjacent to the Tisdale and RD 1000 Howsley Storage sites within adjacent ditches, waterways, riparian areas, and wetlands. Suitable habitat not present within or adjacent to the City Freeport WTP Corp Yard, City North, or RD 1000 Corp Yard sites.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<i>Elanus leucurus</i>	White-tailed kite	--/FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Medium. Suitable foraging habitat present within and adjacent to the Tisdale site. Suitable nesting habitat adjacent to the Tisdale, RD 1000 Howsley Storage, and RD 1000 Corp Yard sites. Suitable nesting or foraging habitat not present within or adjacent to the City Freeport WTP Corp Yard, or City North Corp Yard sites.
<i>Falco columbarius</i>	Merlin	--/WL	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches. Clumps of trees or windbreaks are required for roosting in open country.	Medium. Suitable foraging habitat present within the Tisdale site. Suitable foraging habitat located adjacent to the Tisdale, RD 1000 Corp Yard, and RD 1000 Howsley Storage sites. No foraging or nesting habitat present within or adjacent to the City Freeport WTP Corp Yard or City North Corp Yard sites.
<i>Grus canadensis tabida</i>	Greater sandhill crane	--/ST; FP	Winter resident and migrant in Central Valley from mid-September to early April. Frequents annual and perennial grassland habitats, moist croplands with rice or corn stubble, and open, emergent wetlands.	Low. No suitable foraging habitat present within project site. Suitable foraging habitat is located adjacent to the Tisdale site.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	--/ST	Brackish, and freshwater emergent wetlands in San Francisco Bay area, Sacramento-San Joaquin Delta, and coastal southern California areas.	Unlikely. Project site is outside the range of this species.
<i>Melospiza melodia</i>	Song sparrow ("Modesto" population)	--/SSC	Emergent freshwater marshes dominated by tule ( <i>Scirpus</i> spp., <i>Schoenoplectus</i> spp.) and cattail ( <i>Typha</i> spp.) as well as riparian willow ( <i>Salix</i> spp.) thickets. Also nest in riparian forests of valley oak ( <i>Quercus lobata</i> ) with a sufficient understory of blackberry ( <i>Rubus</i> spp.), along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites.	Medium. Suitable nesting and foraging habitat present adjacent to the Tisdale site. There are two historical occurrences of this species within five miles of the Freeport WTP Corp Yard site from 1900 and 1927, and five current recorded occurrences from 2009; however, no suitable habitat is present within or adjacent to the site. No suitable habitat present within, or adjacent to, the RD 1000 Corps Yard, RD 1000 Howsley Storage, or the City North Corp Yard sites.
<i>Nycticorax nycticorax</i>	Black-crowned night heron	--/SAL	Forages in marshes swamps and wooded streams; nests in thickets or reedbeds.	Medium. Suitable foraging habitat is present adjacent to the Tisdale and RD 1000 Howsley Storage Yard sites; however, no occurrences of this species have documented in the within five miles of the aforementioned sites. No suitable foraging or nesting habitat present within or adjacent to the RD 1000 Corp Yard, City North Corp Yard, or City Freeport WTP Corp Yard sites.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

<b>Sensitive Species/Habitat</b>	<b>Common Name</b>	<b>Status Federal/ State</b>	<b>Habitat</b>	<b>Potential for Occurrence</b>
<i>Phalacrocorax auritus</i>	Double-crested cormorant	--/WL	Colonial nester on coastal cliffs, offshore islands, & along lake margins in the interior of the state.	Low. No suitable foraging habitat or nesting habitat present within or adjacent to the project site.
<i>Plegadis chihi</i>	White-faced ibis	--/WL	Forages in fresh emergent wetland, shallow lacustrine waters, wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland. Does not breed regularly in California.	Low. Suitable foraging habitat is not present within or adjacent to the project site.
<i>Progne subis</i>	Purple martin	--/SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir ( <i>Pseudotsuga menziesii</i> ), ponderosa pine ( <i>Pinus ponderosa</i> ), and Monterey pine ( <i>Pinus radiata</i> ). Nests primarily in old woodpecker cavities, also in human-made structures. Nest often located in tall, isolated tree/snag.	Unlikely. Project site is not located near known breeding colonies in the Central Valley (Shuford et al., 2008).
<i>Riparia riparia</i>	Bank swallow	--/ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Unlikely. No suitable habitat present within or adjacent to the project site.
<i>Spinus lawrencei</i>	Lawrence's goldfinch	--/SAL	Breeds in open oak or other arid woodland and chaparral, near water.	Unlikely. Project site is outside the known range of this species.
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE/SE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, <i>Baccharis</i> sp., and mesquite.	Unlikely. No suitable habitat present within or adjacent to the project site.
<i>Xanthocephalus xanthocephalus</i>	Yellow-headed blackbird	--/SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	Unlikely. No suitable habitat present within or adjacent to the project site.
<b>Insects</b>				
<i>Andrena subapasta</i>	An andrenid bee	--/SAL	Collects pollen primarily from <i>arenaria californica</i> but also <i>orthocarpus erianthus</i> & <i>lasthenia</i> sp. Nests in uplands near vernal pools.	Unlikely. No suitable habitat present within or adjacent to the project site.
<i>Anthicus antiochensis</i>	Antioch Dunes anthicid beetle	--/SSC	Interior sand dunes and sand bars.	Unlikely. No suitable habitat present within or adjacent to the project site.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<i>Anthicus sacramento</i>	Sacramento anthicid beetle	--/SAL	Interior sand dunes and sand bars.	Unlikely. No suitable habitat present within or adjacent to the project site.
<i>Bombus crotchii</i>	Crotch bumble bee	--/SAL	Inhabits open grassland and scrub habitats. Nesting occurs underground. Food plants include <i>Asclepias</i> , <i>Chaenactis</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Phacelia</i> , and <i>Salvia</i> .	Unlikely. No suitable habitat present within or adjacent to the project site.
<i>Bombus occidentalis</i>	Western bumble bee	--/SAL	Inhabits open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows. In California, species is primarily associated with plants in the Leguminosae (=Fabaceae), Compositae (=Asteraceae), Rhamnaceae, and Rosaceae families.	Unlikely. No suitable habitat present within or adjacent to the project site.
<i>Cicindela hirticollis abrupta</i>	Sacramento Valley tiger beetle	--/SAL	Sandy floodplain habitat in the Sacramento valley. No beetles located during intensive 2001- 2004 surveys. Requires fine to medium sand, terraced floodplains or low sandy water edge flats.	Unlikely. No suitable habitat present within or adjacent to the project site.
<i>Desmocerus californicus dimorphus</i>	Valley elderberry longhorn beetle	FT/--	Occurs only in the Central Valley of California, in association with blue elderberry ( <i>Sambucus nigra</i> ssp. <i>caerulea</i> ). Prefers to lay eggs in elderberry shrub stems ranging from 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Unlikely. No suitable habitat (i.e., elderberry shrubs) is located within or adjacent to the storage sites.
<i>Dumontia oregonensis</i>	Hairy water flea	--/SAL	Vernal pools. In California, known only from Mather Field.	Unlikely. No suitable habitat present within or adjacent to the project site.
<i>Hydrochara rickseckeri</i>	Ricksecker's water scavenger beetle	--/SAL	Aquatic species. Only known from pond habitats scattered around the San Francisco Bay area, including Contra Costa county.	Unlikely. No suitable habitat present within or adjacent to the project site.
<i>Myrmosula pacifica</i>	Antioch multilid wasp	--/SAL	Little is known about this species.	Unlikely.
<b>Crustaceans</b>				
<i>Branchinecta conservatio</i>	Conservancy fairy shrimp	FE/--	Inhabits large, cool-water vernal pools with moderately turbid water.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Branchinecta lynchi</i>	Vernal pool fairy shrimp	FT/--	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Branchinecta mesovallensis</i>	Midvalley fairy shrimp	--/S2	Inhabits small short-lived vernal pools and grass-bottomed swales.	Unlikely. No suitable habitat occurs within or adjacent to the project site.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<i>Lepidurus packardii</i>	Vernal pool tadpole shrimp	FE/--	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Linderiella occidentalis</i>	California linderiella	--/S2S3	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and TDS.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<b>Plants</b>				
<i>Astragalus pauperculus</i>	Depauperata milk-vetch	--/4.3	Vernally mesic areas and volcanic soils in chaparral, woodland, and valley and foothill grassland. 196-3,986 feet elevation. Blooms March through June.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Astragalus tener</i> var. <i>ferrisiae</i>	Ferris' milk-vetch	--/ 1B.1	Meadows, valley and foothill grassland. Subalkaline flats on overflow land in the central valley; usually seen in dry, adobe soil. 15-245 feet elevation. Blooms April through May.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Astragalus tener</i> var. <i>tener</i>	Alkali milk-vetch	--/1B.2	Alkaline playas, valley and foothill grassland (adobe clay), vernal pools. 0-18 feet elevation. Blooms March-June.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Atriplex cordulata</i> var. <i>cordulata</i>	Heartscale	--/1B.2	Chenopod scrub, valley and foothill grassland, meadows. Alkaline flats and scalds in the central valley, sandy soils. 0-1,968 feet elevation. Blooms April through October.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Atriplex depressa</i>	Brittlescale	--/1B.2	Alkaline, clay cheopod scrub, meadows and seeps, playas, valley foothill grassland, and vernal pools. 0-1,049 feet elevation. Blooms April through October.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Balsamorhiza macrolepis</i>	Big-scale balsamroot	--/1B.2	Perennial herb occurring in chaparral, cismontane woodland, and in valley and foothill grassland, sometimes on serpentinite substrate. 295-4,593 feet elevation. Blooms March through June.	Unlikely. Project site is outside the elevation range of this species.
<i>Brasenia schreberi</i>	Watershield	--/2B.3	Freshwater marshes and swamps. 98-7217 feet elevation. Blooms June through September.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>California macrophylla</i>	Round-leaved filaree	--/1B.2	Open sites, grassland and scrub habitats in clay soils. 0-3,937 feet elevation. Blooms March through May.	Unlikely. No suitable habitat occurs within or adjacent to the project site.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<i>Carex comosa</i>	Bristly sedge	--/2B.1	Coastal prairie, marshes and swamps (lake margins), and valley and foothill grassland. 0-2,050 feet elevation. Blooms May through September.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Centromadia parryi</i> ssp. <i>rudis</i>	Parry's rough tarplant	--/4.2	Alkaline, vernal mesic, seeps sometimes roadsides in valley and foothill grasslands and vernal pools. 0-328 feet elevation. Blooms May through October.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	Hispid salty bird's-beak	1B.1	Saline marshes and flats. 0-426 feet elevation. Blooms June through July.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Chloropyron palmatum</i>	Palmate-bracted salty bird's beak	FE/SE; 1B.1	Chenopod scrub, valley and foothill grassland. Usually on pescadero silty clay which is alkaline, with <i>Distichlis</i> sp., <i>Frankenia</i> sp., etc. 15-508 feet elevation. Blooms May through October.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Cicuta maculata</i> var. <i>bolanderi</i>	Bolander's water-hemlock	--/2B.1	Marshes and swamps, coastal, fresh or brackish water. 0-656 feet elevation. Blooms July through September.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	--/2B.2	Marshes and swamps (freshwater). Freshwater marsh. 50-918 feet elevation. Blooms July through October.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Dowlingia pusilla</i>	Dwarf downingia	--/2B.2	Vernal pools in foothill woodland and valley grassland. 0-997 feet elevation. Blooms March through May.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Extriplex joaquinana</i>	San Joaquin spearscale	--/1B.2	Chenopod scrub, alkali meadow, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with <i>distichlis spicata</i> , <i>frankenia</i> , etc. 3- 820 feet elevation. Blooms April through October	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Delphinium recurvatum</i>	Recurved larkspur	--/1B.2	Chenopod scrub, cismontane woodland, valley and foothill grassland in alkaline soils. Blooms March through June. 9-2,591 feet elevation.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Fritillaria agrestis</i>	Stinkbells	4.2	Cismontane woodland, chaparral, valley and foothill grassland. Sometimes on serpentine; mostly found in nonnative grassland or in grassy openings in clay soil. 30-5,100 feet elevation. Blooms March through June.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	--/SE; 1B.2	Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 32-7,791 feet elevation. Blooms April through August.	Unlikely. No suitable habitat occurs within or adjacent to the project sites.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

<b>Sensitive Species/Habitat</b>	<b>Common Name</b>	<b>Status Federal/ State</b>	<b>Habitat</b>	<b>Potential for Occurrence</b>
<i>Hesperexax caulescens</i>	Hogwallow starfish	--/4.2	Valley and foothill grassland (mesic and clay soils), vernal pools. 0-1,656 feet elevation. Blooms March through June.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	Woolly rose-mallow	--/1B.2	Marshes and swamps (freshwater). Moist, freshwater-soaked river banks & low peat islands in sloughs; can also occur on riprap and levees. In California, known from the delta watershed. 0-393 feet elevation. Blooms June through September.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	--/1B.2	Vernal pools, valley and foothill grassland. Restricted to the edges of vernal pools. 98-751 feet elevation. Blooms March through May.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	--/1B.1	Occurs in vernal mesic areas, including chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools. 114-4,101 feet elevation. Blooms March through June.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Lasthenia ferrisiae</i>	Ferris' goldfields	--/4.2	Vernal pools. 65-2,296 feet elevation. Blooms February through May.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Lasthenia glabrata</i> spp. <i>coulteri</i>	Coulter's goldfields	--/1B.1	Marshes and swamps (coastal salt), playas, vernal pools. 0-4,002 feet elevation. Blooms February through June.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Delta tule pea	--/1B.2	Coastal, estuarine marshes. 0-98 feet elevation. Blooms April through August.	Unlikely. No suitable habitat occurs within or adjacent to the project site.
<i>Layia septentrionalis</i>	Colusa layia	--/1B.2	Found in sandy serpentinite soils, in chaparral, cismontane woodland, and valley and foothill grasslands. 328-3,592 feet elevation. Blooms April through May.	Unlikely. No suitable habitat occurs within or adjacent to the project area.
<i>Legenere limosa</i>	Legenere	--/1B.1	Vernal pools. Many historical occurrences are extirpated. In beds of vernal pools. 3-2,887 feet. Blooms April through June.	Unlikely. No suitable habitat occurs within or adjacent to the project area.
<i>Lepidium latipes</i> var. <i>heckardii</i>	Heckard's pepper-grass	--/1B.2	Valley and foothill grassland. Grassland, and sometimes vernal pool edges. Alkaline soils. 6-656 feet elevation. Blooms March through May.	Unlikely. No suitable habitat occurs within, or adjacent to the project area.
<i>Lilaeopsis masonii</i>	Mason's Lilaeopsis	FE/--	Intertidal marshes, streambanks. 0-118 feet elevation. Blooms June through August.	Unlikely. No suitable habitat occurs within, or adjacent to the project area.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<i>Limosella australis</i>	Delta mudwort	--/2B.1	Muddy or sandy intertidal flats, brackish water. 0-98 feet elevation. Blooms April.	Unlikely. No suitable habitat occurs within, or adjacent to the project area.
<i>Monardella venosa</i>	Veiny Monardella	--/1B.1	Found in heavy clay soils in cismontane woodland and valley and foothill grassland. 196-1,345 feet elevation. Blooms May through July.	Unlikely. No suitable habitat occurs within, or adjacent to the project area.
<i>Myosurus minimus</i> ssp. <i>apus</i>	Little mousetail	--/3.1	Wet valley and foothill grassland, vernal pools. 65-2,099 feet elevation. Blooms March through June.	Unlikely. No suitable habitat occurs within, or adjacent to the project area.
<i>Navarretia leucocephala</i> spp. <i>bakeri</i>	Baker's navarretia	--/1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. Vernal pools and swales; adobe or alkaline soils. 16-3,116 feet. Blooms April through July.	Unlikely. No suitable habitat occurs within, or adjacent to the project area.
<i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>	Adobe navarretia	--/4.2	Clay, sometimes serpentinite soils. Vernal mesic valley and foothill grassland, vernal pools. 328-3,280 feet elevation. Blooms April through June.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Neostapfia colusana</i>	Colusa grass	FT/SE, 1B.1	Vernal pools. 0-410 feet elevation. Blooms May through August.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Orcuttia viscida</i>	Sacramento Orcutt grass	FE/SE; 1B.1	Vernal pools. Often in gravelly pools. 35-1760 m. Blooms May through September (October).	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Plagiobothrys hystriculus</i>	Bearded popcornflower	--/1B.1	Wet grassland, vernal pool margins. 0-164 feet elevation. Blooms March through May.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Pseudobahia bahiifolia</i>	Hartweg's golden sunburst	FE/SE	Cismontane woodland, valley and foothill grassland in clay, often acidic soils. 49-492 feet elevation. Blooms march through April.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Puccinellia simplex</i>	California alkali grass	--/1B.2	Saline flats, mineral springs. 0-2,952 feet elevation. Blooms March through May.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	--/1B.2	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0-2,000 feet. Blooms May through October.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Scutellaria galericulata</i>	Marsh skullcap	--/2B.2	Wet sites, meadows, streambanks, and conifer forest. 3280-6889 feet elevation. Blooms June through September.	Unlikely. Project site is outside the elevation range of this species.
<i>Scutellaria lateriflora</i>	Side-flowering skullcap	--/2B.2	Marshes, wet meadows. 0-1,640 feet elevation. Blooms May through July.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

<b>Sensitive Species/Habitat</b>	<b>Common Name</b>	<b>Status Federal/ State</b>	<b>Habitat</b>	<b>Potential for Occurrence</b>
<i>Symphotrichum lentum</i>	Suisun Marsh aster	--/1B.2	Marshes and swamps (brackish and freshwater). Most often seen along sloughs with Phragmites sp., Scirpus sp., blackberry, Typha sp., etc. 0-10 feet. Blooms May through November.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i>	Wright's Trichocoronis	--/2B.1	Meadows, seeps, swamps, riparian forest, and vernal pools in alkaline soils. 16-1,427 feet elevation. Blooms May through September.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Trifolium hydrophilum</i>	Saline clover	--/1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 0-984 feet. Blooms April through June.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Tuctoria mucronata</i>	Crampton's Tuctoria or Solano Grass	FE/SE, 1B.1	Vernal pools and mesic grassland. 0-32 feet elevation. Blooms April through August.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<b>Reptiles</b>				
<i>Emys marmorata</i>	Western Pond Turtle	--/SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 1,640 feet from water for egg-laying.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Thamnophis gigas</i>	Giant garter snake	FT/ST	<b>Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. This is the most aquatic of the garter snakes in California.</b>	<b>Medium. Suitable habitat occurs adjacent to the Tisdale and RD1000 Howsley Storage sites. No suitable habitat present within or adjacent to the City Freeport WTP Corp Yard, City North Corp Yard, or RD 1000 Corps Yard sites.</b>
<b>Fish</b>				
<i>Archoplites interruptus</i>	Sacramento perch	--/SSC	Historically found in the sloughs, slow-moving rivers, and lakes of the central valley. Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of Physio-chemical water conditions.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Hypomesus transpacificus</i>	Delta smelt	FT/SE	Found in upper San Francisco Estuary, principally the Delta and Suisun Bay. Occur primarily below Isleton on the Sacramento River.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Oncorhynchus mykiss irideus</i>	California Central Valley Steelhead Distinct Population Segment	FT/--	Requires cold, freshwater streams with suitable gravel for spawning; rears seasonally inundated floodplains, rivers, tributaries, and Delta.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<i>Oncorhynchus tshawytscha</i>	Chinook salmon – Central Valley spring-run Evolutionary Significant Unit	FT/ST	Requires cold, freshwater streams with suitable gravel for spawning; rears seasonally inundated floodplains, rivers, tributaries, and Delta.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Oncorhynchus tshawytscha</i>	Chinook salmon – Central Valley winter-run Evolutionary Significant Unit	FE/SE	Requires cold, freshwater streams with suitable gravel for spawning; rears seasonally inundated floodplains, rivers, tributaries, and Delta.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Pogonichthys macrolepidotus</i>	Sacramento splittail	--/SSC	Spawning and juvenile rearing from winter to early summer in shallow weedy areas inundated during seasonal flooding in the lower reaches and flood bypasses of the Sacramento River including the Yolo Bypass.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Spirinchus thaleichthys</i>	Longfin smelt	FC/ST	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 parts per thousand, but can be found in completely freshwater to almost pure seawater.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Thaleichthys pacificus</i>	Eulachon	FT/--	Anadromous. Found in nearshore ocean waters and to 1,000 feet in depth. Spawning occurs in lower reaches of larger snowmelt-fed rivers over sand or coarse gravel substrates.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<b>Mammals</b>				
<i>Antrozous pallidus</i>	Pallid bat	--/S3	Cavity-roosting species found in Deserts, grasslands, shrublands, woodlands & forests. Prefers open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Dipodomys californicys eximius</i>	Marysville California kangaroo rat	--/SSC	Found in the vicinity of the Marysville Buttes in Sutter County.	Unlikely. Project site is outside the range of this species.
<i>Lasiurus blossevillii</i>	Western red bat	--/SSC	<b>Roosts primarily in trees, 0-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.</b>	<b>Medium. Suitable roosting habitat present in mature trees adjacent to the Tisdale site. No suitable roosting habitat present within or adjacent to the City Freeport WTP Corp Yard, City North Corp Yard, RD 1000 Corp Yard, or RD 1000 Howsley Storage sites.</b>

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
<i>Lasiurus cinereus</i>	Hoary bat	--/SAL	Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water in diet.	Medium. Suitable roosting habitat present in mature trees adjacent to the Tisdale site. No suitable roosting habitat present within or adjacent to the City Freeport WTP Corp Yard, City North Corp Yard, RD 1000 Corp Yard, or RD 1000 Howsley Storage sites.
<i>Lasionycteris noctivageans</i>	Silver-haired bat	--/SAL	Primarily a coastal & montane forest dweller feeding over streams, ponds & open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes & rarely under rocks. Needs drinking water.	Medium. Suitable roosting habitat present in mature trees adjacent to the Tisdale site. No suitable roosting habitat present within or adjacent to the City Freeport WTP Corp Yard, City North Corp Yard, RD 1000 Corp Yard, or RD 1000 Howsley Storage sites.
<i>Myotis yumanensis</i>	Yuma myotis	--/SAL	Cavity-roosting species, specifically in buildings, mines, caves, or crevices such as abandoned swallow nests, and under bridges. Open forests and woodlands are optimal habitat.	Unlikely. No suitable habitat occurs within, or adjacent to the project site.
<i>Perognathus inornatus</i>	San Joaquin Pocket Mouse	--/SAL	Requires areas with friable soils in grasslands and Blue Oak savannas, from near sea level to 1,500 feet in elevation. Most common on the eastern side of the San Joaquin Valley and known present in the Sacramento Valley, though occurrence is not well documented.	Unlikely. Storage sites are outside the range of this species.
<i>Taxidea taxus</i>	American badger	--/SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils & open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Medium. Suitable habitat present adjacent to the Tisdale site. Suitable habitat is not present within or adjacent to the City Freeport WTP Corp Yard, City North Corp Yard, RD 1000 Corp Yard, or RD 1000 Howsley Storage sites.
<b>Natural Communities</b>				
Coastal and Valley Freshwater Marsh				Unlikely. Habitat is not present within or directly adjacent to the project site.
Great Valley Mixed Riparian Forest				Unlikely. Habitat is not present within or directly adjacent to the project site.
Northern Hardpan Vernal Pool				Unlikely. Habitat is not present within or directly adjacent to the project site.
Alkali Meadow				Unlikely. Habitat is not present within or directly adjacent to the project site.

**TABLE B-1.  
REGIONAL SPECIAL-STATUS SPECIES AND THEIR POTENTIAL FOR OCCURRENCE AT THE PROJECT SITE**

Sensitive Species/Habitat	Common Name	Status Federal/ State	Habitat	Potential for Occurrence
Alkali Seep				Unlikely. Habitat is not present within or directly adjacent to the project site.
Elderberry Savanna				Unlikely. Habitat is not present within or directly adjacent to the project site.
Northern Volcanic Mud Flow Vernal Pool				Unlikely. Habitat is not present within or directly adjacent to the project site.
Great Valley Valley Oak Riparian Forest				Unlikely. Habitat is not present within or directly adjacent to the project site.
Great Valley Cottonwood Riparian Forest				Unlikely. Habitat is not present within or directly adjacent to the project site.
Great Valley Mixed Riparian Forest				Unlikely. Habitat is not present within or directly adjacent to the project site.
Northern California Black Walnut				Unlikely. Habitat is not present within or directly adjacent to the project site.
Northern Claypan Vernal Pool				Unlikely. Habitat is not present within or directly adjacent to the project site.
Valley Oak Woodland				Unlikely. Habitat is not present within or directly adjacent to the project site.

Key:  
 (FE) Federally Listed Endangered – USFWS  
 (FP) State Fully Protected – CDFW  
 (FT) Federally Listed Threatened – USFWS  
 (SAL) Special Animals List – CDFW  
 (SE) State Listed Endangered – CDFW  
 (ST) State Listed Threatened – CDFW  
 (SSC) Species of Special Concern – CDFW  
 (CNPS) California Native Plant Society  
 (X) Critical Habitat  
 (NL) Not Listed  
 (WL) Watch List – CDFW  
 (DL) Delisted – USFWS

Source: CNDDDB, 2016; CNPS, 2016; USFWS, 2016

# **Appendix C.**

## DWR GHG Emissions Reduction Plan Consistency Determination Form



# DWR GHG Emissions Reduction Plan Consistency Determination Form For Projects Using Contractors or Other Outside Labor

Print Form



California Department of Water Resources  
1416 9th Street  
Sacramento, CA 95814  
[dwrcimatechange.water.ca.gov](http://dwrcimatechange.water.ca.gov)  
[www.water.ca.gov/climatechange](http://www.water.ca.gov/climatechange)

This form is to be used by DWR project managers to document a DWR CEQA project's consistency with the DWR Greenhouse Gas Emissions Reduction Plan. This form is to be used only when DWR is the Lead Agency and when contractors or outside labor and equipment are use to implement the project.

Additional Guidance on filling out this form can be found at:  
[dwrcimatecange.water.ca.gov/guidance\\_resources.cfm](http://dwrcimatecange.water.ca.gov/guidance_resources.cfm)

The DWR Greenhouse Gas Emissions Reduction Plan can be accessed at:  
<http://www.water.ca.gov/climatechange/CAP.cfm>

<b>Project Name:</b>	Rock Reuse Project
<b>Environmental Document type:</b>	Initial Study/Mitigation Declaration
<b>Manager's Name:</b>	Kristin Ford
<b>Manager's email:</b>	kford@water.ca.gov
<b>Division:</b>	Division of Flood Management
<b>Office, Branch, or Field Division</b>	Flood Maintenance Office

**Short Project Description:** The proposed project includes the transportation of rock from the Folsom Dam Modification Project (the Folsom Joint Federal Project or Folsom JFP) construction site in Sacramento County to the DWR Tisdale and Reclamation District (RD) 1000 Howsley Road storage sites in Sutter County, and three rock storage sites in Sacramento County used by the City of Sacramento and Sacramento Area Flood Control Agency.

**Project GHG Emissions Summary**

Total Construction Emissions  mtCO<sub>2</sub>e

Maximum Annual Construction Emissions  mtCO<sub>2</sub>e

All other emissions from the project not accounted for above will occur as ongoing operational, maintenance, or business activity emissions and therefore have already been accounted for and analyzed in the GGERP.

**Extraordinary Construction Project Determination**  
Do total project construction emissions exceed 25,000 mtCO<sub>2</sub>e for the entire construction phase or exceed 12,500 mtCO<sub>2</sub>e in any single year of construction.

Yes - Addition analysis is required, consult with C4

No - Additional analysis not required

## Project GHG Reduction Plan Checklist

All Project Level GHG Emissions Reduction Measures have been incorporated into the design or implementation plan for the project. ([Project Level GHG Emissions Reduction Measures](#))

Or

All feasible Project Level GHG Emissions Reduction Measures have been incorporated into the design or implementation plan for the project and Measures not incorporated have been listed and determined not to apply to the proposed project (include as an attachment)

Project does not conflict with any of the Specific Action GHG Emissions Reduction Measures ([Specific Action GHG Emissions Reduction Measures](#))

Would implementation of the project result in additional energy demands on the SWP system of 15 GWh/yr or greater?

Yes  No

If you answered Yes, attach a Renewable Power Procurement Plan update approval letter from the DWR SWP Power and Risk Office.

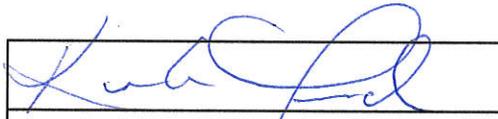
Is there substantial evidence that the effects of the proposed project may be cumulatively considerable notwithstanding the proposed project's compliance with the requirements of the DWR GHG Reduction Plan?

Yes  No

If you answered Yes, the project is not eligible for streamlined analysis of GHG emissions using the DWR GHG Emissions Reduction Plan. (See CEQA Guidelines, section 15183.5, subdivision (b)(2).)

Based on the information provided above and information provided in associated environmental documentation completed pursuant to the above referenced project, the DWR CEQA Climate Change Committee has determined that the proposed project is consistent with the DWR Greenhouse Gas Reduction Plan and the greenhouse gases emitted by the project are covered by the plan's analysis.

Project Manager  
Signature:



Date: 7.6.16

C4 Approval  
Signature:



Date: 7-6-16

Attachments:

- GHG Emissions Inventory
- List and Explanation of excluded Project Level GHG Emissions Reduction Measures
- Plan to update Renewable Energy Procurement Plan from DWR SWP Power and Risk Office