PUBLIC HEARING

SUBJECT: DRAINAGE BASIN 18 – GENERAL PLAN AMENDMENT AND ZONE CHANGE

SOURCE: COMMUNITY DEVELOPMENT DEPARTMENT – PLANNING DIVISION;
PUBLIC WORKS DEPARTMENT- ENGINEERING DIVISION

COMMENT: The City of Porterville intends to construct and operate a master planned storm drain basin south of W. North Grand Avenue and west of State Route 65, in the City of Porterville, on the western half of APN 243-210-065. Approximately 1,230 linear feet of pipeline will be installed to connect the basin to the City’s existing system, with approximately 200 feet of that pipeline being bore-and-jacked under State Route 65. The proposed project would serve to implement the City’s approved Storm Water Master Plan and capture increased amounts of storm water to recharge the underlying groundwater basin in wet years.

The proposed Project is located on a 4.6± acre portion of a 9.5± acre parcel (APN 243-210-065), in northern Porterville. The Project site is approximately 750 feet south of W. North Grand Avenue and immediately west of State Route 65, as represented in the Vicinity Map – Attachment 1.

The site is currently designated as Retail Centers in the Porterville General Plan, and is zoned CR- Retail Centers. To maintain consistency between land use and the designations, a General Plan Amendment and Zone Change will be processed to modify the area of the basin to Public/Institutional on the General Plan diagram and to zone the site as PS- Public Semi-Public.

Development of the site into a storm water recharge basin includes the following components:

- A 4.6± acre storm basin that will be excavated to 15 feet deep
- Approximately 25,000 cubic yards of soil will be trucked out of the basin, and additional soil will be excavated as needed for City projects or sold to contractors for projects in the area of Porterville
- Approximately 1,245 feet of six (6) foot high block wall will be installed along the northern, western and southern perimeters of the storm basin
- Approximately 615 feet of six (6) foot high chain link fence will be installed along the eastern perimeter of the storm basin
- Approximately 760 feet of 36 inch diameter pipe will connect the storm basin with the existing storm pipe on W. North Grand Avenue
- Approximately 470 feet of 30 inch diameter pipe will connect the existing pipe on W. North Grand Avenue west of State Route 65 with the existing pipe east of State Route 65 by bore-and-jacking 200± feet of pipeline under State Route 65

DD $ Appropriated/Funded MDC CM

Item No. 17
• A 15-foot wide gravel road will extend north from the storm basin to connect to W. North Grand Avenue
• A parcel map is not required per Section 66428 of the Subdivision Map Act

Construction is anticipated to take between three and four months, and the work is anticipated to be budgeted in the 2015/2016 Fiscal Year.

ENVIRONMENTAL REVIEW:

Staff has completed the preparation of an Initial Study for the project and has made a preliminary determination that a Mitigated Negative Declaration is required. As a result of the environmental evaluation for the project, five mitigation measures were identified relating to Biological and Cultural Resources. The mitigation measures include pre-construction surveys for Swainson’s hawks if the construction period extends into the breeding season, and require that during any ground disturbing activities that may result from the project, attention be given to cultural or paleontological remains that may be unearthed, and that work stop within that area to allow an archaeologist to evaluate said items. Implementing these standard protocols would reduce the potential environmental impacts to less than significant. The mitigation measures have been incorporated into a Mitigation Monitoring Program that will be implemented as a part of the project. The mitigation measures will reduce all potential environmental impacts to a less than significant level.

Adoption of the draft resolution approving the Mitigated Negative Declaration is a necessary step before the project can move forward. The next steps for the project include property acquisition and coordination with Caltrans for an encroachment permit.

On January 13, 2015, the Environmental Coordinator made a preliminary determination that a Mitigated Negative Declaration would be appropriate to evaluate the development of the storm water basin. The Initial Study was publicly noticed and transmitted to interested agencies, groups, and individuals for review and comment on January 16, 2015. Additionally, the document was made available at City Hall and in the Porterville Library. The review period ran from January 16, 2015 to February 17, 2015. A comment letter acknowledging adequacy of the document was received from the San Joaquin Valley Air Pollution Control District. Another comment letter outlining necessary steps related to encroachment was received by Caltrans. A third letter from the Department of Water Resources confirmed that the proposed project does not qualify as a dam, and advised as to what the City should do in the event it should expand the basin in the future. All letters are attached. Two members of the public who received notice contacted the City for additional information, but neither party represented concern or negativity related to the project.
RECOMMENDATION: That the City Council:

1. Adopt the draft resolution approving the Mitigated Negative Declaration for the Drainage Basin 18 Project;
2. Adopt the draft resolution approving the General Plan Amendment to modify the land use designation from Retail Centers to Public/Institutional for that 4.6± acre site of the proposed basin;
3. Approve the draft ordinance amending the zone district for that 4.6± acre site of the proposed basin from CR- Re:tail Centers to PS- Public and Semi-Public and give first reading to the draft ordinance; and
4. Waive further reading and order ordinance to print.

ATTACHMENTS:
1. Project Vicinity Map
2. Site Plan
3. General Plan Diagram
4. Zoning Map
5. Initial Study and Mitigated Negative Declaration, including comments received
6. Draft Resolution approving the Mitigated Negative Declaration - Exhibit A: Mitigation Monitoring and Reporting Program
7. Draft Resolution approving the General Plan Amendment - Exhibit A: General Plan Land Use Diagram
8. Draft Ordinance approving the Zone Change - Exhibit A: Zoning Map
Drainage Basin 18
Zone change and
General Plan Amendment
General Plan Land Use Map
1" = 400 ft.
Environmental Documentation Prepared and Processed in compliance with the California Environmental Quality Act

Initial Study-Mitigated Negative Declaration

A. Public Notice
B. Environmental Document
C. Comments Received Regarding Environmental Documentation
   1. San Joaquin Valley Air Pollution Control District
   2. California Department of Transportation, District 6
   3. California Department of Water Resources, Southern Region, Field Engineering Branch, Division of Safety of Dams

Attachment No. 5
NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

CONSIDERATION OF A PROPOSED STORM WATER BASIN

Notice is hereby given, that a public hearing will be held by the City Council of the City of Porterville on Tuesday, February 17, 2015 at 6:30 p.m. or as soon thereafter as the matter can be heard in the Council Chambers at City Hall, 291 N. Main Street, Porterville, California, in order to consider the proposed construction and operation of a new storm water runoff retention facility near the southwest corner of the intersection of State Route 65 and West North Grand Avenue. The retention basin will be approximately 4.6 acres in size and requires approximately 1220 feet of new pipeline to connect the basin to the existing system in West North Grand Avenue. Development of the project also requires a General Plan Amendment and Zone Change from Retail Centers to Public and Semi-Public designations.

On January 13, 2015, the Environmental Coordinator made a preliminary determination that a Mitigated Negative Declaration would be appropriate to evaluate the proposed storm water basin, as described above. The Initial Study has been transmitted to interested agencies, groups, and individuals for review and comment. The review period will run for 30 days from January 16, 2015 to February 17, 2015. Written comments on the environmental document must be submitted by the end of the review period.

Copies of the documents are on file at 291 N. Main Street, Porterville, California in the Community Development Department, Planning Division and on the City’s website at www.ci.porterville.ca.us. This notice is given in order to provide all interested parties an opportunity to present their views with respect to the proposed project and the environmental effects from it. For more information call Julie Phillips, Project Manager at (559) 782-7460 or email requests to planning@ci.porterville.ca.us.

In compliance with the Americans with Disabilities Act and the California Ralph M. Brown Act, if you need special assistance to participate in this meeting, or to be able to access this agenda and documents in the agenda packet, please contact the Deputy City Clerk at (559) 782-7442. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting and/or provision of an appropriate alternative format of the agenda and documents in the agenda packet.

DATED: January 15, 2015

John D. Lollis, City Clerk

ATTACHMENT NO. 5A
MITIGATED NEGATIVE DECLARATION

Drainage Reservoir 18

January 2015

Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 302
Visalia, CA 93291

City of Porterville
291 N. Main Street
Porterville, CA 93257
INTRODUCTION

1.1 Project Summary
This document is the Initial Study/Mitigated Negative Declaration on the potential environmental effects of the City of Porterville’s (City) Drainage Reservoir 18 Project (Project). The City intends to construct and operate a Storm Drain Basin south of W. North Grand Avenue and west of State Route 65, in the City of Porterville, on the western half of APN 243-210-065. Approximately 1,230 linear feet of pipeline will be installed to connect the Storm Drain Basin to the City’s existing system, with approximately 200 feet of that pipeline being bored and jacked under State Route 65. The City will also complete applications for a General Plan Amendment and Zone Change to allow for the Storm Drain Basin land use on the selected parcel.

The proposed Project is more fully described in Chapter Two – Project Description.

The City of Porterville will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

1.2 Document Format
This IS/MND contains five chapters, and appendices. Section 1, Introduction, provides an overview of the project and the CEQA environmental documentation process. Chapter 2, Project Description, provides a detailed description of project objectives and components. Chapter 3, Initial Study Checklist, presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the proposed project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. Chapter 4, Mitigation Monitoring and Reporting Program, provides the proposed mitigation measures, completion timeline, and person/agency responsible for implementation and Chapter 5, List of Preparers, provides a list of key personnel involved in the preparation of the IS/MND.

Environmental impacts are separated into the following categories:

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce
impacts to a less than significant level. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

**Less Than Significant After Mitigation Incorporated.** This category applies where the incorporation of mitigation measures would reduce an effect from a “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

**Less Than Significant Impact.** This category is identified when the project would result in impacts below the threshold of significance, and no mitigation measures are required.

**No Impact.** This category applies when a project would not create an impact in the specific environmental issue area. “No Impact” answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis.)

Regardless of the type of CEQA document that must be prepared, the basic purpose of the CEQA process as set forth in the CEQA Guidelines Section 15002(a) is to:

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
2. Identify ways that environmental damage can be avoided or significantly reduced.
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

According to Section 15070(b), a Mitigated Negative Declaration is appropriate if it is determined that:

1. Revisions in the project plans or proposals made by or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for
public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

(2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

The Initial Study contained in Section Three of this document has determined that with mitigation measures and features incorporated into the project design and operation, the environmental impacts are less than significant and therefore a Mitigated Negative Declaration will be adopted.
Chapter 2

PROJECT DESCRIPTION
Project Description

2.1 Project Background

The City of Porterville intends to construct and operate a Storm Drain Basin south of W. North Grand Avenue and west of State Route 65, in the City of Porterville, on the western half of APN 243-210-065. Approximately 1,230 linear feet of pipeline will be installed to connect the Storm Drain Basin to the City’s existing system, with approximately 200 feet of that pipeline being bored and jacked under State Route 65. The City will also complete applications for a General Plan Amendment and Zone Change to allow for the Storm Drain Basin land use on the selected parcel.

2.2 Objectives

The following are the primary goals of the City of Porterville’s Storm Drain Basin Improvements (Project):

- Be in compliance with the City’s approved Stormwater Master Plan.
- Capture increased amounts of stormwater to recharge the underlying groundwater basin.

2.3 Location

The proposed Project is located on a 4.6 acre portion of a 9.514 acre parcel (APN 243-210-065), within the northern portion of the City of Porterville. The Project site is approximately 750 feet south of W. North Grand Avenue and immediately west of State Route 65. (see Figures 1 and 2–Regional Map and Vicinity Map, respectively).
Figure 1
Regional Map

Legend
- Highway
- County
- City/Town

Proposed Project
Figure 2
Location Map

- Existing Storm Drain Pipe
- Proposed Storm Drain Pipe
- Basin Project Boundary

LINDA VISTA
AGNES
BOYLES
NORTH GRAND
WILSON
BEVERLY
CASTLE
PIONEER
WESTFIELD
PROSPECT
STATE HWY 65

CITY OF PORTERVILLE | Crawford & Bowen Planning, Inc.

2-3
2.4 Setting and Surrounding Land Use

The Project site is located in the northern part of the City of Porterville and is currently a vacant lot. The site is approximately 750 feet south of W. North Grand Avenue and State Route 65 is immediately to the east. The nearest residences are approximately 30 feet to the west.

The site is zoned CR – Retail Centers and is subject to conformance with the Porterville 2030 General Plan.

Land use and zoning surrounding the site are identified in Table 1, as follows:

<table>
<thead>
<tr>
<th>Location</th>
<th>Existing Land Use</th>
<th>Current Zoning Classification</th>
<th>General Plan Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>Vacant field</td>
<td>Retail Centers (CR)</td>
<td>Retail Centers</td>
</tr>
<tr>
<td>South</td>
<td>Residential neighborhood</td>
<td>Medium Density Residential (RM-2);</td>
<td>Medium Density Residential</td>
</tr>
<tr>
<td>East</td>
<td>Commercial</td>
<td>General Service &amp; Commercial (CG)</td>
<td>General Service &amp; Commercial</td>
</tr>
<tr>
<td>West</td>
<td>Vacant field; Residential neighborhood</td>
<td>Retail Centers (CR)</td>
<td>Retail Centers</td>
</tr>
</tbody>
</table>
2.5 Project Description

The City of Porterville intends to comply with its existing Stormwater Master Plan and construct and operate a 4.6 acre storm basin (47 acre/foot capacity) and associated infrastructure to connect the storm basin to the City’s existing stormwater system (Project). The Project includes construction of the following components that can be seen in Figure 3:

- A 4.6 acre storm basin that will be excavated to 15 feet deep
- Approximately 25,000 cubic yards of soil will be trucked out of the basin
- Approximately 1,245 feet of 6 foot high block wall will be installed along the northern, western, and southern perimeters of the storm basin
- Approximately 615 feet of 6 foot high chain link fence will be installed along the eastern perimeter of the storm basin
- Approximately 760 feet of 36 inch diameter pipe will connect the storm basin with the existing storm pipe on W. North Grand Avenue
- Approximately 470 feet of 30 inch diameter pipe will connect the existing pipe on W. North Grand Avenue west of State Route 65 with the existing pipe east of State Route 65 by bore and jacking approximately 200 feet of pipeline under State Route 65.
- A 15 foot wide gravel road will surround the perimeter of the storm basin and will extend north from the storm basin to connect to W. North Grand Avenue
- Construction is anticipated to take between three and four months.

In addition to the above-mentioned construction aspects of the Project, the Project also includes acquiring a General Plan Amendment (changing the designation from Retail Centers to Public Institutional) and Zone Change (changing from Retail Centers to Public-Semi-Public). Thirty foot easement alignments will also be acquired to place the pipeline.

Once operational, the storm basin will have a maximum water elevation of 424 feet above sea level. Maintenance workers are expected to visit the site once per week and no additional City staff will be hired to accommodate the maintenance.
Figure 3
Site Aerial

2.6 Other Required Approvals

The proposed Project would include, but not be limited to, the following regulatory requirements:

- The adoption of a Mitigated Negative Declaration by the City of Porterville
- Approval of a General Plan Amendment by the City of Porterville
- Approval of a Zone Change by the City of Porterville
- Approval of Encroachment Permit by CalTrans
- Approval of easements needed for the pipeline alignment
- Approval of a Stormwater Pollution Prevention Plan by the Central Valley Regional Water Quality Control Board
- Dust Control Plan Approval letter from the San Joaquin Valley Air Pollution Control District
- Compliance with other federal, state and local requirements
Initial Study Checklist

3.1 Environmental Checklist Form

Project title:
City of Porterville Drainage Reservoir 18 Project

Lead agency name and address:
City of Porterville
291 North Main Street
Porterville, CA 93257

Contact person and phone number:
Jennifer M. Byers, Acting Community Development Director
City of Porterville
(559) 782-7460

Project location:
The site is facility is located on ~5 acres of a larger 9.514 acre site (APN 243-210-065) approximately 750 feet south of W. North Grand Avenue, immediately west of State Route 65 in the City of Porterville.

Project sponsor’s name/address:
City of Porterville
291 North Main Street
Porterville, CA 93257

General plan designation:
Retail Centers

Zoning:
Retail Centers (CR)

Description of project:
Construction/operation of Stormwater drainage facility, General Plan Amendment and Zone Change. See Section Two, Project Description.
Surrounding land uses/setting:

The Project site is located in the northern part of the City of Porterville and is currently a vacant lot. The site is zoned CR (Retail Centers) and the land immediately to the north and west are also zoned as CR. RM-2 (Medium Density Residential) zoning is immediately to the south while State Route 65 is immediately to the east. East of State Route 65 is zoned as CG (General and Service Commercial). The nearest residences are approximately 30 feet to the west.

Other public agencies whose approval or consultation is required (e.g., permits, financing approval, participation agreements):

- State of California Native American Heritage Commission
- California State Clearinghouse, within the Office of Permit Assistance
- State of California Department of Transportation (Caltrans)
- San Joaquin Valley Air Pollution Control District
- Central Valley Regional Water Quality Control Board
3.2 Environmental Factors Potentially Affected

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

☐ Aesthetics  ☐ Agriculture Resources and Forest Resources  ☐ Air Quality

☐ Biological Resources  ☐ Cultural Resources  ☐ Geology / Soils

☐ Greenhouse Gas Emissions  ☐ Hazards & Hazardous Materials  ☐ Hydrology / Water Quality

☐ Land Use / Planning  ☐ Mineral Resources  ☐ Noise

☐ Transportation / Traffic  ☐ Utilities / Service Systems  ☐ Mandatory Findings of Significance

3.3 Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD 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, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a “potentially significant impact” or
"potentially significant unless mitigated" impact on the environment, but at least one
effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal
standards, and 2) has been addressed by mitigation measures based on the earlier analysis
as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required,
but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the
environment, because all potentially significant effects (a) have been analyzed adequately
in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and
(b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE
DECLARATION, including revisions or mitigation measures that are imposed upon the
proposed project, nothing further is required.

Jennifer M. Byers
Acting Community Development Director
City of Porterville

1/13/15 Date
I. AESTHETICS

Would the project:

<table>
<thead>
<tr>
<th>Impact</th>
<th>Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

a. Have a substantial adverse effect on a scenic vista? ☐ ☐ ☒ ☐

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

c. Substantially degrade the existing visual character or quality of the site and its surroundings? ☐ ☐ ☒ ☐

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

SETTING

Environmental Setting

The proposed Project site is located on the San Joaquin Valley floor in the northern portion of the City of Porterville, California. The proposed Project site is bounded by W. North Grand Avenue on the north and State Route (SR) 65 to the east. The aesthetic features of the existing visual environment in the proposed Project area are relatively uniform, with urbanized areas surrounding the Project site. There are no scenic resources or scenic vistas in the area. State Routes in the proposed Project vicinity include 99, 65, 190, 137.

Regulatory Setting

Federal

Aesthetic resources are protected by several federal regulations, none of which are relevant to the proposed Project because it will not be located on lands administered by a federal agency, and the proposed Project applicant is not requesting federal funding or a federal permit.

State

Nighttime Sky – Title 24 Outdoor Lighting Standards
The Energy Commission adopted changes to Title 24, Parts 1 and 6, Building Energy Efficiency Standards (Standards), on April 23, 2008. These new Standards became effective on January 1, 2010. Requirements for outdoor lighting remained consistent with past Standards and the requirements vary according to which “Lighting Zone” the equipment is in. The Standards contain lighting power allowances for newly installed equipment and specific alterations that are dependent on which Lighting Zone the Project is located in. Existing outdoor lighting systems are not required to meet these lighting power allowances. However, alterations that increase the connected load, or replace more than 50% of the existing luminaires, for each outdoor lighting application that is regulated by the Standards, must meet the lighting power allowances for newly installed equipment.

An important part of the Standards is to base the lighting power that is allowed on how bright the surrounding conditions are. The eyes adapt to darker surrounding conditions, and less light is needed to properly see; when the surrounding conditions get brighter, more light is needed to see. The least power is allowed in Lighting Zone 1 and increasingly more power is allowed in Lighting Zones 2, 3, and 4.

The Energy Commission defines the boundaries of Lighting Zones based on U.S. Census Bureau boundaries for urban and rural areas as well as the legal boundaries of wilderness and park areas. By default, government designated parks, recreation areas and wildlife preserves are Lighting Zone 1; rural areas are Lighting Zone 2; and urban areas are Lighting Zone 3. Lighting Zone 4 is a special use district that may be adopted by a local government.

**California Scenic Highway Program**

The Scenic Highway Program allows county and city governments to apply to the California Department of Transportation (Caltrans) to establish a scenic corridor protection program which was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. While not Designated State Scenic Highways, two Eligible State Scenic Highways occur in Tulare County, SR 198 and SR 190.

**Local**

**Porterville General Plan Policies**

- LU-G-4: Promote sustainability in the design and development of public and private development projects.
• LU-I-18: Protect existing residential neighborhoods from the encroachment of incompatible activities and land uses, and environmental hazards.

• LU-I-25: Establish buffering requirements and performance standards intended to minimize harmful effects of excessive noise, light, glare, and other adverse environmental impacts.

RESPONSES

a. Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. The proposed Project site will be located on the northern fringe of residential and commercial development. The proposed Project will modify the western half of a 9.5 acre site by converting fallow land to a drainage reservoir. A six foot high block wall will surround the site to the north, west and south, to block views of the drainage reservoir. The eastern border of the site will be enclosed by a 6 foot high chain link fence.

The City of Porterville General Plan does not identify any scenic vistas within the Project area. A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area. The Project is located in an area of minimal topographic relief, and views of the site are easily obscured by buildings, other structures and trees. Neither the Project area nor any surrounding land use contains features typically associated with scenic vistas (e.g., ridgelines, peaks, overlooks).

The proposed Project also includes constructing approximately 1,230 linear feet of pipeline which will connect the drainage reservoir to the City’s existing stormwater system. Pipeline will be installed along an easement from the drainage reservoir north to W. North Grand Avenue where it will tie into the existing system. Approximately 470 feet of new pipeline will also be installed along W. North Grand Avenue and 200 of that pipeline will be bore and jacked under SR 65 to connect to the existing stormwater system on the east side of SR 65.

Construction activities will occur over a three to four month period and will be visible from the adjacent roadsides; however, the construction activities will be temporary in nature and will not affect a scenic vista. The impact will be less than significant.

Mitigation Measures: None are required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
Less than Significant Impact. There are no state designated Scenic Highways within the immediate proximity to the Project site. California Department of Transportation Scenic Highway Mapping System identifies SR 190 east of SR 65 as an Eligible State Scenic Highway. This is the closest highway, located approximately 3.2 miles south of the Project site; however, the Project site is both physically and visually separated from SR 190 by intervening land uses. In addition, no Scenic Highways or roadways are listed within the Project area in the City of Porterville’s General Plan or Tulare County’s General Plan. Based on the National Register of Historic Places (NRHP) and the City’s General Plan, no historic buildings exist on the Project site. The proposed Project would not damage any trees, rock outcroppings or historic buildings within a State scenic highway corridor. Any impacts would be considered less than significant.

Mitigation Measures: None are required.

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

Less than Significant Impact. The proposed Project site is currently a fallow field, set back approximately 760 feet south of W. North Grand Avenue. The proposed Project site is immediately south of a residence (as seen in the photo below), and as part of the Project, per City of Porterville Development Ordinance 300.10e, a six foot high block wall will be constructed to shield the view of the Project site from the residence. A 20 foot gravel road will also be constructed from W. North Grand Avenue to provide access to the drainage reservoir.

View from W. North Grand Avenue looking south towards Project site

To the south and west of the site is a county island residential neighborhood. A row of residential units are immediately adjacent to the western border of the proposed Project site and N. Cobb Street T’s into the southern boundary of the proposed Project site. An established stand of eucalyptus trees currently
partially obstruct the proposed Project site from N. Cobb Street. A six foot high block wall will be constructed as part of the proposed Project to block views of the site from the west and south.

View from N. Cobb Street looking north towards Project site

To the east of the proposed Project site is SR 65. While the drainage reservoir will be flush with the existing grade, passengers travelling along SR 65 will likely be able to view the drainage reservoir as along the eastern Project border, the site will be enclosed by a six foot high chain link fence. The existing viewshed along SR 65 includes several land uses, including commercial, residential, agricultural and public facilities. The proposed Project site will be similar in visual character to the existing landscape, as public facilities are found throughout both rural and urban parts of the Central Valley. As such, the proposed Project will not substantially degrade the existing visual character or quality of the area or its surroundings.

The underground pipeline construction associated with this Project, as described in Response I-b, will be temporary in nature and will not be detectable once construction has ended. The impact will be less than significant.

Mitigation Measures: None are required.

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

No Impact. No new sources of lighting will be proposed with this Project. There is no impact.

Mitigation Measures: None are required.
### II. AGRICULTURE AND FOREST RESOURCES

**Would the project:**

<table>
<thead>
<tr>
<th></th>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact</th>
<th>With Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b.</td>
<td>Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c.</td>
<td>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))?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d.</td>
<td>Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>e.</td>
<td>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?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>
SETTING

Environmental Setting

The Project site is located in an area of the City considered urban, built up land by the State Farmland Mapping and Monitoring Program. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance or land under the Williamson Act contracts occurs in the Project area.

Regulatory Setting

Federal

Federal regulations for agriculture and forest resources are not relevant to the proposed Project because it is not a federal undertaking (the Project site is not located on lands administered by a federal agency, and the Project applicant is not requesting federal funding or a federal permit).

State

State regulations for agriculture and forest resources are not relevant to the proposed Project because no agricultural resources exist on the site.

Local

Porterville General Plan Policies

Porterville General Plan Policies for agriculture and forest resources are not relevant to the proposed Project because no agricultural resources exist on the site and no agricultural or forest resources will be impacted by the Project.

RESPONSES

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project site is located in an area of the City considered urban, built up land by the State Farmland Mapping and Monitoring Program. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance or land under the Williamson Act contracts occurs in the Project area. Therefore, no land conversion from Farmland would occur for the Project. Surrounding land uses include residential, commercial, and recreational uses; as such, the proposed Project does not have the potential to result in the conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. There is no impact.
Mitigation Measures: None are required.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

**No Impact.** The Project site is not zoned for agriculture nor is the site covered by a Williamson Act contract; No impacts would occur. The Project is not zoned for forestland and does not propose any zone changes related to forest or timberland. There is *no impact.*

Mitigation Measures: None are required.

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))?  

**No Impact.** The Project is not zoned for forestland and does not propose any zone changes related to forest or timberland. There is *no impact.*

Mitigation Measures: None are required.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

**No Impact.** No conversion of forestland, as defined under Public Resource Code or General Code, as referenced above, would occur as a result of the Project. There is *no impact.*

Mitigation Measures: None are required.

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.** No land conversion from Farmland would occur for the Project. Surrounding land uses include residential, commercial, and recreational uses; as such, the proposed Project does not have the potential to result in the conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. There is *no impact.*

Mitigation Measures: None are required.
III. AIR QUALITY

Would the project:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact</th>
<th>Less than Significant Impact</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>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)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Expose sensitive receptors to substantial pollutant concentrations?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Create objectionable odors affecting a substantial number of people?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

SETTING

Environmental Setting

The climate of the San Joaquin Valley is characterized by long, hot summers and stagnant, foggy, winters. Precipitation is low and temperature inversions are common. These characteristics are conducive to the formation and retention of air pollutants and are in part influenced by the surrounding mountains which intercept precipitation and act as a barrier to the passage of cold air and air pollutants.

The proposed Project lies within the San Joaquin Valley Air Basin, which is managed by the San Joaquin Valley Air Pollution Control District (SJVAPCD). National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for the following criteria pollutants: carbon monoxide (CO), ozone (O₃), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), particulate
matter (PM$_{10}$ and PM$_{2.5}$), and lead (Pb). The CAAQS also set standards for sulfates, hydrogen sulfide, and visibility.

Air quality plans or attainment plans are used to bring the applicable air basin into attainment with all state and federal ambient air quality standards designed to protect the health and safety of residents within that air basin. Areas are classified under the Federal Clean Air Act as either “attainment”, “non-attainment”, or “extreme non-attainment” areas for each criteria pollutant based on whether the NAAQS have been achieved or not. Attainment relative to the State standards is determined by the California Air Resources Board (CARB). The San Joaquin Valley is designated as a State and Federal extreme non-attainment area for O$_3$, a State and Federal non-attainment area for PM$_{2.5}$, a State non-attainment area for PM$_{10}$, and Federal and State attainment area for CO, SO$_2$, NO$_2$, and Pb.

**Regulatory Setting**

*Federal*

**Clean Air Act**

The federal Clean Air Act of 1970 (as amended in 1990) required the U.S. Environmental Protection Agency (EPA) to develop standards for pollutants considered harmful to public health or the environment. Two types of National Ambient Air Quality Standards (NAAQS) were established. Primary standards protect public health, while secondary standards protect public welfare, by including protection against decreased visibility, and damage to animals, crops, landscaping and vegetation, or buildings. NAAQS have been established for six “criteria” pollutants: carbon monoxide (CO), nitrogen dioxide (NO$_2$), sulfur dioxide (SO$_2$), ozone (O$_3$), particulate matter (PM$_{10}$ and PM$_{2.5}$), and lead (Pb).

*State*

**California Air Resources Board**

The California Air Resources Board (CARB) is the state agency responsible for implementing the federal and state Clean Air Acts. CARB has established California Ambient Air Quality Standards (CAAQS), which include all criteria pollutants established by the NAAQS, but with additional regulations for Visibility Reducing Particles, sulfates, hydrogen Sulfide (H$_2$S), and vinyl chloride.

The proposed Project is located within the San Joaquin Valley Air Basin, which includes San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and parts of Kern counties and is managed by the SJVAPCD.
Air basins are classified as attainment, nonattainment, or unclassified. Attainment is achieved when monitored ambient air quality data is in compliance with the standards for a specified pollutant. Non-compliance with an established standard will result in a nonattainment designation and an unclassified designation indicates insufficient data is available to determine compliance for that pollutant.

Standards and attainment status for listed pollutants in the SJVAPCD can be found in Table 1. Note that both state and federal standards are presented.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Standards and Attainment Status for Listed Pollutants in SJVAPCD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Federal Standard</td>
</tr>
<tr>
<td>Ozone</td>
<td>0.075 ppm (8-hr avg)</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>9.0 ppm (8-hr avg) 35.0 ppm (1-hr avg)</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>0.053 ppm (annual avg)</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>0.03 ppm (annual avg) 0.14 ppm (24-hr avg) 0.5 ppm (3-hr avg)</td>
</tr>
<tr>
<td>Lead</td>
<td>1.5 µg/m³ (calendar quarter) 0.15 µg/m³ (rolling 3-month avg)</td>
</tr>
<tr>
<td>Particulate Matter (PM10)</td>
<td>150 µg/m³ (24-hr avg)</td>
</tr>
<tr>
<td>Particulate Matter (PM2.5)</td>
<td>15 µg/m³ (annual avg)</td>
</tr>
</tbody>
</table>

µg/m³ = micrograms per cubic meter

Additional State regulations include:

CARB Portable Equipment Registration Program – This program was designed to allow owners and operators of portable engines and other common construction or farming equipment to register their equipment under a statewide program so they may operate it statewide without the need to obtain a permit from the local air district.

U.S. EPA/CARB Off-Road Mobile Sources Emission Reduction Program – The California Clean Air Act (CCAA) requires CARB to achieve a maximum degree of emissions reductions from off-road mobile sources to attain State Ambient Air Quality Standards (SAAQS); off-road mobile sources include most construction equipment. Tier 1 standards for large compression-ignition engines used in off-road mobile sources went into effect in California in 1996. These standards, along with ongoing rulemaking, address emissions of nitrogen oxides (NOX) and toxic particulate matter from diesel engines. CARB is currently
developing a control measure to reduce diesel PM and NOX emissions from existing off-road diesel equipment throughout the state.

California Global Warming Solutions Act – Established in 2006, Assembly Bill 32 (AB 32) requires that California’s GHG emissions be reduced to 1990 levels by the year 2020. This will be implemented through a statewide cap on GHG emissions, which will be phased in beginning in 2012. AB 32 requires CARB to develop regulations and a mandatory reporting system to monitor global warming emissions levels.

In addition, the proposed Project is being evaluated pursuant to CEQA.

Local

San Joaquin Valley Air Pollution Control District

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is the local agency charged with preparing, adopting, and implementing mobile, stationary, and area air emission control measures and standards. The SJVAPCD has several rules and regulations that may apply to the Project:

Rule 3135 (Dust Control Plan Fees) – This rule requires the project applicant to submit a fee in addition to a Dust Control Plan. The purpose of this rule is to recover the SJVAPCD’s cost for reviewing these plans and conducting compliance inspections.

Rules 4101 (Visible Emissions) and 4102 (Nuisance) – These rules apply to any source of air contaminants and prohibits the visible emissions of air contaminants or any activity which creates a public nuisance.

Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations) – This rule applies to use of asphalt for paving new roadways or restoring existing roadways disturbed by project activities.

Regulation VIII (Fugitive PM$_{10}$ Prohibitions) – This regulation, a series of eight regulations, is designed to reduce PM$_{10}$ emissions by reducing fugitive dust. Regulation VIII requires implementation of control measures to ensure that visible dust emissions are substantially reduced. The control measures are summarized in Table 2.
Table 2
San Joaquin Valley Air Pollution Control District
Regulation VIII Control Measures for Construction Related Emissions of PM$_{10}$

<table>
<thead>
<tr>
<th>The following are required to be implemented at all construction sites:</th>
</tr>
</thead>
<tbody>
<tr>
<td>All disturbed areas, including storage piles, which are not actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizers/suppressants, covered with a tarp or other similar cover, or vegetative ground.</td>
</tr>
<tr>
<td>All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions during construction using water or chemical stabilizer suppressant.</td>
</tr>
<tr>
<td>All land clearing, grubbing, scraping, excavation, land leveling, grading cut and fill, and demolition activities during construction shall be effectively controlled of fugitive dust emissions utilizing application of water or pre-soaking.</td>
</tr>
<tr>
<td>When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from top of container shall be maintained.</td>
</tr>
<tr>
<td>All operations shall limit, or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.</td>
</tr>
<tr>
<td>Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.</td>
</tr>
<tr>
<td>Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site at the end of each workday.</td>
</tr>
<tr>
<td>Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.</td>
</tr>
</tbody>
</table>

Porterville General Plan Policies

- OSC-G-9: Improve and protect Porterville’s air quality by making air quality a priority in land use and transportation planning and in development review.


- OSC-I-61: Coordinate air quality planning efforts with other local, regional and State agencies.

- OSC-I-63: Notify local and regional jurisdictions of proposed projects that may affect regional air quality.

- OSC-G-10: Reduce and conserve energy use in existing and new commercial, industrial, and public structures.
RESPONSES

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

Less than Significant Impact. The San Joaquin Valley Air Basin (SJVAB) is designated nonattainment of state and federal health based air quality standards for ozone and PM2.5. The SJVAB is designated nonattainment of state PM10. To meet Federal Clean Air Act (CAA) requirements, the SJVAPCD has multiple air quality attainment plan (AQAP) documents, including:

- Extreme Ozone Attainment Demonstration Plan (EOADP) for attainment of the 1-hour ozone standard (2004);
- 2007 Ozone Plan for attainment of the 8-hour ozone standard;
- 2007 PM10 Maintenance Plan and Request for Redesignation; and
- 2008 PM2.5 Plan.

Because of the region’s non-attainment status for ozone, PM2.5, and PM10, if the project-generated emissions of either of the ozone precursor pollutants (ROG or NOx), PM10, or PM2.5 were to exceed the SJVAPCD’s significance thresholds, then the project uses would be considered to conflict with the attainment plans. In addition, if the project uses were to result in a change in land use and corresponding increases in vehicle miles traveled, they may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

As discussed in Impact c), below, predicted construction and operational emissions would not exceed the SJVAPCD’s significance thresholds for ROG, NOx, PM10, and PM2.5. As a result, the Project uses would not conflict with emissions inventories contained in regional air quality attainment plans, and would not result in a significant contribution to the region’s air quality non-attainment status. In addition, the Project would result in a change of land use and would result in a decrease in vehicle miles traveled that were accounted for in regional emissions inventories (change of land use from Retail Center to Public Institutional. Additionally, the Project would comply with all applicable rules and regulations. Therefore, this impact is less than significant.

Mitigation Measures: None are required.

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

Less than Significant Impact. Because ozone is a regional pollutant (SJVAPCD 2002), the pollutants of concern for localized impacts are CO and fugitive PM10 dust from construction. Ozone and PM10 exhaust
impacts are addressed under Impact c), below. The proposed Project would not result in localized CO hotspots or PM$_{10}$ impacts, as discussed below. Therefore, the proposed Project would not violate an air quality standard or contribute to a violation of an air quality standard in the Project area.

**Localized PM$_{10}$**

Localized PM$_{10}$ would be generated by Project construction activities, which would include earth-disturbing activities. The SJVAPCD indicates that all control measures in Regulation VIII are required for all construction sites by regulation. The SJVAPCD’s Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) (SJVAPCD 2002) lists additional measures that may be required of very large projects or projects close to sensitive receptors. If all appropriate “enhanced control measures” in the GAMAQI are not implemented for very large projects or those close to sensitive receptors, then construction impacts would be considered significant (unless the Lead Agency provides a satisfactory detailed explanation as to why a specific measure is unnecessary). The GAMAQI also lists additional control measures (Optional Measures) that may be implemented if further emission reductions are deemed necessary by the Lead Agency. The SJVAPCD’s Regulation VIII (Fugitive PM$_{10}$ Prohibitions) has been updated and expanded since the GAMAQI guidance was written in 2002. Regulation VIII now includes the “enhanced control measures” contained in the GAMAQI.

The proposed Project would comply with the SJVAPCD’s Regulation VIII dust control requirements during any proposed construction (including Rules 8011, 8031, 8041, and 8071). Compliance with this regulation would reduce the potential for significant localized PM$_{10}$ impacts to less than significant levels.

**CO Hotspot**

Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. The SJVAPCD provides screening criteria to determine when to quantify local CO concentrations based on impacts to the level of service (LOS) of roadways in the Project vicinity.

As further discussed in the Transportation/Traffic checklist evaluation, the Project would not generate, or substantially contribute to, additional traffic that would reduce the level of surface on local roadways. Therefore, the Project would not significantly contribute to an exceedance that would exceed state or federal CO standards. Impacts are considered less than significant.

**Mitigation Measures:** None are required.
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.** The nonattainment pollutants for the SJVAPCD are ozone, PM\(_{10}\) and PM\(_{2.5}\). Therefore, the pollutants of concern for this impact are ozone precursors, regional PM\(_{10}\), and PM\(_{2.5}\). Ozone is a regional pollutant formed by chemical reaction in the atmosphere, and the Project’s incremental increase in ozone precursor generation is used to determine the potential air quality impacts, as set forth in the GAMAQI.

The SJVAPCD does not have a threshold for regional PM\(_{10}\) or PM\(_{2.5}\). This document proposes a PM\(_{10}\) threshold using the same basis as the ozone precursor thresholds. Since the GAMAQI was published, the SJVAPCD has been recommending use of a PM\(_{10}\) threshold of 15 tons per year. However, a similar basis of threshold is not available for PM\(_{2.5}\) emissions. Because the SJVAB is in nonattainment for PM\(_{2.5}\), the threshold for PM\(_{2.5}\) for this Project will be nine tons per year. The justification for this number is that PM\(_{2.5}\) is in nonattainment and should have a more stringent threshold than PM\(_{10}\) to provide a worst-case assessment. The annual standard for PM\(_{10}\) is 20 µg/m\(^3\) and the annual standard for PM\(_{2.5}\) is 12 µg/m\(^3\). Therefore, the ratio of PM\(_{10}\) to PM\(_{2.5}\) results in a threshold for PM\(_{2.5}\) of nine tons per year.

The annual significance thresholds to be used for the Project for construction and operational emissions are as follows:

- 10 tons per year ROG;
- 10 tons per year NO\(_x\);
- 15 tons per year PM\(_{10}\); and
- 9 tons per year PM\(_{2.5}\).

The estimated construction emissions are shown below. There are no anticipated operational emissions as operating the reservoir basin will be a passive process. The California Emissions Estimator (CalEEMod), Version 2013.2.2, was used to estimate construction emissions of the reservoir basin and the Sacramento Metropolitan Air Quality Management District’s (SMAQMD) Road Construction Emissions Model, Version 7.1.5.1 was used to estimate construction emissions of the associated pipeline. Modeling results are provided in Table 3 and the CalEEMod and SMAQMD Road Construction Emissions output files are provided in Appendix A.
Table 3
Proposed Project Construction and Operation Emissions

<table>
<thead>
<tr>
<th></th>
<th>VOC (ROG) (tons/year)</th>
<th>NOx (tons/year)</th>
<th>PM10 (tons/year)</th>
<th>CO2 (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Project Construction Emissions</td>
<td>2.22</td>
<td>7.41</td>
<td>0.72</td>
<td>809.96</td>
</tr>
<tr>
<td>Total Project Operation and Area</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Project Emissions</td>
<td>2.22</td>
<td>7.41</td>
<td>0.72</td>
<td>809.96</td>
</tr>
<tr>
<td>Threshold of Significance</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>--</td>
</tr>
</tbody>
</table>

Any impacts would be considered *less than significant*.

**Mitigation Measures:** None are required.

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

**Less than Significant Impact.** The proposed Project would not expose sensitive receptors to substantial concentrations of localized PM10, carbon monoxide, diesel particulate matter, or hazardous pollutants, naturally occurring asbestos, or valley fever, as discussed below.

**Localized PM10**

As shown in Response III-b, above, the Project would not generate a significant impact for construction-generated, localized PM10. Therefore, the Project would not expose sensitive receptors to unhealthy levels of PM10.

**PM Hotspot**

A PM2.5 and PM10 Hotpot Analysis is not required for the Project because it is not a Project of Air Quality Concern (POAQC).

**Carbon Monoxide Hotspot**

As shown in Impact b), above, the Project would not generate a CO hotspot. In addition, the existing background concentrations of CO are low and any CO emissions would disperse rapidly. The nearest SJVAPCD monitoring station located approximately 45 miles south of the Project site (Bakersfield-Golden State Highway) shows the highest 1-hour and 8-hour CO concentrations for the past three years
as 2.08 ppm and 1.46 ppm, respectively. The 1-hour and 8-hour CO standard are 20 ppm and 9 ppm, respectively. Therefore, the Project would not expose sensitive receptors to unhealthy levels of CO.

Naturally Occurring Asbestos

The Department of Conservation, Division of Mines and Geology published a guide entitled A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, for generally identifying areas that are likely to contain naturally occurring asbestos. The guide includes a map of areas where formations containing naturally occurring asbestos in California are likely to occur. Foothill areas within Tulare County are identified as areas with ultramafic rocks. The City of Porterville’s General Plan, Chapter Seven: Public Health and Safety provides a more detailed map, Figure 7-2 that shows some foothill locations adjacent to the City as areas with ultramafic rocks. Those areas are not located near the Project site. For this reason, the Project is not anticipated to expose workers or nearby receptors to naturally occurring asbestos. Any impacts to this analysis area would be considered less than significant.

e. Create objectionable odors affecting a substantial number of people?

Less than Significant Impact. The proposed Project operation will not be a source of odors. Construction related activities of the proposed Project may have the potential to result in diesel fuel combustion odors from construction equipment; however, the construction periods will be temporary and short-term. Diesel-type construction related exhaust odors are not typically detectable offsite and therefore are not considered a “nuisance” by the general public. Therefore, objectionable odors are not expected to be a significant concern during either proposed Project construction related or operational emissions. As such, any impacts would be considered less than significant.

Mitigation Measures: None are required.
IV. BIOLOGICAL RESOURCES

Would the project:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>With Mitigation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td>☐ ☒ ☐ ☐</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>☐ ☒ ☐ ☐</td>
<td></td>
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</tr>
<tr>
<td>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?</td>
<td>☐ ☒ ☐ ☐</td>
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<tr>
<td>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?</td>
<td>☐ ☒ ☐ ☐</td>
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</tbody>
</table>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

SETTLENG

Environmental Setting

The proposed Project site is located in a portion of the central San Joaquin Valley that has, for decades, experienced intensive agricultural and urban disturbances. Current agricultural endeavors in the region include dairies, groves, and row crops.

Like most of California, the Central San Joaquin Valley experiences a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures usually exceed 90 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely raise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. Annual precipitation within the proposed Project site is about 10 inches, almost 85% of which falls between the months of October and March. Nearly all precipitation falls in the form of rain and storm-water readily infiltrates the soils of the surrounding the sites.

Native plant and animal species once abundant in the region have become locally extirpated or have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region.

The site consists of a vacant field that has been disked regularly for weed abatement purposes. Surrounding lands are residential, commercial, fallow field, and industrial.

No aquatic or wetland features occur on the propose Project site; therefore, jurisdictional waters are considered absent from the site.
Regulatory Setting

Federal

Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and wildlife that are listed as endangered or threatened by the USFWS and National Oceanic and Atmospheric Administration (NOAA) Fisheries. Section 9 of the FESA prohibits the taking of listed wildlife, where taking is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging-up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16USC1538). Pursuant to Section 7 of the FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed plant or wildlife species or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to another authorized activity, provided the action will not jeopardize the continued existence of the species. Section 10 of the FESA provides for issuance of incidental take permits to private parties, provided a Habitat Conservation Plan (HCP) is developed.

Migratory Bird Treaty Act

The MBTA implements international treaties devised to protect migratory birds and any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredateing birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits are in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the CDFG Code.

Federal Clean Water Act

The federal Clean Water Act’s (CWA’s) purpose is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into waters of the United States without a permit from the U.S. Army Corps of Engineers (ACOE). The definition of waters of the United States includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated
by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3 7b).” The USEPA also has authority over wetlands and may override an ACOE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or Waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the RWQCB.

State

California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA, but unlike its federal counterpart, the CESA applies the take prohibitions to species proposed for listing (called candidates by the state). Section 2080 of the CDFG Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the CDFG Code as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the CDFG to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered, threatened, or candidate species or result in destruction or adverse modification of essential habitat. The CDFG administers the act and authorizes take through Section 2081 agreements (except for designated fully protected species).

Fully Protected Species

The State of California first began to designate species as fully protected prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians, reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered pursuant to the CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (CDFG Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, the CDFG prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

Native Plant Protection Act

Regarding listed rare and endangered plant species, the CESA defers to the California Native Plant Protection Act (NPPA) of 1977 (CDFG Code Sections 1900 to 1913), which prohibits importing of rare
and endangered plants into California, and the taking and selling of rare and endangered plants. The CESA includes an additional listing category for threatened plants that are not protected pursuant to NPPA. In this case, plants listed as rare or endangered pursuant to the NPPA are not protected pursuant to CESA, but can be protected pursuant to the CEQA. In addition, plants that are not state listed, but that meet the standards for listing, are also protected pursuant to CEQA (Guidelines, Section 15380). In practice, this is generally interpreted to mean that all species on lists 1B and 2 of the CNPS Inventory potentially qualify for protection pursuant to CEQA, and some species on lists 3 and 4 of the CNPS Inventory may qualify for protection pursuant to CEQA. List 3 includes plants for which more information is needed on taxonomy or distribution. Some of these are rare and endangered enough to qualify for protection pursuant to CEQA. List 4 includes plants of limited distribution that may qualify for protection if their abundance and distribution characteristics are found to meet the standards for listing.

California Lake and Streambed Alteration Agreement

Sections 1600 through 1616 of the CDFG Code require that a Lake and Streambed Alteration Program Notification Package be submitted to the CDFG for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” The CDFG reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal on which the CDFG and the applicant agree is the Lake and Streambed Alteration Agreement. Often, projects that require a Lake and Streambed Alteration Agreement also require a permit from the ACOE pursuant to Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Lake and Streambed Alteration Agreement may overlap.

In addition, the proposed Project is being evaluated pursuant to CEQA.

Local

Porterville General Plan Policies

- OSC-G-7: Protect habitat for special status species, designated under State and federal law.

RESPONSES

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 Impact with Mitigation. A desktop review of literature resources was conducted to determine if the Project area is located within the range of sensitive biological resources such as state and/or federally-listed threatened and/or endangered species. A list of special-status species that could potentially occur in the Project area and a 9-quad search of the Project area was compiled (see Appendix B) by accessing the California Natural Diversity Database (CNDDB) (2014), the California Native Plant Society (CNPS) (2014) online inventory and the United States Fish and Wildlife Service (USFWS) online database (accessed July 2014) for the USGS 7.5-minute quadrangle of Porterville in which the Project area is located as well as the eight surrounding quads of Fountain Springs, Ducor, Sausalito School, Frazier Valley, Success Dam, Lindsay, Cairn’s Corner, and Woodville.

The site is actively maintained for weed control and is surrounded by a chain link fence and as such, provides very little habitat for animal species and no habitat for plant species; however, to the south of the Project site is a large stand of eucalyptus trees. Several bird species in the Project area are protected under the Migratory Bird Treaty Act. Migratory birds can typically be seen foraging in fallow fields and grassland habitats and they nest in dense vegetation. Small suitable habitat patches exist in the vicinity and immediately adjacent to the proposed Project site.

Swainson’s hawk have been found to nest in isolated trees or small groves of eucalyptus, valley oak, Fremont’s cottonwood, Goodding’s black willow, and deodar cedar and several of these tree species are in the immediate Project vicinity. Nest trees typically stand in (or adjacent to) open agricultural land, along riparian corridors or irrigation channels, or at the edge of a tailwater pond. Foraging habitat surrounding the nest trees is chiefly alfalfa or other row crops but also includes expanses of grassland and scrub habitat. Swainson’s hawks prefer open habitats, including mixed and short grass grasslands with scattered trees or shrubs for perching; dry grasslands; irrigated meadows; and edges between two habitat types. Potential impacts to these protected bird species will be avoided with implementation of Mitigation Measures BIO-1 through BIO-3. As such, impacts to sensitive species will be less than significant with mitigation incorporation.

Mitigation Measures:

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1 Hansen, R.B. 2005. Biological Evaluation of Potential Impacts to Special Status Species (Endangered, Threatened, Candidate Species and Species of Special Concern) and Natural Habitat Areas on Tulare County Tract No. 767, an approximately 14.71 acre preliminary subdivision on the north side of Avenue 320, ¼ mile east of State Highway 63 just north of the City of Visalia, Tulare County, California.
BIO-1 To protect raptors and migratory song birds and to assist in avoiding take of avian species as required by Fish and Game Code Section 3503, 3503.5, and 3513, Project related activities will occur during the non-breeding season (September 16th through December 31st).

BIO-2 If Project related activities will occur during the breeding season (Jan 1 through Sept 15), the City of Porterville shall conduct nest surveys for nesting Swainson’s hawks within ½ mile buffer around the Project site before starting any Project related activities following the survey methodology developed by the Swainson’s hawk Technical Advisory Committee. In the event that Swainson’s hawk is detected, California Department of Fish & Wildlife (CDFW) shall be consulted by the Applicant or the Applicant’s consultant to discuss project implementation and take avoidance. If take cannot be avoided the City shall obtain an Incidental Take Permit from CDFW for project related incidental take of Swainson’s hawk.

If other nesting raptors and migratory songbirds are identified, the following minimum no disturbance buffers shall be required:

- 250 feet around active passerine (perching birds and songbirds) nests
- 500 feet around active raptor nests

These buffers shall be maintained until the breeding season has ended or until a qualified biologist has determined and CDFW has agreed in writing that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

BIO-3 Vertical tubes such as chain link fencing poles can result in the entrapment and death of a variety of bird species. All vertical tubes such as chain link fencing poles shall be immediately capped at the time that they are installed to prevent avian fatalities.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant Impact. There are no waterways or vegetation on the subject site and the area consists of an actively maintained vacant field along with paved and gravel areas. There is no riparian habitat or other sensitive natural community on site or adjacent to the Project. As such, any impacts would be less than significant.

Mitigation Measures: None are required.

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?

Less than Significant Impact. No wetlands occur in or near the Project site. Impacts would be less than significant.

Mitigation Measures: None are required.

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?

Less than Significant Impact. There are no waterways or vegetation on the subject site and the area consists of an actively maintained vacant field along with paved and gravel areas. The Project site is located in a residential area adjacent to commercial land uses. The Project site is immediately adjacent to SR 65. There are no waterways or migratory wildlife corridors on site or in the Project vicinity. Any impacts to native species movement would be less than significant.

Mitigation Measures: None are required.

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

Less than Significant Impact. The City of Porterville’s General Plan includes various policies for the protection of biological resources. The proposed Project would not conflict with any of the adopted policies and any impacts would be considered less than significant.

Mitigation Measures: None are required.

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?
Less than Significant Impact. Several conservation and recovery plans apply to land in the City, including the Recovery Plan for Upland Species of the San Joaquin Valley and the Valley Elderberry Longhorn Beetle Habitat Conservation Plan. A review of Figure 6-4 (Special Status Species and Sensitive Vegetation) in the City of Porterville’s General Plan indicates the Project site is not within an area set aside for the conservation of habitat or sensitive plant or animal species pursuant to such plans. The nearest such areas are the Valley Elderberry Longhorn Beetle Conservation Area located southeast of the Project site along the Tule River within the Yaudanchi Ecological Reserve. As such, any impacts would be less than significant.

Mitigation Measures: None are required.
V. CULTURAL RESOURCES

Would the project:

<table>
<thead>
<tr>
<th>Would the project</th>
<th>Less than Significant Impact</th>
<th>With Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
<td>☐</td>
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<tr>
<td>c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
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<td>d. Disturb any human remains, including those interred outside of formal cemeteries?</td>
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SETTING

Environmental Setting

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric (before the introduction of writing in a particular area) or historic (after the introduction of writing). The majority of such places in this region are associated with either Native American or Euroamerican occupation of the area. The most frequently encountered prehistoric and early historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and sites of rock art. Historic archaeological sites may include foundations or features such as privies, corrals, and trash dumps.

The City of Porterville and Tulare County was inhabited by indigenous California Native American groups consisting of the Southern Valley Yokuts, Foothill Yokuts, Monache, and Tubatulabal. Most information regarding these groups is based on Spanish government and Franciscan mission records of the 18th and 19th centuries, and in studies conducted during the 1900s to 1930s by American and British
ethnographers. The ethnographic setting presented below is derived from the early works, compiled by W. J. Wallace, Robert F.G. Spier, and Charles R. Smith, with statistical information provided by the California Native American Heritage Commission.

Of the four main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory, which is defined roughly by the crest of the Diablo Range on the west and the foothills of the Sierra Nevada on the east, and from the Kings River on the north, to the Tehachapi Mountains on the south. The Foothill Yokuts inhabited the western slopes of the Sierra Nevada, between the Fresno River and Kern River, with settlements generally occurring between the 2,000 to 4,000-foot elevations. The Tubatulabal inhabited the Sierra Nevada Mountains, at the higher elevations, near Mt. Whitney in the east, extending westward along the drainages of the Kern River, and the Kern River-South Fork. The Monache were comprised of six small groups that lived in the Sierras east of the Foothill Yokuts, in locations ranging between 3,000 to 7,000 foot elevations.

The proposed Project site has been highly disturbed for many years due to active discing and weed maintenance. A records search was conducted at the Southern San Joaquin Valley Information Center (SSJVIC), California Historical Resources Information System in October 2014 and a Cultural Resources Study and Survey was completed by Petra Resources Management in December, 2014. As part of the Study, a Sacred Files Search was conducted with the Native American Heritage Commission (NAHC) (see Appendix C). According to the SSJVIC records, ten previous archaeological surveys have been completed that have covered portions of the study area, primarily east of State Route 65. While no cultural resources were previously identified within the study area, four historical sites have been recorded within 0.5 miles of the Project area. The NAHC Sacred Lands File search did not indicate the presence of any cultural places within the Project area.

**Regulatory Setting**

**Federal**

Cultural resources are protected by several federal regulations, none of which are relevant to this proposed Project because it will not be located on lands administered by a federal agency and the Project applicant is not requesting federal funding.

**State**

The proposed Project is subject to CEQA which requires public or private projects financed or approved by public agencies to assess their effects on historical resources. CEQA uses the term “historical resources” to include buildings, sites, structures, objects or districts, each of which may have historical, prehistoric, architectural, archaeological, cultural, or scientific importance. CEQA states that if
implementation of a project results in significant effects on historical resources, then alternative plans or mitigation measures must be considered; however, only significant historical resources need to be addressed (CCR 15064.5, 15126.4). For the purposes of this CEQA document, a significant impact would occur if project implementation:

- Causes a substantial change in the significance of a historical resource
- Causes a substantial adverse change in the significance of an archaeological resource
- Disturbs any human remains, including those interred outside of formal cemeteries

Therefore, before impacts and mitigation measures can be identified, the significance of historical resources must be determined. CEQA guidelines define three ways that a property may qualify as a historical resource for the purposes of CEQA review:

- If the resource is listed in or determined eligible for listing in the California Register of Historical Resources (CRHR)
- If the resource is included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC unless the preponderance of evidence demonstrates that it is not historically or culturally significant
- The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record (CCR, Title 14, Division 6, Chapter 3, Section 15064.5(a))

Each of these ways of qualifying as a historical resource for the purpose of CEQA is related to the eligibility criteria for inclusion in the CRHR (PRC 5020.1(k), 5024.1, 5024.1(g)).

A historical resource may be eligible for inclusion in the CRHR if it:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage
- Is associated with the lives of persons important in our past
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- Has yielded, or may be likely to yield, information important in prehistory or history

Properties that area listed in or eligible for listing in the National Register of Historic Places
are considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (PRC Section 5024.1(d)(1)).

Public Resources Code §5097.5

California Public Resources Code §5097.5 prohibits excavation or removal of any “vertebrate paleontological site...or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands.” Public lands are defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. Section 5097.5 states that any unauthorized disturbance or removal of archaeological, historical, or paleontological materials or sites located on public lands is a misdemeanor.

Human Remains

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner’s authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper and dignified treatment of the remains and associated grave artifacts.

Paleontological Resources

Paleontological resources are the fossilized remains of plants and animals and associated deposits. The Society of Vertebrate Paleontology has identified vertebrate fossils, their taphonomic and associated environmental indicators, and fossiliferous deposits as significant nonrenewable paleontological resources. Botanical and invertebrate fossils and assemblages may also be considered significant resources.

CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature (CEQA Appendix G(v)(c)). If an impact is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) §15126.4 (a)(1)). California Public Resources Code §5097.5 (see above) also applies to paleontological resources.
Local

Porterville General Plan Policies

- OSC-G-11: Identify and protect archaeological, paleontological, and historic resources.
- OSC-I-72: Develop an agreement with Native American representatives for consultation in the cases where new development may result in disturbance to Native American sites.
- OSC-I-73: Require that new development analyze and avoid any potential impacts to archaeological, paleontological, and historic resources by:
  - Requiring a records review for development proposed in areas that are considered archaeologically sensitive, including hillsides and near the Tule River;
  - Studying the potential effects of development and construction (as required by CEQA);
  - Developing, where appropriate, mitigation measures to minimize potential impacts; and Implementing appropriate measures to avoid the identified impacts.

RESPONSES

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

Less than Significant Impact with Mitigation. An intensive archaeological survey (see Appendix C) was conducted for the proposed Project which included a records search of site files and maps at the SSJVIC and a search of the NAHC Sacred Lands File. No Native American sacred sites or cultural landscapes had been identified within or immediately adjacent to the study area. The survey of the approximately 4.48-acre study area failed to identify any significant prehistoric or historical resources.

While no historic resources were discovered during the investigations, subsurface construction activities associated with the proposed Project could potentially damage or destroy previously undiscovered historic resources. This is considered a potentially significant impact; however, implementation of Mitigation Measure CUL1 will ensure that significant impacts remain less than significant with mitigation incorporation.

CUL1: The City shall be required to do the following:
Before initiation of construction or ground-disturbing activities associated with the Project, the City shall require all construction personnel to be alerted to the possibility of buried cultural resources, including historic, archeological and paleontological resources;

The general contractor and its supervisory staff shall be responsible for monitoring the construction Project for disturbance of cultural resources; and

If a potentially significant historical, archaeological, or paleontological resource, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains or trash deposits are encountered during subsurface construction activities (i.e., trenching, grading), all construction activities within a 100-foot radius of the identified potential resource shall cease until a qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation (DPR) forms. The archaeologist shall determine whether the item requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the item is determined to be significant under California Environmental Quality Act, the archaeologist shall recommend feasible mitigation measures, which may include avoidance, preservation in place or other appropriate measure, as outlined in Public Resources Code section 21083.2. The City of Porterville shall implement said measures.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant Impact with Mitigation. The possibility exists that subsurface construction activities may encounter undiscovered archaeological resources. This would be a potentially significant impact. Implementation of Mitigation Measure CUL1 would require inadvertently discovery practices to be implemented should previously undiscovered archeological resources be located. As such, impacts to undiscovered archeological resources would be less than significant with mitigation incorporation.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation. There are no unique geological features or known fossil-bearing sediments in the vicinity of the proposed Project site. However, there remains the possibility for previously unknown, buried paleontological resources or unique geological sites to be uncovered during subsurface construction activities. Therefore, this would be a potentially significant impact. Mitigation
is proposed requiring standard inadvertent discovery procedures to be implemented to reduce this impact to a level of *less than significant with mitigation incorporation*.

CUL3: The City of Porterville will incorporate into the construction contract(s) a provision that in the event a fossil or fossil formations are discovered during any subsurface construction activities for the proposed Project (i.e., trenching, grading), all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the appropriate representative at the City of Porterville, who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the City shall implement those measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code section 21083.2.

d. Disturb any human remains, including those interred outside of formal cemeteries?

**Less than Significant Impact.** Although unlikely given the highly disturbed nature of the site and the records search did not indicate the presence of such resources, subsurface construction activities associated with the proposed Project could potentially disturb previously undiscovered human burial sites. Accordingly, this is a potentially significant impact. The California Health and Safety Code Section 7050.5 states that if human remains are discovered on-site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition. If the Coroner determines that the remains are not subject to his or her authority and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC. The NAHC shall identify the person or persons it believes to be the “most likely descendant” (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resource Code Section 5097.98.

Although considered unlikely subsurface construction activities could cause a potentially significant impact to previously undiscovered human burial sites, however compliance with regulations would reduce this impact to *less than significant*.  

**Mitigation Measures:** None are required.
VI. GEOLOGY AND SOILS

Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

[ ] Potentially Significant Impact
[ ] Significantly Mitigated
[ ] Less than Significant Impact
[ ] No Impact

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

[ ] Potentially Significant Impact
[ ] Mitigated
[ ] Less than Significant Impact
[ ] No Impact

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?

[ ] Potentially Significant Impact
[ ] Mitigated
[ ] Less than Significant Impact
[ ] No Impact

d. Be located on expansive soil, as defined in Table 18-1-B of the most recently

[ ] Potentially Significant Impact
[ ] Mitigated
[ ] Less than Significant Impact
[ ] No Impact
adopted Uniform Building Code creating substantial risks to life or property?

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?

SETTING

Environmental Setting

The City of Porterville is situated along the western slope of a northwest-trending belt of rocks comprising the Sierra Nevada and within the southern portion of the Cascade Range. The Sierra Nevada geomorphic province is primarily composed of cretaceous granitic plutons and remnants of Paleozoic and Mesozoic metavolcanic and metasedimentary rocks, and Cenozoic volcan and sedimentary rocks. The majority of Porterville has elevations ranging from 400 to 800 feet. However, the eastern portion of the City is in the Sierra Nevada foothills where elevations reach almost 1,800 feet above sea level.

Faulting and Seismicity

There are no known active earthquake faults in the City of Porterville. The proposed Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the local soil at the site. There are several faults located within a 70 mile radius of the proposed Project site. An unnamed fault is approximately seven miles south, Poso Creek Fault is 30 miles southwest, White Wolf Fault Zone is 60 miles south, San Andreas and Cholame-Carrizo Fault sections are approximately 69 miles southwest of the proposed Project site. These faults are small and have exhibited activity in the last 1.6 million years, but not in the last 200 years. It is possible, but unlikely, that previously unknown faults could become active in the area. No Alquist-Priolo Earthquake Fault Zones are in or near Porterville. Porterville is located in a Seismic Zone 3 of the 1994 Uniform Building Code (UBC). This zone is expected to experience moderate effects from earthquake ground shaking. This seismic zone is expected to experience moderate effects from earthquake ground shaking activity.
Soils

According to the City’s General Plan EIR, much of the Project area has soils with moderate to high erosion potential. Generally, areas most susceptible to soil erosion are hilly or have slopes greater than 15 percent. Lower flatlands, such as the subject site, are usually less likely to erode than those located on slopes.

Regulatory Setting

Federal

Federal regulations for geology and soils are not relevant to the proposed Project because it is not a federal undertaking (the Project site is not located on lands administered by a federal agency, and the Project applicant is not requesting federal funding or a federal permit).

State

Uniform Building Code

The California Code of Regulations (CCR) Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. The California Building Code incorporates by reference the Uniform Building Code with necessary California amendments. The Uniform Building Code is a widely adopted model building code in the United States published by the International Conference of Building Officials. About one-third of the text within the California Building Code has been tailored for California earthquake conditions.

In addition, the proposed Project is being evaluated pursuant to CEQA.

Local

Porterville General Plan Policies

- OSC-G-5: Preserve soil resources to minimize damage to people, property, and the environment resulting from potential hazards.
- OSC-G-6: Protect significant mineral resources.
- OSC-I-21: Adopt soil conservation regulations to reduce erosion caused by overgrazing, plowing, mining, new roadways and paths, construction, and off-road vehicles.
- OSC-I-23: Require adequate grading and replanting to minimize erosion and prevent slippage of manmade slopes.
- PHS-G-4: Protect soils, surface water, and groundwater from contamination from hazardous materials.
- PHS-I-17: Require remediation and cleanup of sites contaminated with hazardous substances.

RESPONSES

a-i. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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.

No Impact. The Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone. Since no known surface expression of active faults is believed to cross the site, fault rupture through the site is not anticipated. No impacts would occur.

Mitigation Measures: None are required.

a-ii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less than Significant Impact. The City of Porterville’s 2030 General Plan identified the City as being within the Uniform Building Code Seismic Zone 3. The California Geological Survey maintains a web-based computer model that estimates probabilistic seismic ground motions for any location with California. The computer model estimates the “Design Basis Earthquake” ground motion, which is defined as the peak ground acceleration with a 10-percent chance of exceedance in 50 years (475-year return period). For an alluvium soil type, the Project site’s estimated peak ground acceleration is approximately 0.22g.

No buildings or structures are proposed with implementation of this Project as the Project includes the construction and operation of a reservoir basin. The basin will be excavated 15 feet deep and the banks of the basin will be flush with the surrounding grade. The impact is less than significant.

Mitigation Measures: None are required.

a-iii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?
**Less than Significant Impact.** See Response a-ii. According to the City of Porterville General Plan, Public Health and Safety Element the Project site is in the Seismic -3 zone, the site has a moderate to high risk of damaging ground motion; however the Project’s Valley location has a low risk of liquefaction. No Subsidence prone soils or oil or gas production is involved with the proposed Project. Therefore, the impact is *less than significant*.

**MITIGATION MEASURES:** None are required.

a-iv. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

**Less than Significant Impact.** The City of Porterville’s 2030 General Plan, Figure 7-1 (Geological and Soil Hazards) indicates that the Project site is located on relatively flat topography and is not located adjacent to any steep slopes or areas that would otherwise be subject to landslides. Therefore, the impact is *less than significant*.

**MITIGATION MEASURES:** None are required.

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

**Less than Significant Impact.** The City of Porterville sits on top of the alluvial fans of the Tule River and its distributaries. The bedrock is present at relatively shallow depths beneath the eastern end of Porterville. The soil in the Project area is characterized as moderately deep, well-drained, sandy loam underlain by hardpan. The Project site has a generally flat topography, is in an established area within the City’s public works complex, and does not include any Project features that would result in soil erosion or loss of topsoil. Therefore, the impact is *less than significant*.

**MITIGATION MEASURES:** None are required.

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?

**No Impact.** The City of Porterville sits on top of the alluvial fans of the Tule River and its distributaries. The bedrock is present at relatively shallow depths beneath the eastern end of Porterville. The soil in the
Project area is characterized as moderately deep, well-drained, sandy loam underlain by hardpan. See also Response a-ii. There is no impact.

**Mitigation Measures:** None are required.

d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?

**Less than Significant Impact.** See Responses c and a-ii. The impact is less than significant.

**Mitigation Measures:** None are required.

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.** No permanent wastewater facilities using septic tanks or alternative wastewater disposal systems would be required by the Project. There is no domestic waste discharge from the Project. There is no impact.

**Mitigation Measures:** None are required.
VII. GREENHOUSE GAS EMISSIONS

Would the project:

<table>
<thead>
<tr>
<th>a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</th>
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<tbody>
<tr>
<td>Potentially Significant Impact</td>
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</table>

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

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<th>b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</th>
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SETTING

Environmental Setting

Various gases in the earth’s atmosphere play an important role in moderating the earth’s surface temperature. Solar radiation enters earth’s atmosphere from space and a portion of the radiation is absorbed by the earth’s surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs are transparent to solar radiation, but are effective in absorbing infrared radiation. Consequently, radiation that would otherwise escape back into space is retained, resulting in a warming of the earth’s atmosphere. This phenomenon is known as the greenhouse effect. Scientific research to date indicates that some of the observed climate change is a result of increased GHG emissions associated with human activity. Among the GHGs contributing to the greenhouse effect are water vapor, carbon dioxide (CO₂), methane (CH₄), ozone, Nitrous Oxide (NOₓ), and chlorofluorocarbons. Human-caused emissions of these GHGs in excess of natural ambient concentrations are considered responsible for enhancing the greenhouse effect. GHG emissions contributing to global climate change are attributable, in large part, to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation. Global climate change is, indeed, a global issue. GHGs are global pollutants, unlike criteria pollutants and TACs (which are pollutants of regional and/or local concern). Global climate change, if it occurs, could potentially affect water resources in California. Rising temperatures could be anticipated to result in sea-level rise (as polar ice caps melt) and possibly change the timing and amount of precipitation, which could alter water quality. According to some, climate change could result in more extreme weather patterns; both heavier precipitation that could lead to flooding, as well as more |
extended drought periods. There is uncertainty regarding the timing, magnitude, and nature of the potential changes to water resources as a result of climate change; however, several trends are evident.

Snowpack and snowmelt may also be affected by climate change. Much of California’s precipitation falls as snow in the Sierra Nevada and southern Cascades, and snowpack represents approximately 35 percent of the state’s useable annual water supply. The snowmelt typically occurs from April through July; it provides natural water flow to streams and reservoirs after the annual rainy season has ended. As air temperatures increase due to climate change, the water stored in California’s snowpack could be affected by increasing temperatures resulting in: (1) decreased snowfall, and (2) earlier snowmelt.

**Regulatory Setting**

*Federal*

The USEPA Mandatory Reporting Rule (40 CFR Part 98), which became effective December 29, 2009, requires that all facilities that emit more than 25,000 metric tons CO\textsubscript{2}-equivalent per year beginning in 2010, report their emissions on an annual basis. On May 13, 2010, the USEPA issued a final rule that established an approach to addressing GHG emissions from stationary sources under the CAA permitting programs. The final rule set thresholds for GHG emissions that define when permits under the New Source Review Prevention of Significant Deterioration and title V Operating Permit programs are required for new and existing industrial facilities.

In addition, the Supreme Court decision in Massachusetts v. EPA (Supreme Court Case 05-1120) found that the USEPA has the authority to list GHGs as pollutants and to regulate emissions of GHGs under the CAA. On April 17, 2009, the USEPA found that CO\textsubscript{2}, CH\textsubscript{4}, NO\textsubscript{x}, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride may contribute to air pollution and may endanger public health and welfare. This finding may result in the USEPA regulating GHG emissions; however, to date the USEPA has not proposed regulations based on this finding.

*State*

California is taking action to reduce GHG emissions. In June 2005, Governor Schwarzenegger signed Executive Order S-3-05 to address climate change and GHG emissions in California. This order sets the following goals for statewide GHG emissions:

- Reduce to 2000 levels by 2010
- Reduce to 1990 levels by 2020
- Reduce to 80 percent below 1990 levels by 2050
In 2006, California passed AB 32, the California Global Warming Solutions Act of 2006 (Act). The Act requires ARB to design and implement emission limits, regulations, and other feasible cost-effective measures to reduce statewide GHG emissions to 1990 levels by 2020. Senate Bill 97 was signed into law in August 2007. The Senate Bill required the Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resource Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions by July 1, 2009. On April 13, 2009, the OPR submitted to the Secretary for Natural Resources its recommended amendments to the State CEQA Guidelines for addressing GHG emissions. On July 3, 2009, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting the amendments. Following a 55-day public comment period and 2 public hearings, and in response to comments, the Natural Resources Agency proposed revisions to the text of the proposed Guidelines amendments. The Natural Resources Agency transmitted the adopted amendments and the entire rulemaking file to the Office of Administrative Law on December 31, 2009. On February 16, 2010, the Office of Administrative Law approved the amendments, and filed them with the Secretary of State for inclusion in the CCR. The Amendments became effective on March 18, 2010.

The AB 32 Scoping Plan contains the main strategies California will use to reduce GHG emissions that cause climate change. The scoping plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 cost of implementation fee regulation to fund the program. The first regulation adopted by the ARB pursuant to AB 32 was the regulation requiring mandatory reporting of GHG emissions. The regulation requires large industrial sources emitting more than 25,000 metric tons of CO$_2$ per year to report and verify their GHG emissions from combustion of both fossil fuels and biomass-derived fuels. The California Cap and Trade program is being developed and the ARB must adopt regulations by January 1, 2011. Finally, Governor Schwarzenegger directed the ARB, pursuant to Executive Order S-21-09, to adopt a regulation by July 31, 2010, requiring the state’s load serving entities to meet a 33 percent renewable energy target by 2020.

In addition, the proposed Project is being evaluated pursuant to CEQA.

*Local*

**Porterville General Plan Policies**

- OSC-G-9: Improve and protect Porterville’s air quality by making air quality a priority in land use and transportation planning and in development review.


• OSC-I-61: Coordinate air quality planning efforts with other local, regional and State agencies.

• OSC-I-63: Notify local and regional jurisdictions of proposed projects that may affect regional air quality.

RESPONSES

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

**Less than Significant Impact.** The U.S. Environmental Protection Agency published a rule for the mandatory reporting of greenhouse gases from sources that in general emit 25,000 metric tons or more of carbon dioxide (CO₂) per year. As shown in Table 2.1, Overall Construction, Unmitigated Construction, of Appendix A, the Project is estimated to produce 809.96 tons per year of CO₂ (combined construction and operational totals). This represents approximately three percent of the reporting threshold.

Additionally, emissions from construction are temporary in nature. The SJVAPCD has implemented a guidance policy for development projects within their jurisdiction. This policy, “Guidance for Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA,” approved by the Board on December 17, 2009, does not address temporary GHG emissions from construction, nor does this policy establish numeric thresholds for ongoing GHG emissions. AB 32 requires that emissions within the State be reduced to 1990 levels by the year 2020. These construction emissions are minimal and would mainly occur prior to 2020; therefore, construction-generated GHGs are *less than significant*.

**Mitigation Measures:** None are required.

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

**Less than Significant Impact.** The City of Porterville does not have an adopted Climate Action Plan. Therefore, the plan adopted for the purpose of reducing the emissions of GHGs applicable to the proposed project is ARB’s approved Scoping Plan, which will be used to determine significance for this criterion. As discussed previously, AB 32 requires that emissions within the State be reduced to 1990 levels by the year 2020. The project would generate temporary construction emissions prior to the year 2020; therefore, impacts would be *less than significant*.

**Mitigation Measures:** None are required.
### VIII. HAZARDS AND HAZARDOUS MATERIALS

**Would the project:**

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

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

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

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

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

f. For a project within the vicinity of a private airstrip, would the project result in
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

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

**SETTING**

**Environmental Setting**

The Project site is located in the northern portion of the City adjacent to residential and commercial land uses. The site is currently a vacant lot actively maintained for weed control.

The nearest residences are approximately 30 feet to the west of the Project site. The Project site is approximately 4.4 miles northeast of the Porterville Municipal Airport. Fresno-Yosemite International Airport is approximately 70 miles northwest of the proposed Project site, while Meadows Field Airport in Bakersfield is approximately 47 miles south.

The Teapot Dome Landfill plant is approximately six miles southwest of the proposed Project site, while the Porterville Wastewater Treatment Plant is located approximately 1.3 miles southwest. The site is approximately 665 feet (0.126 miles) from the fenceline of the nearest school (Sequoia Middle School).

**Regulatory Setting**

**Federal**

The primary federal agencies with responsibility for hazardous materials management include the EPA, U.S. Department of Labor Occupational Safety and Health Administration (OSHA), and the U.S. Department of Transportation (DOT). The Environmental Protection Agency (EPA) was created to protect human health and to safeguard the natural environment – air, water and land – and works closely with other federal agencies, and state and local governments to develop and enforce regulations under
existing environmental laws. Where national standards are not met, EPA can issue sanctions and take other steps to assist the states in reaching the desired levels of environmental quality. EPA also works with industries and all levels of government in a wide variety of voluntary pollution prevention programs and energy conservation efforts.

State

The California Department of Industrial Relations, Division of Occupational Safety and Health is the administering agency designed to protect worker health and general facility safety. The California Department of Forestry and Fire Protection has designated the area that includes the proposed Project site as a Local Responsibility Area, defined as an area where the local fire jurisdiction is responsible for emergency fire response.

In addition, the proposed Project is being evaluated pursuant to CEQA.

Local

City of Porterville Fire Department

The City of Porterville Fire Department, Fire Prevention Division provides limited oversight of hazardous materials. The Fire Department is responsible for conducting inspections for code compliance and fire-safe practices, permitting of certain hazardous materials, and for investigation of fire and hazardous materials incidents. The Fire Department regulates explosive and hazardous materials under the California Building and Fire Code, and permits the handling, storage and use of any explosive or other hazardous material.

Tulare County Environmental Health Division

The Tulare County Environmental Health Division (TCEHD) is the Certified Unified Program Agency (CUPA) for all cities and unincorporated areas within Tulare County. The CUPA was created by the California Legislature to minimize the number of inspections and different fees for businesses. The TCEHD provides the management and record keeping of hazardous materials and underground storage tank (UST) sites for Tulare County, including the City of Porterville.

Porterville General Plan Policies

- PHS-G-1: Minimize risks of property damage and personal injury posed by geologic and seismic hazards.
• PHS-I-2: Maintain and enforce appropriate building standards and codes to avoid and/or reduce risks associated with geologic constraints and to ensure that all new construction is designed to meet current safety regulations.

• PHS-I-17: Require remediation and cleanup of sites contaminated with hazardous substances.

• PHS-I-18: Adopt a Household Hazardous Waste Program and support the proper disposal of hazardous household waste and waste oil; encourage citizens and crime watch organizations to report unlawful dumping of hazardous materials.

• PHS-I-19: Ensure that all specified hazardous facilities conform to the Tulare County Hazardous Waste Management Plan.


RESPONSES

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 is the construction and operation of a reservoir basin and during operation will not generate nor store any hazardous wastes. During construction, nonhazardous construction debris will be generated and disposed of in local landfills. Construction may require the transport and use of small quantities of hazardous materials in the form of grease, gasoline, diesel and oil for construction vehicle maintenance. There is the potential for small leaks to occur due to construction activities such as refueling the construction equipment; however, standard construction Best Management Practices (BMPs) included in the Stormwater Pollution Prevention Plan will reduce the potential for the release of construction-related fuels and other hazardous materials to storm water contamination from spills or leaks and require proper disposal or recycling of hazardous materials. Any hazardous waste generated during construction of the proposed Project will be collected and transported away from the site in compliance with all federal, state and local regulations will be followed. Therefore, the proposed Project will not create a significant hazard to the public or the environment and any impacts would be less than significant.

Mitigation Measures: None are required.
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.** See Response a. above. Any accumulated hazardous construction wastes will be collected and transported away from the site in compliance with all federal, state and local regulations. Any impacts would be less than significant.

**Mitigation Measures:** None are required.

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

**Less than Significant Impact.** The site is approximately 665 feet (0.126 miles) from the fenceline of the nearest school (Sequoia Middle School); however, no operational hazardous waste will be generated or stored. See also Responses a. and b. regarding construction hazardous material handling. The impact is less than significant.

**Mitigation Measures:** None are required.

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 site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The nearest Department of Toxic Substances Control listed site is Sequoia Middle School (54010013), which is a 17.5 acre school site located at the intersection of N. Prospect Street and W. Castle Avenue, approximately 665 feet west of the proposed Project site. The soil and groundwater are possibly contaminated with Arsenic, dichlorodiphenyldichlorehane (DDD), dichlorodiphenyl dichloroethene (DDE), and dichlorodiphenyltrichloroethane (DDT) contaminants of potential concern. The investigation is being handled by the Department of Toxic Substances Control, Site Cleanup Program and the site has been certified as of August 18, 2005. There

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3 California Environemntal Protection Agency, Cortese List Data Resources.
are no hazardous materials sites that impact the Project. As such, no impacts would occur that would create a significant hazard to the public or the environment.

**Mitigation Measures:** None are required.

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.** Based on review of the 2030 General Plan, the proposed Project site is approximately 4.4 miles northeast of the Porterville Municipal Airport. Land use controls for this area are provided by the City of Porterville General Plan and Development Ordinance, and the Tulare County General Plan and Zoning Ordinance, Part 77.21. The City of Porterville has also prepared an airport master plan for the Porterville Municipal Airport. The Project site is outside the height and safety restriction zones imposed by these plans. There is no impact.

**Mitigation Measures:** None are required.

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 in the Project vicinity and as such, there is no impact.

**Mitigation Measures:** None are required.

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

**Less than Significant Impact.** The Project consists of the construction and operation of a drainage reservoir that will connect to the City’s existing stormwater drainage system. The site is currently only accessible by a private gravel road, which is not a part of the City’s emergency response plan or emergency evacuation plan. As such, the reservoir basin will not interfere with any adopted emergency response or evacuation plan. Any impacts are less than significant.

**Mitigation Measures:** None are required.
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?

No Impact. There are no wildlands on or near the Project site. There is no impact.

Mitigation Measures: None are required.
IX. HYDROLOGY AND WATER QUALITY

Would the project:

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<tr>
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<th>Potentially Significant Impact</th>
<th>Less than Significant Impact</th>
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<tbody>
<tr>
<td>a. Violate any water quality standards or waste discharge requirements?</td>
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<td>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)?</td>
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<td>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?</td>
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<td>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?</td>
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<td>e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or</td>
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</table>
IX. HYDROLOGY AND WATER QUALITY

Would the project:

- provide substantial additional sources of polluted runoff?
  - Potentially Significant Impact: ☐
  - With Mitigation Incorporation: ☐
  - Less than Significant Impact: ☒
  - No Impact: ☐

f. Otherwise substantially degrade water quality?
  - Potentially Significant Impact: ☐
  - With Mitigation Incorporation: ☐
  - Less than Significant Impact: ☒
  - 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?
  - Potentially Significant Impact: ☐
  - With Mitigation Incorporation: ☐
  - Less than Significant Impact: ☒
  - No Impact: ☒

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
  - Potentially Significant Impact: ☐
  - With Mitigation Incorporation: ☐
  - Less than Significant Impact: ☒
  - No Impact: ☒

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
  - Potentially Significant Impact: ☐
  - With Mitigation Incorporation: ☐
  - Less than Significant Impact: ☒
  - No Impact: ☐

j. Inundation by seiche, tsunami, or mudflow?
  - Potentially Significant Impact: ☐
  - With Mitigation Incorporation: ☐
  - Less than Significant Impact: ☒
  - No Impact: ☒

SETTING

Environmental Setting

The City of Porterville has a dry climate with evaporation rates that exceed rainfall. The local climate is considered warm desert with annual precipitation between approximately seven to nine inches, and rainfall rates are highly variable. The majority of precipitation (roughly 84%) falls during the months of November through April.

The Porterville area is underlain by an unconfined aquifer that is part of the Tule Sub-basin of the San Joaquin Valley Groundwater Basin. Groundwater supplies have not been significantly impacted by
droughts in the past, and, as a result, there is no history of any water supply deficiencies for the City water system. Even during the 1976-1977 drought records indicate a sufficient supply of water.

**Regulatory Setting**

*Federal*

**Clean Water Act**

The Clean Water Act (CWA) is intended to restore and maintain the chemical, physical, and biological integrity of the nation’s waters (33 CFR 1251). The regulations implementing the CWA protect waters of the U.S. including streams and wetlands (33 CFR 328.3). The CWA requires states to set standards to protect, maintain, and restore water quality by regulating point source and some non-point source discharges. Under Section 402 of the CWA, the National Pollutant Discharge Elimination System (NPDES) permit process was established to regulate these discharges.

The National Flood Insurance Act (1968) makes available federally subsidized flood insurance to owners of flood-prone properties. To facilitate identifying areas with flood potential, Federal Emergency Management Agency (FEMA) has developed Flood Insurance Rate Maps (FIRM) that can be used for planning purposes.

*State*

**State Water Resources Control Board**

The State Water Resources Control Board (SWRCB), located in Sacramento, is the agency with jurisdiction over water quality issues in the State of California. The SWRCB is governed by the Porter-Cologne Water Quality Act (Division 7 of the California Water Code), which establishes the legal framework for water quality control activities by the SWRCB. The intent of the Porter-Cologne Act is to regulate factors which may affect the quality of waters of the State to attain the highest quality which is reasonable, considering a full range of demands and values. Much of the implementation of the SWRCB's responsibilities is delegated to its nine Regional Boards. The proposed Project site is located within the Central Valley Region.

**Regional Water Quality Board**

The Regional Water Quality Control Board (RWQCB) administers the NPDES storm water-permitting program in the Central Valley region. Construction activities on one acre or more are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit). The General Construction Permit requires the
preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The plan will include specifications for Best Management Practices (BMPs) that will be implemented during proposed Project construction to control degradation of surface water by preventing the potential erosion of sediments or discharge of pollutants from the construction area. The General Construction Permit program was established by the RWQCB for the specific purpose of reducing impacts to surface waters that may occur due to construction activities. BMPs have been established by the RWQCB in the California Storm Water Best Management Practice Handbook (2003), and are recognized as effectively reducing degradation of surface waters to an acceptable level. Additionally, the SWPPP will describe measures to prevent or control runoff degradation after construction is complete, and identify a plan to inspect and maintain these facilities or project elements.

In addition, the proposed Project is being evaluated pursuant to CEQA.

Local

Porterville General Plan Policies

- OSC-I-43: Work with agricultural and industrial uses to ensure that water contamination and waste products are handled in a manner that protects the long-term viability of water resources.
- OSC-I-44: Work with the Regional Water Quality Control Board to ensure that all point source pollutants are adequately mitigated (as part of the CEQA review and project approval process) and monitored to ensure long-term compliance.
- OSC-I-45: Continue to require use of feasible and practical best management practices (BMPs) and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and urban runoff in coordination with the Regional Water Quality Control Board.
- OSC-I-51: Prior to the approval of individual projects, require the City Engineer and/or Building Official to verify that the provisions of applicable point source pollution programs have been satisfied.
- PHS-G-2: Protect the community from risks to life and property posed by flooding and stormwater runoff.

RESPONSES

a. Violate any water quality standards or waste discharge requirements?
Less than Significant Impact. The State Water Resources Control Board requires any new construction project over an acre to complete a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP involves site planning and scheduling, limiting disturbed soil areas, and determining best management practices to minimize the risk of pollution and sediments being discharged from construction sites. Implementation of the SWPPP will minimize the potential for the proposed Project to substantially alter the existing drainage pattern in a manner that will result in substantial erosion or siltation onsite or offsite. Additionally, there will be no discharge to any surface or groundwater source. Further, no chemicals or surfactants will be used in the maintenance or operation of the drainage reservoir. As such, there will be no discharge that could impact water quality standards. The proposed Project will not violate any water quality standards and will not impact waste discharge requirements. The impact will be less than significant.

Mitigation Measures: None are required.

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 site is located in the Tulare Lake Basin, an area significantly affected by overdraft. The Department of Water Resources (DWR) has estimated the groundwater by hydrologic region and for the Tulare Lake Basin; the total overdraft is estimated at 820,000 acre-feet per year, the greatest overdraft projected in the state, and 56 percent of the statewide total overdraft. The proposed Project site is located within the Tule Sub-basin portion of the regional area.

Water in the drainage reservoir would percolate into the existing groundwater basin, thereby creating a net positive in aquifer volume. As such, there is no impact to this impact area.

Mitigation Measures: None are required.

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 Impact. There are no natural lakes or streams within or adjacent to the Project area. The site is presently a vacant dirt lot, actively maintained for weed control. No impervious surfaces
are proposed as part of the Project, as the site will consist of a reservoir basin with a gravel road along the perimeter of the site and connecting the site to W. North Grand Avenue to the north. The site will be graded so stormwater drains into the basin. No natural drainage or riparian areas occur within the Project area. Storm water will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP is retained on-site during construction. As a result, impacts would be less than significant.

**Mitigation Measures:** None are required.

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 Impact.** Impacts regarding the alteration of drainage patterns to increase runoff that will potentially induce flooding have been discussed in the impact analysis for Response IX-c. No facilities are being proposed that would alter the existing drainage pattern of the area. Storm water will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP is retained on-site during construction. As a result, impacts are less than significant.

**Mitigation Measures:** None are required.

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?**

**Less than Significant Impact.** See Responses a, c and d. Implementation of the proposed Project will expand the capacity of the City’s existing stormwater system. The impact is less than significant.

**Mitigation Measures:** None are required.

f. **Otherwise substantially degrade water quality?**

**Less than Significant Impact.** See Responses a, c and d. The Project would not otherwise degrade water quality and therefore the impact is less than significant.

**Mitigation Measures:** None are required.
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 Project site is not within a 100-year or 500-year flood zone, as shown on Figure 7-3 of the 2030 General Plan. There is no housing associated with this Project. Therefore, there is no impact.

**Mitigation Measures:** None are required.

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

**No Impact.** The Project site is not within a 100-year or 500-year flood zone, as shown on Figure 7-3 of the 2030 General Plan. No facilities are being proposed that would alter the existing drainage pattern of the area and therefore there is no impact.

**Mitigation Measures:** None are required.

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?

**Less than Significant Impact.** Flows into the Tule River (located approximately 2.4 miles south of the Project site) are controlled by the Success Dam located approximately five miles upstream from the City. A dam failure is usually the result of neglect, poor design, or structural damage caused by a major event such as an earthquake. Dams must be operated and maintained in a safe manner, which is ensured through inspections for safety deficiencies, analyses using current technologies and designs, and taking corrective actions as needed based on current engineering practices.

The Project site is located within the Success Dam inundation area, as shown on Figure 7-3 of the 2030 General Plan. This inundation area runs through Porterville, to a location downstream of Corcoran, a distance of approximately 44 miles. The Army Corp Of Engineers (ACOE) is in the process of completing an environmental impact statement for reinforcing the strength of the dam in the event of seismically induced failure. The Project site is within the 0.5-hour to 1-hour inundation zone of Success Dam. In the event of a dam failure, most of the City would be flooded within one hour. The Porterville Emergency Operations Plan (EOP), adopted in 2004, includes planning and response scenarios for seismic hazards, extreme weather conditions, landslides, dam failure and other flooding. The City has designated several evacuation routes through Porterville to be used in case of catastrophic emergencies. In the unlikely
event that the dam fails before the ACOE’s proposed dam reinforcement completion date of 2014–2015, the dam owner would follow the emergency action plan (EAP) developed for Success Dam. The EAP includes a notification flowchart, early detection systems, notification for warning and evacuation by state and local emergency management officials, steps to moderate or alleviate the effects of a dam failure, and inundation maps. No impervious surfaces are being proposed. As such, impacts related to exposure of people or structures to a risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam would be less than significant.

**Mitigation Measures:** None are required.

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

**No Impact.** There are no inland water bodies that could be potentially susceptible to a seiche in the Project vicinity. This precludes the possibility of a seiche inundating the Project site. The Project site is more than 100 miles from the Pacific Ocean, a condition that precludes the possibility of inundation by tsunami. There are no steep slopes that would be susceptible to a mudflow in the Project vicinity, nor are there any volcanically active features that could produce a mudflow in the City of Porterville. This precludes the possibility of a mudflow inundating the Project site. **No impacts** would occur.

**Mitigation Measures:** None are required.
X. LAND USE AND PLANNING

Would the project:

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With Mitigation Incorporation</td>
<td></td>
</tr>
</tbody>
</table>

a. Physically divide an established community? [ ]  [ ]  [ ]  [X]

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? [ ]  [ ]  [X]  [ ]

c. Conflict with any applicable habitat conservation plan or natural community conservation plan? [ ]  [ ]  [ ]  [X]

SETTING

Environmental Setting

The proposed Project site is located in the northern portion of City of Porterville and is surrounded completely by rural urban uses. Porterville is located in Tulare County within the San Joaquin Valley. Tulare County lies south of the Sacramento-San Joaquin Delta, and is comprised of 4,863 square miles. The County is bordered by Fresno County to the north, Kings County to the west, Kern County to the south, and Inyo County to the east.

Existing land uses in City of Porterville have been organized into generalized categories that are summarized below on Table 4. City of Porterville has a 2030 General Plan planned build-out of approximately 36,341 acres in size, equivalent to approximately 56.6 square-miles.
Table 4

<table>
<thead>
<tr>
<th>Generalized Land Use Category</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/Rural/Conservation</td>
<td>21,270</td>
<td>59%</td>
</tr>
<tr>
<td>Single Family Residential</td>
<td>4,760</td>
<td>13%</td>
</tr>
<tr>
<td>Multi Family Residential</td>
<td>240</td>
<td>1%</td>
</tr>
<tr>
<td>Retail Shopping</td>
<td>80</td>
<td>0%</td>
</tr>
<tr>
<td>Commercial</td>
<td>760</td>
<td>2%</td>
</tr>
<tr>
<td>Industrial</td>
<td>350</td>
<td>1%</td>
</tr>
<tr>
<td>Public/Quasi-Public</td>
<td>2,630</td>
<td>7%</td>
</tr>
<tr>
<td>Vacant</td>
<td>3,590</td>
<td>10%</td>
</tr>
<tr>
<td>Unclassified (Roads, water, etc)</td>
<td>2,661</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total Area</strong></td>
<td><strong>36,341</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The proposed Project site has been historically utilized for agriculture related uses and currently is an uncultivated fallow property. The site is surrounded by to the west, north and south by residential uses and State Route 65 and commercial land uses are to the east.

The site is zoned as Retail Centers (CR) and the land immediately to the north and west are also zoned as CR. RM-2 (Medium Density Residential) zoning is immediately to the south while State Route 65 is immediately to the east. East of State Route 65 is zoned as CG (General and Service Commercial). The nearest residences are approximately 30 feet to the west.

No forest or timber land is present at the proposed Project site or in the proposed Project vicinity.

**Regulatory Setting**

**Federal**

Federal regulations for land use are not relevant to the proposed Project because it is not a federal undertaking (the proposed Project site is not located on lands administered by a federal agency, and the Project applicant is not requesting federal funding or a federal permit).

**State**

The proposed Project is being evaluated pursuant to CEQA; however, there are no state regulations, plans, programs, or guidelines associated with land use and planning that are applicable to the proposed Project.

---

4 City of Porterville Land Use Element
Local

Porterville General Plan Policies

- LU-G-15: Promote clustering of industrial uses into areas that have common needs and are compatible in order to maximize their efficiency.

- LU-G-16: Discourage industrial development in locations where access and operations conflict with neighboring land uses.

RESPONSES

a. **Physically divide an established community?**

   **No Impact.** The Project is located within the northern limits of the City of Porterville. The proposed Project site is an existing vacant field. The construction and operation of a reservoir basin would not cause any land use changes in the surrounding vicinity nor would it divide an established community. The construction of the pipeline will occur completely in easements and will be underground. **No impacts** would occur as a result of this Project.

   **Mitigation Measures:** None are required.

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?**

   **Less than Significant Impact.** The proposed Project will include two entitlement requests in order for the proposed Project to be approved by City Council. The City will request a General Plan Amendment for APN 243-210-065, to deviate from its existing “Retail Centers” land use designation to the proposed Public Institutional designation. The City will also request a Zone Change for the same parcel, to change the site zoning from Retail Centers to Public-Semi-Public. **Any impacts are less than significant.**

   **Mitigation Measures:** None are required.

c. **Conflict with any applicable habitat conservation plan or natural community conservation plan?**
No Impact. A review of the 2030 General Plan, Figure 6-4 (Special Status Species and Sensitive Vegetation) indicates the Project site is not within an adopted or proposed conservation plan area. The nearest such plan area is the Valley Elderberry Longhorn Beatle Conservation Area, located along the Tule River within the Yaudanchi Ecological Reserve. There would be no impact to an adopted or proposed conservation plan area.

Mitigation Measures: None are required.
XI. MINERAL RESOURCES

Would the project:

| Potentially Significant Impact | Less than Significant Impact | Mitigation Incorporation | Less than Significant Impact | No Impact |
|--------------------------------|--------------------------------|----------------------------|--------------------------------|

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

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?

SETTING

Environmental Setting

The City of Porterville is situated along the western slope of a northwest-trending belt of rocks comprising the Sierra Nevada and within the southern portion of the Cascade Range. The Sierra Nevada geomorphic province is primarily composed of cretaceous granitic plutons and remnants of Paleozoic and Mesozoic metavolcanic and metasedimentary rocks, and Cenozoic volcan and sedimentary rocks. The majority of the Planning Area has elevations ranging between 400 and 800 feet; however, the eastern portion is in the Sierra Nevada foothills where elevations reach almost 1,800 feet above sea level.

Historically, the quarrying of magnesite was a significant industry in the City of Porterville. Currently, the most economically significant mineral resources in Tulare County are sand, gravel, and crushed stone, used as sources for aggregate (road materials and other construction). The two major sources of aggregate are alluvial deposits (river beds, and floodplains), and hard rock quarries. Consequently, most Tulare County mines are located along rivers at the base of the Sierra foothills.

Tule River contains various State-classified mineral resource zones (MRZ-2a, MRZ-2b, and MRZ-3a). While this area was once suitable for mining operations, it is now surrounded by urban development. Approximately 890 acres along the Tule River, or 2.5 percent of all lands within the Planning Area, are within mineral resource zones. Tule River contains various State-classified mineral resource zones (MRZ-2a, MRZ-2b, and MRZ-3a). While this area was once suitable for mining operations, it is now surrounded by urban development. Approximately 890 acres along the Tule River, or 2.5 percent of all lands within the Project Area, are within mineral resource zones.
**Regulatory Setting**

**Federal**

There are no federal or local regulations pertaining to mineral resources relevant to the proposed Project.

**State**

**California Surface Mining and Reclamation Act of 1975**

Enacted by the State Legislature in 1975, the Surface Mining and Reclamation Act (SMARA), Public Resources Code Section 2710 et seq., ensures a continuing supply of mineral resources for the State.

In addition, the proposed Project is being evaluated pursuant to CEQA.

**Local**

**Porterville General Plan Policies**

- OSC-I-21: Adopt soil conservation regulations to reduce erosion caused by overgrazing, plowing, mining, new roadways and paths, construction, and off-road vehicles.
- OSC-I-23: Require adequate grading and replanting to minimize erosion and prevent slippage of manmade slopes.
- PHS-G-4: Protect soils, surface water, and groundwater from contamination from hazardous materials.
- PHS-I-17: Require remediation and cleanup of sites contaminated with hazardous substances.

**RESPONSES**

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?

**No Impact.** As shown in Figure 6-3 of the 2030 General Plan, the proposed Project area is not included in a State classified mineral resource zones. Therefore, there is no impact.

**Mitigation Measures:** None are required.
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?

No Impact. As shown in Figure 6-3 of the 2030 General Plan, the Project area is not included in a State classified mineral resource zones. Soil disturbance for the proposed Project would be limited to the 4.6 acre reservoir site and the 1,230 linear feet of pipeline to be installed. Therefore, there is no impact.

Mitigation Measures: None are required.
### XII. NOISE

**Would the project:**

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact</th>
<th>With Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>
SETTING

Environmental Setting

The proposed Project site is currently vacant and surrounding land uses include residential and commercial, with State Route 65 running immediately east of the site. Existing noise levels around the site are mostly associated with traffic and associated activities. The eastern portion of the site is located within the State Route 65 established noise contour, as shown in Figure 9-2 of the City’s General Plan Noise Element. The nearest sensitive noise receptor is a residential neighborhood located approximately 30 feet west of the Project site.

Regulatory Setting

Federal

The Federal Railway Administration (FRA) and the Federal Transit Administration (FTA) have published guidance relative to vibration impacts. According to the FRA, fragile buildings can be exposed to ground-borne vibration levels of 0.5 PPV without experiencing structural damage. The FTA has identified the human annoyance response to vibration levels as 80 RMS.

State

The California Noise Control Act was enacted in 1973 (Health and Safety Code § 46010 et seq.), and states that the Office of Noise Control (ONC) should provide assistance to local communities in developing local noise control programs. It also indicates that ONC staff will work with the OPR to provide guidance for the preparation of the required noise elements in city and county General Plans, pursuant to Government Code § 65302(f). California Government Code § 65302(f) requires city and county general plans to include a noise element. The purpose of a noise element is to guide future development to enhance future land use compatibility.

In addition, this proposed Project is being evaluated pursuant to CEQA.

Local

Measuring and reporting noise levels involves accounting for variations in sensitivity to noise during the daytime versus nighttime hours. Noise descriptors used for analysis need to factor in human sensitivity to nighttime noise when background noise levels are generally lower than in the daytime and outside noise intrusions are more noticeable. Common descriptors include the Community Noise Equivalent Level (CNEL) and the Day-Night Average Level (Ldn). Both reflect noise exposure over an average day with weighting to reflect the increased sensitivity to noise during the evening and night. The two
descriptors are roughly equivalent. The CNEL descriptor is used in relation to major continuous noise sources, such as aircraft or traffic, and is the reference level for the Noise Element under State planning law. The Noise Element included in the 2030 City of Porterville General Plan (2008) includes noise and land use compatibility standards for various land uses. These are shown in Table 5 below.

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Community Noise Exposure, Ldn or CNEL dB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normally Acceptable</td>
</tr>
<tr>
<td>Residential – Low density single family, duplex</td>
<td>&lt;65 (&lt;45 Interior)</td>
</tr>
<tr>
<td>Residential – Multiple family</td>
<td>&lt;65 (&lt;45 Interior)</td>
</tr>
<tr>
<td>Schools, libraries, churches, hospitals, nursing</td>
<td>&lt;70</td>
</tr>
<tr>
<td>Industrial, manufacturing, utilities, agriculture</td>
<td>&lt;75</td>
</tr>
</tbody>
</table>

Normally acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally unacceptable – New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly unacceptable – New construction or development should generally not be undertaken.

Porterville General Plan Policies

- N-G-1: Minimize vehicular and stationary noise levels and noise from temporary activities.
- N-G-2: Ensure that new development is compatible with the noise environment.
• N-G-5: Reduce noise intrusion generated by miscellaneous noise sources through conditions of approval to control noise-generating activities.

• N-I-7: Require noise from existing mechanical equipment to be reduced by soundproofing materials and sound-deadening installation.

RESPONSES

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 Impact. According to the City’s General Plan EIR, the major noise sources in Porterville are related to roadways and vehicle traffic. Much of the Project area, along with the area adjacent to the Project site is in an established noise contour (from HWY 65) as shown in Figure 9-2 of the City’s General Plan Noise Element. Minimal amounts of noise is anticipated to be generated during Project operation, as the reservoir basin will be supplied with water via underground pipes and the water in the basin will passively percolate into the underlying groundwater basin. Additionally, as part of the Project, and in accordance with City of Porterville Development Ordinance 300.10e, a six foot high block wall will be constructed along the north, west and south boundaries of the site, with would further buffer any noises generated by the Project from the surrounding residences.

Proposed Project construction related activities will involve temporary noise sources and are anticipated to last approximately four months. Typical construction related equipment include graders, trenchers, small tractors and excavators. During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity. Activities involved in construction will generate maximum noise levels, as indicated in Table 6, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g., mufflers) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise controls.

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Typical Construction Noise Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Equipment</td>
<td>dBA at 50 ft</td>
</tr>
<tr>
<td></td>
<td>Without Feasible Noise Control</td>
</tr>
<tr>
<td>Dozer or Tractor</td>
<td>80</td>
</tr>
<tr>
<td>Excavator</td>
<td>88</td>
</tr>
<tr>
<td>Scraper</td>
<td>88</td>
</tr>
<tr>
<td>Front End Loader</td>
<td>79</td>
</tr>
<tr>
<td>Backhoe</td>
<td>85</td>
</tr>
<tr>
<td>Grader</td>
<td>85</td>
</tr>
</tbody>
</table>
The City of Porterville’s General Plan Noise Element (2008) sets the standard noise threshold of 60 dBA at the exterior of nearby residences; however, it does not identify a short-term, construction-noise-level threshold. The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources. A more severe approach would be impractical and might preclude the kind of construction activities that are to be expected from time to time in urban environments. Most residents of urban areas recognize this reality and expect to hear construction activities on occasion. The noise generated from the reservoir basin operations will not exceed the 65 dBA Ldn during ongoing operation and maintenance. Any impacts would be less than significant.

**Mitigation Measures:** None are required.

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

**Less than Significant Impact.** Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. Construction associated with the proposed Project is the excavation of the reservoir basin and installation of associated pipeline to connect the reservoir basin to the exiting stormwater system.

The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day. Table 7 describes the typical construction equipment vibration levels.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>VdB at 25 ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Bulldozer</td>
<td>58</td>
</tr>
<tr>
<td>Jackhammer</td>
<td>79</td>
</tr>
</tbody>
</table>

Table 7
Typical Construction Vibration Levels
Vibration from construction activities will be temporary and not exceed the FTA threshold for the nearest residences which are located approximately 30 feet west of the facility. The impact will be less than significant.

**Mitigation Measures:** None are required.

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

**Less than Significant Impact.** See Response a. There will be no substantial permanent increase in ambient noise levels and therefore the impact is less than significant.

**Mitigation Measures:** None are required.
XIII. POPULATION AND HOUSING

Would the project:

<table>
<thead>
<tr>
<th>Would the project</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact With Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

SETTING

Environmental Setting

Over the past 30 years, the City of Porterville’s population has grown at an average annual rate of 3.7 percent. However, the City’s population growth slowed to an average annual rate of 2.8 percent over the most recent 15 years. In 2006, the California Department of Finance (DOF) estimated the City with a population of 45,220 residents. In 2010, the City had an estimated population of 54,165 residents. In 2011 the City grew to 54,676 residents, while the City recorded an approximate population of 55,490 in 2012. According to the most recent California DOF report, the City currently is at approximately 55,490 residents, a 0.5 percent increase from 2012. Build-out of the 2030 General Plan will accommodate a population of approximately 107,300 in Porterville, which represents an annual population growth rate of 3.7 percent.

Regulatory Setting

The proposed Project is being evaluated pursuant to CEQA; however, there are no federal, state or local regulations, plans, programs, and guidelines associated with population or housing that are applicable to the proposed Project.
RESPONSES

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. There are no new homes or businesses associated with the Project and the project is outlined the City’s existing Stormwater Master Plan. The Project will not require the City to hire any additional employees to maintain the reservoir basin. The proposed Project will not affect any regional population, housing, or employment projections anticipated by City policy documents. There is no impact.

Mitigation Measures: None are required.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project will not displace any housing and therefore there is no impact.

Mitigation Measures: None are required.

No Impact. The Project will not displace any people and therefore there is no impact.

Mitigation Measures: None are required.
XIV. PUBLIC SERVICES

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:

<table>
<thead>
<tr>
<th>Services</th>
<th>Potentially Significant Impact</th>
<th>With Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire protection?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[X]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Police protection?</td>
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<tr>
<td>Schools?</td>
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<td>[X]</td>
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<tr>
<td>Parks?</td>
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<td>[X]</td>
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<tr>
<td>Other public facilities?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[X]</td>
</tr>
</tbody>
</table>

SETTING

Environmental Setting

The nearest fire station is Porterville Fire Station 2, which is approximately 1.4 miles to the southwest of the proposed Project site. The Porterville Police Station is located approximately 2.5 miles southeast of the site at 350 N D Street.

The Teapot Dome Landfill plant is approximately six miles southwest of the proposed Project site, while the Porterville Wastewater Treatment Plant is located approximately 1.3 miles southwest. Porterville Charter High School and Sequoia Middle School are both located less than one mile to the west of the proposed Project site. Hayes Field (sports park) is approximately one mile south of the site, while Veteran’s Park is approximately 1.4 miles southwest of the proposed site.
Regulatory Setting

Federal

National Fire Protection Association

The National Fire Protection Association (NFPA) is an international nonprofit organization that provides consensus codes and standards, research, training, and education on fire prevention and public safety. The NFPA develops, publishes, and disseminates more than 300 such codes and standards intended to minimize the possibility and effects of fire and other risks. The NFPA publishes the NFPA 1, Uniform Fire Code, which provides requirements to establish a reasonable level of fire safety and property protection in new and existing buildings.

State

California Fire Code and Building Code

The 2013 California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety and assistance to fire fighters and emergency responders during emergency operations. The provision of the Fire Code includes regulations regarding fire-resistance rated construction, fire protection systems such as alarm and sprinkler systems, fire service features such as fire apparatus access roads, fire safety during construction and demolition, and wildland urban interface areas.

In addition, the proposed Project is being evaluated pursuant to CEQA.

Local

Porterville General Plan Policies

- LU-G-5: Promote sustainability in the design and development of public and private development projects.

- OSC-G-10: Reduce and conserve energy use in existing and new commercial, industrial, and public structures.

- PHS-I-28: Ensure that new development incorporates safety concerns into the site, circulation, building design and landscaping plans.
RESPONSES

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?

   **Less than Significant Impact.** The Project site will continue to be served by the City of Porterville fire department. The reservoir basin will continually be maintained to keep the site weed free, which will decrease any potential fire hazards. No additional fire personnel or equipment is anticipated. The impact is *less than significant.*

   Police Protection?

   **Less than Significant Impact.** The proposed Project will continue to be served by the City of Porterville police department. The facility has been designed to discourage unauthorized access by persons and vehicles through the use of perimeter fencing surrounding the property. A block wall along the north, west and southern borders of the Project site serve to screen views of the interior of the site. No additional police personnel or equipment is anticipated. The impact is *less than significant.*

   Schools?

   **No Impact.** The direct increase in demand for schools is normally associated with new residential projects that bring new families with school-aged children to a region. The proposed Project does not contain any residential uses. The proposed Project, therefore, would not result in an influx of new students in the Project area and is not expected to result in an increased demand upon District resources and would not require the construction of new facilities. There is *no impact.*

   Parks?

   **No Impact.** The Project would not result in an increase in demand for parks and recreation facilities because it would not result in an increase in population. Accordingly, the proposed Project would have *no impacts* on parks.

   Other public facilities?
No Impact. The proposed Project does not propose residential, commercial, or industrial development. The Project, therefore, would not result in increased demand for, or impacts on, other public facilities such as library services. Accordingly, no impact would occur.

Mitigation Measures: None are required.
XV. RECREATION

Would the project:

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact</th>
<th>With Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
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</tbody>
</table>

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

SETTING

Environmental Setting

The City of Porterville provides its residents several types of parks and recreational facilities. Parks are defined as land owned or leased by the City and used for public recreational purposes. The City classifies parks and recreational facilities in five categories: Pocket Parks, Neighborhood Parks, Community Parks, Specialized Recreation, and Trail/Parkways. Currently, the City of Porterville has 15 parks for a total of approximately 295 acres of parkland.

These facilities range in size from the 0.1-acre North Park pocket park up to the 95-acre Sports Complex facility. With a 2006 population of 45,220 residents, the City has a ratio of 5.1 acres of parkland per 1,000 residents. The park ratio is based on Neighborhood Parks, Community Parks, and Specialized Recreation areas only. Trails, Community Facilities and Pocket Parks do not contribute to the ratio.

Regulatory Setting

The proposed Project is being evaluated pursuant to CEQA; however, there are no additional federal, state or local regulations, plans, programs, and guidelines associated with recreation that are applicable to the proposed Project.
RESPONSES

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?

No Impact. The proposed Project does not include the construction of residential uses and would not directly or indirectly induce population growth. Therefore, the proposed Project would not cause physical deterioration of existing recreational facilities from increased usage or result in the need for new or expanded recreational facilities. The Project would have no impact to existing parks.

Mitigation Measures: None are required.

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?

No Impact. The proposed Project does not include the construction of residential uses and would not directly induce population growth. Therefore, the Project would not cause physical deterioration of existing recreational facilities from increased usage or result in the need for new or expanded recreational facilities. There is no impact.

Mitigation Measures: None are required.
XVI. TRANSPORTATION/TRAFFIC

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?

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?

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

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

e. Result in inadequate emergency access?
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?

**SETTING**

**Environmental Setting**

The Project site is located within the northern portion of the City of Porterville, less than one-tenth of a mile west of SR 65 and approximately three miles north of SR 190. The site is located approximately 760 south of W. North Grand Avenue. The nearest airport to the proposed Project site is the Porterville Municipal Airport, which is located approximately 4.4 miles to the southwest of the site.

**Regulatory Setting**

*Federal*

Several federal regulations govern transportation issues. They include:

- Title 49, CFR, Sections 171-177 (49 CFR 171-177), governs the transportation of hazardous materials, the types of materials defined as hazardous, and the marking of the transportation vehicles.


- 49 CFR 397.9, the Hazardous Materials Transportation Act of 1974, directs the U.S. Department of Transportation to establish criteria and regulations for the safe transportation of hazardous materials.

*State*

**State of California Transportation Department Transportation Concept Reports**

Each District of the State of California Transportation Department (Caltrans) prepares a Transportation Concept Report (TCR) for every state highway or portion thereof in its jurisdiction. The TCR usually represents the first step in Caltrans’ long-range corridor planning process. The purpose of the TCR is to determine how a highway will be developed and managed so that it delivers the targeted LOS and quality of operations that are feasible to attain over a 20-year period, otherwise known as the “route concept” or beyond 20 years, for what is known as the “ultimate concept”.

State Route 190 is designated as Segment 3 in the proposed Project vicinity. Route 190 is classified by Caltrans as rural except for the portion in Porterville that is designated urban. The route is also predominately indicated as a Minor Arterial and Major Collector. Therefore, the Route Concept LOS of D has been assigned to the entire route. Segment 3 is a 4-lane expressway and there are no changes expected to this segment.

SR 65 is designated as Segment 7 in the vicinity of the proposed Project site and has a LOS of C. The route concept for Segment 7 of Route 65 is described by Caltrans as a two-lane expressway, with improvements potentially being a four-lane expressway over the next 10 years.

In addition, the proposed Project is being evaluated pursuant to CEQA.

Local

The City of Porterville and the Tulare County Regional Transportation Plan designate level of service “D” as the minimum acceptable intersection peak hour level of service standard.

Porterville General Plan Policies

- C-G-6: Maintain acceptable levels of service and ensure that future development and the circulation system are in balance.
- C-G-7: Ensure that new development pays its fair share of the costs of transportation facilities.
- C-I-12: Continue to require that new development pay a fair share of the costs of street and other traffic and local transportation improvements based on traffic generated and impacts on traffic service levels.

RESPONSES

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 will consist of the construction and operation of a reservoir basin and associated pipeline and will not require any new roadway construction. A 200 foot portion of pipeline will be bore and jacked under State Route 65 (which will require consultation and
permitting through Caltrans). Construction related activities will be completed in a three to four month time period and will generate approximately 20 construction related trips per day. Once completed, the reservoir basin will not require any on-site operating staff; however, approximately once per week, the site will be regularly maintained. Construction related vehicle trips will be temporary and short term. Any permanent impact to local roadways will be less than significant.

**Mitigation Measures:** None are required.

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.** As shown in Response XVI-a., the proposed Project will have a less than significant impact on any existing level of service or other travel demand measures. The Project will not conflict with any congestion management programs, as none are applicable to the Project.

**Mitigation Measures:** None are required.

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

**No Impact.** The Project site is approximately 4.4 miles northeast of the Porterville Municipal Airport. There are no characteristics of the Project that would have any impact on air traffic patterns. There is no impact.

**Mitigation Measures:** None are required.

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

**No Impact.** No roadway design features are associated with this proposed Project and the change in the existing land use will not result in an incompatible use with the surrounding area. There is no impact.

**Mitigation Measures:** None are required.
## XVII. UTILITIES AND SERVICE SYSTEMS

### Would the project:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less than Significant Impact</th>
<th>With Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
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</tr>
<tr>
<td>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?</td>
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</tr>
<tr>
<td>d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
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</tr>
<tr>
<td>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?</td>
<td>![ ]</td>
<td>![ ]</td>
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</tr>
<tr>
<td>f. Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>![ ]</td>
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<td>![ ]</td>
<td>![ ]</td>
</tr>
</tbody>
</table>
g. Comply with federal, state, and local statutes and regulations related to solid waste?

SETTING

Environmental Setting

The Teapot Dome Landfill plant is approximately six miles southwest of the proposed Project site. This landfill is one of three that serve all of Tulare County as well as parts of surrounding counties and they accept wood, green waste, and tires for recycling purposes in addition to solid waste.

Regulatory Setting

State

State Water Resources Control Board (SWRCB)

Waste Discharge Requirements Program. State regulations pertaining to the treatment, storage, processing, or disposal of solid waste are found in Title 27, CCR, Section 20005 et seq. (hereafter Title 27). In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.44. Several SWRCB programs are administered under the WDR Program, including the Sanitary Sewer Order and recycled water programs.

National Pollutant Discharge Elimination System (NPDES) Permit

As authorized by the Clean Water Act (CWA), the National Pollutant Discharge Elimination System (NPDES) Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. In California, it is the responsibility of Regional Water Quality Control Boards (RWQCB) to preserve and enhance the quality of the state’s waters through the development of water quality control plans and the issuance of waste discharge requirements (WDRs). WDRs for discharges to surface waters also serve as NPDES permits. Tulare County is within the Central Valley RWQCB’s jurisdiction.

In addition, the proposed Project is being evaluated pursuant to CEQA.
Local

Porterville General Plan Policies

- OSC-G-10: Reduce and conserve energy use in existing and new commercial, industrial, and public structures.

- OSC-I-41: Work with agricultural and industrial uses to ensure that water contamination and waste products are handled in a manner that protects the long-term viability of water resources.

- OSC-I-44: Work with the Regional Water Quality Control Board to ensure that all point source pollutants are adequately mitigated (as part of the CEQA review and project approval process) and monitored to ensure long-term compliance.

- OSC-I-51: Prior to the approval of individual projects, require the City Engineer and/or Building Official to verify that the provisions of applicable point source pollution programs have been satisfied.

RESPONSES

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

**Less than Significant Impact.** The proposed Project includes the construction and operation of a reservoir basin and associated pipeline to connect the basin to the existing City stormwater system. There will be no wastewater discharge from the Project. Therefore, the impact is *less than significant*.

**Mitigation Measures:** None are required.

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?

**Less than Significant Impact.** See Response XVII-a. The Project will not require construction of any new water or wastewater facilities. Therefore, the impact is *less than significant*.

**Mitigation Measures:** None are required.
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?

**Less than Significant Impact.** The proposed Project includes the expansion of the existing City of Porterville stormwater system, as identified in the City of Porterville Stormwater Master Plan. Storm water will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP is retained on-site during construction. As a result, any impacts are less than significant.

**Mitigation Measures:** None are required.

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

**No Impact.** There will be no water utilized to operate the reservoir basin. There is no impact.

**Mitigation Measures:** None are required.

---

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.** As described in Response XVII-a, the proposed Project will not generate any new source of wastewater. There is no impact.

**Mitigation Measures:** None are required.

---

f. Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

**Less than Significant Impact.** Proposed Project construction and operation will generate minimal amounts of solid waste. Solid waste from the site during operation, as well as any construction debris that is not recycled will be received at the Teapot Dome Landfill. Any impacts will be less than significant.

**Mitigation Measures:** None are required.
g. Comply with federal, state, and local statutes and regulations related to solid waste?

**Less than Significant Impact.** See Response XVII-f. The proposed Project will comply with all federal, state and local statutes and regulations related to solid waste. As such, any impacts would be *less than significant.*

**Mitigation Measures:** None are required.
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Less than Significant Impact</th>
<th>With Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? □ □ □ □

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

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

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

**Less than Significant Impact.** The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to *less than significant*.

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

**Less than Significant Impact.** CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc). The impact is *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 Impact.** The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project design to reduce all potentially significant impacts to *less than significant*. 
MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the City of Porterville’s Drainage Reservoir 18 Project (proposed Project). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements as well as conditions recommended by responsible agencies who commented on the project.

The first column of the Table identifies the mitigation measure. The second column, entitled “Party Responsible for Implementing Mitigation,” names the party responsible for carrying out the required action. The third column, “Implementation Timing,” identifies the time the mitigation measure should be initiated. The fourth column, “Party Responsible for Monitoring,” names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last column will be used by the City to ensure that individual mitigation measures have been monitored.
<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Party responsible for Implementing Mitigation</th>
<th>Implementation Timing</th>
<th>Party responsible for Monitoring</th>
<th>Verification (name/date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-1 To protect raptors and migratory song birds and to assist in avoiding take of avian species as required by Fish and Game Code Section 3503, 3503.5, and 3513, Project related activities will occur during the non-breeding season (September 16th through December 31st).</td>
<td>City of Porterville</td>
<td>During construction</td>
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<tr>
<td>BIO-2 If Project related activities will occur during the breeding season (Jan 1 through Sept 15), the City of Porterville shall conduct nest surveys for nesting Swainson’s hawks within ½ mile buffer around the Project site before starting any Project related activities following the survey methodology developed by the Swainson’s hawk Technical Advisory Committee. In the event that Swainson’s hawk is detected, California Department of Fish &amp; Wildlife (CDFW) shall be consulted by the Applicant or the Applicant’s consultant to discuss project implementation and take avoidance. If take cannot be avoided the City shall obtain an</td>
<td>City of Porterville</td>
<td>During construction</td>
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Mitigation Measure | Party responsible for Implementing Mitigation | Implementation Timing | Party responsible for Monitoring | Verification (name/date)
--- | --- | --- | --- | ---
Incidental Take Permit from CDWF for project related incidental take of Swainson’s hawk.  
If other nesting raptors and migratory songbirds are identified, the following minimum no disturbance buffers shall be required:  
- 250 feet around active passerine (perching birds and songbirds) nests  
- 500 feet around active raptor nests  
These buffers shall be maintained until the breeding season has ended or until a qualified biologist has determined and CDFW has agreed in writing that the birds have fledged and are no longer reliant upon the nest or parental care for survival. |  |  |  |
BIO-3 Vertical tubes such as chain link fencing poles can result in the entrapment and death of a variety of bird species. All vertical tubes such as chain link fencing poles shall be immediately capped at the time that they are installed to prevent avian fatalities. | City of Porterville | During construction | City of Porterville | 
### Mitigation Measure

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<th>Mitigation Measure</th>
<th>Party responsible for Implementing Mitigation</th>
<th>Implementation Timing</th>
<th>Party responsible for Monitoring</th>
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<tr>
<td>CUL-1</td>
<td>City of Porterville</td>
<td>During construction</td>
<td>City of Porterville</td>
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</table>

- Before initiation of construction or ground-disturbing activities associated with the Project, the Project proponent for all Project phases shall require all construction personnel to be alerted to the possibility of buried cultural resources, including historic, archeological and paleontological resources;

- The general contractor and its supervisory staff shall be responsible for monitoring the construction Project for disturbance of cultural resources; and

- If a potentially significant historical, archaeological, or paleontological resource, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains or trash deposits are encountered during subsurface construction activities (i.e., trenching, grading), all construction activities within a 100-foot radius of the identified potential resource shall cease until a qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation (DPR) forms. The archaeologist shall determine whether the item requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the item is determined to be significant under California Environmental Quality Act, the archaeologist shall recommend feasible mitigation measures, which may include avoidance, preservation in place or
Mitigation Measure | Party responsible for Implementing Mitigation | Implementation Timing | Party responsible for Monitoring | Verification (name/date)
---|---|---|---|---
other appropriate measure, as outlined in Public Resources Code section 21083.2. The City of Porterville shall implement said measures. | | | | 
CUL-2 | City of Porterville | During construction | City of Porterville | 
The City of Porterville will incorporate into the construction contract(s) a provision that in the event a fossil or fossil formations are discovered during any subsurface construction activities for the proposed Project (i.e., trenching, grading), all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the appropriate representative at the City of Porterville, who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the City shall implement those measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code section 21083.2.
Chapter 5

Preparers and References
LIST OF PREPARERS AND REFERENCES

List of Preparers

Crawford & Bowen Planning, Inc.

- Travis Crawford, AICP, Principal Environmental Planner
- Emily Bowen, LEED AP, Principal Environmental Planner

Persons and Agencies Consulted

City of Porterville

- Julie Phillips, AICP, Community Development Manager
- Jennifer M. Byers, Interim Community Development Director
- Mike Reed, City Engineer

Petra Resource Management

- David S. Whitley, Ph.D., RPA, Principal Investigator
- Peter A. Carey, M.A., RPA, Associate Archaeologist

California Historic Resources Information System

- Celeste Thomson, Coordinator

References

California Code of Regulations (CCR) Title 24 (Uniform Building Code).


California School Finder. *California School Data.*  
http://www.schoolfinder.ca.gov/.

California Environmental Quality Act (CEQA) Statues (Public Resources Code Section 21000, et. seq.).

California Environmental Protection Agency, Cortese List Data Resources,  
http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm.

California Historical Resources Information System, “Cultural Resources Records Search”,  
August 2014.


City of Porterville “2030 General Plan” and EIR, March 2008.


State of California, Air Resources Board.

Title 14, California Code of Regulations, Chapter 3. *Guidelines for Implementation of the California Environmental Quality Act,* Section 15000 et. seq.

Appendices
Appendix A

Air Quality Model Results
Porterville Drainage Reservoir 18
Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

<table>
<thead>
<tr>
<th>Land Uses</th>
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1.2 Other Project Characteristics

- Urbanization: Rural
- Wind Speed (m/s): 2.2
- Precipitation Freq (Days): 5
- Climate Zone: 7
- Operational Year: 2014
- Utility Company
- CO2 Intensity (lb/MWhr): 0
- CH4 Intensity (lb/MWhr): 0
- N2O Intensity (lb/MWhr): 0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use -

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2.0 Emissions Summary
2.1 Overall Construction

Unmitigated Construction

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<th>SO2</th>
<th>Fugitive PM10</th>
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<th>Fugitive PM2.5</th>
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<th>PM2.5 Total</th>
<th>Bio-CO2</th>
<th>NBio-CO2</th>
<th>Total CO2</th>
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<th>CO2e</th>
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2.2 Overall Operational

Unmitigated Operational

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### 2.2 Overall Operational

#### Mitigated Operational

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### 3.0 Construction Detail

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 300,564; Non-Residential Outdoor: 100,188 (Architectural Coating – sqft)

**OffRoad Equipment**
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**Trips and VMT**
### 3.1 Mitigation Measures Construction

### 3.2 Demolition - 2015

**Unmitigated Construction On-Site**

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| Category      | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4  | N2O    | CO2e  |
|---------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|----------------|-------------|---------|----------|-----------|------|--------|-------|--------|
| Off-Road      | 0.0451 | 0.4836 | 0.3607 | 4.0000e-04 | 0.0245       | 0.0245       | 0.0229     | 0.0229         | 0.0229         | 0.0000      | 37.4413 | 37.4413  | 0.0102    | 0.0000| 37.6544|
| Total         | 0.0451 | 0.4836 | 0.3607 | 4.0000e-04 | 0.0245       | 0.0245       | 0.0229     | 0.0229         | 0.0229         | 0.0000      | 37.4413 | 37.4413  | 0.0102    | 0.0000| 37.6544|
### 3.2 Demolition - 2015

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3.2 Demolition - 2015

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3.3 Site Preparation - 2015

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### 3.3 Site Preparation - 2015

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### 3.4 Grading - 2015

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#### Mitigated Construction On-Site

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### 3.4 Grading - 2015

**Mitigated Construction Off-Site**

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### 3.5 Building Construction - 2015

**Unmitigated Construction On-Site**

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### 3.5 Building Construction - 2015

#### Unmitigated Construction Off-Site

| Category   | ROG | NOx | CC | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------|-----|-----|----|-----|---------------|--------------|------------|---------------|--------------|------------|----------|----------|----------|--------|-----|-----|------|
| Hauling    | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor     | 0.0559 | 0.3931 | 0.5699 | 8.2000e-004 | 0.0220 | 7.0900e-003 | 0.0291 | 6.3100e-003 | 6.5100e-003 | 0.0128 | 0.0000 | 74.7780 | 74.7780 | 7.2000e-004 | 0.0000 | 74.7931 |
| Worker     | 0.0549 | 0.0829 | 0.8069 | 1.3700e-003 | 0.1186 | 1.0200e-003 | 0.1196 | 0.0315 | 9.2000e-004 | 0.0325 | 0.0000 | 106.0426 | 106.0426 | 6.2500e-003 | 0.0000 | 106.1735 |
| Total      | 0.1108 | 0.4760 | 1.3768 | 2.1900e-003 | 0.1406 | 8.1100e-003 | 0.1487 | 0.0378 | 7.4300e-003 | 0.0453 | 0.0000 | 180.8206 | 180.8206 | 6.9700e-003 | 0.0000 | 180.9670 |

#### Mitigated Construction On-Site

| Category   | ROG | NOx | CC | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------|-----|-----|----|-----|---------------|--------------|------------|---------------|--------------|------------|----------|----------|----------|--------|-----|-----|------|
| Off-Road   | 0.4171 | 3.4234 | 2.1369 | 3.0600e-003 | 0.2413 | 0.2413 | 0.2268 | 0.2268 | 0.0000 | 278.1532 | 278.1532 | 0.0698 | 0.0000 | 279.6188 |
| Total      | 0.4171 | 3.4234 | 2.1369 | 3.0600e-003 | 0.2413 | 0.2413 | 0.2268 | 0.2268 | 0.0000 | 278.1532 | 278.1532 | 0.0698 | 0.0000 | 279.6188 |
### 3.5 Building Construction - 2015

#### Mitigated Construction Off-Site

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### 3.5 Building Construction - 2016

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3.5 Building Construction - 2016

Unmitigated Construction Off-Site

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### 3.5 Building Construction - 2016

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### 3.6 Paving - 2016

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3.6 Paving - 2016

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### 3.6 Paving - 2016

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<th>Fugitive PM2.5</th>
<th>Exhaust PM2.5</th>
<th>PM2.5 Total</th>
<th>Bio- CO2</th>
<th>NBio- CO2</th>
<th>Total CO2</th>
<th>CH4</th>
<th>N2O</th>
<th>CO2e</th>
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<tbody>
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<td>Hauling</td>
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<td>0.0000</td>
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<tr>
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<td>0.0000</td>
<td>0.0000</td>
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</tr>
<tr>
<td>Worker</td>
<td>7.6000e-004</td>
<td>1.1600e-003</td>
<td>0.0112</td>
<td>2.0000e-005</td>
<td>1.8900e-003</td>
<td>2.0000e-005</td>
<td>1.9100e-003</td>
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<td>1.0000e-005</td>
<td>5.2000e-004</td>
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<td>1.6302</td>
<td>9.0000e-005</td>
<td>0.0000</td>
<td>1.6320</td>
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<tr>
<td>Total</td>
<td>7.6000e-004</td>
<td>1.1600e-003</td>
<td>0.0112</td>
<td>2.0000e-005</td>
<td>1.8900e-003</td>
<td>2.0000e-005</td>
<td>1.9100e-003</td>
<td>5.0000e-004</td>
<td>1.0000e-005</td>
<td>5.2000e-004</td>
<td>0.0000</td>
<td>1.6302</td>
<td>1.6302</td>
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</table>

#### Mitigated Construction On-Site

<table>
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<tr>
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<th>NOx</th>
<th>CC</th>
<th>SO2</th>
<th>Fugitive PM10</th>
<th>Exhaust PM10</th>
<th>PM10 Total</th>
<th>Fugitive PM2.5</th>
<th>Exhaust PM2.5</th>
<th>PM2.5 Total</th>
<th>Bio- CO2</th>
<th>NBio- CO2</th>
<th>Total CO2</th>
<th>CH4</th>
<th>N2O</th>
<th>CO2e</th>
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<td>Archit. Coating</td>
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<tr>
<td>Off-Road</td>
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<td>0.0170</td>
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<td>1.7700e-003</td>
<td>1.7700e-003</td>
<td>1.7700e-003</td>
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<td>1.7700e-003</td>
<td>1.7700e-003</td>
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3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

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<th>Exhaust PM10</th>
<th>PM10 Total</th>
<th>Fugitive PM2.5</th>
<th>Exhaust PM2.5</th>
<th>PM2.5 Total</th>
<th>Bio- CO2</th>
<th>NBio- CO2</th>
<th>Total CO2</th>
<th>CH4</th>
<th>N2O</th>
<th>CO2e</th>
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</tr>
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<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Worker</td>
<td>7.6000e-004</td>
<td>1.1600e-003</td>
<td>0.0112</td>
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<td>1.8900e-003</td>
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<td>1.9100e-003</td>
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<td>1.0000e-005</td>
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<tr>
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<td>1.1600e-003</td>
<td>0.0112</td>
<td>2.0000e-005</td>
<td>1.8900e-003</td>
<td>2.0000e-005</td>
<td>1.9100e-003</td>
<td>5.0000e-004</td>
<td>1.0000e-005</td>
<td>5.2000e-004</td>
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<td>1.6302</td>
<td>9.0000e-005</td>
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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

<table>
<thead>
<tr>
<th>Category</th>
<th>ROG</th>
<th>NOx</th>
<th>CC</th>
<th>SO2</th>
<th>Fugitive PM10</th>
<th>Exhaust PM10</th>
<th>PM10 Total</th>
<th>Fugitive PM2.5</th>
<th>Exhaust PM2.5</th>
<th>PM2.5 Total</th>
<th>Bio- CO2</th>
<th>NBio- CO2</th>
<th>Total CO2</th>
<th>CH4</th>
<th>N2O</th>
<th>CO2e</th>
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<tbody>
<tr>
<td>Mitigated</td>
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<td>0.0000</td>
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<td>0.0000</td>
<td>0.0000</td>
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<tr>
<td>Unmitigated</td>
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<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
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4.2 Trip Summary Information

<table>
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<th>Land Use</th>
<th>Average Daily Trip Rate</th>
<th>Unmitigated</th>
<th>Mitigated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weekday</td>
<td>Saturday</td>
<td>Sunday</td>
</tr>
<tr>
<td>Other Non-Asphalt Surfaces</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0.00</td>
<td>0.00</td>
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4.3 Trip Type Information

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Miles</th>
<th>Trip %</th>
<th>Trip Purpose %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H-W or C-W</td>
<td>H-S or C-C</td>
<td>H-O or C-NW</td>
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<tr>
<td>Other Non-Asphalt Surfaces</td>
<td>14.70</td>
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</table>

5.0 Energy Detail

5.1 Mitigation Measures Energy
## Emission Estimates for Drainage Reservoir 18

<table>
<thead>
<tr>
<th>Project Phases (English Units)</th>
<th>ROG (lbs/day)</th>
<th>CO (lbs/day)</th>
<th>NOx (lbs/day)</th>
<th>PM10 (lbs/day)</th>
<th>Exhaust (lbs/day)</th>
<th>Fugitive Dust (lbs/day)</th>
<th>Total PM2.5 (lbs/day)</th>
<th>Exhaust PM2.5 (lbs/day)</th>
<th>Fugitive Dust PM2.5 (lbs/day)</th>
<th>CO2 (lbs/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grubbing/Land Clearing</td>
<td>2.1</td>
<td>12.5</td>
<td>21.8</td>
<td>3.5</td>
<td>1.0</td>
<td>2.5</td>
<td>1.4</td>
<td>0.9</td>
<td>0.5</td>
<td>2,475.2</td>
</tr>
<tr>
<td>Grading/Excavitation</td>
<td>11.2</td>
<td>53.6</td>
<td>126.4</td>
<td>8.7</td>
<td>6.2</td>
<td>2.5</td>
<td>6.1</td>
<td>5.5</td>
<td>0.5</td>
<td>13,104.8</td>
</tr>
<tr>
<td>Drainage/Utilities/Sub-Grade</td>
<td>6.5</td>
<td>30.8</td>
<td>57.8</td>
<td>6.0</td>
<td>3.5</td>
<td>2.5</td>
<td>3.7</td>
<td>3.2</td>
<td>0.5</td>
<td>5,938.3</td>
</tr>
<tr>
<td>Paving</td>
<td>3.3</td>
<td>16.6</td>
<td>27.8</td>
<td>1.9</td>
<td>1.9</td>
<td>-</td>
<td>1.7</td>
<td>1.7</td>
<td>-</td>
<td>3,028.4</td>
</tr>
<tr>
<td>Maximum (pounds/day)</td>
<td>11.2</td>
<td>53.6</td>
<td>126.4</td>
<td>8.7</td>
<td>6.2</td>
<td>2.5</td>
<td>6.1</td>
<td>5.5</td>
<td>0.5</td>
<td>13,104.8</td>
</tr>
</tbody>
</table>

**Total (tons/construction project)**: 0.2 1.2 2.5 0.2 0.1 0.1 0.1 0.1 0.0 264.7

Notes:
- Project Start Year: 2015
- Project Length (months): 3
- Total Project Area (acres): 1
- Maximum Area Disturbed/Day (acres): 0
- Total Soil Imported/Exported (yd³/day): 417

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

---

## Emission Estimates for Drainage Reservoir 18

<table>
<thead>
<tr>
<th>Project Phases (Metric Units)</th>
<th>ROG (kgs/day)</th>
<th>CO (kgs/day)</th>
<th>NOx (kgs/day)</th>
<th>PM10 (kgs/day)</th>
<th>Exhaust (kgs/day)</th>
<th>Fugitive Dust (kgs/day)</th>
<th>Total PM2.5 (kgs/day)</th>
<th>Exhaust PM2.5 (kgs/day)</th>
<th>Fugitive Dust PM2.5 (kgs/day)</th>
<th>CO2 (kgs/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grubbing/Land Clearing</td>
<td>1.0</td>
<td>5.7</td>
<td>9.9</td>
<td>1.6</td>
<td>0.5</td>
<td>1.1</td>
<td>0.6</td>
<td>0.4</td>
<td>0.2</td>
<td>1,125.1</td>
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<tr>
<td>Grading/Excavitation</td>
<td>5.1</td>
<td>24.4</td>
<td>57.5</td>
<td>3.9</td>
<td>2.8</td>
<td>1.1</td>
<td>2.8</td>
<td>2.5</td>
<td>0.2</td>
<td>5,956.7</td>
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<tr>
<td>Drainage/Utilities/Sub-Grade</td>
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<td>14.0</td>
<td>26.3</td>
<td>2.7</td>
<td>1.6</td>
<td>1.1</td>
<td>1.7</td>
<td>1.4</td>
<td>0.2</td>
<td>2,699.2</td>
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<tr>
<td>Paving</td>
<td>1.5</td>
<td>7.5</td>
<td>12.6</td>
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<td>0.9</td>
<td>-</td>
<td>0.8</td>
<td>0.8</td>
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<td>Maximum (kilograms/day)</td>
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<td>3.9</td>
<td>2.8</td>
<td>1.1</td>
<td>2.8</td>
<td>2.5</td>
<td>0.2</td>
<td>5,956.7</td>
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</table>

**Total (megagrams/construction project)**: 0.2 1.1 2.3 0.2 0.1 0.1 0.1 0.1 0.0 240.1

Notes:
- Project Start Year: 2015
- Project Length (months): 3
- Total Project Area (hectares): 0
- Maximum Area Disturbed/Day (hectares): 0
- Total Soil Imported/Exported (meters³/day): 319

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.
Appendix B

CNDDDB Results
<table>
<thead>
<tr>
<th>Element_Type</th>
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<th>Common_Name</th>
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<th>State_Status</th>
<th>CDFW_Status</th>
<th>CA_Rare_Plan</th>
<th>Rank</th>
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</thead>
<tbody>
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<td>Rana boylii</td>
<td>foothill yellow-legged frog</td>
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<td>None</td>
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</tr>
<tr>
<td>Animals - Amphibians</td>
<td>Spea hammondii</td>
<td>western spadefoot</td>
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<td>None</td>
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<td>Animals - Birds</td>
<td>Buteo swainsoni</td>
<td>Swainson's hawk</td>
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<td>Gymnogyps californianus</td>
<td>California condor</td>
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<td>Animals - Birds</td>
<td>Athene cunicularia</td>
<td>burrowing owl</td>
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<td>Animals - Crustaceans</td>
<td>Branchinecta lynchi</td>
<td>vernal pool fairy shrimp</td>
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<td>Desmocerus californicus dimorphus</td>
<td>valley elderberry longhorn beetle</td>
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<td>Dipodomys nitratoides nitratoides</td>
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Cairns Corner
Lindsay
Frazier Valley
Woodville
Porterville
Success Dam
Sausalito School
Ducor
Fountain Springs
Appendix C
Cultural Resources Study
PHASE I SURVEY, DRAINAGE BASIN 18 PROJECT, PORTERVILLE, TULARE COUNTY, CALIFORNIA

Prepared for:

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December 2014

PN 23420.00
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MANAGEMENT SUMMARY

An intensive Phase I cultural resources survey was conducted for the Drainage Basin 18 project, near Porterville, Tulare County, California. This study was conducted by Petra Resource Management, with David S. Whitley, Ph.D., RPA, serving as principal investigator. Background studies and fieldwork for the survey were completed in November 2014. The study was undertaken to assist with California Environmental Quality Act (CEQA) compliance. The City of Porterville will serve as the lead agency.

A records search of site files and maps was conducted on November 25, 2014, at the Southern San Joaquin Valley Archaeological Information Center (AIC), California State University, Bakersfield. A search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed on December 19, 2014. These investigations determined that the study area had not been previously surveyed in its entirety. No sacred sites or traditional cultural places had been identified within or adjacent to the study area.

The Phase I survey fieldwork was conducted in November 2014, with parallel transects spaced at 15-meter (m.) intervals along the proposed 1,230 foot (ft) storm drain route with a buffer of 50-ft. on each side of the pipeline route, and an approximately 4.34-acre area for the water basin. The total survey area was about 4.48-acres.

No significant historical resources or properties were discovered within the study area. Based on these findings, the construction of the pipeline and basin does not have the potential to result in adverse impacts to significant historical resources or properties, and no additional cultural resource studies are recommended.
1. INTRODUCTION AND REGULATORY CONTEXT

Petra Resource Management (Petra) was retained by Crawford and Bowen Planning, Visalia, to conduct an intensive Phase I cultural resources survey for the Drainage Basin 18 project study area, near Porterville, Tulare County, California. The project consists of the construction of a storm drain and basin.

The purpose of this archaeological investigation was to assist with compliance with the California Environmental Quality Act (CEQA) for development of the above location. The investigation was undertaken, specifically, to ensure that significant impacts to historical resources do not occur as a result of the construction of the pipeline.

This current included:

- A background records search and literature review to determine if any known archaeological sites were present in the project zone and/or whether the area had been previously and systematically studied by archaeologists;
- A search of the NAHC Sacred Lands File to determine if any traditional cultural places or cultural landscapes have been identified within the area;
- An on-foot, intensive inventory of the study area to identify and record previously undiscovered cultural resources and to examine known sites; and
- A preliminary assessment of any such resources found within the subject property.

This study was conducted by Petra, of Tehachapi, California, in November 2014. David S. Whitley, Ph.D., RPA, served as principal investigator, and Peter A. Carey, M.A., RPA, Associate Archaeologist, conducted the fieldwork.

This manuscript constitutes a report on the Phase I survey. Subsequent chapters provide background to the investigation, including historic context studies; the findings of the archival records search; a summary of the field surveying techniques employed; and the results of the fieldwork. We conclude with management recommendations for the pipeline project area.

1.1 Project Location

The project area is located at the northern limits of Porterville about 20-miles (mi.) southeast of Visalia, Tulare County, California. This places it next to the western foothills of the Sierra Nevada mountain range on the southeastern end of the San Joaquin Valley, which is a large interior and relatively low-lying valley that drains northwards to the San Francisco Bay. While the study area is a significant distance from the Pacific Ocean, elevation is only approximately 425-ft. above mean seal level (amsl). The project study area is located adjacent to Highway 65. A portion of the proposed storm drain route crosses Highway 65 north of Grand Avenue in Porterville.

The proposed basin and storm drain project will total approximately 4.48-acres in Section 15 in Township 21 South, Range 27 East (T27S/R22E) of the Porterville United States Geological Survey (USGS) quadrangle on the Mount Diablo Base and Meridian (MDBM; Figure 1).
1. Introduction and Regulatory Context

1.2 Project Description

The City of Porterville in Tulare County, California will expand their storm drain system near Highway 65. The proposed project primarily entails excavation of a proposed 4.34 acre reservoir basin and the installation of a new 1,230-ft linear pipe that will connect the basin to the existing storm drain system (Figure 1).

1.3 Regulatory Context

1.3.1 CEQA

CEQA is applicable to discretionary actions by state or local lead agencies. Under CEQA, lead agencies must analyze impacts to cultural resources. Significant impacts under CEQA occur when “historically significant” or “unique” cultural resources are adversely affected, which occurs when such resources could be altered or destroyed through project implementation. Historically significant cultural resources are defined by eligibility for or by listing in the California Register of Historical Resources (CRHR; see PRC § 5024.1, Title 14 CCR, Section 4852 and § 15064.5(a) (3)).

Significant cultural resources are those archaeological resources and historical properties that:

(A) Are associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;

(B) Are associated with the lives of persons important in our past;

(C) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

(D) Have yielded, or may be likely to yield, information important in prehistory or history.

Unique resources under CEQA are those that represent:

An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC § 21083.2(g)).

Preservation in place is the preferred approach under CEQA to mitigating adverse impacts to significant or unique cultural resources.
Figure 1. Location of the Basin 18 Project study area, Tulare County, California.
2. ENVIRONMENTAL AND CULTURAL BACKGROUND

2.1 ENVIRONMENTAL BACKGROUND

At the time of the study, the Basin 18 study area consisted of a barren dirt field, a gravel road adjacent to residential properties, and a section of Highway 65 just north of Grand Avenue (Figures 2-4). Although this location currently may be characterized as a dry open valley margin, the study area is located along the Tule River. Prior to development, the region would have been a low lying, water rich area characterized by sloughs, marshes and swamps. While occasionally inundated by floodwaters, in most years the region would have been marshy during the winter rainy season.

Historical and recent land-use has thus changed the vegetation that was once present within and near the project area. It is likely that Riparian Woodlands were once found along drainages in the general vicinity. Although the project area may have included the Valley Grassland community, depending upon drainage and seasonal storm systems, would have been present along the Tule River (see Schoenherr 1992). The study area, on the open flats of the San Joaquin Valley, is on an alluvial plain. The potential for subsurface archaeological deposits, given this geomorphological setting, is minimal as a result.

Figure 2. Basin 18 location overview, looking southeast.
2. Environmental and Cultural Background

Figure 3. Proposed storm drain route, looking north.

Figure 4. Proposed storm drain location crossing Highway 65, looking northeast.
2.3 ETHNOGRAPHIC CONTEXT

Penutian-speaking Yokuts tribal groups occupied the southern San Joaquin Valley region and much of the nearby Sierra Nevada. Ethnographic information about the Yokuts was collected primarily by Powers (1971, 1976 [originally 1877]), Kroeber (1925), Gayton (1930, 1948), Driver (1937), Latta (1977) and Harrington (n.d.). For a variety of historical reasons, existing research information emphasizes the central Yokuts tribes who occupied both the valley and particularly the foothills of the Sierra. The northernmost tribes suffered from the influx of Euro-Americans during the Gold Rush and their populations were in substantial decline by the time ethnographic studies began in the early twentieth century. In contrast, the southernmost tribes were partially removed by the Spanish to missions and eventually absorbed into multi-tribal communities on the Sebastian Indian Reservation (on Tejon Ranch), and later the Tule River Reservation and Santa Rosa Rancheria to the north. The result is an unfortunate scarcity of ethnographic detail on southern Valley tribes, especially in relation to the rich information collected from the central foothills tribes where native speakers of the Yokuts dialects are still found. Regardless, the general details of indigenous life-ways were similar across the broad expanse of Yokuts territory, particularly in terms of environmentally influenced subsistence and adaptation and with regard to religion and belief, which were similar everywhere.

This scarcity of specific detail is particularly apparent in terms of southern valley tribal group distribution. According to Kroeber (1925:478), the Tulamni occupied the edges of Buena Vista Lake and the southwestern end of the valley; the Hometwoli lived in and around Kern Lake to the east; the Tuhohi (or Chuxoxi) resided near the mouth of Kern River as it drained north into Tulare Lake; and Yauelmani territory comprised the southeastern side of the valley extending north into Bakersfield proper. The study area lies near the boundaries of these tribes, but its specific territorial affiliation is unclear.

Regardless of tribal affiliation, historical village distribution was similar across the region. Villages were typically located along lakeshores and major stream courses (as these existed circa AD 1800). Major historical winter-aggregation village locations on the west side of the San Joaquin Valley were typically located on higher ground above the sloughs, swamps and lakeshores, smaller, summer-dispersal camps may have been located on slight rises on the valley floor. Villages on the east side, in contrast, are adjacent to rivers and streams flowing out the Sierra Nevada to the east.

Most Yokuts groups, regardless of specific tribal affiliation, were organized as a recognized and distinct tribelet; a circumstance that almost certainly pertained to the tribal groups noted above. Tribelets were land-owning groups organized around a central village and linked by shared territory and descent from a common ancestor. The population of most tribelets ranged from about 150 to 500 peoples (Kroeber 1925).

Each tribelet was headed by a chief who was assisted by a variety of assistants, the most important of whom was the winatum, a herald or messenger and assistant chief. A shaman also served as religious officer. While shamans did not have any direct political authority, as Gayton (1930) has illustrated, they maintained substantial influence within their tribelet.
Shamanism is a religious system common to most Native American tribes. It involves a direct and personal relationship between the individual and the supernatural world enacted by entering a trance or hallucinatory state usually based on the ingestion of psychotropic plants, such as jimsonweed or more typically native tobacco. Shamans were considered individuals with an unusual degree of supernatural power, serving as healers or curers, diviners, and controllers of natural phenomena such as rain or thunder. Shamans also produced the rock art of this region, depicting the visions they experienced in vision quests believed to represent their spirit helpers and events in the supernatural realm (Whitley 1992, 2000).

The centrality of shamanism to the religious and spiritual life of the Yokuts was demonstrated by the role of shamans in the yearly ceremonial round. The ritual round, performed the same each year, started in the spring with the jimsonweed ceremony, followed by rattlesnake dance and (where appropriate) first salmon ceremony. After returning from seed camps, fall rituals began in the late summer with the mourning ceremony, followed by first seed and acorn rites and then bear dance (Gayton 1930:379). In each case, shamans served as ceremonial officials responsible for specific dances involving a display of their supernatural powers (Kroeber 1925).

Subsistence practices varied from tribelet to tribelet based on the environment of residence. Throughout Native California, and Yokuts territory in general, the acorn was a primary dietary component, along with a variety of gathered seeds. Valley tribes augmented this resource with lacustrine and riverine foods, especially fish and wildfowl. As with many Native California tribes, the settlement and subsistence rounds included the winter aggregation into a few large villages, where stored resources, like acorns, served as staples, followed by dispersal into smaller camps, often occupied by extended families, where seasonally available resources would be gathered and consumed.

Although population estimates vary and population size was greatly affected by the introduction of Euro-American diseases and social disruption, the Yokuts were one of the largest, most successful groups in Native California. Cook (1978) estimates that the Yokuts region contained 27 percent of the aboriginal population in the state at the time of contact; other estimates are even higher.

**2.4 PREHISTORIC CONTEXT**

The southern San Joaquin Valley region has received minimal archaeological attention compared to other areas of the state. In part, this is because the majority of California archaeological work has concentrated in the Sacramento Delta, Santa Barbara Channel and central Mojave Desert areas (see Moratto 1984). Although knowledge of the region’s prehistory is limited, enough is known to determine that the archaeological record is broadly similar to south-central California as a whole (see Gifford and Schenk 1926; Hewes 1941; Wedel 1941; Fenenga 1952; Elsasser 1962; Fredrickson and Grossman 1977; Schiffman and Garfinkel 1981). Based on these sources, the general prehistory of the region can be outlined as follows.

Initial occupation of the region occurred at least as early as the *Paleoindian Period*, or prior to about 10,000 YBP (years before present). Evidence of early use of the region is indicated by characteristic fluted and stemmed points found around the margin of Tulare Lake, in the foothills
of the Sierra, and in the Mojave Desert proper. (In each case, these are locations many miles distant from the study area.)

Both fluted and stemmed points are particularly common around lake margins, suggesting a terminal Pleistocene/early Holocene lakeshore adaptation similar to that found throughout the far west at the same time; little else is known about these earliest peoples. Additional finds consist of a Clovis-like projectile point discovered in a flash-flood cut-bank near White Oak Lodge in 1953 on Tejon Ranch (Glennan 1987a, 1987b). More recently, a similar fluted point was found near Bakersfield (Zimmerman et al. 1989), and a number are known from the Edwards Air Force Base and Boron area of the western Mojave Desert. Although human occupation of the state is well-established during the Late Pleistocene, relatively little can be inferred about the nature and distribution of this occupation with a few exceptions. First, little evidence exists to support the idea that these Paleo-Indians peoples were big-game hunters, similar to those found on the Great Plains. Second, the western Mojave Desert evidence suggests small, very mobile populations that left a minimal archaeological signature.

Substantial evidence for human occupation of California first occurs during the middle Holocene, roughly 7500 to 4000 YBP. This period is known as the Early Horizon, or alternatively as the Early Millingstone along the Santa Barbara Channel. In the south, populations concentrated along the coast with minimal visible use of inland areas. Adaptation emphasized hard seeds and nuts with tool-kits dominated by mullers and grindstones (manos and metates). Additionally, little evidence for Early Horizon occupation exists in most inland portions of the state, partly due to a severe cold and dry paleoclimatic period occurring at this time. Regardless of specifics, Early Horizon population density was low with a subsistence adaptation more likely tied to plant food gathering than hunting.

Environmental conditions improved dramatically after about 4000 YBP during the Middle Horizon (or Intermediate Period). This period known climatically as the Holocene Maximum (circa 3800 YBP) and was characterized by significantly warmer and wetter conditions than previously experienced. Archaeologically, it was marked by large population increase and radiation into new environments along coastal and interior south-central California and the Mojave Desert (Whitley 2000). In the Delta region to the north, this same period of favorable environmental conditions was characterized by the appearance of the Windmiller culture which exhibited a high degree of ritual elaboration, especially in burial practices, and perhaps even rudimentary mound-building tradition (Meighan, personal communication, 1985). Along with ritual elaboration, Middle Horizon times experienced increasing subsistence specialization, perhaps correlating with the appearance of acorn processing technology. Penutian speaking peoples (including the Yokuts) are also posited to have entered the state roughly at the beginning of this period and, perhaps to have brought this technology with them (cf. Moratto 1984). Likewise it appears the so-called "Shoshonean Wedge" in southern California or the Takic speaking groups that include the Gabrieleno/Fernandeño, Tataviam and Kitanemuk, may have moved into the region at this time, rather than at about 1500 BP as first suggested by Kroeber (1925).

Evidence for Middle Horizon occupation of interior south-central California is substantial. For example, in northern Los Angeles County along the upper Santa Clara River, to the south of the San Joaquin Valley, the Agua Dulce village complex indicates occupation extending back to the
Intermediate Period, when the population of the village may have been 50 or more people (King et al n.d.). Similarly, inhabitation of the Hathaway Ranch region near Lake Piru, and the Newhall Ranch near Valencia, appears to date to the Intermediate Period (W & S Consultants 1994). To the west, little or no evidence exists for pre-Middle Horizon occupation in the upper Sisquoc and Cuyama River drainages; populations first appear there at roughly 3500 YBP (Horne 1981). The Carrizo Plain, the valley immediately west of the San Joaquin, experienced a major population expansion during the Middle Horizon (W & S Consultants 2004; Whitley et al. 2007), and recently collected data indicates the Tehachapi Mountains region was first significantly occupied during the Middle Horizon (W & S Consultants 2006). A parallel can be drawn to the inland Ventura County region where a similar pattern has been identified (Whitley and Beaudry 1991), as well as the western Mojave Desert (Sutton 1988a, 1988b), the southern Sierra Nevada (W & S Consultants 1999), and the Coso Range region (Whitley et al. 1988). In all of these areas a major expansion in settlement, the establishment of large site complexes and an increase in the range of environments exploited appear to have occurred sometime roughly around 4,000 years ago. Although most efforts to explain this expansion have focused on local circumstances and events, it is increasingly apparent this was a major southern California-wide occurrence and any explanation must be sought at a larger level of analysis (Whitley 2000). Additionally, evidence from the Carrizo Plain suggests the origins of the tribelet level of political organization developed during this period (W & S Consultants 2004; Whitley et al. 2007). Whether this same demographic process holds for the southern San Joaquin Valley, including the study area, is yet to be determined.

The beginning of the Late Horizon is set variously at 1500 and 800 YBP, with a consensus for the shorter chronology. Increasing evidence suggests the importance of the Middle-Late Horizons transition (AD 800 to 1200) in the understanding of south-central California. This corresponds to the so-called Medieval Climatic Anomaly, a period of climatic instability that included major droughts and resulted in demographic disturbances across much of the west (Jones et al. 1999). It is also believed to have resulted in major population decline and abandonments across south-central California, involving as much as 90 percent of the interior populations in some regions including the Carrizo Plain (Whitley et al. 2007). It is not clear whether site abandonment was accompanied by a true reduction in population or an agglomeration of the same numbers of peoples into fewer but larger villages. What is clear is that Middle Period villages and settlements were widely dispersed across the landscape; many at locations that lack contemporary evidence of fresh water sources. Late Horizon sites, in contrast, are typically located where fresh water was available during the historical period, if not currently.

The subsequent Late Horizon can be best understood as a period of recovery from a major demographic collapse. One result is the development of regional archaeological cultures as the precursors to ethnographic Native California; suggesting that ethnographic life-ways recorded by anthropologists extend roughly 800 years into the past.

The position of southern San Joaquin Valley prehistory relative to patterns seen in surrounding areas is still somewhat unknown. The presence of large lake systems in the valley bottoms can be expected to have mediated some of the desiccation seen elsewhere. But, as the reconstruction of Soda Lake in the nearby Carrizo Plain demonstrates (see Whitley et al. 2007) environmental perturbations had serious impacts on lake systems too. Identifying certain of the prehistoric
demographic trends for the southern San Joaquin Valley and determining how these trends (if present) correlate with those seen elsewhere, is a current important research objective.

2.5 HISTORIC CONTEXT

The San Joaquin Valley had non-native visitors as early as 1772 with Father Garces as the first recorded Euro-American in the region. Jedediah Smith of New York led the first trapping and trading expedition from St. Louis, Missouri, across the Sierra Nevada into the San Joaquin Valley circa 1827 (Elliott 1883:81). Settlement, however, did not occur immediately after Smith’s expedition, which might be attributed to the competition amongst fur companies whereby the locations of their travels were kept secret (Mitchell 1976:21). The first recorded non-native settler in the San Joaquin Valley was in 1835 (Elliott 1883:43). A Mexican Army expedition in the same year opened up the San Joaquin area to more than trappers (Elliott 1883:81). In March of 1844, General John C. Fremont’s second expedition reached Sutter’s Fort, having traveled the length of the San Joaquin Valley (Mitchell 1976:23).

Euro-American settlement of the San Joaquin Valley, however, was effectively initiated by the Gold Rush, with prospectors moving progressively southwards from the Sacramento foothills by the early-1850s. Although the interests of the miners emphasized the foothills and Sierras, their presence had two outcomes. First, the demographic and other pressures that resulted promoted unrest among Native American tribes, leading to the so-called Mariposa Indian War of 1850 – 1851. In 1851-1852, 18 treaties were signed between the U.S. government and tribal groups in the Central and San Joaquin Valleys. These designated specified reserve lands for Native Americans, but none of these treaties was ratified by the U.S. Senate, and the status of the local tribal groups ultimately was not resolved until after the Civil War. The influx of prospectors and miners into the region also promoted the development of a livestock industry, initially intended to satisfy a regional market (Mitchell 1976:36). Around this time, in 1852, Tulare County was created from the southern portion of Mariposa County (ESA 2010). The Southern Pacific Railroad was extended into Tulare County in 1872 and community members constructed numerous water conveyance systems throughout the county. These two things combined led to a population boom with productive farming activities (ESA 2010).

The early settlers primarily raised hogs, cattle, and grain, with grain gaining in importance over time over hogs. Neither hogs nor cattle were fenced until the 1872, restricting opportunities for framing. The livestock grazed on grasses, ate acorns from the abundant oaks, and then were driven to market. Ranching grew in response to the miners’ intense demand for fresh meat, a demand so high that it depleted the herds north of San Luis Obispo and caused southern California ranchers to provide meat to the San Joaquin Valley (Mitchell 1976:35). Since hogs could be smoked or cured and brought to the hungry miners, they were preferred to cattle. The alternative was to drive the cattle directly to the mines, which took one month. Demand increased between 1850 and 1860 by nearly five times the 1850 price. With the amount of time it took to bring the herd up over the land and with the impending dangers of wild animals and the terrain, records indicate that local cattle ranching provided some relief. When the supply met and surpassed the demand by 1860, the increased heads of cattle deflated the record high prices (Mitchell 1976:35, 37). An overextended cattle market and floods in the 1860s forced a number of ranchers out of the business and into farming (Mitchell 1976:40). While cattlemen suffered in the 1860s, sheep ranchers were redeemed.
by the wool requirement brought on by the blockades in the North during the Civil War. Despite the catastrophic effect of an 1864 drought, the cattle and sheep markets bounced back (Mitchell 1976:36).

In 1874, ranching and agriculture collided. The “No Fence Law” passed, despite some controversy, to “advance agriculture” over ranching. This allowed the development of large wheat ranches, dairying, deciduous and citrus fruit orchards, and other forms of agriculture by compelling the livestock owners to fence their stock. With its passage and an 1877 drought, a noticeable economic transition occurred in the San Joaquin Valley as ranchers increasingly chose grain farming (Mitchell 1976:40). The first steam thresher brought to the region in 1870 also aided the transition toward wheat cultivation (Mitchell 1976:63). While livestock remained important, the San Joaquin Valley became the nation’s main supplier of wheat from the 1870s to the 1890s when Minnesota exceeded its production. Wheat cultivation was “remote, abstract,” which historian Kevin Starr likened to “the cattle and sheep ranches of the Central Valley” (Starr 2007:150). With the importance of agriculture recognized by law, oak trees were removed to make way for more agriculture (Varner and Stuart 1975:17). Citrus and grapes were two major crops, but farmers also grew peaches, plums, figs, and olives with field crops of wheat, barley alfalfa, cotton, and potatoes. The study area and immediately surrounding region has remained an area of intense farming for over a century.

The ideal farming conditions led to the settlement of numerous cities and hamlets throughout the county. Tulare, Visalia, Porterville, and Hanford became the major cities of Tulare County and served the surrounding farms, dairies, and cattle ranches (ESA 2010). The city of Porterville was formed in 1870 after Royal Porter Putnam purchased 40 acres of land and divided it into lots. In 1902 the town was incorporated and contained a population of 2,906 residents. By the 1920’s the population increased to over 5,000 due to the economic growth and the presence of the Southern Pacific Railroad in the region. Industry contributed to the development and success of Porterville. Businesses such as Wal-Mart, Foster Farms, and Royalty Carpet Mills brought their business to Porterville (Porterville 2006). New highway construction and agricultural commerce continued to ensure Tulare County’s population growth. In 2007, the population of the County was estimated to be 429,000 (ESA 2010).

2.6 RESEARCH DESIGN

Previous research in the south-central California region suggests a series of topics worthy of further research efforts. Although any given cultural resource management study may not be able to fully resolve these topics, due to limited scopes of work or the nature of the sites encountered or studied, it is nonetheless recognized that, where possible, these studies can contribute to the accumulation of the kinds of data that may help us better understand this region’s prehistory.

2.6.1 Terminal Middle Horizon Site Abandonment

A significant prehistoric problem concerns the putative abandonment of village sites at the end of the Middle Horizon, which has been observed in a number of locations throughout south-central California (Whitley 2000; Whitley et al. 2007). Confirmation of this apparent pattern throughout
the region would help to define the geographical extent of this phenomenon. It further could help
determine whether, at the end of the Middle Horizon, there was an overall reduction in population,
or instead whether total population levels remained roughly constant while population
concentrated in fewer, environmentally favorable locations.
3. ARCHIVAL RECORDS SEARCH

An archival records search was conducted at the California State University, Bakersfield, Southern San Joaquin Valley Archaeological Information Center (AIC), by AIC staff members to determine: (i) if prehistoric or historical archaeological sites had previously been recorded within the Basin 18 Project study area; (ii) if the project area had been systematically surveyed by archaeologists prior to the initiation of this field study; and/or (iii) whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. Additionally, a search of the NAHC Sacred Lands File was conducted in order to ascertain whether traditional cultural places or cultural landscapes had been identified within the APE. The results of the background studies are summarized here.

The records search at the AIC indicated that ten previous archaeological surveys had been completed that covered portions of the study area, primarily east of Highway 65 (Table 3.1). While no cultural resources were previously identified within the study area, four historical sites have been recorded within 0.5-mi. of the study area (Table 3.2). The NAHC Sacred Lands File did not indicate the presence of any cultural places within the project area.

Table 3.1 Survey reports within the APE.

<table>
<thead>
<tr>
<th>Report No</th>
<th>Year</th>
<th>Author(s)/Affiliation</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TU-00156</td>
<td>1976</td>
<td>R.J. Cantwell/Archaeologist Consultant</td>
<td>Archaeological Survey Report Diagonal Road 242 from Avenue 160 to Avenue 178</td>
</tr>
<tr>
<td>TU-00190</td>
<td>1977</td>
<td>R.J. Cantwell/Archaeologist Consultant</td>
<td>Archaeological and Historical Survey Report, Road 234 from Avenue 168 to Avenue 170</td>
</tr>
<tr>
<td>TU-00348</td>
<td>1980</td>
<td>Jane E. Kamplain/California State University Fresno, Laboratory of Archaeological/Cultural Resources Facility</td>
<td>Archaeological Reconnaissance of Saddleback Estates, Porterville, Tulare County, California</td>
</tr>
<tr>
<td>TU-00376</td>
<td>1986</td>
<td>Jim McManus and Terry Schuster/Department of Transportation</td>
<td>Negative Archaeological Survey Report</td>
</tr>
<tr>
<td>TU-00447</td>
<td>1989</td>
<td>Lynn Riley and Glenn Gmoser/Department of Transportation</td>
<td>Negative Archaeological Survey Report</td>
</tr>
<tr>
<td>TU-01053</td>
<td>2001</td>
<td>Shahira Ashkar and Jay Pawlek/Jones and Stokes</td>
<td>Cultural Resources Inventory Report for the Proposed Widening of North Main Street, Porterville, Tulare County, California</td>
</tr>
<tr>
<td>TU-01638</td>
<td>2013</td>
<td>Robert Parr/Cal Heritage</td>
<td>Archaeological Survey Report for the Porterville Interconnection Project (IO 328108), Tulare County, California</td>
</tr>
</tbody>
</table>
Table 3.2  Resources within 0.5 miles of study area.

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-54-004015</td>
<td>Historic ceramic scatter</td>
</tr>
<tr>
<td>P-54-004354/CA-TUL-002655H</td>
<td>Historic canal structure (Pioneer Ditch)</td>
</tr>
<tr>
<td>P-54-004626/CA-TUL-002880H</td>
<td>Historic railroad structure</td>
</tr>
<tr>
<td>P-54-004632/CA-TUL-002885H</td>
<td>Historic trash scatter and railroad structure</td>
</tr>
</tbody>
</table>
4. METHODS AND RESULTS

The survey totaled approximately 4-acres, including both sections of storm drain installation and the location of Drainage Basin 18 (see Figure 1). The study area was examined by walking parallel transects along the storm drain route and across the Drainage Basin 18 location spaced at 15-m intervals. A close visual inspection of all ground surfaces was performed in order to identify surface artifacts, archaeological indicators (e.g., shellfish or animal bone), and/or archaeological deposits (e.g., organically enriched midden soil). Special attention was paid to rodent burrow back dirt piles, in the hope of identifying sub-surface soil conditions that might be indicative of archaeological features or remains. No cultural resources were collected during the survey. If encountered, the survey included a tabulation and recording of surface diagnostic artifacts, site sketch mapping, preliminary evaluation of site integrity, and site recording, following the California Office of Historic Preservation Instructions for Recording Historic Resources. A 50-ft. wide buffer was included to the project corridor.

Petra conducted limited archival research to assess the potential for existing and newly identified resources prior to survey. The study area was surveyed by Associate Archaeologist Peter A. Carey, M.A., RPA in November 2014 to assess the potential for cultural resources.

4.1 INVENTORY RESULTS

The study area was surveyed by Associate Archaeologist Peter A. Carey, M.A., RPA. Fieldwork was conducted in November 2014. The project area appears disturbed by modern construction and agricultural development. Houses, agricultural fields, roads, and utility installation has contributed to the disturbance. The new drainage basin lies in a currently unused field that has been previously graded. The new pipeline will run along paved and unpaved roads, near Highway 65. Sediment throughout the study area is sandy-silt alluvium with very few lithic clasts. Minimal surface vegetation was observed within the project area and nonnative plants appeared in the surrounding area, mostly as landscaping features. As a result, surface visibility was excellent during the pedestrian survey.

No cultural resources were identified during the survey. All exposed surfaces were closely inspected for the presence of artifacts, ecofacts, or cultural soils. No previously recorded sites are located within the immediate project area and no sites were revisited due to their location outside of the project corridor.
5. SUMMARY AND RECOMMENDATIONS

An intensive Phase I archaeological survey were conducted for the Drainage Basin 18 Project study area, located in Porterville, Tulare County, California. A records search of site files and maps was conducted at the Southern San Joaquin Valley AIC and a search of the NAHC Sacred Lands File was completed. These investigations determined that the study area had not been previously surveyed in its entirety.

No Native American sacred sites or cultural landscapes had been identified within or immediately adjacent to the study area. Intensive Phase I survey of the approximately 4.48-acre study area failed to identify any significant prehistoric or historical resources.

5.1 RECOMMENDATIONS

An archival records search, background studies, and an intensive, on-foot surface reconnaissance Drainage Basin 18 Project study area, Tulare County, California, were conducted as part of a Phase I archaeological survey. No significant historical resources were found to be present within the study area. Development of this study area therefore does not have the potential to result in adverse impacts to cultural resources, and no additional archaeological work is recommended for it. It is recommended that an archaeologist be contacted in the unlikely event that archaeological resources are discovered during the construction or use of the pipeline.
REFERENCES

City of Porterville (Planning Division)
2006  *Porterville 2030 General Plan*. Prepared for the City of Porterville.

Cook, S. F.

Driver, H. E.

Elsasser, A.

ESA

Fenenga, F.

Fredrickson, D.A. and J. Grossman

Gayton, A. H.

Gifford, E. W., and W. E. Schenck
References

Glennan, W.S.


Harrington, John Peabody

Hewes, G.

Horne, S.P.


King, C., C. Smith and T. King

Kroeber, A.L.

Latta, F. F.

Moratto, M

Powers, Stephen

Schiffman, R. A., and A. P. Garfinkel

Schoenherr, A.A.

Sutton, M.Q.

W & S Consultants
1994 Phase II Test Excavations and Determinations of Significance at CA- LAN-2133, -2233, -2234, -2235, -2240, -2241 and -2242, Los Angeles County, California. Manuscript on file, CSUF AIC.
1999 Class III Inventory/Limited Archaeological Testing Program for the Ducor Telephone Project, Kennedy Meadows, Tulare County, California. Manuscript on file, CSUB AIC.

Wedel, W.

Whitley, D.S.

Whitley, D.S. and M.P. Beaudry

Whitley, D.S., G. Gumerman IV, J. Simon and E. Rose
Whitley, David S., Joseph M. Simon and Johannes H.N. Loubser

Zimmerman, K.L., C.L. Pruett, and M.Q. Sutton
Appendix A
Native American Heritage Commission (NAHC) *Sacred Lands File*
December 19, 2014

David Whitley  
ASM Affiliates  
20424 West Valley Blvd., Ste A  
Tehachapi, CA 93561

Sent by Fax: (661) 823-7897  
Number of Pages: 2

Re: Basin 18, Porterville Project, Tulare County.

Dear Mr. Whitley,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

Katy Sanchez  
Associate Government Program Analyst
Native American Contacts
Tulare County
December 16, 2014

Santa Rosa Rancheria Tachi Yokut Tribe
Rueben Barrios Sr., Chairperson
P.O. Box 8, Lemoore, CA 93245
(559) 924-1278
(559) 924-3583 Fax

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589, Porterville, CA 93258
chairman@tulerivertribe-nsn.gov
(559) 781-4271
(559) 781-4610 Fax

Kern Valley Indian Council
Robert Robinson, Co-Chairperson
P.O. Box 401, Weldon, CA 93283
brobinson@iwvisp.com
(760) 378-4575 Home
(760) 549-2131 Work

Jennifer Malone
637 E Lakeview, Woodlake, CA 93286
indianpopup@sbcglobal.net
(559) 584-2146 Home
(559) 280-0712 Cell

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7060.5 of the Health and Safety Code, Section 5997.94 of the Public Resources Code and Section 5997.98 of the Public Resources Code.

This list is only applicable for contacting Native Americans with regard to cultural resources for the proposed Basin 16, Porterville Project, Tulare County.
January 30, 2015

Julie Phillips  
City of Porterville  
Community Development Department  
Planning Division  
291 North Main Street  
Porterville, CA 93257

Agency Project:  Mitigated Negative Declaration - Drainage Reservoir 18

District CEQA Reference No:  20150051

Dear Ms. Phillips:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above consisting of the construction and operation of a Storm Drain Basin south of West North Grand Avenue and west of State Route 65, in Porterville, CA. The proposed project is located on a 4.6 acre portion of a 9.514 acre parcel. (APN 243-210-065) The project requires a General Plan Amendment and Zone Change to allow for the Storm Drain Basin land use on the selected parcel. The District offers the following comments:

1. Based on information provided to the District, project specific emissions of criteria pollutants are not expected to exceed District significance thresholds of 10 tons/year NOX, 10 tons/year R0G, and 15 tons/year PM10. Therefore, the District concludes that project specific criteria pollutant emissions would have no significant adverse impact on air quality.

2. Based on information provided to the District, the proposed project does not meet the definition of a development project. Therefore, the District concludes that the proposed project is not subject to District Rule 9510 (Indirect Source Review).

3. The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified

Seyed Sadredin  
Executive Director/Air Pollution Control Officer
Asphalt, Paving and Maintenance Operations). The above list of rules is neither exhaustive nor exclusive.

More information regarding compliance with District rules and regulation can be obtained by:

- Visiting the District’s website at http://www.valleyair.org/rules/1ruleslist.htm for a complete listing of all current District rules and regulation, or

- Visiting the District’s website at http://www.valleyair.org/busind/comply/PM10/compliance_PM10.htm for information on controlling fugitive dust emissions

4. The District recommends that a copy of the District’s comments be provided to the project proponent.

If you have any questions or require further information, please call Georgia Stewart, at (559) 230-5937.

Sincerely,

Arnaud Marjollet
Director of Permit Services

[Signature]

For: Chay Thao
Program Manager

AM: gs
February 4, 2015

Ms. Jennifer M. Byers
Community Development Director
City of Porterville
291 N. Main Street
Porterville, CA 93257

Dear Ms. Byers:

Thank you for the opportunity to review the Mitigated Negative Declaration (MND) for the Drainage Reservoir #18 project. The project proposes to construct and operate a new storm water runoff retention facility on the approximate 4.6 acre site. The project will install 470 feet of 36” pipeline along N. Grand Avenue and under State Route (SR) 65 to connect to the existing storm water line. The project is located in the southwest quadrant of the SR 65/Grand Avenue intersection. Caltrans has the following comments:

1. An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English units. The Permit Department and the Environmental Planning Branch will review and approved the activity and work in the State right-of-way before an encroachment permit is issued. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, “Time Limitations.” (Revision: 02/23/05)

2. Encroachments are subject to removal by the Department in accordance with Sections 673 and 720 of the Streets and Highways Code.

3. The project site is adjacent to access control right of way (SR 65). Access from the State right-of-way is prohibited. The right-of-way fence shall remain unmodified and undisturbed.

4. An encroachment permit is required to repair the fence if damaged or modified.
5. A tunnel is defined as any jacked casing, liner plate, or wood lagging work that is 30" in diameter or larger. A Cal-OSHA permit and tunnel classification is required for tunnels.

6. The requirements of Caltrans Encroachment Permit Manual, Section 518 and Section 623 must be met for all tunneling and/or jacking operations. This manual may be found at: http://www.dot.ca.gov/hq/traffops/developserv/permits/encroachment_permits_manual/index.html

7. The bore and receiving pits shall be located outside State right-of-way.

8. Any work within the existing or proposed State right-of-way shall comply with State Standard Plans, Specifications and Special Provisions.

9. The highway drainage shall not be modified. Site runoff is not allowed into the State right-of-way without approval from the Department.

10. Existing concrete sidewalk that is damaged or broken (cracked) may need to be rehabilitated to comply with current ADA requirements or other applicable State or Federal law.

11. Work within State Highway right-of-way shall be conducted in compliance with all applicable requirements of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Department of Transportation (Department), to govern the discharge of storm water and non-storm water from its properties. Compliance with the Department's NPDES permit requires amongst other things, the preparation and submission of a Storm Water Pollution Protection Plan (SWPPP), or a Water Pollution Control Program (WPCP), and the approval of same by the appropriate reviewing authority prior to the issuance of an encroachment permit.

Please be advised that any future development adjacent to a State Route, whether the entitlement is deemed by the lead agency to be discretionary or ministerial should be sent to Caltrans for review. Please send a response to our comments prior to staff's recommendations to the Planning Commission and the City Council.

If you have any other questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
North Planning Branch

"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"
Ms. Julie Phillips, Project Manager  
City of Porterville  
291 North Main Street  
Porterville, California 93257

SCH# 2015011023 – Mitigated Negative Declaration for Drainage Reservoir 18  
Tulare County

Dear Ms. Phillips:

We have reviewed your submittal entitled Notice of Intent to Adopt a Mitigated Declaration (Notice) for the above referenced project which describes the construction of a below grade drainage basin. The Notice indicates that the basin will be excavated below existing grade to a proposed maximum depth of 15 feet. The proposed storage capacity will be approximately 47 acre-feet. No above ground barrier will be created. Therefore, this project as described is not subject to State jurisdiction for dam safety.

As defined in Sections 6002 and 6003, Division 3 of the California Water Code, dams 25 feet or higher with a storage capacity of more than 15 acre-feet, and dams higher than 6 feet with a storage capacity of 50 acre-feet or more are subject to State jurisdiction. Dam height is defined as the vertical distance measured from the maximum possible water storage level to the downstream toe of the barrier.

If the design of the proposed basin is revised such that a jurisdictional dam is constructed, it will become subject to State jurisdiction for dam safety. In the event the proposed project becomes subject to State jurisdiction, a construction application, together with plans, specifications, and the appropriate fees must be filed with us. All dam safety related issues must be satisfactorily addressed prior to our approval of the application. Additionally, all work must be performed under the direction of a Civil Engineer registered in California.

If you have any questions or need additional information, you may contact Office Engineer Roberto Cervantes at (916) 227-4601 or me at (916) 227-4600.

Sincerely,

Shawn O. Jones, Regional Engineer  
Southern Region  
Field Engineering Branch  
Division of Safety of Dams

cc: (See attached list.)

ATTACHMENT NO. 5C3
cc:  Ms. Nadell Gayou,
Resources Agency Project Coordinator
Environmental Review Section
Division of Statewide Integrated Water Management
901 P Street
Sacramento, California 95814

Governor's Office of Planning and Research
State Clearinghouse
Post Office Box 3044
Sacramento, California 95812-3044
RESOLUTION NO.__________

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PORTERVILLE
CONTAINING FINDINGS IN SUPPORT OF APPROVAL OF A
MITIGATED NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACT
FOR THE DRAINAGE BASIN 18 PROJECT

WHEREAS: The project proposes to construct and operate a Storm Drain Basin south of W. North Grand Avenue and west of State Route 65 on a 4.6 acre portion of that 9.5± acre parcel identified as APN 243-210-065. The site is currently designated as Retail Centers in the Porterville General Plan, and is zoned CR- Retail Centers. To maintain consistency between land use and the designations, a General Plan Amendment and Zone Change will be processed to modify the area of the basin to Public/Institutional on the General Plan diagram and to zone the site as PS- Public Semi-Public; and

WHEREAS: On January 13, 2015, the Environmental Coordinator made a preliminary determination that a Mitigated Negative Declaration would be appropriate for the proposed project in light of the studies prepared and with implementation of five defined mitigation measures related to Biological and Cultural Resources; and

WHEREAS: The City Council of the City of Porterville at its regularly scheduled meeting of February 17, 2015, conducted a public hearing to consider approval of the Mitigated Negative Declaration which evaluates the environmental impacts of the development of the proposed storm drain basin and associated General Plan Amendment and Zone Change from Retail Centers to Public and Semi-Public.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Porterville does hereby make the following findings:

1. That a Mitigated Negative Declaration was prepared for the project in accordance with the California Environmental Quality Act and was transmitted to interested agencies and made available for public review and comment. The review period ran from January 16, 2015, to February 17, 2015. Three comment letters were received from public agencies: the San Joaquin Valley Air Pollution Control District, the California Department of Transportation, and the California Department of Water Resources. All three agencies affirmed and agreed with the information provided in the environmental document and support the project subject as identified in the document.

2. That the proposed project will not create adverse environmental impacts. The approved Mitigated Negative Declaration was evaluated in light of the prepared environmental initial study and comments from interested parties received during the review period.

3. That the mitigation measures contained in the Mitigated Negative Declaration were incorporated into a Mitigation Monitoring Program attached hereto as Exhibit A.

ATTACHMENT NO. 6
4. That review of the environmental circumstances regarding this project indicates that no adverse impacts would accrue to wildlife resources from implementation of the project.

5. That the City Council is the decision-making body for the project.

BE IT FURTHER RESOLVED: That the City Council does hereby approve the Mitigated Negative Declaration for the Drainage Basin 18 Project and the Mitigation Monitoring Program attached hereto as Exhibit A.

PASSED, APPROVED AND ADOPTED this 17th day of February, 2015.

By:_________________________
Milt Stowe, Mayor

ATTEST:
John D. Lollis, City Clerk

By:_________________________
Patrice Hildreth, Chief Deputy City Clerk
MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the City of Porterville’s Drainage Reservoir 18 Project (proposed Project). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements as well as conditions recommended by responsible agencies who commented on the project.

The first column of the Table identifies the mitigation measure. The second column, entitled “Party Responsible for Implementing Mitigation,” names the party responsible for carrying out the required action. The third column, “Implementation Timing,” identifies the time the mitigation measure should be initiated. The fourth column, “Party Responsible for Monitoring,” names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last column will be used by the City to ensure that individual mitigation measures have been monitored.
<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Party responsible for Implementing Mitigation</th>
<th>Implementation Timing</th>
<th>Party responsible for Monitoring</th>
<th>Verification (name/date)</th>
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</thead>
<tbody>
<tr>
<td>BIO-1</td>
<td>City of Porterville</td>
<td>During construction</td>
<td>City of Porterville</td>
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<td></td>
<td>To protect raptors and migratory song birds and to assist in avoiding take of avian species as required by Fish and Game Code Section 3503, 3503.5, and 3513, Project related activities will occur during the non-breeding season (September 16th through December 31st).</td>
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<tr>
<td>BIO-2</td>
<td>City of Porterville</td>
<td>During construction</td>
<td>City of Porterville</td>
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<td>If Project related activities will occur during the breeding season (Jan 1 through Sept 15), the City of Porterville shall conduct nest surveys for nesting Swainson’s hawks within ½ mile buffer around the Project site before starting any Project related activities following the survey methodology developed by the Swainson’s hawk Technical Advisory Committee. In the event that Swainson’s hawk is detected, California Department of Fish &amp; Wildlife (CDFW) shall be consulted by the Applicant or the Applicant’s consultant to discuss project implementation and take avoidance. If take cannot be avoided the City shall obtain an</td>
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<tr>
<td>Incidental Take Permit from CDWF for project related incidental take of Swainson's hawk.</td>
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<td>If other nesting raptors and migratory songbirds are identified, the following minimum no disturbance buffers shall be required:</td>
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<td>• 250 feet around active passerine (perching birds and songbirds) nests</td>
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<td>• 500 feet around active raptor nests</td>
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<td>These buffers shall be maintained until the breeding season has ended or until a qualified biologist has determined and CDFW has agreed in writing that the birds have fledged and are no longer reliant upon the nest or parental care for survival.</td>
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<td>BIO-3 Vertical tubes such as chain link fencing poles can result in the entrapment and death of a variety of bird species. All vertical tubes such as chain link fencing poles shall be immediately capped at the time that they are installed to prevent avian fatalities.</td>
<td>City of Porterville</td>
<td>During construction</td>
<td>City of Porterville</td>
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<tr>
<td>Mitigation Measure</td>
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<tr>
<td>CUL-1</td>
<td>City of Porterville</td>
<td>During construction</td>
<td>City of Porterville</td>
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- Before initiation of construction or ground-disturbing activities associated with the Project, the Project proponent for all Project phases shall require all construction personnel to be alerted to the possibility of buried cultural resources, including historic, archeological and paleontological resources;

- The general contractor and its supervisory staff shall be responsible for monitoring the construction Project for disturbance of cultural resources; and

- If a potentially significant historical, archeological, or paleontological resource, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains or trash deposits are encountered during subsurface construction activities (i.e., trenching, grading), all construction activities within a 100-foot radius of the identified potential resource shall cease until a qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation (DPR) forms. The archaeologist shall determine whether the item requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the item is determined to be significant under California Environmental Quality Act, the archaeologist shall recommend feasible mitigation measures, which may include avoidance, preservation in place or
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<tbody>
<tr>
<td>other appropriate measure, as outlined in Public Resources Code section 21083.2. The City of Porterville shall implement said measures.</td>
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<tr>
<td>CUL-2</td>
<td>City of Porterville</td>
<td>During construction</td>
<td>City of Porterville</td>
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<tr>
<td>The City of Porterville will incorporate into the construction contract(s) a provision that in the event a fossil or fossil formations are discovered during any subsurface construction activities for the proposed Project (i.e., trenching, grading), all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the appropriate representative at the City of Porterville, who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the City shall implement those measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code section 21083.2.</td>
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RESOLUTION NO. __________

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PORTERVILLE
CONTAINING FINDINGS IN SUPPORT OF APPROVAL FOR THE GENERAL PLAN
AMENDMENT FOR A 4.6± ACRE SITE DESCRIBED HEREIN GENERALLY LOCATED
AT THE SOUTHWEST CORNER OF W. NORTH GRAND AND STATE ROUTE 65

WHEREAS: The City Council of the City of Porterville at its regularly scheduled
meeting of February 17, 2015, conducted a public hearing to consider approval of a General Plan
amendment from Retail Centers to Public/Institutional at the site of a proposed City owned storm
water basin generally located at the southwest corner of W. North Grand Avenue and State Route
65, a portion of APN 243-210-065; and

WHEREAS: A Zone Change is also proposed to change the present zoning classifications
of the subject site from CR (Retail Centers) to PS (Public and Semi-Public) contingent upon
approval of the General Plan Amendment; and

WHEREAS: Development of the project area would be subject to the City’s development
standards and the General Plan Land Use Implementation Policies; and

WHEREAS: Approval of the General Plan Amendment and Zone Change would allow
the project site to be developed as a storm basin as prescribed in the Storm Water Master Plan
while maintaining consistency between the proposed land use and respective designations; and

WHEREAS: Approval of the General Plan Amendment and Zone Change furthers the
goals and objectives of the General Plan and supporting documents, including the Storm Water
Master Plan by providing land for civic uses such as infrastructure, as referenced in General Plan
Policy LU-G-17; and

WHEREAS: On January 13, 2015, the Environmental Coordinator made a preliminary
determination that a Mitigated Negative Declaration would be appropriate for the development of
the proposed storm drain basin and associated General Plan Amendment and Zone Change from
Retail Centers to Public/Institutional; and

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Porterville
does hereby make the following findings:

1. The proposed General Plan Amendment has identified as a requirement in order to
   maintain consistency between land use and applicable designations for the
   proposed development of Drainage Basin 18. The development of the storm drain
   basin is consistent with the General Plan and the Storm Drain Master Plan, but at

ATTACHMENT NO. 7
the time the General Plan Land Use Diagram was developed, specifying a site for
such a public use would have been premature.

2. Based on review of project designs and by the very nature of the project, the
proposed project serves to fulfill the goals of the General Plan as adopted, and the
amendment of the land use designation on the subject parcel does not infringe on
the goals of the General Plan to maintain transitions between types and intensities
of land use.

3. That a Mitigated Negative Declaration was prepared for the project in accordance
with the California Environmental Quality Act and was transmitted to interested
agencies and made available for public review and comment. The review period
ran from January 16, 2015, to February 17, 2015.

4. The City Council is the decision-making body for the project.

BE IT FURTHER RESOLVED: That the City Council does hereby approve the General
Plan Amendment from Retail Centers to Public/Institutional at the site of a proposed City owned
storm water basin generally located at the southwest corner of W. North Grand Avenue and State
Route 65, a portion of APN 243-210-065.

PASSED, APPROVED AND ADOPTED this 17th day of February, 2015.

By: ________________________________
    Milt Stowe, Mayor

ATTEST:
John D. Lollis, City Clerk

By: ________________________________
    Patrice Hildreth, Chief Deputy City Clerk
ORDINANCE NO. ________

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PORTERVILLE
APPROVING A ZONE CHANGE FROM CR (RETAIL CENTERS) TO PS (PUBLIC AND
SEMI-PUBLIC) FOR THAT 4.6± ACRE SITE DESCRIBED HEREIN GENERALLY
LOCATED AT THE SOUTHWEST CORNER OF WEST NORTH GRAND AVENUE AND
STATE ROUTE 65

WHEREAS: The City Council of the City of Porterville at its regularly scheduled
meeting of February 17, 2015, conducted a public hearing to approve findings and consider a Zone
Change from CR (Retail Centers) to PS (Public and Semi-Public) for development of a master
planned storm drain basin generally located at the southwest corner of West North Grand Avenue
and State Route 65; and

WHEREAS: The City Council of the City of Porterville determined that the proposed
Zone Change is consistent with the guiding and implementation policies of the adopted 2030
General Plan, particularly LU-G-17, which guides the City to provide sufficient land for civic and
institutional uses such as water facilities and infrastructure to meet future demand; and

WHEREAS: Development of the basin would be subject to the City’s development
standards and the General Plan Land Use Implementation Policies, including but not limited to
perimeter improvements; and

WHEREAS: That a Mitigated Negative Declaration was prepared for the project in
accordance with the California Environmental Quality Act and was transmitted to interested
agencies and made available for public review and comment. The review period ran from January
16, 2015 to February 17, 2015; and

WHEREAS: The City Council made the following findings that the proposed project will
advance the goals and objectives of and is consistent with the policies of the General Plan and any
other applicable plan that the City has adopted.

a. The project supports and complies with the following General Plan guiding
   policies:
      LU-G-1: Promote a sustainable, balanced land use pattern that responds to
      existing needs and future needs of the City.
      LU-G-3: Promote sustainability in the design and development of public and
      private development projects.
      LU-G-17: Provide sufficient land for civic and institutional uses such as police
      and fire services, water and sanitary facilities, infrastructure and other City
      services to meet future demand.

b. Development of the basin would be subject to the City’s development standards.

ATTACHMENT NO. 8
c. An amendment to the General Plan designation is being processed concurrently with this Zone Change request. Approval of the Zone Change is contingent upon the approval of General Plan Amendment for Drainage Basin 18, to ensure consistency between the General Plan and Zoning.

d. The subject Zone Change will not create adverse environmental impacts on the biological resources or adjacent neighborhood when mitigation measures are implemented and standards of the Development Ordinance and General Plan are applied to the project.

NOW, THEREFORE, BE IT ORDAINED: That the City Council of the City of Porterville does ordain as follows:

Section 1: That the following described property in the City of Porterville, County of Tulare, State of California, is hereby rezoned from CR (Retail Centers) to PS (Public and Semi-Public) for the parcel described herein as Assessor’s Parcel Number 243-210-065, generally located at the southwest corner of W North Grand Avenue and State Route 65; and

Section 2: It is further ordained that all records of the City of Porterville, together with the official zoning map of the City of Porterville, shall be changed to show the above described real property is rezoned from CR (Retail Centers) to PS (Public and Semi-Public) for the site described above, more particularly shown on the attached map as Exhibit “A”; and

Section 3: This ordinance shall be in full force and effect not sooner than thirty (30) days from and after the ordinance’s publication and passage.

PASSED, APPROVED AND ADOPTED this 17th day of February, 2015.

By: ________________________________
    Milt Stowe, Mayor

ATTEST:
John D. Lollis, City Clerk

By: ________________________________
    Patrice Hildreth, Chief Deputy City Clerk