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North Shore Pipeline Replacement Project

LEAD AGENCY:

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1.0 INTRODUCTION

The proposed North Shore Pipeline Replacement Project (herein referenced as the “project”) involves upgrading existing high-pressure natural gas pipeline infrastructure along North Shore Lane, North Shore Drive (State Route 38 [SR-38]), and Stanfield Cutoff to increase the pressure and natural gas feed into the Big Bear area for the purpose of meeting existing and future demands; refer to Section 2.0, Project Description. Following a preliminary review of the proposed project, the County of San Bernardino (County) has determined that it is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect, and cumulative environmental effects of the project, as proposed.

It is acknowledged that the proposed project trends through Federally-owned (United States Forest Service [USFS]) lands. As such, the National Environmental Policy Act (NEPA) applies. Pursuant to the USFS Categorical Exclusion 36 CFR 220.6(e)(2), the project is categorically excluded from NEPA and a Decision Memorandum has been documented under a separate cover with the USFS.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with the CEQA (Public Resources Code Section 21000-21177) and pursuant to California Code of Regulations (CCR) Section 15063, the County of San Bernardino, acting in the capacity of Lead Agency under CEQA, is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration for that project. Such determination can be made only if “there is no substantial evidence in light of the whole record before the Lead Agency” that such impacts may occur (Public Resources Code Section 21080(c)).

The environmental documentation, which is ultimately selected by the County in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and/or other discretionary approvals would be required.

The environmental documentation and supporting analysis is subject to a public review period. During this review, public agency comments on the document relative to environmental issues should be addressed to the County. Following review of any comments received, the County will consider these comments as a part of the project’s environmental review and include them with the Initial Study documentation for consideration by the County.

1.2 PURPOSE

CEQA Guidelines Section 15063 identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- Identification of the environmental setting;
Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;

- Discussion of ways to mitigate significant effects identified, if any;
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

1.3 CONSULTATION

As soon as a Lead Agency (in this case, the County of San Bernardino) has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study, the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.4 INCORPORATION BY REFERENCE

The following references were utilized during preparation of this Initial Study and are incorporated into this document by reference. These documents are available for review at the County of San Bernardino, County Government Center, 385 North Arrowhead Avenue, San Bernardino, California 92415; City of Big Bear Lake Planning Division, 39707 Big Bear Boulevard, Big Bear Lake, California 92315; and the USFS Headquarters Office, 602 South Tippecanoe Avenue, San Bernardino, California, 92408.

- United States Department of Agriculture Land Management Plan (September 2005). The United States Department of Agriculture Land Management Plan (USDA Land Management Plan) provides direction for broad program-level strategic planning for southern California national forests, including the Angeles National Forest, Cleveland National Forest, Los Padres National Forest, and San Bernardino National Forest. The USDA Land Management Plan is divided into three parts: 1) Southern California National Forests Vision; 2) San Bernardino National Forest Strategy, and 3) Design Criteria for the Southern California National Forests. The key purpose of the USDA Land Management Plan is to articulate the long-term vision and strategic management direction for each national forest and to facilitate the development of management activities that will contribute toward the realization of the national forests' desired conditions.

- County of San Bernardino 2007 General Plan (effective April 12, 2007 and amended April 24, 2014). The County of San Bernardino 2007 General Plan (County General Plan) provides a general, comprehensive, and long-range guide for community decision-making in unincorporated San Bernardino County. The General Plan covers the following eight elements: Land Use; Circulation and Infrastructure; Housing; Conservation; Open Space; Noise; Safety; Renewable Energy and Conservation Element; and Economic Development. Each element identifies its purpose and relationship to other elements of the County General Plan and goals and policies for the County’s valley, mountain, and desert regions.

- Bear Valley Community Plan (effective April 12, 2007). The Bear Valley Community Plan (Community Plan) is focused on the Bear Valley region in the County and is consistent with the County General Plan goals and policies. The primary purpose of the Community Plan is to guide the future use and development of land within the Bear Valley area in a manner that preserves the character and independent identity of the individual communities.
communities within the area, which include the City of Big Bear, Fawnskin, Sugarloaf, Erwin Lake, Baldwin Lake, Lake Williams, and Moonridge. The Community Plan consists of the following sections, each with related goals and policies: Land Use; Circulation and Infrastructure; Housing; Conservation; Open Space; Noise; Safety; and Economic Development.

- **San Bernardino County Code of Ordinances (current through Ordinance 4351, passed September 25, 2018).** The San Bernardino County Code of Ordinances (County Code) contains all existing regulatory, penal, and administrative ordinances of the County. Title 8, Development Code, of the County Code is the County’s Development Code and is the primary tool to implement the County General Plan by classifying and regulating the uses of land and structures within unincorporated San Bernardino County; preserving and protecting the County’s important agricultural, cultural, natural, open space and scenic resources; and protecting and promoting the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the County.

- **City of Big Bear Lake General Plan (adopted August 23, 1999).** The City of Big Bear Lake General Plan (Big Bear General Plan) contains the City of Big Bear’s (City’s) blueprint for long-range growth and development and addresses immediate, mid-, and long-term issues. The Big Bear General Plan consists of the following elements: Circulation; Community Design; Environmental Hazards; Environmental Resources; Housing; Land Use; Noise; Open Space Parks and Recreation; and Public Services. Each element identifies goals, policies, and implementation actions for existing and future conditions within the City.

- **Big Bear Lake Municipal Code (codified through Ordinance No. 2017-456, enacted July 10, 2017).** The Big Bear Lake Municipal Code (Big Bear Municipal Code) includes the City’s regulatory, penal, and administrative ordinances. Title 17, Land Use, of the Big Bear Municipal Code is the City’s Development Code and is the primary tool for implementing its General Plan objectives and policies. The purpose of the City’s Development Code is to provide for the creation of zones in the City’s incorporated areas and sphere of influence, and to prescribe classes of uses, area requirements, and standards of development for buildings, structures, improvements and premises in said zones. The standards and regulations contained in the Big Bear Development Code govern the use and development of property to protect the public health, safety, welfare, and convenience and to enhance quality of life, by ensuring that an appropriate mix of land uses is developed in an orderly manner.
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2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The proposed North Shore Pipeline Replacement Project (project) is generally located along an approximate 2.3-mile segment of an existing natural gas pipeline easement (maintained by Southwest Gas Corporation [Southwest Gas]) within the community of Bear Valley (unincorporated County of San Bernardino [County]), United States Forest Service (USFS) land, and the City of Big Bear Lake (City); refer to Exhibit 2-1, *Regional Vicinity*. From west to east, the proposed project generally follows within the existing roadway right-of-way (ROW) starting at North Shore Lane (approximately 0.5-mile east of the entrance to the Lighthouse Resort and Marina) for approximately 0.44 mile, to North Shore Drive (State Route 38 [SR-38]) for approximately 1.45 mile, and then south along Stanfield Cutoff for approximately 0.42 mile to Big Bear Boulevard (Highway 18); refer to Exhibit 2-2, *Site Vicinity*. Exhibit 2-2 also identifies the applicable jurisdictions along the project alignment, which include the County, USFS, California Department of Transportation (Caltrans), and the City.

2.2 ENVIRONMENTAL SETTING

The project Applicant, Southwest Gas, currently provides natural gas services to the City and surrounding areas and has an existing 6-inch underground high-pressure steel gas main pipeline along the project alignment, which transports pressurized natural gas to the Big Bear area. Southwest Gas also maintains four above-ground pressure-regulating structures along the project alignment.

Most of the project site consists of paved roadway and disturbed dirt shoulders. Due to the length of the project site (approximately 2.3 miles), the project site has been broken up into four segments (Segment A through Segment D) to aid the reader in identifying which part of the alignment is being discussed; refer to Exhibit 2-2 for a mapping of each segment. *Table 2-1, Existing and Surrounding Land Uses,* identifies applicable land use designations, zoning districts, and existing and surrounding development along the four segments (Segment A through Segment D) of the project site.

<table>
<thead>
<tr>
<th>Project Segment</th>
<th>Jurisdiction</th>
<th>Plan Designation/Zoning</th>
<th>Existing and Surrounding Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>On-Site</td>
<td>Surrounding</td>
</tr>
<tr>
<td>A</td>
<td>County of San Bernardino¹</td>
<td>Resource Conservation (RC)</td>
<td>RC, Special Development-Residential (SD-RES)</td>
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<tr>
<td></td>
<td>USFS</td>
<td>Developed Area Interface</td>
<td>Developed Area Interface</td>
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<tr>
<td></td>
<td>Caltrans</td>
<td>NA</td>
<td>NA</td>
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<td></td>
<td>City of Big Bear Lake</td>
<td>NA</td>
<td>NA</td>
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</tbody>
</table>

¹ Existing uses include a Southwest Gas above-ground pressure regulating utility building on the west end, roadway ROW along North Shore Lane and SR-38, and a parking lot associated with the Meadows Edge Picnic Area.

Surrounding uses include the Lighthouse Trailer Resort and Marina, Serrano Campground, Big Bear Shores RV Resort, Meadows Edge Picnic Area, and Cougar Crest Trailhead.
Table 2-1 (continued)
Existing and Surrounding Land Uses

<table>
<thead>
<tr>
<th>Project Segment</th>
<th>Jurisdiction</th>
<th>Plan Designation/Zoning On-Site</th>
<th>Existing and Surrounding Uses</th>
<th>Project Segment</th>
<th>Jurisdiction</th>
<th>Plan Designation/Zoning Surrounding</th>
<th>Existing and Surrounding Uses</th>
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<td></td>
<td>C</td>
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</tr>
<tr>
<td></td>
<td>County of San Bernardino¹</td>
<td>RC</td>
<td>RC, Single Residential 1 (RS-1)</td>
<td>Existing uses include roadway ROW along SR-38.</td>
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<tr>
<td></td>
<td>USFS</td>
<td>Developed Area Interface</td>
<td>Developed Area Interface</td>
<td></td>
<td></td>
<td>Surrounding uses include the Big Bear Discovery Center, San Bernardino National Forest Mountaintop Ranger Station, Juniper Point Picnic Area and parking lot, and a single-family residence.</td>
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<td></td>
<td>Caltrans</td>
<td>NA</td>
<td>NA</td>
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<td>City of Big Bear Lake</td>
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<td>D</td>
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<tr>
<td></td>
<td>County of San Bernardino¹</td>
<td>RC, Institutional (IN)</td>
<td>IN, RC, RS-1</td>
<td>Existing uses include roadway ROW along SR-38 and Stanfield Cutoff, as well as the North Shore Elementary School parking lot.</td>
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<td></td>
<td>USFS</td>
<td>Developed Area Interface</td>
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<td>Surrounding uses include the North Shore Elementary School, Big Bear Animal Shelter, Stanfield Marsh Wildlife and Waterfowl Preserve, and commercial and residential uses.</td>
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<td></td>
<td>Caltrans</td>
<td>NA</td>
<td>NA</td>
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</tr>
<tr>
<td></td>
<td>City of Big Bear Lake</td>
<td>Single Family Residential (R-1)</td>
<td>General Plan designations: Open Space (OS), Single Family Residential-4 (SFR-4), and Commercial General (CG)</td>
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<td></td>
<td>Zoning Districts: Public/Open Space (P-OS), Single Family Residential (R-1), and Commercial-General (C-2)</td>
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</table>

Notes:
1. Land use designations and zoning districts in unincorporated San Bernardino County are the same and designated under the Bear Valley Community Plan.
2. USFS = United States Forest Service
3. Caltrans = California Department of Transportation
4. NA = Not Applicable (i.e., no existing land use designation or zoning apply, as these areas are within roadway ROW)
Source: Google Earth Pro, 2018.
Note: The majority of the project alignment also trends through to U.S. Forest Service lands.
2.3 PROJECT BACKGROUND

As stated above, Southwest Gas currently provides natural gas services to the Big Bear area and has existing underground pipeline structures along the project alignment, which transports pressurized natural gas to residential and commercial customers in the area. Currently, existing development in the area is experiencing low natural gas pressure during times of high demand. Increasing the operating pressure of the existing pipeline is not an option due to the age and yield strength of the pipeline. To better serve the area’s existing and future demands for natural gas, Southwest Gas is proposing to upgrade existing high-pressure pipeline infrastructure along North Shore Lane, SR-38, and Stanfield Cutoff. Upgrading the existing infrastructure would increase the pressure and capacity of natural gas serving the area in order to support existing demands and planned future growth.

2.4 PROJECT CHARACTERISTICS

The proposed improvements would involve replacing the existing 6-inch high-pressure steel natural gas pipeline with an 8-inch high-pressure steel natural gas pipeline; refer to Exhibit 2-3, Proposed Improvements, and Appendix A, Proposed Improvements Exhibits.

Other lateral pipelines would also be upgraded, including pipes that range in diameter from 0.75-inch to 8 inches. In total, the proposed project would replace 42 feet of 8-inch high-pressure steel, 12,065 feet of 6-inch high-pressure steel, 79 feet of 2-inch high-pressure steel, 111 feet of 1-inch high-pressure steel, and 70 feet of 0.75-inch high-pressure steel pipelines with 12,441 feet of 8-inch steel, 13 feet of 6-inch high-pressure steel, 51 feet of 4-inch high-pressure steel, and 243 feet of 2-inch high-pressure steel pipelines.

The existing natural gas pipelines would be abandoned in place and capped off, and new natural gas pipelines would be installed primarily by open trench excavation with some areas installed by horizontal directional drilling (HDD) to avoid impacts to existing culverts along Stanfield Cutoff and other resources along the project alignment.

2.5 CONSTRUCTION/PHASING

CONSTRUCTION ACTIVITIES

Construction activities associated with the project involve hauling of construction materials, such as steel gas pipelines, construction equipment, and other miscellaneous construction materials, to and along the project alignment. The project would require approximately 450 cubic yards of shading materials import and 450 cubic yards of trench soils export. In areas where replacement pavement is needed, approximately 450 cubic yards of paving materials import and 450 cubic yards of paving materials export would be required. The export materials would be hauled off-site and processed and recycled for resale as fill dirt or crushed concrete/asphalt products by the construction contractor.

As stated above, the new natural gas pipelines would be installed via open trench excavation or HDD. The following describes in more detail the anticipated construction activities along the project alignment.

Existing Pipeline Abandonment

Bell hole locations are proposed along the existing pipeline alignment to assist with abandonment of the existing pipeline. Bell holes are defined as enlarged, bell-shaped holes dug beneath and along the side of an existing, buried pipeline to provide room for construction workers to perform work. The bell holes are spaced approximately every 1,500 feet along the existing pipeline alignment and would allow workers to purge and abandon the existing pipeline.
Refer to Appendix A, Proposed Improvements, for detailed improvement plans along the project alignment.
Open Trench Excavation

Open trench excavation is one of the most common methods of installing underground utilities (e.g., pipelines, conduit, or cables) and consists of excavating into the ground to the required depth, installing the utility, and backfilling the trench with appropriate soils/materials. Anticipated trench excavation for installation of new pipe would reach a maximum depth of approximately 9 feet and maximum width of approximately 7.5 feet.

Horizontal Directional Drilling

HDD is a trenchless method of installing underground utilities with minimal impact. The drilling technique involves a launch and receiving pit at each end of the proposed alignment to guide a drill string along a prescribed bore path to avoid obstacles, such as the existing culverts along Stanfield Cutoff and other potential identified resources along the alignment. Bell holes would be provided at each launch and receiving pit to provide adequate work space. The proposed launch and receiving pits are anticipated to reach a maximum length of approximately 10 feet, maximum width of approximately 7.5 feet, and maximum depth of approximately 10 feet.

It should be noted that the City is currently planning to widen Stanfield Cutoff as part of a separate project. Should construction of the City’s roadway widening project coincide with construction of the proposed project, the Applicant would concurrently install the replacement pipelines via open trench excavation rather than HDD along Stanfield Cutoff. At this time, it is speculative to assume the City’s widening project would occur at the same time as the proposed project. Therefore, this analysis conservatively assumes the project would require HDD to install the replacement pipelines along Stanfield Cutoff.

Summary

Trenching and HDD would cause temporary construction impacts, but no permanent impacts are anticipated from these construction activities. Overall, the replacement pipelines would be installed at the same depth as existing lines at a minimum depth of 90 inches within SR-38 and Highway 18 (Caltrans ROW) and a minimum depth of 48 inches outside of Caltrans ROW. Pavement cutting would be required in some areas and would be replaced with similar pavement materials as needed.

CONSTRUCTION PHASING AND STAGING

Project construction would take place in one phase for a period of seven months, from July 2020 to November 2020 and March 2021 to May 2021. Most construction activities would occur within the existing ROW for North Shore Lane, SR-38, and Stanfield Cutoff. Potential construction staging areas are proposed at the Meadows Edge Picnic Area parking lot, North Shore boat launch parking lot, and the North Shore Elementary School parking lot, near the project alignment. All construction equipment would be staged on paved surfaces.

2.6 PERMITS AND APPROVALS

Applicable agency approvals required for implementation of the project would include the following, among others:

- County of San Bernardino
  - California Environmental Quality Act Clearance
  - Encroachment Permit
  - Construction Permit

1 It is acknowledged that construction activities would have to cease once snowfall begins and would restart in the Spring months.
- United States Forest Service  
  - Encroachment Permit
- California Department of Transportation  
  - Encroachment Permit
- California Department of Fish and Wildlife  
  - Section 1602 Streambed Alteration Agreement
- Santa Ana Regional Water Quality Control Board  
  - National Pollutant Discharge Elimination System Construction General Permit  
  - Waste Discharge Permit
- City of Big Bear Lake  
  - Construction Permit
3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1. Project Title: North Shore Pipeline Replacement Project

2. Lead Agency Name and Address:
   County of San Bernardino
   385 North Arrowhead Avenue
   San Bernardino, CA 92415

3. Contact Person and Phone Number:
   County of San Bernardino
   Mr. Jim Morrissey, Planner
   (909) 387-4234

4. Project Location: The North Shore Pipeline Replacement Project (project) is generally located along an approximate 2.3-mile segment of an existing natural gas pipeline easement (maintained by Southwest Gas Corporation) within the community of Bear Valley (unincorporated County of San Bernardino), United States Forest Service land, and the City of Big Bear Lake.

5. Project Sponsor’s Name and Address:
   Southwest Gas Corporation
   Pam Chavez, Engineering Technician
   P.O. Box 1498
   Victorville, CA 92393

6. General Plan Designation: Portions of the project site are designated Resource Conservation (RC) and Institutional (IN) under the County of San Bernardino 2007 General Plan and Single Family Residential-4 (SFR-4) under the City of Big Bear Lake General Plan.

7. Zoning: The project site is zoned RC and IN by the San Bernardino County Land Use Zoning Districts Map and Single Family Residential (R-1) under the City of Big Bear Lake Zoning Map.

8. Description of the Project: Refer to Section 2.4, Project Characteristics.

9. Surrounding Land Uses and Setting: Surrounding land uses in proximity to the project site are primarily comprised of undeveloped open space, recreation, and residential. The surrounding land uses are as follows:
   - **North:** The Serrano Campground, Cougar Crest Trailhead, Big Bear Discovery Center, San Bernardino National Forest Mountaintop Ranger Station, Woodland Trailhead, and a single-family residence are located to the north along the project alignment.
   - **East:** North Shore Elementary School, Big Bear Animal Shelter, Stanfield Marsh Wildlife and Waterfowl Preserve are located to the east of eastern end of the project alignment.
   - **South:** The Big Bear Shores RV Resort, Meadows Edge Picnic Area, Juniper Point Picnic Area, North Shore boat launch, and commercial and residential uses are to the south along the project alignment.
   - **West:** The Serrano Campground and Lighthouse Trailer Resort and Marina are located to the west of the western end of the project alignment.
10. Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).
   Refer to Section 2.6, Permits and Approvals.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?
   In compliance with AB 52, the County distributed letters to applicable Native American tribes informing them of the project on October 23, 2018. The San Manuel Band of Mission Indians, Twenty-Nine Palms Band of Mission Indians, and Morongo Band of Mission Indians responded requested additional information and/or consultation. Refer to Section 4.18, Tribal Cultural Resources, for additional analysis of project impacts on tribal cultural resources.

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” or “Less Than Significant Impact with Mitigation Incorporated,” as indicated by the following checklist.

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

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This Initial Study analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance
The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines and used by the County of San Bernardino in its environmental review process. For the preliminary environmental analysis undertaken as part of this Initial Study’s preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development’s impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development would not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The development would have the potential for impacting the environment, although this impact would be below established thresholds that are considered to be significant.

- **Less Than Significant Impact With Mitigation Incorporated.** The development would have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development’s physical or operational characteristics can reduce these impacts to levels that are less than significant.

- **Potentially Significant Impact.** The development would have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures would be required, so that impacts may be avoided or reduced to insignificant levels.
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4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study/Environmental Checklist. Explanations are provided for each item.

4.1 AESTHETICS

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

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

Less Than Significant Impact With Mitigation Incorporated. A scenic vista is generally defined as a view of undisturbed natural lands exhibiting a unique or unusual feature that comprises an important or dominant portion of the viewshed.1 Scenic vistas may also be represented by a particular distant view that provides visual relief from less attractive views of nearby features. Other designated Federal and State lands, as well as local open space or recreational areas, may also offer scenic vistas if they represent a valued aesthetic view within the surrounding landscape of nearby features. The United States Department of Agriculture (USDA) defines “scenic” as areas which constitute or afford pleasant views of natural landscape attributes or positive cultural elements. According to the USDA Land Management Plan for the San Bernardino National Forest, the valued landscape attributes of Big Bear to be preserved over time include the big-tree conifer forests, relic quaking aspen groves, lodgepole pine forests, and the rocky base of terrain providing numerous outcrops. As indicated in the Section 4.4, Biological Resources, quaking aspen groves and coniferous and lodgepole pine species are not present within the project area. Instead, most of the project area is dominated by undisturbed mixed pine forest habitat, including Jeffrey pine (Pinus jeffreyi), yellow pine (Pinus ponderosa), and western juniper (Juniperus occidentalis). No rock outcroppings are visible within the project vicinity. Thus, no impacts to USDA-designated landscape attributes would occur.

Pursuant to County General Plan Policy OS 5.1, San Bernardino County considers the following criteria for scenic resource designation: a roadway, vista point, or area that provides a vista of undisturbed natural resources; includes a unique or unusual feature that comprises an important or dominant portion of the viewshed; and/or offers a distant vista that provides relief from nearby attractive features (such as views of mountain backdrops from urban areas). Recognizing the value of protecting scenic resources, San Bernardino County has designated Scenic Routes to place restrictions on adjacent development including specific sign standards regarding sign placement and dimensions, utility

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1 A viewshed is the geographical area which is visible from a particular location.
placement, architectural design, grading, landscaping characteristics, and vegetation removal. According to the County General Plan, a “Scenic Route” is a roadway that has scenic vistas and other scenic and aesthetic qualities that over time have been found to add beauty to the County. An approximately 1.45-mile segment of the proposed project would be located within North Shore Drive (State Route 38 [SR-38]), which has been designated by San Bernardino County as a Scenic Route from the Yucaipa sphere of influence northeast to Big Bear Dam. As discussed in Section 2.0, Project Description, the project site would occur in areas of paved roadway and disturbed dirt shoulders adjacent to mixed pine forest and native grassland associated with the San Bernardino National Forest. Within the project site, SR-38 provides scenic views to undisturbed areas of the San Bernardino National Forest and Big Bear Lake.

Short-Term (Construction) Impacts

Short-term construction activities occurring along SR-38 could temporarily impact views to undisturbed areas of the San Bernardino National Forest and Big Bear Lake. Construction activities are expected to take approximately seven months. During this time, exposed surfaces, construction debris, equipment, and truck traffic would temporarily impact surrounding views. Impacts would be temporary in nature, as project construction would occur linearly along the project alignment such that impacts are not localized to one specific area for a prolonged period of time. Further, construction staging areas are proposed at the Meadows Edge Picnic Area parking lot, North Shore boat launch parking lot, and the North Shore Elementary School parking lot, near the project alignment, but not within SR-38 ROW. These areas are partially visible from SR-38. To reduce impacts to scenic vistas as a result of construction staging, the project would incorporate Mitigation Measure AES-1. Mitigation Measure AES-1 requires that the project construction materials, heavy duty equipment, and debris piles are clustered in the project’s designated staging areas. Compliance with Mitigation Measure AES-1 would ensure the project’s construction-related impacts to scenic vistas are less than significant.

Long-Term (Operational) Impacts

Upon completion of construction, most utilities (with the exception of limited pressure recording and monitoring equipment) would be located underground, project implementation would not result in substantial changes to the visible environment within identified scenic routes and no increases in potential view blockage would result compared to existing conditions. No impact would occur in this regard.

Mitigation Measures:

AES-1  To minimize construction-related impacts to scenic vistas as well as visual character or quality of the site and its surroundings, the project contractor shall ensure that all materials, heavy-duty equipment, and debris piles are clustered in the project’s designated construction staging area(s). Staging locations shall be identified on final development plans and shall be verified and approved by the County of San Bernardino. Compliance with this measure shall be subject to periodic field inspections.

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

No Impact. The proposed project would be aligned within a segment of SR-38 that has been designated as an Eligible State Scenic Highway under the State of California Scenic Highway Program. It is noted that SR-38 is identified as an Officially Designated State Scenic Highway from east of South Fork Campground to State Lane, approximately 4.36 miles southeast of the project site. However, views of the project site from the Officially Designated State Scenic Highway segment of SR-38 are not readily afforded due to topographic conditions and intervening vegetation and structures. Further, given that most utilities would be located underground, project implementation would not impact the eligibility status of SR-38 over the long-term. Thus, no impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

c) **In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

**Less Than Significant Impact With Mitigation Incorporated.** The project site's existing condition is generally characterized by paved roadway and disturbed dirt shoulders adjacent to mixed pine forest and native grasslands. In addition to undisturbed areas of the San Bernardino National Forest and Big Bear Lake, the project site is surrounded by a variety of recreational, commercial, and residential uses.

**Short-Term (Construction) Impacts**

Short-term construction activities associated with the proposed project could temporarily impact the existing visual character and quality of the project site and its surrounding, including views of big-tree conifer forests. Construction activities are expected to take approximately seven months. During this time, exposed surfaces, construction debris, equipment, and truck traffic would temporarily impact the existing visual character and quality of the project site and its surroundings. Impacts associated with the project's construction activities would be temporary in nature, as construction would occur linearly along the project alignment such that impacts are not localized to one specific area for a prolonged period of time.

Potential construction staging areas are proposed at the Meadows Edge Picnic Area parking lot, North Shore boat launch parking lot, and the North Shore Elementary School parking lot, near the project alignment. To reduce impacts to visual character and quality as a result of construction staging, the project would incorporate Mitigation Measure AES-1. Mitigation Measure AES-1 requires that the project's construction materials, heavy duty equipment, and debris piles are clustered in the project's designated staging areas. Compliance with Mitigation Measure AES-1 would ensure the project's construction-related impacts to the visual character and quality of the project site and its surrounding areas are less than significant.

**Long-Term (Operations) Impacts**

As discussed in Response 4.1(a), the project site consists of paved roadway and disturbed dirt shoulders adjacent to mixed pine forest and native grassland associated with the San Bernardino National Forest. Project implementation would not result in aboveground structures (other than limited pressure recording and monitoring equipment). Further, North Shore Lane, North Shore Drive (SR-38), and Stanfield Cutoff would be restored to their existing condition upon construction completion. Thus, the project's long-term impacts to visual character and quality of the project site and its surrounding areas would be less than significant.

**Mitigation Measures:** Refer to Mitigation Measure AES-1.

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

**Less Than Significant Impact With Mitigation Incorporated.** There are two primary sources of light: light emanating from building interiors that pass through windows, and light from exterior sources (i.e., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Light introduction can be a nuisance to adjacent uses and diminish the view of the clear night sky. Currently, light and glare in the project vicinity is primarily produced by vehicle headlights and adjacent uses. However, street lighting is present along Segment D of the project site along Stanfield Cutoff.
Short-Term (Construction) Impacts

Construction activities occurring within Caltrans right-of-way may require nighttime construction activities. Nighttime construction activities occurring within these areas could potentially result in impacts to nearby uses and motorists travelling along the project site. However, this project area includes existing sources of light (i.e., vehicle head lights, lighting from adjacent uses, and street lighting along Segment D). In accordance with Caltrans regulations, nighttime construction would be limited to the hours of 10:00 p.m. to 6:00 a.m. Pursuant to Mitigation Measure AES-2, necessary lighting for safety and construction purposes would be directed away from land uses outside of the project area and contained and directed toward the specific area of construction. With implementation of Mitigation Measure AES-2, project-related light and glare from nighttime construction activities would be less than significant.

Long-Term (Operational) Impacts

Project implementation would not result in long-term impacts to light and glare. The project would not include any new lighting, and none of the proposed construction materials for the project would be capable of creating substantial glare. For these reasons, no new impacts as a result of project operations would result.

Mitigation Measures:

AES-2 To minimize project-related light and glare to the maximum extent feasible, color-corrected halide lights shall be used during project construction. Portable lights shall be operated at the lowest allowable wattage and shall be raised to a height no greater than 20 feet. All lights shall be screened and directed downward toward work activities and away from the night sky and nearby uses to the maximum extent possible. The number of nighttime lights used shall be minimized to the greatest extent possible. This measure would be subject to verification by the County of San Bernardino Building and Safety Division, City of Big Bear Lake Building and Safety Department, and/or California Department of Transportation.
### AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

<table>
<thead>
<tr>
<th>Impact Description</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 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. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 122220(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. 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. 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 forest land to non-forest use?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 along an approximate 2.3-mile segment of an existing natural gas pipeline easement that generally follows the roadway rights-of-way (ROWs) of North Shore Lane, SR-38, and Stanfield Cutoff. Given that the project site consists predominantly of paved roadways and disturbed dirt shoulders, the site is not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.\(^1\) Thus, project implementation would not result in the conversion of mapped farmland to non-agricultural uses. No impacts would result in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** Refer to Response 4.2(a). As detailed in Table 2-1, *Existing and Surrounding Land Uses*, project segment A, B, and C are zoned “Resource Conservation (RC)” by the San Bernardino County Land Use Zoning Districts Map. Project segment D is zoned RC and “Institutional (IN)” by the San Bernardino County Land Use Zoning Districts Map and Single Family Residential (R-1) by the Big Bear Lake Zoning Map and General Plan land use map. Further, the portions of the project site located within the USFS are designated Developed Area Interface. No portions along the project alignment are zoned for agricultural use. Further, there are no Williamson Act or agriculturally-zoned properties

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within or adjacent to the project site. Thus, project implementation would not conflict with existing zoning for agricultural use or a Williamson Act contract.

**Mitigation Measures:** No mitigation measures are required.

c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 122220(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.** Refer to Response 4.2(b). The project site is situated within a heavily forested area of the San Bernardino National Forest, which is under the jurisdiction of the United States Forest Service (USFS). The portions of the project site located within the USFS are designated Developed Area Interface. Further, the proposed natural gas pipeline improvements would be predominantly confined to the existing roadway ROW and adjacent disturbed dirt shoulders. The project would not conflict with the existing zoning for, or cause the rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** Refer to Response 4.2(c). Although the project site is located within the San Bernardino National Forest, the project alignment would be predominantly confined to the existing roadway ROW and adjacent disturbed dirt shoulders. No trees would be removed and no land use changes are proposed. As such, no impact would occur in this regard.

**Mitigation Measures:** No mitigation measures 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.** Refer to Responses 4.2(a) through 4.2(d). No impact would occur.

**Mitigation Measures:** No mitigation measures are required.
4.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

<table>
<thead>
<tr>
<th></th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</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>
</tr>
<tr>
<td>b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Expose sensitive receptors to substantial pollutant concentrations?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

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

Less Than Significant Impact With Mitigation Incorporated. The project is located within the South Coast Air Basin (Basin), which is governed by the South Coast Air Quality Management District (SCAQMD). The Federal Clean Air Act (CAA) requires the SCAQMD to reduce emissions of criteria pollutants for which the Basin is in non-attainment: ozone (O₃), coarse particulate matter (PM₁₀), and fine particulate matter (PM₂.₅).¹ O₃, PM₁₀, and PM₂.₅ are considered criteria pollutants because they are three of several prevalent air pollutants known to be hazardous to human health.

The SCAQMD prepared its 2016 Air Quality Management Plan for the South Coast Air Basin (2016 AQMP) to reduce emissions of criteria pollutants for which the Basin is in non-attainment. The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017 and incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and updated emission inventory methodologies for various source categories. Consistency with the 2016 AQMP means that a project is consistent with the goals, objectives, and assumptions set forth in the 2016 AQMP that are designed to achieve Federal and State air quality standards. According to the SCAQMD CEQA Air Quality Handbook, the Criteria for determining consistency with the 2016 AQMP is defined by the following indicators:

- **Consistency Criterion No. 1:** The proposed project would not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

- **Consistency Criterion No. 2:** The proposed project would not exceed the assumptions in the AQMP based on the years of project buildout phase.

The project consists of improving an existing natural gas pipeline to meet existing and future natural gas demands of residents and businesses in the Big Bear area. As indicated in Response 4.3(b) below, based on the project’s limited scope, project implementation with Mitigation Measures AQ-1 and AQ-2 would not exceed short-term construction standards and thus would not violate any air quality standards. The project would not emit any operational-related emissions and therefore would not exceed the SCAQMD’s thresholds of significance.

¹ An area designated as “nonattainment” for an air pollutant is an area that does not achieve national and/or State ambient air quality standards for that pollutant.
Further, as a utility improvement project, the project would not conflict with any existing general plan designation or zoning assumptions within the County of San Bernardino (County), United States Forest Service (USFS), California Department of Transportation (Caltrans), and City of Big Bear Lake (City) jurisdiction surrounding the project site; refer to Section 4.11, Land Use and Planning. The proposed improvements would be consistent with current designations, and project implementation would not induce direct population growth. Rather, it would increase pipeline capacity to accommodate future growth in the area. The availability of additional natural gas supply in the project area could indirectly increase population in the Big Bear Lake area as future development occurs; however, quantifying indirect population growth would be speculative at this time. Additionally, any future development beyond the scope of applicable general plan and zoning assumptions would require separate environmental review. Therefore, the proposed project is consistent with the 2016 AQMP and impacts would be less than significant in this regard.

**Mitigation Measures:** Refer to Mitigation Measures AQ-1 and AQ-2 in Response 4.3(b) below.

**b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?**

**Less Than Significant Impact With Mitigation Incorporated.** Project construction would take place in one phase for a period of seven months. Most construction activities would occur within the existing roadway right-of-ways for North Shore Lane, SR-38, and Stanfield Cutoff. Potential construction staging areas are proposed at the Meadows Edge Picnic Area parking lot, North Shore boat launch parking lot, and the North Shore Elementary School parking lot, near the project alignment. All construction equipment would be staged on paved surfaces.

The proposed improvements would involve replacing the existing 6-inch high-pressure steel natural gas pipeline with an 8-inch high-pressure steel natural gas pipeline. Construction activities associated with the project involve hauling of construction materials, such as steel gas pipelines, construction equipment, and other miscellaneous construction materials, to and along the project alignment. The project would require approximately 450 cubic yards of shading materials import and 450 cubic yards of trench soils export. In areas where replacement pavement is needed, approximately 450 cubic yards of paving materials import, and 450 cubic yards of paving materials export would be required. The new pipelines would be installed via open trench excavation or horizontal directional drilling (HDD).

**Short-Term (Construction) Emissions**

The SCAQMD has established methods to quantify air emissions associated with construction activities, such as those generated by operation of on-site construction equipment, fugitive dust emissions related to grading and site work activities, and mobile (tailpipe) emissions from construction worker vehicles and haul/delivery truck trips. Emissions would vary from day to day, depending on the level of activity, the specific type of construction activity occurring, and, for fugitive dust, prevailing weather conditions.

The project’s estimated construction emissions are identified in Table 4.3-1, Maximum Short-Term Construction Emissions. Concerning the proposed project, particulate matter (PM$_{10}$ and PM$_{2.5}$) emissions would occur from small quantities of fugitive dust and from construction equipment exhaust. Emitted pollutants would include reactive organic gases (ROG), carbon monoxide (CO), nitrogen oxides (NO$_{x}$), sulfur oxides (SO$_{x}$), PM$_{10}$, and PM$_{2.5}$. As identified in Table 4.3-1, unmitigated NO$_{x}$ air emissions would exceed the SCAQMD thresholds, while the other pollutants would be below the respective SCAQMD thresholds. Mitigation Measure AQ-1 requires that all non-road construction equipment greater than 50 horsepower meet the Environmental Protection Agency (EPA) Tier 3 emission standards to reduce NO$_{x}$ emissions below SCAQMD thresholds. Upon implementation of recommended Mitigation Measure AQ-1, impacts from NO$_{x}$ would be reduced to a less than significant level; refer to Table 4.3-1. Furthermore, the project would adhere to all standard SCAQMD regulations, such as maintaining all construction equipment in proper tune, shutting down equipment when not in use for extended periods of time, and implementing SCAQMD Rule 403 (Fugitive

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2 Emissions were calculated using the California Emissions Estimator Model (CalEEMod), a statewide land use emissions computer model developed in coordination with the SCAQMD.
Dust) as required in Mitigation Measure AQ-2. Conformance with standard SCAQMD regulations and implementation of Mitigation Measures AQ-1 and AQ-2 would ensure the project’s construction-related impacts are less than significant.

Table 4.3-1
Maximum Short-Term Construction Emissions

<table>
<thead>
<tr>
<th>Emissions Source</th>
<th>ROG (pounds/day)</th>
<th>NOX (pounds/day)</th>
<th>CO (pounds/day)</th>
<th>SO2 (pounds/day)</th>
<th>PM10 (pounds/day)</th>
<th>PM2.5 (pounds/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmitigated Construction Emissions</td>
<td>18.39</td>
<td>160.86</td>
<td>108.71</td>
<td>0.21</td>
<td>9.07</td>
<td>7.47</td>
</tr>
<tr>
<td>Mitigated Construction Emissions</td>
<td>8.49</td>
<td>95.86</td>
<td>130.52</td>
<td>0.21</td>
<td>6.10</td>
<td>5.07</td>
</tr>
<tr>
<td>Total Mitigated Emissions</td>
<td><strong>8.49</strong></td>
<td><strong>95.86</strong></td>
<td><strong>130.52</strong></td>
<td><strong>0.21</strong></td>
<td><strong>6.10</strong></td>
<td><strong>5.07</strong></td>
</tr>
<tr>
<td>SCAQMD Thresholds</td>
<td>75</td>
<td>100</td>
<td>550</td>
<td>150</td>
<td>150</td>
<td>55</td>
</tr>
</tbody>
</table>

| Is Threshold Exceeded After Mitigation?| No               | No               | No              | No               | No                | No                |

Notes:
1. Emissions were calculated using California Emission Estimator Model version 2016.3.2 (CalEEMod), as recommended by the South Coast Air Quality Management District (SCAQMD).
2. The reduction/credits for construction emission mitigations are based on mitigation included in the CalEEMod model and as typically required by the SCAQMD. The mitigation includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; limit speeds on unpaved roads to 15 miles per hour and require that all non-road construction equipment greater than 50 horsepower shall meet EPA Tier 3 emission standards.

With respect to the proposed project’s construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2016 AQMP pursuant to Federal Clean Air Act mandates. As such, the proposed project would comply with SCAQMD Rule 403 requirements to ensure project-related emissions would not contribute to an exceedance of the State and Federal Ambient Air Quality Standards or further exacerbate concentrations of existing non-attainment pollutants (i.e., ozone and PM2.5); refer to Mitigation Measure AQ-2. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures to reduce dust so that it does not remain visible in the atmosphere beyond the project’s property line. Additionally, the project would comply with Mitigation Measure AQ-1, which would reduce the short-term construction NOX emissions.

The project would also be subject to compliance with all other applicable SCAQMD rules and regulations. Cumulative construction projects throughout the Basin would be subject to compliance with existing SCAQMD rules and regulations. As a result, it can be reasonably inferred that project-related construction emissions, in combination with those from other projects in the area, would not substantially deteriorate local air quality. A less than significant impact would occur in this regard.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by the California Air Resources Board in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some
localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. These activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, serpentinite and ultramafic rocks are not known to occur within the project site.3

It is common for older natural gas pipelines to be coated in a protective asbestos wrap. Due to the age of the existing pipeline on-site, small quantities of asbestos containing materials are anticipated with the handling and demolition of the existing line. At the locations where the existing pipeline will be cut and capped, any asbestos containing materials would be handled and disposed in accordance with the Southwest Gas Environmental Asbestos Handling Requirements and Safety Manual and SCAQMD guidance. Thus, a less than significant impact would occur.

**Long-Term (Operational) Emissions**

As a utility improvement project, project operations would not involve new buildings or uses which would introduce new permanent stationary or mobile sources of emissions within the project area. The proposed improvements identified in Section 2.0 would continue to serve existing uses and would accommodate future planned growth in the area. The project would not directly result generate vehicular trips (a predominant source of air quality emissions) or induce population growth. Rather, it would increase pipeline capacity to accommodate future growth in the area. The availability of additional natural gas supply in the project area could indirectly increase vehicle trips from future residents and visitors of the Big Bear Lake area but quantifying indirect operational emissions of such trips would be speculative at this time. As a result, project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant and no cumulative operational impacts associated with project operations would occur.

**Mitigation Measures:**

**AQ-1** Prior to the commencement of construction, the developer/applicant shall submit for review and obtain approval from the County Land Use Services Department – Planning Division of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements and submitting documentation of compliance to ensure that project plans stipulate that all non-road construction equipment greater than 50 horsepower shall meet the Environmental Protection Agency (EPA) Tier 3 emission standards.

**AQ-2** Prior to the commencement of construction, the developer/applicant shall submit for review and obtain approval from the County Land Use Services Department – Planning Division of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements and submitting documentation of compliance to ensure that all project plans and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD’s Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust;

- Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;

Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;

- On-site vehicle speed shall be limited to 15 miles per hour; and
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site.

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

**Less Than Significant Impact With Mitigation Incorporated.** Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The California Air Resources Board has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptor in the project area is the North Shore Elementary School located 20 feet from the project boundaries in Segment D. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds for construction and operations impacts (area sources only).

**Localized Significance Thresholds**

Localized significance thresholds (LSTs) were developed in response to SCAQMD Governing Boards’ Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NOX, PM$_{2.5}$, or PM$_{10}$. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD recommends that any project with over five acres graded per day should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. The SCAQMD look-up tables are intended for projects less than or equal to five acres graded per day and provide standards for projects that are one, two, and five acres. The project is located within Sensitive Receptor Area (SRA) 38, East San Bernardino Mountains.

Because CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, Table 4.3-2, **Equipment-Specific Grading Rates**, is used to determine the maximum daily disturbed acreage for comparison to LSTs.

<table>
<thead>
<tr>
<th>Construction Phase</th>
<th>Equipment Type</th>
<th>Equipment Quantity</th>
<th>Acres Graded per 8-Hour Day</th>
<th>Operating Hours per Day</th>
<th>Acres Graded per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Tractors</td>
<td>6</td>
<td>0.5</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Graders</td>
<td>0</td>
<td>0.5</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Dozers</td>
<td>2</td>
<td>0.5</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Scrapers</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Acres Graded per Day</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

Source: South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, July 2008.
Based on the SCAQMD LST methodology, the project would have a maximum daily soil disturbance of approximately four acres during the construction phase; therefore, the LST thresholds for two acres were conservatively utilized for the construction LST analysis. The nearest sensitive receptor to the project site is the North Shore Elementary School located 6 meters (20 feet) from the project boundaries in Segment D. This sensitive land use may be potentially affected by air pollutant emissions generated during on-site construction activities. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Notwithstanding, the SCAQMD Methodology explicitly states: “It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.” Therefore, LSTs for the receptor located at 25 meters was utilized in this analysis.

As depicted in Table 4.3-3, Localized Significance of Construction Emissions, the project’s construction emissions would not exceed the LST’s thresholds. It is noted that the localized emissions presented in Table 4.3-3 are less than those in Table 4.3-1 since localized emissions only include on-site construction emissions (i.e., from construction equipment and fugitive dust). Mitigation Measure AQ-1 would ensure that all non-road construction equipment greater than 50 horsepower meets the EPA Tier 3 emission standards, which would lower NOX and particulate matter (PM10 and PM2.5) emissions. Mitigation Measure AQ-2 would ensure best available control measures are implemented during project construction to reduce dust so that it does not remain visible in the atmosphere beyond the project’s property line. With implementation of Mitigation Measure AQ-1 and AQ-2, construction-related impacts to sensitive receptors would be less than significant.

<table>
<thead>
<tr>
<th>Source</th>
<th>Pollutant (pounds/day)</th>
<th>NOX</th>
<th>CO</th>
<th>PM10</th>
<th>PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Site Unmitigated Emissions – Construction</td>
<td></td>
<td>122.46</td>
<td>76.35</td>
<td>5.81</td>
<td>5.37</td>
</tr>
<tr>
<td>On-Site Mitigated Emissions – Construction</td>
<td></td>
<td>70.86</td>
<td>93.51</td>
<td>3.49</td>
<td>3.49</td>
</tr>
<tr>
<td>Localized Significance Threshold</td>
<td></td>
<td>170</td>
<td>1,156</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Thresholds Exceeded after mitigation?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes:
1. The Localized Significance Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NOX, CO, PM10, and PM2.5. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (approximately 4 acres; therefore, the thresholds for 2 acres was used), the distance to sensitive receptors (approximately 20 feet, therefore, the thresholds for 25 meters were conservatively used), and the source receptor area (SRA 38).

Operations

According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed project does not include such uses. Thus, due to the lack of such emissions, no long-term localized significance threshold analysis is needed. No operational LST impacts would result in this regard.

**Mitigation Measures:** Refer to Mitigation Measures AQ-1 and AQ-2.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?
Less Than Significant Impact. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and asphalt off-gassing. These construction-related odors would be short-term in nature and would cease upon project completion. Furthermore, standard construction requirements would minimize the odor impacts from heavy-duty equipment exhaust emissions. Thus, the project’s odor impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.
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### Biological Resources

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>a.</strong> 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>
<td></td>
</tr>
<tr>
<td><strong>b.</strong> 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>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>c.</strong> Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>d.</strong> 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>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>e.</strong> Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>f.</strong> Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

This section is based on the SIMP/2019 HP STL/North Shore Replacement Project, City of Big Bear Lake, County of San Bernardino, California (Biological Assessment), prepared by Michael Baker International, dated April 23, 2018, and the Delineation of Jurisdictional Waters for the SIMP/2019 HP STL/North Shore Replacement Project, City of Big Bear Lake, County of San Bernardino, California (Jurisdictional Delineation), also prepared by Michael Baker International, dated April 27, 2018; refer to Appendix C, Biological Resources Reports.

**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.** A Biological Assessment was prepared for the project and included a habitat assessment to survey existing biological conditions on and surrounding the project site. In addition to the habitat assessment, the California Natural Diversity Database (CNDDB) was queried for reported locations of listed and special-status plant and wildlife species as well as special-status vegetation communities in the United States Geologic Survey 7.5-minute Fawnskin quadrangle. A search of published records of these species was conducted within this quadrangle using the CNDDB Rarefind5 online software. The California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants supplied information regarding the distribution and habitats of plants in the project vicinity.
The habitat assessment assessed the ability of the plant communities found on-site to provide suitable habitat for relevant special-status plant and wildlife species.

According to the Biological Assessment, the study area is located on the northern end of Big Bear Lake along existing roadways and comprised of mixed pine forest, southern willow scrub, native grassland, freshwater seep, urban/developed areas, and bare ground. The study area consisted of a 100-foot buffer along the proposed project alignment. The majority of the study area is dominated by undisturbed mixed pine forest habitat (approximately 31.08 acres) and urban/developed areas (17.69 acres).

Special-Status Plant Species. No special-status plant species were observed in the study area during the field survey; however, a total of 40 special-status plant species have been recorded within the vicinity of the project by the CNDDB and CNPS online inventory. Many of these species have a low potential or are not expected to occur on-site due to a lack of habitat suitable to support them. There is a moderate potential for the following four special-status plant species to occur within the study area: crested milk-vetch (*Astragalus bicristatus*), Heckard’s paintbrush (*Castilleja montigena*), Parish’s rupertia (*Rupertia rigidia*), and San Bernardino Mountains bladderpod (*Physaria kingie ssp. Bernardina*). However, the proposed development footprint would be confined within the existing roadway rights-of-way (ROWs) and disturbed dirt shoulders along North Shore Lane, SR-38, and Stanfield Cutoff that are routinely maintained by the City and County. No native habitat would be impacted and the potential to impact special-status plant species would be less than significant in this regard.

Special-Status Wildlife Species. No special-status wildlife species were observed on-site; however, two special-status wildlife species have been recorded within the vicinity of the project by the CNDDB. These species have a low potential or are not expected to occur within the study area due to a lack of habitat suitable to support them. As such, no impacts to special-status wildlife species would occur.

Special-Status Plant Communities. No records of special-status plant communities have been documented by the CNDDB within the project site or its vicinity. Further, no special-status plant communities were observed on-site during the habitat assessment. No impact would occur in this regard.

United States Fish and Wildlife Service (USFWS) Critical Habitat. According to the USFWS *Critical Habitat for Threatened & Endangered Species Mapper*, no designated critical habitats are present within the project site. The closest critical habitat is for the ash-grey paintbrush (*Castilleja cinereal*) located approximately 160 feet south of SR-38 near the Juniper Point parking area.1 Given that project development would occur within the SR-38 ROW, the project would not impact any USFWS critical habitat and no impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact.** Riparian habitats are those occurring along the banks of rivers and streams. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies, known to provide habitat for sensitive animal or plant species, or known to be important wildlife corridors.

There are three key agencies that regulate activities within streams, wetlands, and riparian areas in California. The Army Corps of Engineers (Corps) Regulatory Branch regulates activities pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. The California Department of Fish and Wildlife (CDFW) regulates activities under the Fish and Game Code Section 1600-1616, and the Santa Ana Regional Water Quality

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Control Board (Regional Board) regulates project activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The Jurisdictional Delineation included a review of relevant literature and existing resources to identify any features on-site that may fall under an agency's jurisdiction. Literature reviews included the United States Department of Agriculture's Natural Resources Conservation Service Web Soil Survey and National Hydric Soils List; U.S. Fish and Wildlife Service National Wetlands Inventory; and Federal Emergency Management Agency's National Flood Hazard Layer. Riparian habitat associated with Big Bear Lake is mapped adjacent to Stanfield Cutoff; refer to Exhibit 4.4-1, Jurisdictional Map. However, the project would not impact these riparian habitats. Construction along Stanfield Cutoff would utilize a horizontal directional drilling (HDD) method, which is a trenchless method to install underground utilities and would avoid impacts to riparian habitats associated with Big Bear Lake. As such, project impacts would be less than significant in this regard.

It should be noted that the City is currently planning to widen Stanfield Cutoff as part of a separate project. Should construction of the City's roadway widening project coincide with construction of the proposed project, the Applicant would concurrently install the replacement pipelines via open trench excavation rather than HDD. At this time, it is speculative to assume the City's widening project would occur at the same time as the proposed project. Therefore, this analysis conservatively assumes the project would require HDD to install the replacement pipelines along the Stanfield Cutoff segment of the project alignment to avoid impacts to riparian habitat.

**Mitigation Measures:** No mitigation measures are required.

c) **Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**Less Than Significant Impact.** Refer to Response 4.4(b) above. A formal jurisdictional delineation of the survey area (i.e., 100-foot buffer around the project alignment) was conducted to identify and map jurisdictional limits within the project site. The following findings were summarized in the Jurisdictional Delineation:

- **Corps:** Big Bear Lake qualifies as Corps non-wetland Waters of the U.S. and evidence of an ordinary high-water mark was noted within the project site, which totaled approximately 0.44-acres; refer to Exhibit 4.4-1.

- **Regional Board:** No additional State Waters were observed within the boundaries of the project site; therefore, the Regional Board follows that of Corps jurisdiction.

- **CDFW:** Big Bear Lake is considered a CDFW jurisdictional lake. Approximately 0.44 acres of CDFW jurisdictional lake and 0.05 acres of associated vegetation is located within the project site; refer to Exhibit 4.4-1.

As shown on Exhibit 4.4-1, the 0.44-acre Corps non-wetland Waters of the U.S. and CDFW jurisdictional lake and 0.05-acre CDFW associated vegetation are located along Stanfield Cutoff. As stated above, the proposed project would install replacement pipelines via HDD and would avoid impacts to these jurisdictional features under the Corps, Regional Board, and CDFW. Therefore, project impacts in this regard would be less than significant.

**Mitigation Measures:** No mitigation measures 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?**

**No Impact.** The proposed project alignment is situated adjacent to a heavily forested area of the San Bernardino National Forest. Therefore, the project area is likely heavily utilized by native or migratory wildlife. However, the project site consists predominantly of paved roadways and adjacent dirt shoulders, and construction activities would be confined primarily to existing ROWs. No trees would be removed, and no operational impacts would occur once the proposed pipelines are installed. Project implementation would not increase human encroachment on established wildlife movement corridors within the project vicinity, and the project would not interfere substantially with the movement of any native resident or migratory wildlife species, with established native resident or migratory wildlife corridors, or impede the use of a native wildlife nursery site. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** Project implementation would not result in the removal of any trees. As noted above in Responses 4.4(a) through 4.4(d), the project would not result in significant impacts to biological resources. As such, no conflicts with any local policies or ordinances protecting biological resources would occur, and no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** The project site is not located within an adopted Habitat Conservation Plan or Natural Community Conservation Plan. Thus, project implementation would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. Additionally, given that the proposed development footprint would be confined within the existing roadway ROWs and disturbed dirt shoulders and no native habitat would be impacted, the project also would not conflict with the strategic goals of the USDA Land Management Plan. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.
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4.5  CULTURAL RESOURCES

Would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact
--- | --- | --- | --- | ---
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? |  | ✓ |  | |
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ✓ |  |  | |
c. Disturb any human remains, including those interred outside of dedicated cemeteries? |  | ✓ |  | |

This section is based upon the North Shore Drive Project City of Big Bear Lake, San Bernardino County, California Archaeological and Built Environment Resources Finding of Effect - Redacted (FOE), prepared by Michael Baker International, dated March 2020; refer to Appendix D, Cultural Resources Study FOE. It is acknowledged that the following documentation was relied upon for the FOE, but are not available for public review:

- Michael Baker International, North Shore Drive Project City of Big Bear Lake, San Bernardino County, Cultural Resources Identification Study (Cultural Resources Identification Study), November 2018; and

Methodology

The intent of the Cultural Resources Identification Report is to comply with the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended; its implementing regulations, 36 CFR 800; and the First Amended Regional Programmatic Agreement Among the U.S.D.A. Forest Service, Pacific Southwest Region, California State Historic Preservation Officer, and Advisory Council on Historic Preservation, Regarding the Process for Compliance with Section 106 of the National Historic Preservation Act for Undertakings on the National Forests of the Pacific Southwest Region (2001), (PA). As part of the Cultural Resources Identification Study, Michael Baker International (Michael Baker) conducted a San Bernardino National Forest (SBNF) records search, South Central Coastal Information Center (SCCIC) records search, literature review, Native American Heritage Commission (NAHC) Sacred Lands File search, Native American consultation completed by the SBNF archaeologist, historical society consultation, and field survey; refer to Appendix D.

Michael Baker also conducted Phase I Testing, as documented by the Phase I Testing Plan and FOE. The purpose of the Phase I Testing Plan is to present the methodology for an extended phase one (XPI) excavation of potential archaeological resources that could be encountered during proposed excavations. In order to determine the project’s potential impacts to archaeological resources, six Shovel Test Units (STU) and nine Shovel Test Pits (STP) were hand excavated between December 2 and December 12, 2019, within the Area of Direct Impact (ADI). Areas were chosen based on proximity to known resources, proposed construction-related ground disturbance, and ability to hand excavate (i.e., proposed excavations are along road shoulders and are not within the paved roadbed). All excavated sediments were screened through a quarter-inch dry screen in 10–20 cm arbitrary levels. All excavation locations were then backfilled and the soil was compacted to minimize settling. All work was carried out by, or under the direct supervision of, a registered professional archaeologist. The findings of the Phase I Testing are documented in the FOE.
Existing Conditions

The APE is located in Big Bear Lake valley within the eastern portion of the San Bernardino Mountains. Prior to European contact, the Serrano were hunters and gatherers who exploited both large and small game, as well as numerous plant resources within the APE. Historic background for the APE includes the Spanish Mission Period (1771-1834), Mexican Rancho Period (1834-1850), Mormon Period (1850-1857), Post-Mormon Period (1857-1893), and Federal Stewardship (1893-Present).

SBNF and SCCIC Records Searches. Records searches at the SBNF and SCCIC were conducted to identify known cultural resources. The SBNF and SCCIC identified the same three known resources within the ADI. In addition, SBNF identified 13 cultural resources within a 0.25-mile radius of the ADI and the SCCIC identified 47 known resources within 0.5-mile radius of the ADI.

Literature Review. Publications, maps, and websites were reviewed for archaeological, ethnographic, historical, and environmental information about the ADI and its vicinity; refer to Appendix D. The literature review identified two additional cultural resources within the ADI.

NAHC Sacred Lands File Search, Native American Consultation, and Historical Society Consultation. No cultural resources were identified as part of the project’s NAHC Sacred Lands File Search, Native American consultation completed by the SBNF archaeologist, or historical society consultation.

Field Survey. All five resources identified in the records search and literature review were identified during a field survey conducted on June 27 through June 29, 2018. Each resource was recorded on California Department of Parks and Recreation 523 series forms (refer to Appendix D, Department of Parks and Recreation 523 Forms, of Appendix D).

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less Than Significant Impact. According to the FOE, a 3.7-mile segment of the Rim of the World Highway Historic District (P36-007049) was determined eligible for the National Register of Historic Places (NRHP) and listed in the California Register of Historical Resources (CRHR). This segment of State Route 38 (SR-38) is located approximately 20 miles west of the project limits. This resource was determined eligible at the local level of significance under Criterion A for its association with important events in the history of recreation, tourism, and transportation in the San Bernardino Mountains and Southern California. Under Criterion C, this resource is significant as an outstanding Depression-era example of designing a road and its associated features to be compatible with the scenic and rustic character of a mountainous landscape with a period of significance from 1928 to 1936.

The proposed project would cap and abandon the existing gas pipelines, and new gas pipelines would be installed along the project alignment. Installation of the pipelines would include pavement cutting, trenching, horizontal directional drilling (across Stanfield Cutoff), adding bell holes within and adjacent to the alignment for construction access, and replacing pavement where removed.

The FOE concluded that the project does not propose any changes to the character-defining features for which the Rim of the World Highway Historic District was determined eligible for listing in the NRHP and listed in the CRHR. The project does not propose augmenting the road width or altering the road alignment. The project will not affect any rock piers, chain guard rails, rock walls, slopes or scenic overlooks, or trees or vegetation adjacent to the roadway. Proposed alterations to this historic property include removal and replacement of the existing pavement along portions of the pipeline and addition of bell holes within and adjacent to the roadway. The road surface material has not been identified as a character-defining feature of the historic property and therefore its removal and replacement will not affect the
integrity or the historic property’s ability to convey its significance. Furthermore, the addition of bell holes within and adjacent to the roadway is a minor addition common for roadways, and visually, due to their low profile, will not detract from the setting or other character-defining features of the historic property that would affect the integrity or the historic property's ability to convey its significance.

Therefore, the proposed project would have less than significant impacts to the Rim of the World Highway Historic District since character-defining features of the historic resource would remain undamaged and unaltered; the roadway would remain in its original location and alignment; it would remain in use as a roadway; the setting would remain unchanged; no atmospheric or audible elements would be introduced; and the resource would not be transferred, leased, or sold, as defined in the Criteria of Adverse Effect at 36 Code of Federal Regulations 800.5(a)(2)(i–vii); refer to Appendix D. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

**Less Than Significant Impact With Mitigation Incorporated.** According to the cultural resources documentation for the project, portions of the ADI are sensitive for encountering archaeological resources. Known resource locations and other areas of sensitivity identified in consultation with consulting tribes were tested for subsurface archaeology and were determined to contain no archaeological deposits that could be eligible for inclusion in the NRHP or CRHR. Further, the majority of the project would avoid areas of sensitivity through the use of horizontal directional drilling (HDD).

Notwithstanding, due to the high sensitivity of the area and the high volume of cultural resources identified, and significance of the ADI with the San Manuel Band of Mission Indians, the potential remains that ground-disturbing activities associated with the project could impact previously undiscovered cultural resources. Mitigation Measure CUL-1 requires all construction activities to halt if cultural resources are discovered during ground-disturbing activities, a San Bernardino National Forest (SBNF) Heritage staff be notified immediately, and a qualified archaeologist evaluate the find. Mitigation Measure CUL-4 requires archaeological monitoring to occur during sensitive bell hole excavations and during the lateral line trenching at station 50+50. Should inadvertent effects to or unanticipated discoveries of human remains be made, the County Coroner and SBNF Heritage staff are required to be notified immediately (Mitigation Measure CUL-2). If the remains are determined to be Native American or if Native American (Indian) cultural items pursuant to Native American Graves Protection and Repatriation Act (NAGPRA) are uncovered, the provisions of NAGPRA and its regulations at 43 CFR 10 and Archaeological Resources Protection Act of 1979 (ARPA) at 43 CFR 7 must be followed on federal lands (Mitigation Measure CUL-4). Last, Mitigation Measure CUL-3 would also require resource awareness training for non-archaeologist field and construction crews working on the project prior to ground-disturbing activities. Implementation of these mitigation measures would ensure impacts to potentially significant archaeological resources are reduced to less than significant levels.

**Mitigation Measures:**

**CUL-1** In the event that cultural resources are discovered, or historic properties are inadvertently affected, during project implementation, all work in the vicinity of the resource (within a 60-foot buffer) shall cease, and a San Bernardino National Forest (SBNF) Heritage staff shall be notified immediately. A qualified archaeologist meeting Secretary of Interior standards shall be hired by the developer/applicant to assess
the find and/or effects. SBNF shall identify acceptable mitigation or treatment measures in order to resolve the effects.

CUL-2 Should inadvertent effects to or unanticipated discoveries of human remains be made, the County Coroner and San Bernardino National Forest (SBNF) Heritage staff shall be notified immediately. If the remains are determined to be Native American or if Native American (Indian) cultural items pursuant to Native American Graves Protection and Repatriation Act (NAGPRA) are uncovered, the provisions of NAGPRA and its regulations at 43 CFR 10 and Archaeological Resources Protection Act of 1979 (ARPA) at 43 CFR 7 shall be followed on federal lands.

CUL-3 Resource awareness training shall be provided for non-archaeologist field and construction crews working on the project prior to ground-disturbing activities.

CUL-4 During site disturbance activities, an archaeological monitor shall be present for the lateral line trenching at station 50+50 and to ensure directional drilling launch and receiving pit locations are placed outside of mapped resource boundaries.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

**Less Than Significant Impact With Mitigation Incorporated.** Due to the disturbed nature of the project area, it is not anticipated that human remains, including those interred outside of dedicated cemeteries, would be encountered during ground disturbance activities. However, if human remains are found, those remains would require proper treatment, in accordance with applicable laws. Should inadvertent effects to or unanticipated discoveries of human remains be made, the County Coroner and SBNF Heritage staff are required to be notified immediately (Mitigation Measure CUL-2). If the remains are determined to be Native American or if Native American (Indian) cultural items pursuant to NAGPRA are uncovered, the provisions of NAGPRA and its regulations at 43 CFR 10 and ARPA at 43 CFR 7 must be followed on federal lands. Further, the California Public Resources Health and Safety Code Section 7050.5 through 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the San Bernardino County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the most likely descendant. If human remains are found during excavation, excavation must stop near the find and any area that is reasonably suspected to overlay adjacent remains until the San Bernardino County Coroner has been called out, the remains have been investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with existing Federal and State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts concerning disturbance of human remains would be less than significant.

**Mitigation Measures:** Refer to Mitigation Measure CUL-2.
Would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
--- | --- | --- | --- | --- |
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | ✓ | |
b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency? | | | ✓ | |

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact.

Project-Related Sources of Energy Consumption

This analysis focuses on three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle trips associated with new development and for project construction. The analysis of operational electricity/natural gas usage is based on the California Emissions Estimator Model version 2016.3.2 (CalEEMod) modeling results for the project. The project’s estimated electricity/natural gas consumption is based primarily on CalEEMod’s default settings for the County of San Bernardino (County), and consumption factors provided by Bear Valley Electric Service (BVES) and the Southwest Gas Corporation (Southwest Gas) (the electricity and natural gas providers for the City of Big Bear Lake). The results of the CalEEMod modeling are included in Appendix B, Air Quality/GHG/Energy Data. The amount of operational fuel consumption was estimated using the California Air Resources Board (CARB) Emissions Factor 2014 (EMFAC2014) computer program which provides projections for typical daily fuel usage in the County, and the project’s annual vehicle miles traveled (VMT) outputs from CalEEMod. The estimated construction fuel consumption is based on the project’s construction equipment, timing/phasing, and hours of duration for construction equipment.

As the proposed project consists of utility improvements (i.e. gas pipeline replacement), project operations would not involve new buildings or uses which would introduce new permanent stationary or mobile sources of emissions within the project area. The project would not result in increased vehicular trips to and from the project site and would not generate new operational emissions. As a result, project operations would not result in increased energy consumption from electricity, natural gas, or fuel usage. The project’s estimated energy consumption is summarized in Table 4.6-1, Energy Consumption. As shown in Table 4.6-1, the project would not increase annual electricity or natural gas consumption in the County. The project’s construction vehicle fuel consumption would increase the County’s consumption by a nominal 0.015 percent. Since the project is a utility improvement project, no increase in operational vehicle fuel consumption would result. The project would not involve new buildings, increased vehicular trips, or generation of additional energy and natural gas consumption. As such, the project would not have an annual energy, natural gas, or operational fuel consumption.
Table 4.6-1  
Energy Consumption

<table>
<thead>
<tr>
<th>Energy Type</th>
<th>Project Annual Energy Consumption¹</th>
<th>County Annual Energy Consumption²</th>
<th>Percentage Increase Countywide²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Consumption³</td>
<td>0 MWh</td>
<td>15,273,090 MWh</td>
<td>0.000%</td>
</tr>
<tr>
<td>Natural Gas Consumption³</td>
<td>0 therms</td>
<td>493,140,000 therms</td>
<td>0.000%</td>
</tr>
<tr>
<td>Fuel Consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction (Heavy-Duty Diesel Vehicle) Fuel Consumption⁴</td>
<td>84,572 gallons</td>
<td>227,017,864 gallons</td>
<td>0.015%</td>
</tr>
<tr>
<td>Operational Automotive Fuel Consumption⁴</td>
<td>0 gallons</td>
<td>917,736,757 gallons</td>
<td>0.000%</td>
</tr>
</tbody>
</table>

Notes: MWh = megawatt hours  
1. As modeled in CalEEMod version 2016.3.2.  
3. The project is a utility improvement project which would not involve new buildings, increased vehicular trips, or generate additional energy and natural gas consumption. As such, the project would not have annual energy, natural gas, or operational fuel consumption.  
4. Project fuel consumption calculated based on CalEEMod results. Countywide fuel consumption is from the California Air Resources Board EMFAC2014 model for the year 2019.  
Refer to Appendix B, Air Quality/GHG/Energy Data, for assumptions used in this analysis.

Construction-Related Energy Consumption

Project construction would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, and construction. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. The project-related incremental increase in the use of energy found in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest in minimizing the cost of doing business. As indicated in Table 4.6-1, the project’s fuel consumption from construction would be approximately 84,572 gallons, which would increase fuel use in the County by 0.015 percent. As such, project construction would have a nominal effect on the local and regional energy supplies. It is noted that construction fuel use is temporary and would cease upon completion of construction activities.
There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. A less than significant impact would occur in this regard.

**Operational Energy Consumption**

As a utility improvement project, project operations would not involve new buildings or uses which would introduce new permanent stationary or mobile sources of emissions within the project area. The proposed utility improvements would continue to serve existing uses and would accommodate future planned growth in the area. The project would not result in increased vehicular trips to and from the project site and would not generate new operational emissions. The availability of additional natural gas supply in the project area could indirectly increase vehicle trips from future residents and visitors of the Big Bear Lake area but quantifying indirect operational energy consumption of such trips would be speculative at this time. As a result, project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant and no cumulative operational impacts associated with project operations would occur.

Overall, the project would not result in the inefficient, wasteful, or unnecessary consumption of building energy. A less than significant impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

**b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?**

**Less than significant Impact.** As stated above in Response 4.6(a), project operation would not have operational energy, natural gas, or fuel consumption. The project would not result in increased vehicular trips to and from the project site. The project would include fuel consumption in the form of heavy-duty diesel fuel consumption; however, this fuel consumption would cease immediately once construction is complete. As the project would not have any operational energy, natural, or fuel usage, the project would not conflict with any State or local plan for renewable energy or energy efficiency. Therefore, the proposed project would result in less than significant impacts associated with renewable energy or energy efficiency plans.

**Mitigation Measures:** No mitigation measures are required.
## 4.7 GEOLOGY AND SOILS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a.</strong> Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) 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.</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2) Strong seismic ground shaking?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Seismic-related ground failure, including liquefaction?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Landslides?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b.</strong> Result in substantial soil erosion or the loss of topsoil?</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c.</strong> 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?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>d.</strong> Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001), creating substantial direct or indirect risks to life or property?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>e.</strong> 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?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>f.</strong> Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

The information presented in this analysis is based on the Geotechnical Study, *Southwest Gas Corporation Gasoline Installation, Northshore Drive and Stanfield Cutoff, Big Bear Lake, California* (Geotechnical Study), prepared by TRINITY Geotechnical Engineering, Inc., dated September 14, 2018 and revised January 14, 2019; refer to Appendix E, Geotechnical Study.

**a)**  
Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

1) 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, like the rest of Southern California, is located within a seismically active margin between the North American and Pacific tectonic plates. According to the Geotechnical Study, the project site is not located within an Alquist-Priolo earthquake fault zone. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.
2) **Strong seismic ground shaking?**

**Less Than Significant Impact.** According to the Geotechnical Study, the project site is located within a seismically active area. The most significant seismic hazard at the site is considered to be shaking caused by an earthquake occurring on a nearby or distant active fault (i.e., San Andreas Fault Zone or North Frontal Thrust System). The project does not involve the construction of aboveground habitable structures, and its implementation would not increase the potential for human loss, injury, or death as a result of strong seismic ground shaking. Consistent with the existing seismic safety requirements of the California Building Code, the project would incorporate site-specific seismic design recommendations identified in the Geotechnical Study to minimize the potential for damage and major injury during a seismic event; refer to Geotechnical Study Section 9.8, *Seismic Design Parameters*. The San Bernardino County Building and Safety Division would review the project’s construction plans to verify California Building Code compliance prior Construction Permit issuance. Conformance with the California Building Code’s seismic safety requirements, as enforced by the San Bernardino County Building and Safety Division, would ensure impacts related to strong seismic ground shaking are less than significant.

**Mitigation Measures:** No mitigation measures are required.

3) **Seismic-related ground failure, including liquefaction?**

**Less Than Significant Impact.** Liquefaction and seismically-induced settlement or ground failure is generally related to strong seismic shaking events where the groundwater table occurs at a relatively shallow depth (generally within 50 feet of the ground surface) or where lands are underlain by loose, cohesionless deposits. Liquefaction generally results in the loss of shear strength of a soil, which occurs due to the increase of pore water pressure caused by the rearrangement of soil particles induced by shaking or vibration. During liquefaction, soil strata typically behave similar to a heavy fluid.

According to the Geotechnical Study, the project site is underlain by alluvial soils that contain some zones of loose sands. Groundwater was not encountered during the Geotechnical Study’s subsurface investigation of 16.5 feet below ground surface and is not anticipated to impact the project’s shallow cut and cover trench construction; however, groundwater is expected to be shallower than 50 feet below ground surface based on the project’s proximity to Big Bear Lake, particularly along Segment D of the project site (Stanfield Cutoff). Segments of the project that are installed within areas of loose soils that are saturated with groundwater may be susceptible to liquefaction. However, the design of the proposed pipeline would be subject to all Federal and State requirements related to pipeline strength and safety. These requirements include pipe material specifications that exceed the operating needs of the pipeline and control valves within the project boundary that would allow for isolation of the pipeline in the event of pipeline failure. Further, the existing pipeline was installed in 1964 very near to the location of the proposed pipeline and has endured numerous seismic events with no adverse effects related to seismic-related ground failure, including liquefaction; refer to Appendix E. Following compliance with all Federal and State requirements related to pipeline strength and safety, impacts concerning seismic-related ground failure, including liquefaction, would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

4) **Landslides?**

**Less Than Significant Impact.** The project site is located within areas classified as “Area 1 – Least Susceptible Areas” and “Area 2 – Marginally Susceptible Areas;” refer to Geotechnical Study Figure No. 8, *Landslide Potential Areas Map*. No physiographic features suggesting the potential for landslide, slope instability, or rockfall were identified during the field exploration for the Geotechnical Study. As a result, the potential for landslide hazards is considered low and impacts concerning landslide hazards would be less than significant.

**Mitigation Measures:** No mitigation measures are required.
b) **Result in substantial soil erosion or the loss of topsoil?**

**Less Than Significant Impact.** As the project would disturb more than one acre of soil, the project would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which would require preparation of a Storm Water Pollution Prevention Plan (SWPPP) for approval by the Santa Ana Regional Water Quality Control Board. The SWPPP would identify best management practices (BMPs) to be implemented with the project to prevent erosion, minimize siltation impacts, and protect water quality. The project would also be subject to Development Code Section 85.11.030, *Erosion Control Plan and Inspection Required*, which specifies that disturbance of land (e.g., grading or land clearing) or construction activity that has potential to cause erosion is not permitted without first obtaining approval of erosion control measures to ensure that erosion would not reasonably be expected to occur. Thus, impacts associated with substantial soil erosion or the loss of top soil would be less than significant.

**Mitigation Measures:** No mitigation measures 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 an on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

**Less Than Significant Impact.** Responses 4.7(a)(3), 4.7(a)(4), and 4.7(d) for a discussion concerning liquefaction, landslides, and expansive soils. Lateral spreading is a phenomenon in which large blocks of intact, non-liquefied soil move down a slope on a liquefied soil layer. Lateral spreading is often a regional event. For lateral spreading to occur, the liquefiable soil zone must be laterally continuous, unconstrained laterally, and free to move along sloping ground. As indicated in Response 4.7(a)(3), segments of the project that are installed within areas of loose soils that are saturated with groundwater may be susceptible to liquefaction. These areas could have potential for lateral spreading. However, the design of the proposed pipeline would be subject to all Federal and State requirements related to pipeline strength and safety. These requirements include pipe material specifications that exceed the operating needs of the pipeline and control valves within the project boundary that would allow for isolation of the pipeline in the event of pipeline failure. Further, the existing pipeline was installed in 1964 very near to the location of the proposed pipeline and has endured numerous seismic events with no adverse effects related to seismic-related ground failure, including liquefaction. Following compliance with all Federal and State requirements related to pipeline strength and safety, impacts concerning lateral spreading would be less than significant.

The proposed pipeline replacement would not involve a change in use which would increase the project site’s risk to unstable geologic units or soils beyond existing conditions. Further, the San Bernardino County Building and Safety Division would verify project conformance with the site-specific design recommendations identified in the Geotechnical Study to minimize the potential for damage and major injury as a result of unstable geologic units or soils. Thus, following compliance with all Federal, State, and local requirements related to pipeline strength and safety, impacts concerning unstable geologic units or soils would be less than significant.

**Mitigation Measures:** No mitigation measures are required.

d) **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

**Less Than Significant Impact.** Expansive soils are those that undergo volume changes as moisture content fluctuates, swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement, and distorting structural elements. According to the Geotechnical Study, soils underlaying the project site generally have a “Very Low” to “Low” expansion potential. The project’s proposed pipeline replacement would not involve a change in use which would increase the project’s risk to expansive soils. Further, no permanent habitable structures are proposed. Nonetheless, the San Bernardino County Building and Safety Division...
would verify project compliance with the site-specific design recommendations identified in the Geotechnical Study to minimize the potential for direct or indirect risk of life or property as a result of expansive soils. As a result, impacts related to expansive soils would be less than significant.

**Mitigation Measures:** No mitigation measures 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 septic tanks or alternative wastewater systems would be constructed as part of the project. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact With Mitigation Incorporated.** The project site is located in the central portion of the northwest-trending San Bernardino Mountains. Based on the Geotechnical Study, the site is generally underlain with alluvial soils with a portion of the alignment underlain by sedimentary rocks south of Bertha Ridge. Alluvial materials underlie the fill soils within most of the project alignment and were encountered to depth within each boring conducted as part of the Geotechnical Study. The alluvial units were similar in composition, consisting of loose to very dense silty sand and clayey sand with an abundance of gravel. The sedimentary rocks south of Bertha Ridge were not encountered in the borings but were identified on regional geologic maps. These materials consist of brownish-gray, siltstone or fine to coarse-grained sandstone. The silty clay sands associated with the alluvial deposits have potential to preserve fossil localities. In the event the presence of fossil localities are discovered during excavation or earthwork, appropriate actions shall be followed to avoid damaging or destroying potentially significant paleontological resources. As such, implementation of Mitigation Measure GEO-1 would ensure if paleontological resources are encountered during ground disturbing activities, work is halted until a qualified paleontologist can evaluate the find for potential significance. As such, project impacts in this regard would be less than significant with mitigation incorporated.

**Mitigation Measures:**

**GEO-1** If paleontological resources are encountered during ground disturbing activities, work in the immediate area shall halt and the construction contract shall contact the County of San Bernardino. With direction from the County, the Applicant shall retain a qualified paleontologist, defined as a paleontologist who meets the Secretary of the Interior’s Professional Qualification Standards for paleontology, to immediately evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts.
4.8 GREENHOUSE GAS EMISSIONS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>b. Conflict with an applicable plan, policy, or regulations adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

GLOBAL CLIMATE CHANGE

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 429 million tons of carbon dioxide (CO₂) per year.¹ Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit (°F) over the next century. Methane is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth’s ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission.

The impact of anthropogenic activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO₂, methane (CH₄), and nitrous oxide (N₂O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO₂ concentrations ranged from 180 parts per million (ppm) to 300 ppm. For the period from approximately 1750 to the present, global CO₂ concentrations increased from a pre-industrialization period concentration of 280 ppm to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range.

REGULATIONS AND SIGNIFICANCE CRITERIA

The Intergovernmental Panel on Climate Change (IPCC) developed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 parts per million CO₂ equivalent² (CO₂eq) concentration is required to keep global mean warming below two degrees Celsius, which in turn is assumed to be necessary to avoid significant levels of climate change.

State of California Regulations

Executive Order S-3-05 was issued in June 2005, which established the following GHG emission reduction targets:

- 2010: Reduce GHG emissions to 2000 levels
- 2020: Reduce GHG emissions to 1990 levels
- 2050: Reduce GHG emissions to 80 percent below 1990 levels

² Carbon Dioxide Equivalent (CO₂eq) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.
Assembly Bill 32 (AB 32) requires that the California Air Resources Board (CARB) determine what the statewide GHG emissions level was in 1990 and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 million metric tons (MMT) of CO₂eq.

Executive Order B-30-15, which was issued in April 2015, requires statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030. Senate Bill 32 (SB 32), signed into law in September 2016, codifies the 2030 GHG reduction target in Executive Order B-30-15. The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. GHG emissions from the proposed project would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change.

In June 2008, the California Governor’s Office of Planning and Research published a Technical Advisory, which provides informal guidance for public agencies as they address the issue of climate change in CEQA documents. This is assessed by determining whether a proposed project is consistent with or obstructs the 39 Recommended Actions identified by CARB in its Climate Change Scoping Plan which includes nine Early Action Measures (qualitative approach). The Attorney General’s Mitigation Measures identify areas where GHG emissions reductions can be achieved in order to achieve the goals of AB 32. As set forth in the California Governor’s Office of Planning and Research Technical Advisory and in CEQA Guidelines Section 15064.4, this analysis examines whether the proposed project’s GHG emissions are significant based on a qualitative and performance-based standard (CEQA Guidelines Section 15064.4(a)(1) and (2)).

South Coast Air Quality Management District Thresholds

At this time, there is no absolute consensus in the State of California among CEQA lead agencies regarding the analysis of global climate change and the selection of significance criteria. In fact, numerous organizations, both public and private, have released advisories and guidance with recommendations designed to assist decision-makers in the evaluation of GHG emissions given the current uncertainty regarding when emissions reach the point of significance. Lead agencies may elect to rely on thresholds of significance recommended or adopted by State or regional agencies with expertise in the field of global climate change.

The SCAQMD has formed a GHG CEQA Significance Threshold Working Group (Working Group) to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting No. 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.

With the tiered approach, the project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. For all non-industrial projects, the SCAQMD is proposing a screening threshold of 3,000 MTCO₂eq per year (MTCO₂eq/yr). SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three options. Under the Tier 4 first option, the SCAQMD initially outlined that the project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual

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3 Governor’s Office of Planning and Research, CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review, 2008.
4 The most recent SCAQMD GHG CEQA Significance Threshold Working Group meeting was held on September 2010.
emissions. However, the Working Group did not provide a recommendation for this approach. Under the Tier 4 second option, the Working Group folded this into the third option. Under the Tier 4 third option, the project would be excluded if it was below an efficiency-based threshold of 4.8 MTCO\textsubscript{2}eq per service population (SP) per year or 3.0 MTCO\textsubscript{2}eq per SP for post-2020 projects.\textsuperscript{5} Tier 5 would exclude projects that implement off-site mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

The 3,000 MTCO\textsubscript{2}eq/yr non-industrial screening threshold has been selected as the significance threshold, as it is most applicable to the proposed project. The 3,000 MTCO\textsubscript{2}eq threshold is used in addition to the qualitative thresholds of significance set forth below from Section VII of Appendix G to the CEQA Guidelines.

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

\textbf{Less Than Significant Impact.} Project-related GHG emissions would include emissions from construction activities. Construction of the project would result in direct emissions of CO\textsubscript{2}, N\textsubscript{2}O, and CH\textsubscript{4} from the operation of construction equipment. Transport of materials and construction workers to and from the project site would also result in GHG emissions. Construction activities would be short-term in duration and would cease upon project completion. Construction-generated GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod). The project’s anticipated GHG emissions are identified in Table 4.8-1, \textit{Estimated Greenhouse Gas Emissions}.\textsuperscript{6} As indicated in Table 4.8-1, the total project construction would result in 1,115.05 MTCO\textsubscript{2}eq (37.17 MTCO\textsubscript{2}eq over 30 years), which is well below the 3,000 MTCO\textsubscript{2}eq/yr screening threshold.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|}
\hline
Source & CO\textsubscript{2} & N\textsubscript{2}O & CH\textsubscript{4} & Total Metric Tons of CO\textsubscript{2}eq \\
\hline
\hline
\textbf{Construction Emissions}\textsuperscript{2} & & & & \\
\hline
Total Construction Emissions (one time) & 1,107.10 & 0.00 & 0.00 & 0.32 & 7.95 & 1,115.05 \\
\hline
Total Emissions (one time)\textsuperscript{2} & 1,107.10 & 0.00 & 0.00 & 0.32 & 7.95 & 1,115.05 \\
\hline
Total Emissions (amortized over 30 years)\textsuperscript{2} & 36.90 & 0.00 & 0.00 & 0.01 & 0.27 & 37.17 \\
\hline
\textbf{SCAQMD Threshold} & & & & 3,000 MTCO\textsubscript{2}eq/yr \\
\hline
\textbf{Is Threshold Exceeded?} & No \\
\hline
\end{tabular}
\caption{Estimated Greenhouse Gas Emissions}
\end{table}

Notes: CO\textsubscript{2} = carbon dioxide; N\textsubscript{2}O = nitrous oxide; CH\textsubscript{4} = methane; CO\textsubscript{2}eq = carbon dioxide equivalent
2. Totals may be slightly off due to rounding. Due to rounding, the results given by the equation calculations used in the Greenhouse Gas Equivalencies Calculator may not return the exact results shown in California Emission Estimator Model (CalEEMod).

Source: Refer to Appendix B, Air Quality/GHG/Energy Data for detailed model input/output data.

In terms of operational GHG emissions, the proposed project is a utility improvement project and does not propose a trip-generating land use. The proposed project would not include the provision of new permanent stationary or mobile sources of emissions, and therefore, by its very nature, would not generate quantifiable GHG emissions from project operations.

\textsuperscript{5} The project-level efficiency-based threshold of 4.8 MTCO\textsubscript{2}eq per SP per year is relative to the 2020 target date. The SCAQMD has also proposed efficiency-based thresholds relative to the 2035 target date to be consistent with the GHG reduction target date of SB 375. GHG reductions by the SB 375 target date of 2035 would be approximately 40 percent. Applying this 40 percent reduction to the 2020 targets results in an efficiency threshold for plans of 4.1 MTCO\textsubscript{2}eq per SP per year and an efficiency threshold at the project level of 3.0 MTCO\textsubscript{2}eq/year.

\textsuperscript{6} CalEEMod outputs are contained within the Appendix B, Air Quality/GHG/Energy Data.
operations. The project does not propose any buildings and therefore no permanent source or stationary source emissions. In addition, the utility improvements would not directly generate vehicle trips (a predominant source of GHG emissions) or induce population growth. Rather, the project would increase pipeline capacity to accommodate future growth in the area. As such, the project’s construction and operational GHG emissions would not exceed the SCAQMD screening threshold of 3,000 MTCO₂eq/yr. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**Less than significant Impact.** The County of San Bernardino (County) adopted their *Regional Greenhouse Gas Reduction Plan* (RGGRP) in March 2014. The RGGRP describes the GHG reduction goals for various cities within the County to comply with the State’s GHG reduction targets. The City of Big Bear Lake (City) selected a goal to reduce its community GHG emissions to a level that is 15 percent below its 2008 emissions level by 2020. The City is anticipated to meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective per AB 32, through combination of State (~99 percent) and local (~1 percent) efforts. The City would exceed the goal with only State/County level actions (101 percent of goal), but has committed to several additional local measures: the Pavley vehicle standards, the State’s low carbon fuel standard, the Renewable Portfolio Standards (RPS), and other State measures that would significantly reduce GHG emissions in City’s on-road and solid waste sectors in 2020.

As a utility improvement project, the project would not generate operational GHG emissions and would not conflict with the goals listed in the RGGRP for the County and the City. Additionally, as identified in Table 4.8-1, project implementation would result in construction GHG emissions that are well below SCAQMD’s 3,000 MTCO₂eq/yr non-industrial threshold. Thus, a less than significant impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.
### HAZARDS AND HAZARDOUS MATERIALS

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</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 result in a safety hazard or excessive noise for people residing or working in the project area?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**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 With Mitigation Incorporated.** Short-term construction activities for the proposed project would utilize gasoline and diesel fuels for construction equipment. Additionally, existing natural gas pipelines contain asbestos containing materials (ACMs) and would require cutting and capping during construction. No other hazardous materials would be transported to or from the project site or used during construction activities. Fuels and solvents for construction would be stored and utilized pursuant to existing State and local regulatory requirements for handling, storage, and disposal of hazardous substances. ACMs would be handled in accordance with the Southwest Gas Environmental Asbestos Handling Requirements and Safety Manual, as well as all Federal, State, and local laws and regulations. Therefore, short-term construction impacts would be less than significant.

Operations of the pipeline would involve the routine transport of natural gas. The project would replace the existing 6-inch high-pressure steel natural gas pipeline with an 8-inch high-pressure steel natural gas pipeline but would not result in a change in operations at the site. Thus, project operations would not result in new routine transport, use, or disposal of hazardous materials compared to existing conditions. Similar to existing conditions, should a release of natural gas occur, notification to the State Warning Center and San Bernardino County Fire Department would occur (enforced through Mitigation Measure HAZ-1). Thus, impacts would be less than significant with implementation of Mitigation Measure HAZ-1.
Mitigation Measures:

HAZ-1  No less than one hour prior to working on replacing the natural gas line, notify the State Warning Center at (800) 852-7550 of a threatened release of natural gas at the proposed location with any and all information asked for during the phone call. In addition, email Greg Zeigler (gzeigler@sbcfire.org), or his equivalent, no less than one hour prior to working on placing the natural gas line, with the same information provided to the State Warning Center.

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

Less Than Significant Impact With Mitigation Incorporated.

Short-Term Construction Impacts

Construction activities associated with the project involve hauling of construction materials, such as steel gas pipelines, construction equipment, and other miscellaneous construction materials, to and along the project alignment. The existing pipeline would be abandoned in place and capped off, and new natural gas pipelines would be installed primarily by open trench excavation with some areas installed by horizontal directional drilling. As previously discussed, ACMs lie within the existing pipeline. As such, ACMs would be handled in accordance with the Southwest Gas Environmental Asbestos Handling Requirements and Safety Manual, as well as all Federal, State, and local laws and regulations. During project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law.

In the event that any unknown waste materials or suspect materials are discovered by the contractor during construction, implementation of Mitigation Measure HAZ-2 would be required. Further, the project would be required to implement a Soil Management Plan (SMP) during grading activities (Mitigation Measure HAZ-3). The SMP would provide guidelines for safety measures, soil management, and handling of disturbed soils. The SMP would also be required to present a decision framework and specific risk management measures for managing soil in a manner protective of human health and consistent with applicable regulatory requirements. With implementation of the recommended Mitigation Measures HAZ-2 and HAZ-3, impacts in this regard would be reduced to less than significant levels.

Long-Term Operational Impacts

Operation of the 8-inch high-pressure steel natural gas pipeline would not be different from existing operations of 6-inch high-pressure steel natural gas pipeline. As noted above, project operation would not result in new routine transport, use, or disposal of hazardous materials. Therefore, the project would not involve a change in use which would create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. However, should a release of natural gas occur, Mitigation Measure HAZ-1 would require notification to the State Warning Center and San Bernardino County Fire Department. Thus, impacts would be less than significant with implementation of Mitigation Measure HAZ-1.

Mitigation Measures: Refer to Mitigation Measure HAZ-1.
HAZ-2 If unknown wastes or suspect materials (such as stained soils, odors, and/or unknown debris) are discovered during construction by the contractor that he/she believes may involve hazardous waste/materials, the contractor shall:

- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
- Notify the County Director of Public Works;
- Secure the areas as directed by the County;
- Notify the implementing agency’s Hazardous Waste/Materials Coordinator; and
- Perform remedial activities (as required per the implementing agency, and dependent upon the nature of the hazardous materials release) as required under existing regulatory agency standards.

HAZ-3 Prior to issuance of a grading permit, a Soil Management Plan (SMP) shall be prepared by a qualified environmental professional with Phase II/Site Characterization experience. The SMP shall be made available to the contractor and County Land Use Services Department – Planning Division for use during grading activities. The SMP shall include recommendation and guidelines for the testing of any soil import/export of soils to ensure no contamination is present. The SMP shall also include safety measures and soil management procedures in the event that contaminated soils are to be disturbed, and for handling soil during any planned earthwork activities. The SMP shall also include a decision framework and specific risk management measures for managing soil in a manner protective of human health and consistent with applicable regulatory requirements.

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 With Mitigation Incorporated. The nearest school to the project site is North Shore Elementary School, which is located approximately 20 feet to the east of Segment D at 765 Stanfield Cutoff. As detailed above in Responses 4.9(a) and 4.9(b), construction and operations of the proposed project would result in minor hazards related to the routine transport, use, or disposal of hazardous materials. However, Mitigation Measures HAZ-1 through HAZ-3 would ensure that North Shore Elementary School would not be significantly impacted by hazardous emissions or materials. Thus, impacts would be less than significant with incorporation of Mitigation Measures HAZ-1 through HAZ-3.

Mitigation Measures: Refer to Mitigation Measures HAZ-1 through HAZ-3.

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. Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board to compile and update a regulatory sites listing (per the criteria of the Section). The California Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the Health and Safety Code. Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations (CCR), to compile, as
appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste. The project site is not listed pursuant to Government Code Section 65962.5.\(^1\) Thus, no impact would result in this regard.

**Mitigation Measures:** No mitigation measures 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 or excessive noise for people residing or working in the project area?**

**No Impact.** The closest airport to the project site is the Big Bear Airport, approximately one mile to the east of the project site. The Big Bear Airport is a publicly owned, public use airport that is classified in the National Plan of Integrated Airport Systems as a general aviation, basic utility facility. The *Big Bear City Airport Comprehensive Land Use Plan* identifies three Safety Review Areas, each with a specific set of land use compatibility guidelines.\(^2\) Based on Figures 2, 60 CNEL Contour, and 9, Safety Review Areas, of the *Big Bear City Airport Comprehensive Land Use Plan*, the project site is located outside of the 60 dBA CNEL contour and three Safety Review Areas. Thus, no impacts associated with public airport safety hazards or excessive airport noise would occur.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact With Mitigation Incorporated.** Based on the *County of San Bernardino Mountain Area Emergency Routes Map*, North Shore Drive (State Route 38 [SR-38]) and Highway 18 (Big Bear Boulevard) are designated as emergency routes. According to the *San Bernardino County Emergency Operations Plan* (EOP), the City is currently using the Standardized Emergency Management System (SEMS) for emergency response, where depending on the type of incident, several different agencies and disciplines may be called upon to assist with emergency response. Agencies and disciplines that can be expected to be part of an emergency response team include medical, health, fire and rescue, police, public works, and the coroner.

The project is limited to replacing the existing 6-inch high-pressure steel natural gas pipeline with an 8-inch high-pressure steel natural gas pipeline. This type of use is not anticipated to impair implementation of or physically interfere with the EOP. As discussed in Section 4.17, *Transportation*, the project may temporarily require lane closures. Preparation and implementation of a Traffic Control Plan would be required to ensure construction activities do not adversely impact traffic flow along the project alignment. The Traffic Control Plan would include the sequence of construction activities and the routes that would be utilized by all construction-related traffic during each construction phase. The Traffic Control Plan would also provide specific details regarding construction signage, the placement of traffic controls, emergency access, warning devices, limitations on timing for temporary lane closures to avoid peak hours, the need for a construction flagger to direct traffic during heavy equipment use or lane closures, and (if necessary) any detours. Thus, with implementation of Mitigation Measure TRA-1, impacts would be less than significant.

**Mitigation Measures:** Refer to Mitigation Measure TRA-1 in Section 4.17, *Transportation*.

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\(^2\) San Bernardino County Planning Department, *Big Bear City Airport Comprehensive Land Use Plan*, February 1992.
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

**Less Than Significant Impact.** The California Department of Forestry and Fire Very High Fire Hazard Severity Zones in LRA Map for SW San Bernardino County identifies the site as a Very High Fire Hazard Severity Zone. As a pipeline replacement project, improvements to the approximately 2.3-mile segment of the existing natural gas pipeline easement would not increase exposure of persons, either directly or indirectly, to significant risk of loss, injury, or death involving wildland fires. As the project would not develop new residential units or habitable structures that would be at risk to wildland fires or result in an increased hazard in causing a wildfire, less than significant impacts would occur.

**Mitigation Measures:** No mitigation measures are required.

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4.10 HYDROLOGY AND WATER QUALITY

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Result in substantial erosion or siltation on- or off-site;</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Impeded or redirect flood flows?</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**Less Than Significant Impact.** As authorized by the Clean Water Act, 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. The NPDES permit program is administered by the California Regional Water Quality Control Board (RWQCB). There are nine RWQCBs, which are responsible for development and enforcement of water quality objectives and implementation plans. The project site is located in the jurisdiction of the Santa Ana RWQCB.

Impacts related to water quality typically range over three different periods: 1) during the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest; 2) following construction, prior to the establishment of ground cover, when the erosion potential may remain relatively high; and 3) following completion of the project, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

**Short-Term Construction**

The proposed project would be required to comply with the requirements of a Construction General Permit under the NPDES program. A Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must list Best Management Practices (BMPs) the discharger would use to protect storm water runoff and the placement of those BMPs. BMPs for construction activities may include...
measures to control pollutants at particular sources, such as fueling areas, trash storage areas, outdoor materials storage areas, and outdoor work areas. BMPs are also used during treatment of the pollutants at these particular source areas. In addition to the BMPs, the SWPPP must contain: a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

Construction activities associated with the project have the potential to produce minimal quantities of typical pollutants such as nutrients, heavy metals, toxic chemicals, and waste materials during open trench excavation and horizontal directional drilling (HDD) activities. Impacts to storm water quality may occur from these construction activities and increased runoff of pollutants could occur immediately off-site. However, as stated, the project’s Construction General Permit would require the preparation of a SWPPP prior to initiation of construction. The SWPPP would identify sources of sediments and pollutants that would affect stormwater quality, designate use of appropriate BMPs at the project site, and implement stormwater pollution prevention measures that would reduce water pollution associated with construction activities. The Applicant would be required to submit a Notice of Intent (NOI) to the State prior to construction activities, and then prepare, have on-site, and conform to a SWPPP during construction. Further, should groundwater be encountered during HDD activities, the Applicant would be required to obtain a dewatering permit from the Santa Ana RWQCB, which would ensure the groundwater discharge does not cause or contribute to a violation of applicable water quality standards. Thus, project construction impacts to water quality would be less than significant.

Long-Term Operations

The project would not result in a change in land use compared to existing conditions and would not involve an increase in impermeable surfaces beyond existing conditions. After the new pipelines are installed underground, the roadways would return to their current conditions; any pavement removed during construction would be replaced with similar pavement materials. Overall, no new land uses capable of generating water quality pollutants would be included as part of the project, and operational water quality impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

b) **Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

**Less Than Significant Impact.** The project involves the installation of new natural gas pipelines and no groundwater supplies would be utilized during construction or operations. However, the project could encounter groundwater during HDD construction activities. Should groundwater be encountered, the Applicant would be required to obtain a dewatering permit from the Santa Ana RWQCB. Substantial groundwater loss from construction activities is not anticipated and would not result in substantially decreasing groundwater supplies in a manner that could impede sustainable groundwater management of any groundwater basins. Additionally, the project alignment is paved and does not currently support groundwater recharge. At completion, the project would not result in an increase in impermeable surfaces compared to existing conditions. As such, impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

c) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river or through the addition of impervious surfaces, in a manner which would:**

1) **Result in substantial erosion or siltation on- or off-site?**

**Less Than Significant Impact.** The proposed project would not result in a substantial alteration to existing drainage patterns or increase impervious surfaces along the project alignment. As stated in Response 4.10(a), the project would
comply with the requirements of the Construction General Permit under the NPDES program, which would result in preparation of a SWPPP that outlines necessary BMPs to minimize erosion and water quality impacts during construction. Construction-related erosion impacts would be reduced to a less than significant level.

At project completion, drainage conditions along the project alignment would be similar to existing conditions at project completion, which consists predominantly of asphalt roadways and dirt shoulders. The project also would not alter the grade or topography of the roadways. Thus, project impacts related to long-term operations would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

**No Impact.** The project would not result in a substantial alteration to existing drainage patterns. As stated in Response 4.10(b), the project would not increase impermeable surfaces along the project alignment when compared to existing conditions. Similar to existing conditions, the project alignment would be paved at project completion. Thus, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

3) 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.** As stated above, the project would not result in a substantial alteration of drainage patterns on-site, a substantial increase in runoff, or additional sources of polluted runoff; refer to Responses 4.10(c)(1) and 4.10(c)(2). Project implementation would not increase impermeable surfaces along the project roadways when compared to existing conditions. Thus, the project would not create or contribute runoff water that would exceed the stormwater drainage system or provide substantial sources of polluted runoff. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

4) Impede or redirect flood flows?

**No Impact.** Refer to Response 4.10(c)(2). The project would install an underground natural gas pipeline underground and would not involve the construction of any structures aboveground or recontouring of the surface such that flows would be redirected. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

**Less Than Significant Impact.**

**Flood Hazard**

Big Bear Lake Dam is located on the western end of Big Bear Lake approximately 3.7 miles southwest of the project site and could cause flooding hazards if damaged. Additionally, project segment D located along Stanfield Cutoff is
within a 100-year Federal Emergency Management Act (FEMA) floodplain.\(^1\) However, the project is a utility improvement and consists of installing new natural gas pipelines underground along existing roadways. Further, as detailed in the Geotechnical Study, the road surface elevation of Northshore Drive along the proposed alignment ranges from 6,770 feet above mean sea level (amsl) to 6,830 feet amsl. Excluding construction along Stanfield Cutoff, the closest point of trench construction activity to Big Bear Lake’s shoreline would be greater than 100 feet. Given Big Bear Lake’s high-water mark of 6,744 amsl, average depth of 35 feet, and distance from the shoreline, the potential for pollutant release during construction and project inundation is considered negligible; refer to Appendix E, Geotechnical Study. Additionally, at project completion, all utility improvements would be underground and would not risk release of pollutants due to project inundation. Impacts would be less than significant in this regard.

**Tsunami**

A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. The project site is over 70 miles inland from the Pacific Ocean. Thus, the potential for inundation by tsunami is not anticipated and no impacts would occur in this regard.

**Seiche**

A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. The project site is located near Big Bear Lake, which has the potential to seiche. However, as stated above, excluding construction along Stanfield Cutoff, the closest point of trench construction activity to Big Bear Lake’s shoreline would be greater than 100 feet. Given Big Bear Lake’s high-water mark of 6,744 amsl, average depth of 35 feet, and distance from the shoreline, the potential for the release of pollutants by seiche during project construction is considered negligible. Further, as the project alignment is not located downslope of Big Bear Lake, project operations would not be affected in the event of an earthquake-induced seiche. Therefore, project operations would not risk release of pollutants during a potential seiche event. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

e) **Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less Than Significant Impact.** The project involves installing natural gas utility improvements underground along the project alignment. Project construction and operations would comply with existing NPDES program requirements established by the Santa Ana RWQCB and no new land uses are proposed as part of the project that would involve increased demand for groundwater supplies; refer to Responses 4.10(a) and 4.10(b). As such, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

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4.11 LAND USE AND PLANNING

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Physically divide an established community?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

a) Physically divide an established community?

No Impact. The project site is generally located along an approximate 2.3-mile segment of an existing natural gas pipeline easement (maintained by Southwest Gas) within the community of Bear Valley (unincorporated County of San Bernardino [County]), United States Forest Service (USFS) land, and the City of Big Bear Lake (City). From west to east, the proposed project generally follows within the existing roadway right-of-way (ROW). Implementation of the proposed project would not involve any changes to existing land uses or land use designations, as the project involves upgrading existing high-pressure pipeline infrastructure within paved roadway and disturbed dirt shoulders.

As discussed in Section 2.5, Construction/Phasing, most construction activities would occur within the existing ROW for North Shore Lane, SR-38, and Stanfield Cutoff. Potential construction staging areas are proposed at the Meadow Edge Picnic Area parking lot, North Shore boat launch parking lot, and the North Shore Elementary School parking lot, near the project alignment. Use of these lots would be temporary and would not impede upon existing operations occurring at these sites. In addition, pedestrian and vehicle access along North Shore Lane, SR-38, and Stanfield Cutoff would be maintained during construction. Operations of the natural gas pipeline would continue to provide natural gas service to the Big Bear area from within existing ROW. Thus, the project would not divide an established community, and no impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. As discussed above, the project site is within the community of Bear Valley (unincorporated County), USFS, and City lands, as well as Caltrans ROW. The project site consists of paved roadway and disturbed dirt shoulders adjacent to mixed pine forest and native grasslands. Surrounding uses include commercial, recreational, residential, institutional, and open space uses. Most construction activities would occur within the existing ROW for North Shore Lane, SR-38, and Stanfield Cutoff. Potential construction staging areas are proposed at the Meadows Edge Picnic Area parking lot, North Shore boat launch parking lot, and the North Shore Elementary School parking lot, near the project alignment.

County of San Bernardino

According to the San Bernardino County Land Use Plan, the land use zoning districts for the portions of the project site located within the County are Resource Conservation (RC) and Institutional (IN). The project’s proposed replacement of the natural gas pipeline would not involve or require a change in the land use zoning districts or introduce new land uses as compared to existing conditions. The proposed project would be a continued use of an existing natural gas pipeline serving Big Bear and the surrounding area.
The County of San Bernardino 2007 General Plan (County General Plan) includes goals and policies for the purpose of avoiding or mitigating an environmental effect. Policies are provided at the Countywide and regional level; the project site is located within the Mountain Planning Region. The Bear Valley Community Plan (Community Plan) focuses on the Bear Valley region and guides future use and development of land within the Bear Valley area in a manner that preserves the character and independent identity of the individual communities within the area. The Community Plan is consistent with the goals and policies of the County General Plan. The San Bernardino County Development Code (County Development Code)\(^1\) implements the goals and policies of the County General Plan by regulating land uses within the unincorporated areas of the County. As demonstrated throughout Section 4.0, the project would not conflict with any goals and policies of the County General Plan, Community Plan, or County Development Code adopted for the purpose of avoiding or mitigating an environmental effect. Potential impacts associated with implementation of the proposed project would be less than significant or reduced to a less than significant level with implementation of mitigation measures. Thus, impacts would be less than significant in this regard.

**United States Forest Service**

The portions of the project site located within the USFS are designated Developed Area Interface. The majority of the project alignment extends through USFS lands; however, the project’s proposed replacement of the natural gas pipeline would not involve or require a change in land use or introduce new land uses as compared to existing conditions. The proposed project would be continued use of existing natural gas facilities serving Big Bear and the surrounding area.

The United States Department of Agriculture Land Management Plan (USDA Land Management Plan) provides direction for broad program-level strategic planning for southern California national forests, including the San Bernardino National Forest. The USDA Land Management Plan is organized into three interrelated parts:

- **Part 1 – Vision** describes the national forests' uniqueness on a national and regional level. It describes the Forest Service's national goals, the roles and contributions that the national forests make (their niche), the desired conditions for the various landscapes within the national forests, and the evaluation/monitoring indicators that will be used to assess the progress made toward accomplishing the desired conditions. Goals and desired conditions for resources address four threats: fire and fuels; invasive species; loss of open space; and unmanaged recreation. The goals are responsive to both national priorities and the management challenges identified for the Southern California national forests. Goal 7.1 addresses natural areas in an urban context:

  Goal 7.1 – Retain natural areas as a core for a regional network while focusing the building environment into the minimum land area needed to support growing public needs.

  The desired condition includes facilities supporting urban infrastructure needs are clustered on existing sites or designated corridors, minimizing the number of acres encumbered by special-use authorizations. Special-uses serve public needs, provide public benefits, and conform to resource management and protection objectives. All uses are in full compliance with the terms and conditions of the authorization.

- **Part 2 – Strategy** describes the objectives that the Forest Service intends to implement in order to move the national forests toward the vision described in Part 1. Part 2 identifies suitable uses through land use zones that show allowable uses and opportunities by zone, including existing and recommended wilderness and other special area designations. Part 2 also presents a prospectus that describes past program performance, program priorities and objectives, and a discussion of performance risks, recent trends, and expectations regarding the levels of experiences, goods, and services supplied by the national forests.

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\(^1\) Title 8 of the San Bernardino County Code of Ordinances (current through Ordinance 4351, passed September 25, 2018).
• **Part 3 – Design Criteria** includes the laws, standards, and a reference to other applicable guidance that the Forest Service uses during project planning and implementation. Standards are mandatory requirements that come into play as site-specific activities are planned for implementation and are designed to be consistent with achieving the objectives and desired conditions. The standards act as thresholds or constraints for management activities or practices to ensure the protection of resources.

As stated, the majority of the project alignment extends through USFS lands; however, the project site consists of paved roadway and disturbed dirt shoulders adjacent to mixed pine forest and native grasslands. As demonstrated throughout Section 4.0, the project would not result in significant impacts to forests lands or resources identified for protection in the USDA Land Management Plan. Potential impacts associated with implementation of the proposed project would be less than significant or reduced to a less than significant level with implementation of mitigation measures. Thus, impacts would be less than significant in this regard.

**City of Big Bear Lake**

The *City of Big Bear Lake General Plan* (Big Bear General Plan) *Land Use Map* and *City of Big Bear Lake Zoning Map* designate the portion of the project site located within the City as Single Family Residential-4 and Single Family Residential (R-1), respectively. The project’s proposed replacement of the natural gas pipeline would not involve or require a change in land use or zoning, or introduce new land uses as compared to existing conditions. The proposed project would be a continued use of existing natural gas facilities serving Big Bear and the surrounding area.

The Big Bear General Plan includes goals and policies for the purpose of avoiding or mitigating an environmental effect. The *Development Code of the City of Big Bear Lake* (Big Bear Lake Development Code)\(^2\) implements the goals, objectives, and policies of the Big Bear General Plan by regulating development in the City. As demonstrated throughout Section 4.0, most construction activities in the City would occur within existing ROW and the project would not conflict with any applicable goals and policies of the Big Bear General Plan or Big Bear Lake Development Code adopted for the purpose of avoiding or mitigating an environmental effect. Potential impacts associated with implementation of the proposed project would be less than significant or reduced to a less than significant level with implementation of mitigation measures. Thus, impacts would be less than significant in this regard.

**Mitigation Measures:** No mitigation measures are required.

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4.12 MINERAL RESOURCES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

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._ According to the California Department of Conservation Division of Mine and Geology *Mineral Land Classification of a Part of Southwestern San Bernardino County: The Big Bear Lake – Lucerne Valley Area, California Map*, no mineral resources of Statewide or regional importance are mapped in the project vicinity. ¹ Further, the project site primarily consists of paved roadways and disturbed dirt shoulders. Upon project completion, North Shore Lane, SR-38, and Stanfield Cutoff would continue to operate as paved vehicular roadways. As such, development of the proposed natural gas pipeline replacement would have no impact on mineral resources of Statewide or regional importance or any mineral resource recovery sites.

Mitigation Measures: No mitigation measures 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._ Refer to Response 4.12(a). The project would not 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, including the USDA Land Management Plan. No impact would occur.

Mitigation Measures: No mitigation measures are required.

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4.13 NOISE

<table>
<thead>
<tr>
<th>Would the project result in:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project 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>
</tr>
<tr>
<td>b. Generation of excessive groundborne vibration or groundborne noise levels?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear deemphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level ($L_{eq}$), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level ($L_{dn}$). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical $L_{dn}$ noise levels for light and medium density residential areas, such as those existing in the project vicinity, range from 55 dBA to 65 dBA.

Two of the primary factors that reduce levels of environmental sounds are increasing the distance between the sound source to the receiver and having intervening obstacles such as walls, buildings, or terrain features between the sound source and the receiver. Factors that act to increase the loudness of environmental sounds include moving the sound source closer to the receiver, sound enhancements caused by reflections, and focusing caused by various meteorological conditions.
Regulatory Framework

State of California

California Government Code

The State Office of Planning and Research Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The Noise Element Guidelines contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the Community Noise Equivalent Level (CNEL).

County of San Bernardino

Noise Ordinance

The San Bernardino County Code of Ordinances (County Code), Section 83.01.080 (Noise), prohibits persons to operate a source of sound at a location or allow the creation of noise on property owned, leased, occupied, or controlled by the person, which causes the noise level, when measured on another property, either incorporated or unincorporated to exceed any of the following categories:

(A) The noise standard for the receiving land use as specified in Subsection (b) (Noise-impacted areas) for a cumulative period of more than 30 minutes in any hour.
(B) The noise standard plus five dBA for a cumulative period of more than 15 minutes in any hour.
(C) The noise standard plus ten dBA for a cumulative period of more than five minutes in any hour.
(D) The noise standard plus 15 dBA for a cumulative period of more than one minute in any hour.
(E) The noise standard plus 20 dBA for any period of time.

The County Code identifies a 55 dBA $L_{eq}$ daytime (7:00 a.m. to 10:00 p.m.) and a 45 dBA $L_{eq}$ nighttime (10:00 p.m. to 7:00 a.m.) noise criteria for noise sources on residential property. This means that a noise source operating on residential property cannot cause the $L_{eq}$ noise level to exceed 55 dBA during the daytime or 45 dBA during the nighttime at the nearest residential areas; refer to Table 4.13-1, San Bernardino County Code Noise Criteria (exterior Noise Limits) below.

<table>
<thead>
<tr>
<th>Receiving Land Use Category</th>
<th>Noise Level Not to Be Exceeded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Noise Metric</td>
</tr>
<tr>
<td>Residential</td>
<td>$L_{eq}$</td>
</tr>
<tr>
<td>Professional Services</td>
<td>$L_{eq}$</td>
</tr>
<tr>
<td>Other Commercial</td>
<td>$L_{eq}$</td>
</tr>
<tr>
<td>Industrial</td>
<td>$L_{eq}$</td>
</tr>
</tbody>
</table>

Source: San Bernardino County Code of Ordinances Section 83.01.080 (Noise)

In addition, County Code Section 83.01.080(g) limits construction activity to between the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. No construction activity is permitted to occur on Sundays or Federal holidays.
Applicable policies and standards governing environmental noise in the City of Big Bear Lake (City) are set forth in the Noise Element of the *City of Big Bear Lake General Plan* (Big Bear General Plan). The Noise Element is intended to help coordinate the community’s various land uses with the existing and future noise environment, and to ensure that any negative effects of noise are minimized or avoided. Based on the Noise Element, a CNEL of 65 dBA is used as a standard for maximum outdoor noise levels in residential areas and CNEL of 60 dBA is used as a standard for maximum outdoor noise levels in natural and manmade recreational outdoor environments.

Applicable policies and standards governing environmental noise in the City of Big Bear Lake (City) are set forth in the Noise Element of the *City of Big Bear Lake General Plan* (Big Bear General Plan). The Noise Element is intended to help coordinate the community’s various land uses with the existing and future noise environment, and to ensure that any negative effects of noise are minimized or avoided. Based on the Noise Element, a CNEL of 65 dBA is used as a standard for maximum outdoor noise levels in residential areas and CNEL of 60 dBA is used as a standard for maximum outdoor noise levels in natural and manmade recreational outdoor environments.

Many communities exempt construction from noise limits as long as construction activities occur during certain times. *Big Bear Lake Municipal Code* (Big Bear Municipal Code) Chapter 17.1 (General Provisions), Section 17.01.090.J (General Performance Standards), prohibits construction between 7:00 p.m. and 7:00 a.m.; and Sundays and national holidays, except as approved by the Chief Building Official based on a determination that the work to be performed would not have an adverse effect on public health, safety, and welfare.

The project site consists of paved roadway and disturbed dirt shoulders. Surrounding land uses in proximity to the project site are primarily comprised of residential, commercial, institutional, resource conservation, and open space. The primary sources of noise in the project area consist of motor vehicle traffic, primarily along SR-38 and Highway 18. To a lesser extent, but occasionally substantial degree, aircraft traffic and boats/watercraft using the lake are a source of disruptive noise. Sensitive receptors in the project area include Big Bear Shores RV Resort located approximately 60 feet to the south of Segment A; a residence located approximate 138 feet to the north of Segment B; and North Shore Elementary School located approximately 20 feet to the east and residential uses located approximately 25 feet south of Segment D.

a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Less Than Significant Impact With Mitigation Incorporated.** It is difficult to specify noise levels which are acceptable to everyone, what is annoying to one individual may be acceptable to another. However, standards usually address the needs of most of the general population and can be based on documented complaints in response to documented noise levels or based on studies of the ability of people to sleep, talk, or work under various noise conditions. All such studies recognize that individual responses vary considerably.

Construction activities are generally temporary and have a short duration, resulting in periodic increases in the ambient noise environment. The project’s construction activities would span a seven month period. Typical noise levels generated by construction equipment are shown in Table 4.13-2, *Maximum Noise Levels Generated by Construction Equipment*. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment).
Table 4.13-2  
Maximum Noise Levels Generated by Construction Equipment

<table>
<thead>
<tr>
<th>Type of Equipment</th>
<th>Acoustical Use Factor1</th>
<th>L&lt;sub&gt;max&lt;/sub&gt; at 20 Feet (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Saw</td>
<td>20</td>
<td>97</td>
</tr>
<tr>
<td>Concrete Mixer Truck</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Concrete Saw</td>
<td>20</td>
<td>91</td>
</tr>
<tr>
<td>Backhoe</td>
<td>40</td>
<td>79</td>
</tr>
<tr>
<td>Dozer</td>
<td>40</td>
<td>83</td>
</tr>
<tr>
<td>Truck</td>
<td>40</td>
<td>89</td>
</tr>
<tr>
<td>Paver</td>
<td>50</td>
<td>78</td>
</tr>
<tr>
<td>Roller</td>
<td>20</td>
<td>81</td>
</tr>
<tr>
<td>Tractor</td>
<td>40</td>
<td>85</td>
</tr>
</tbody>
</table>

Note: 1. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.


The closest sensitive receptors to construction activities would be a playground at North Shore Elementary School located approximately 20 feet to the east of the construction staging area (Segment D). This represents the worst-case construction noise impacts at a sensitive receptor throughout the project site. At this distance, noise levels from construction equipment would be approximately 78 to 97 dBA; refer to Table 4.13-2. All construction activities are exempt from both the City and County noise standards as long as they occur within the allowable days and times. Pursuant to County Code Section 83.01.080(g) and Big Bear Municipal Code Section 17.01.090.J, the County and City allow construction between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. Construction is not allowed on Sundays or Federal holidays.

Construction of the proposed project would require the use of heavy equipment during excavation, trenching, and drilling at the project site. During each stage of construction, there would be a different mix of equipment at various areas of the project site and would generally be distanced from neighboring properties. As such, construction activity noise levels at and near the project site would fluctuate depending on the particular type, number, and duration of use of the various construction equipment pieces. Construction would not be localized at one location for an extended period of time. Rather, the construction area would be spread over several locations over a seven-month period. Although construction noise is exempt from County and City noise regulations, Mitigation Measure NOI-1 would ensure that construction-related noise impacts at nearby sensitive receptors would be less than significant. Under Mitigation Measure NOI-1, construction equipment would be furnished with properly operating and maintained mufflers and other State-required noise attenuation devices. A less than significant impact would occur following conformance with County Code Section 83.01.080(g), Big Bear Municipal Code Section 17.01.090.J, and Mitigation Measure NOI-1.

Long-Term Noise Impacts

Due to the nature of the proposed project (a pipeline replacement project), project operations would not introduce a new noise-generating source. Project implementation would not directly increase vehicular trips in the project area. Therefore, no long-term noise impacts associated with mobile or stationary sources would result with implementation of the proposed project.

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1 It should be noted that nighttime construction activities may be required for certain aspects of the project. All nighttime construction activities would occur within the California Department of Transportation (Caltrans) right-of-way, if necessary, and would cease upon completion.
**Mitigation Measures:**

**NOI-1** Prior to the initiation of construction, the County of San Bernardino Director of Public Works shall ensure that all project plans and specifications stipulate that:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State-required noise attenuation devices;

- A construction notice shall be mailed to residents within a 500-foot radius of the project and shall indicate the dates and duration of construction activities, as well as provide County of San Bernardino, City of Big Bear Lake, and California Department of Transportation staff contact names and a telephone numbers where residents can inquire about the construction process and register complaints.

- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

- Construction equipment staging areas shall be located away from adjacent sensitive receptors.

- All construction, maintenance, and demolition activities associated with the proposed project shall be limited to the hours between 7:00 a.m. and 7:00 p.m. Mondays through Saturdays; construction on Sundays and Federal holidays shall be prohibited; and

- Construction haul routes shall be chosen to avoid sensitive uses (i.e., residences, hospitals, etc.), to the extent feasible.

**b) Generation of excessive groundborne vibration or groundborne noise levels?**

**Less Than Significant Impact With Mitigation Incorporated.** Project construction can generate varying degrees of groundborne vibration, depending on the construction equipment used and the type of activity. Construction equipment operation would generate groundborne vibrations which decrease with distance from the source. The effect on buildings located near the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Ground-borne vibrations from construction activities rarely reach levels that damage structures.

The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.20 inch/second) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Table 4.13-3, *Typical Vibration Levels for Construction Equipment*, identifies typical vibration levels for construction equipment.
Table 4.13-3
Typical Vibration Levels for Construction Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Approximate peak particle velocity at 10 feet (inches/second)</th>
<th>Approximate peak particle velocity at 26 feet (inches/second)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibratory roller</td>
<td>0.830</td>
<td>0.198</td>
</tr>
<tr>
<td>Large bulldozer</td>
<td>0.352</td>
<td>0.084</td>
</tr>
<tr>
<td>Loaded trucks</td>
<td>0.300</td>
<td>0.072</td>
</tr>
<tr>
<td>Rock Breaker</td>
<td>0.233</td>
<td>0.056</td>
</tr>
<tr>
<td>Jackhammer</td>
<td>0.138</td>
<td>0.033</td>
</tr>
<tr>
<td>Small bulldozer/Tractors</td>
<td>0.012</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Notes:
1. Calculated using the following formula:
   \[
   PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.5}
   \]
   where:
   \[
   PPV_{\text{equip}} = \text{the peak particle velocity in in/sec of the equipment adjusted for the distance}
   \]
   \[
   PPV_{\text{ref}} = \text{the reference vibration level in in/sec from Table 12-2 of the FTA Transit Noise and Vibration Impact Assessment Guidelines}
   \]
   \[
   D = \text{the distance from the equipment to the receiver}
   \]


The nearest structure to construction activities would be located approximately 10 feet away from the staging area at the North Shore Elementary School (Segment D). As illustrated in Table 4.13-3, based on the FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.012 to 0.830 inch-per-second peak particle velocity (PPV) at 10 feet, which would exceed the 0.20 inch-per-second PPV significance threshold. At a distance of 26 feet, vibration velocities would range from 0.003 to 0.198 inch-per-second PPV, which would be below the 0.20 PPV significance threshold. Therefore, the project would be required to implement Mitigation Measure NOI-2 during project construction activities, which prohibits vibratory compactor/roller activities within 26 feet of any structure. Therefore, as shown in Table 4.13-3, vibration impacts would not exceed the 0.20 inch-per-second PPV significance threshold with incorporation of Mitigation Measure NOI-2. Thus, a less than significance impact with mitigation would occur in this regard.

Mitigation Measures:

NOI-2 Prior to initiation of construction, the developer/applicant shall submit for review and obtain approval from the County Land Use Services Department – Planning Division of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements and submitting documentation of compliance to ensure that construction plans prohibit the use of vibratory compactor/roller equipment within 26 feet of any structure to minimize vibration impacts.

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

No Impact. There are no private airstrips in the project vicinity and the nearest airport is the Big Bear Airport, situated approximately one mile to the east. According to the Airport Comprehensive Land Use Plan Big Bear City Airport, the project is not located within any impact zone(s) and is outside the 60 dBA CNEL contour. As such, no impact would occur.

Mitigation Measures: No mitigation measures are required.

---

2 San Bernardino County Planning Department, Airport Comprehensive Land Use Plan Big Bear City Airport, February 1992.
4.14 POPULATION AND HOUSING

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

a) **Induce substantial unplanned 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)?**

**Less Than Significant Impact.** The proposed project would not involve the construction of any homes, businesses, or other uses that would result in direct population growth. Currently, existing development in the Big Bear area is experiencing low natural gas pressure during times of high demand. Increasing the operating pressure of the existing pipeline is not an option due to the age and yield strength of the pipeline. The project would replace existing natural gas pipeline infrastructure along North Shore Lane, SR-38, and Stanfield Cutoff to increase the pressure and capacity of natural gas serving the area in order to meet existing demands and planned future growth. Construction activities associated with the proposed project would create temporary jobs; however, these would likely be filled by workers already living in the City or County and would not result in a substantial population growth in the area. Further, operations of the project would not require or create any new jobs that would introduce new residents into the Big Bear area.

The proposed utility improvements may indirectly induce population growth in the Big Bear Lake area due to the increased natural gas supply provided by the project. However, all indirectly induced population growth would be associated with future development consistent with the County of San Bernardino 2007 General Plan, Bear Valley Community Plan, and City of Big Bear General Plan, which have been previously contemplated in each plan’s respective environmental evaluation. Any future development beyond the scope of the aforementioned plans would require separate environmental evaluation to determine potential impacts and mitigation requirements. Additionally, to quantify indirect population growth generated by the project would be speculative. Overall, providing continued and improved natural gas service to the area in and of itself would not induce substantial unplanned population growth either directly or indirectly. A less than significant impact is anticipated in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** The project site consists of paved roadway and disturbed dirt shoulders. No houses are present on-site, and development of the project would not displace any residents or demolish any of the existing single-family residences located adjacent to the project alignment. Thus, no impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.
4.15 PUBLIC SERVICES

Would the project: | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
--- | --- | --- | --- | --- |

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:

| 1) Fire protection? | ✓ |
| 2) Police protection? | ✓ |
| 3) Schools? | ✓ |
| 4) Parks? | ✓ |
| 5) Other public facilities? | ✓ |

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:

1) Fire protection?

**No Impact.** United States Forest Service, San Bernardino County Fire, and Big Bear Fire Department provide fire protection services within the project area. The majority of the project alignment is located within the County of San Bernardino jurisdiction; refer to Exhibit 2-2. Fawnskin Station #96 is the closest County fire station to the project area.

As discussed in Responses 4.14(a) and 4.14(b), the project would not directly or indirectly induce substantial unplanned population growth. As the project involves replacement of an existing natural gas pipeline, proposed improvements would not create any new uses that would result in a demand for new or altered fire protection facilities and would not alter the respective fire departments' service ratios or response times. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

2) Police protection?

**No Impact.** San Bernardino County Sheriff's Department provides law enforcement services to San Bernardino County, including the project area. The City of Big Bear Lake also contracts with the San Bernardino County Sheriff's Department for law enforcement services. The Big Bear Sheriff's Station, located at 477 Summit Boulevard, is organized into two distinct groups to serve citizens of the Big Bear Valley.

The project would not directly or indirectly induce substantial unplanned population growth. As the project involves replacement of an existing natural gas pipeline, proposed improvements would not create a new demand for additional new or altered police protection facilities and would not alter any adopted service ratios or response times. No impacts would occur in this regard.
Mitigation Measures: No mitigation measures are required.

3) Schools?

**No Impact.** The project does not propose the addition of residential uses, nor does it propose non-residential uses that could indirectly result in population growth within the area. Therefore, the project would not generate additional demand for schools. No impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

4) Parks?

**No Impact.** Due to the nature of the project, no new residents would be generated which would impact or create the need for new parks and recreational facilities. No impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

5) Other public facilities?

**No Impact.** Due to the nature of the project, no new residents would be generated which would impact or create the need for other new public facilities (i.e., libraries). No impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.
# 4.16 RECREATION

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</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?*

**No Impact.** Refer to Response 4.15(a)(4). As the project involves replacement of an existing natural gas pipeline, proposed improvements would not 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 impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures 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?*

**Less Than Significant Impact.** Refer to Response 4.15(a)(4). The project does not involve any recreational facilities or require the construction or expansion of recreational facilities.

**Mitigation Measures:** No mitigation measures are required.
## 4.17 TRANSPORTATION

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Result in inadequate emergency access?</td>
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<td>✓</td>
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</tr>
</tbody>
</table>

### a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

**Less Than Significant Impact With Mitigation Incorporated.** The project alignment does not have any bicyclist or pedestrian facilities; however, Mountain Transit operates a transit route, “Big Bear Off the Mountain Route 5,” which starts from the City of San Bernardino towards Big Bear Lake traveling along SR-38 and Stanfield Cutoff.¹ One bus stop is located along the project alignment at the intersection of North Shore Lane and SR-38 (Highway 18 at Discovery Center/Serrano Campground). Project construction could temporarily impact public transit services provided by Mountain Transit. To ensure construction activities do not adversely impact traffic flow, including transit services, along the project alignment, preparation and implementation of a Traffic Control Plan would be required (Mitigation Measure TRA-1). The Traffic Control Plan would include the sequence of construction activities and the routes that would be utilized by all construction-related traffic during each construction phase. The Traffic Control Plan would also provide specific details regarding construction signage, the placement of traffic controls, emergency access, warning devices, limitations on timing for temporary lane closures to avoid peak hours, the need for a construction flagger to direct traffic during heavy equipment use or lane closures, and (if necessary) any detours. In addition, implementation of Mitigation Measure TRA-2 would require Southwest Gas to consult with Mountain Transit to determine an appropriate location for a temporary bus stop relocation to ensure adequate and continued bus service during construction activities. As such, project construction is not anticipated to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, and impacts would be less than significant with mitigation incorporated in this regard.

Additionally, according to the San Bernardino Associated Governments’ (SANBAG) San Bernardino County Congestion Management Program 2016 Update (2016 CMP), the closest congestion management program (CMP) facility to the project site is the intersection of SR-38 and Greenway Drive, approximately 2.3 miles to the east.² As stated above, construction-related trips would be short-term in nature (approximately seven months) and would cease upon completion, and project operations would not generate any additional vehicle trips beyond existing conditions. Therefore, project implementation would not impact the level of service at the SR-38 and Greenway Drive intersection and the project would not conflict with the 2016 CMP. No impact would result in this regard.

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The project would not involve a change in use from the site’s existing use as a roadway. Thus, project operations would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Impacts to roadway capacities are analyzed under Response 4.17(b).

**Mitigation Measures:**

**TRA-1** Prior to issuance of construction permits, a Traffic Control Plan shall be prepared for the proposed project for approval by the County of San Bernardino (County) Public Works Department, California Department of Transportation, U.S. Forest Service, and City of Big Bear Lake. The Traffic Control Plan shall address the sequence of construction; construction activities to be performed; and the routes that shall be utilized by all movements of traffic during each phase of construction. The Traffic Control Plan shall provide specific details regarding the construction signage, placement of traffic controls, emergency access, warning devices, limitations on timing for temporary lane closures to avoid peak hours, the need for a construction flagger to direct traffic during heavy equipment use or lane closures, and (if necessary) any detours, as deemed appropriate by the County’s Public Works Department staff. The County’s Public Works Department staff shall verify that these requirements are incorporated into the construction plans and specifications prior to final plan approval.

**TRA-2** Prior to construction activities, Southwest Gas Corporation shall consult with Mountain Transit and the County of San Bernardino to determine an acceptable temporary relocation for the Highway 18 at Discovery Center/Serrano Campground bus stop along Mountain Transit’s “Big Bear Off the Mountain Route 5” that would be temporarily impacted by project construction in order to maintain adequate bus service within the project area.

**b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

**No Impact.** As stated above, construction-related trips would be short-term in nature (approximately seven months) and would cease upon completion, and project operations would not generate any additional vehicle trips, including additional vehicle miles traveled (VMT) beyond existing conditions. Therefore, no impact would result in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**Less Than Significant Impact With Mitigation Incorporated.** The project would consist of installing new natural gas pipelines underground, generally along the existing roadway ROWs of North Shore Lane, SR-38, and Stanfield Cutoff. Open trench excavation and horizontal directional drilling would be utilized to install the pipelines. Any pavement cut during construction would be replaced with similar pavement materials. No hazardous design features are proposed as part of the project and no alteration to the existing circulation system would occur. Further, as concluded in Response 4.17(a), a Traffic Control Plan would be implemented to ensure construction activities do not adversely impact traffic flow along the project alignment, including potential construction hazards along the roadways. The project would not involve a new use that would generate new or additional vehicle trips in the area at project completion nor would the project include any incompatible uses. As such, project construction and operations would not substantially increase hazards due to a geometric design feature or incompatible use. Impacts would be less than significant with implementation of Mitigation Measure TRA-1.

**Mitigation Measures:** Refer to Mitigation Measure TRA-1.
d) **Result in inadequate emergency access?**

*Less Than Significant Impact With Mitigation Incorporated.* Refer to Response 4.9(f) for a discussion concerning the applicable emergency response procedures and evacuation plans. Short-term construction trips would include the delivery of construction equipment, construction worker trips, and hauling trips for the import/export of construction materials. Construction activities would occur over a period of seven months in one phase and would cease upon completion. Potential construction staging areas are proposed at the Meadows Edge Picnic Area parking lot, North Shore boat launch parking lot, and the North Shore Elementary School parking lot, near the project alignment. All construction equipment would be staged on paved surfaces away from existing roadways to eliminate potential access issues for emergency vehicles and passing motorists. As such, pedestrian and vehicle access along North Shore Lane, SR-38, and Stanfield Cutoff would be maintained with some temporary lane closures, as stated above. A Traffic Control Plan would be prepared and implemented as detailed in Mitigation Measure TRA-1, which would ensure traffic control and public safety during all stages of project construction. With implementation of Mitigation Measure TRA-1, the project’s temporary construction-related impacts to emergency access would be less than significant.

As discussed, the project would not involve a change in use from the site’s existing use as a roadway. Thus, project operations would not result inadequate emergency access and no operational impacts would occur.

**Mitigation Measures:** Refer to Mitigation Measure TRA-1.
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## 4.18 TRIBAL CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</td>
<td></td>
<td>✓</td>
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</tbody>
</table>

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to “begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project.” Section 21074 of AB 52 also defines a new category of resources under CEQA called “tribal cultural resources.” Tribal cultural resources are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is either listed on or eligible for the California Register of Historical Resources (CRHR) or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

On February 19, 2016, the California Natural Resources Agency proposed to adopt and amend regulations as part of AB 52 implementing Title 14, Division 6, Chapter 3 of the California Code of Regulations, CEQA Guidelines, to include consideration of impacts to tribal cultural resources pursuant to Government Code Section 11346.6. On September 27, 2016, the California Office of Administrative Law approved the amendments to Appendix G of the CEQA Guidelines, and these amendments are addressed within this Initial Study.

This section is based upon the North Shore Drive Project City of Big Bear Lake, San Bernardino County, California Archaeological and Built Environment Resources Finding of Effect - Redacted (FOE), prepared by Michael Baker International, dated March 2020; refer to Appendix D, Cultural Resources Study FOE). It is acknowledged that the following documentation was relied upon for the FOE, but are not available for public review:

- Michael Baker International, North Shore Drive Project City of Big Bear Lake, San Bernardino County, Cultural Resources Identification Study (Cultural Resources Identification Study), November 2018; and
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

No Impact. According to the FOE, no known historical resources, as defined in Public Resources Code Section 5020.1(k), are known to occur in the Area of Direct Impact (ADI) for the proposed project. Therefore, no impacts related to historic tribal cultural resources would occur in this regard.

Mitigation Measures: No mitigation measures are required.

2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact With Mitigation Incorporated. The County distributed letters to potentially affected Native American tribes which have cultural and traditional affiliation with the project site in accordance with AB 52 requirements and following guidelines established by the Native American Heritage Commission. The following four tribes were notified via certified mail on October 23, 2018: Colorado River Indian Tribes, Morongo Band of Mission Indians, Twentynine Palms Band of Mission Indians, and San Manuel Band of Mission Indians (SMBMI). Of the four tribes, three tribes responded to the notification letter requesting additional information and/or consultation.

The Morongo Band of Mission Indians responded on October 29, 2018 requesting consultation and copies of a records search and Phase I cultural resources study as well as a Morongo Band of Mission Indians tribal monitor to be present during all ground disturbing activities related to the project. The County contacted the tribe several times to schedule a consultation meeting. On October 21, 2019, the tribe responded stating that they are not requesting tribal monitoring as mitigation, however, requests that if the County is requiring tribal monitoring that the Morongo Band of Mission Indians be included as a consulting tribe. As such, consultation concluded.

The Twentynine Palms Band of Mission Indians responded on November 20, 2018 requesting to review any cultural reports related to the project; no consultation was requested.

The SMBMI responded on November 20, 2018 requesting consultation and to review any cultural, paleontological, and/or geotechnical report related to the project. The tribe also requested project plans showing the vertical extent of proposed disturbance. A consultation meeting between the San Manuel Band of Mission Indians, County, San Bernardino National Forest, applicant, and environmental consultants (Michael Baker staff) was conducted on October 7, 2019. The tribe requested additional project information to evaluate the potential for project construction activities to impact undiscovered tribal cultural resources at various depths along the project alignment, which the County provided. Based on the Phase I Testing Plan and FOE, the tribe concluded that only a few isolated prehistoric resources were recorded, none of which are archaeologically significant or constitute a tribal cultural resource. Additionally, the tribe’s assessment of the remainder of the project area indicates that there is an extremely low potential to uncover significant and intact buried tribal cultural resources during project implementation in the areas where testing was not feasible. No additional archaeological testing or monitoring was requested by the tribe and consultation was concluded.
Based on consultation efforts conducted as part of Section 106 and AB 52, no evidence of tribal cultural resources known to be present within the Area of Direct Impact (ADI) was encountered. The proposed project is not anticipated to encounter tribal cultural resources during excavation activities. However, due to the high sensitivity of the area and the high volume of cultural resources identified, and significance of the project area with the San Manuel Band of Mission Indians, the potential remains that ground-disturbing activities associated with the project could impact previously undiscovered tribal cultural resources. As such, the SMBMI requested the inclusion of Mitigation Measures TCR-1 and TCR-2 regarding the inadvertent discovery of potential tribal cultural resources during project construction and continued consultation with the tribe. Following implementation of Mitigation Measures CUL-1, CUL-2, TCR-1, and TCR-2, impacts related to tribal cultural resources would be reduced to less than significant levels.

**Mitigation Measures:** Refer to Mitigation Measures CUL-1 and CUL-2.

TCR-1 The San Manuel Band of Mission Indians (SMBMI) Cultural Resources Department shall be contacted, as detailed in Mitigation Measure CUL-1, of any pre-contact and/or post-contact cultural resources discovered during ground-disturbing activities and be provided information regarding the nature of the find, so as to provide tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by the California Environmental Quality Act, a cultural resources Monitoring and Treatment Plan shall be prepared by the qualified archaeologist (Mitigation Measure CUL-2), in coordination with SMBMI, and all subsequent finds shall be subject to the Monitoring and Treatment Plan. The Monitoring and Treatment Plan shall allow for a monitor to be present that represents SMBMI for the remainder of all ground-disturbing activities, should SMBMI elect to place a monitor on-site.

TCR-2 Any and all archaeological/cultural documents prepared as part of the project (e.g., isolate records, site records, survey reports, and testing reports) shall be supplied to the applicant and lead agency for dissemination to the San Manuel Band of Mission Indians (SMBMI). The lead agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.
4.19 UTILITIES AND SERVICE SYSTEMS

<table>
<thead>
<tr>
<th>Would the project:</th>
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<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider’s existing commitments?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>g. Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?**

**Less Than Significant Impact.**

**Water**

Natural gas pipeline improvements along North Shore Lane, SR-38, and Stanfield Cutoff would not require water during construction or operational activities. Therefore, no additional water supply or water treatment would be required. No impact would occur in this regard.

**Wastewater**

Installation of new natural gas pipelines along the project alignment would not generate any wastewater during construction or operational activities. Thus, the project would not require the construction of new wastewater treatment facilities or expansion of existing facilities. No impact would occur in this regard.

**Stormwater**

The project site’s existing condition is predominantly characterized by paved concrete and adjacent dirt shoulders. The construction staging areas are paved parking lots along the project alignment. During project construction and operations, the drainage conditions of the project roadways would remain similar to existing conditions. Open trench excavation and horizontal directional drilling would be utilized to install the new pipelines over the course of approximately seven months. Any pavement removed would be replaced with similar pavement materials as needed.
As such, no changes to the project site’s impervious surfaces would result at project completion and the project would not require the construction of new or expanded stormwater drainage facilities or expansion of existing facilities. A less than significant impact would occur in this regard.

Dry Utilities

No improvements related to electric power or telecommunication facilities are proposed. However, the project involves replacing natural gas utilities along North Shore Lane, SR-38, and Stanfield Cutoff. Potential environmental impacts associated with construction of the natural gas utility improvements are analyzed throughout Section 4.0, Environmental Analysis. Construction of the natural gas improvements would be subject to compliance with all applicable local, State, and Federal laws, ordinances, and regulations, as well as the specific mitigation measures throughout this Initial Study. Compliance with the relevant laws, ordinances, and regulations, as well as the specified mitigation measures, would ensure the project’s construction-related environmental impacts are reduced to less than significant levels.

**Mitigation Measures:** No mitigation measures are required.

**b)** Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

**No Impact.** Refer to Response 4.19(a). Construction and operations of the proposed project would not increase water supply demands. As such, no water supply is needed to serve the project and existing water supplies serving the Big Bear area would be able to continue serving reasonably foreseeable future development during normal, dry, and multiple dry years. No impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

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

**No Impact.** As concluded in Response 4.19(a), project implementation would not generate additional wastewater above existing conditions. The project would not develop a new land use which would require the expansion of wastewater treatment facilities to serve the project site. No impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

**d)** Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

**Less Than Significant Impact.** Solid waste collection services in the Big Bear area are provided by Big Bear Disposal under an exclusive franchise agreement with the County of San Bernardino (County). Solid waste collected in unincorporated County areas are disposed of at one of the County’s five regional landfills. The Barstow Sanitary Landfill is located at 32553 Barstow Road in the City of Barstow and would receive most of the project’s construction waste. The Barstow Sanitary Landfill has a permitted capacity to receive 1,500 tons per day and has a remaining capacity of 71,481,660 cubic yards with an anticipated closure date of 2071.1

Construction activities associated with the project would generate solid waste, such as construction debris and crushed asphalt. Overall, the project would require approximately 450 cubic yards of shading materials import and 450 cubic yards of asphalt. No impact would occur in this regard. Solid waste generated during construction activities is expected to be less than the landfill’s permitted capacity. Construction waste is expected to be less than 1,500 tons per day. No impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.
yards of trench soils export. In areas where replacement pavement is needed, approximately 450 cubic yards of paving materials import and 450 cubic yards of paving materials export would be required. Export materials would be hauled off-site and processed and recycled for resale as fill dirt or crushed concrete/asphalt products. Therefore, project construction would not impact the capacities of landfills serving the Big Bear area and would not impair the County’s attainment of solid waste reduction goals. Impacts would be less than significant.

Upon project completion, the installed natural gas pipelines would not generate any solid waste. Project operations would not impact capacities of landfills serving the Big Bear area and would not impair the County’s attainment of solid waste reduction goals. No impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

e) **Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?**

**Less Than Significant Impact.** All construction activities would be required to demonstrate compliance with existing Federal, State, and local management and reduction statutes and regulations for solid waste disposal, including the 50 percent diversion of solid waste requirement established by the California Integrated Waste Management Act of 1989 (AB 939). Conformance with AB 939 would ensure compliance with Federal, State, and local management and reduction statutes and regulations related to solid waste for project construction. Further, as stated above, export materials associated with construction of the project would be hauled off-site and processed and recycled for resale as fill dirt or crushed concrete/asphalt products. Additionally, project operations would not involve a change in land use with the potential to conflict with Federal, State, and local management and reduction statutes and regulations related to solid waste. Overall, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are required.
4.20 WILDFIRE

<table>
<thead>
<tr>
<th>If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Substantially impair an adopted emergency response plan or emergency evacuation plan?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact With Mitigation Incorporated. According to the California Department of Forestry and Fire Protection, the entire project alignment, with the exception of Stanfield Cutoff (Segment D), is located within a very high fire hazard severity zone and designated as a Federal Responsibility Area.¹ As stated in Response 4.9(f), North Shore Drive (State Route 38 [SR-38]) and Highway 18 (Big Bear Boulevard) are designated as emergency routes. According to the San Bernardino County Emergency Operations Plan (EOP), the City is currently using the Standardized Emergency Management System (SEMS) for emergency response, where depending on the type of incident, several different agencies and disciplines may be called upon to assist with emergency response.

The project is limited to replacing the existing 6-inch high-pressure steel natural gas pipeline with an 8-inch high-pressure steel natural gas pipeline. This type of use is not anticipated to impair implementation of or physically interfere with the EOP. However, the project may temporarily require lane closures during construction activities. Mitigation Measure TRA-1 would require the preparation and implementation of a Traffic Control Plan to ensure construction activities do not adversely impact traffic flow along the project alignment, including emergency traffic conditions. The Traffic Control Plan would include the sequence of construction activities and the routes that would be utilized by all construction-related traffic during each construction phase. The Traffic Control Plan would also provide specific details regarding construction signage, the placement of traffic controls, emergency access, warning devices, limitations on timing for temporary lane closures to avoid peak hours, the need for a construction flagger to direct traffic during heavy equipment use or lane closures, and (if necessary) any detours. Thus, with implementation of Mitigation Measure TRA-1, impacts in this regard would be less than significant.

Mitigation Measures: Refer to Mitigation Measure TRA-1 in Section 4.17, Transportation.

b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

**No Impact.** The proposed project involves installing natural gas utility improvements underground along the project alignment and would not introduce any new residents or residences. Therefore, no project occupants would be exposed to pollutant concentrations or the uncontrolled spread of a wildfire associated with exacerbated wildfire risks. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

**No Impact.** The project itself is a utility improvement project and would not require additional installation or maintenance of infrastructure that could exacerbate fire risk or result in temporary or permanent environmental impacts. Potential environmental impacts associated with development of the project are analyzed throughout Section 4.0, *Environmental Analysis*. At project completion, the project alignment would return to its existing condition as a paved roadway. As such, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.

d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

**No Impact.** No structures or residences are present on-site. Therefore, the proposed underground installation of natural gas utility improvements would not expose any people or structures to significant wildfire risks as a result of runoff, post-fire slope instability, or drainage changes. Thus, no impact would occur in this regard.

**Mitigation Measures:** No mitigation measures are required.
4.21 MANDATORY FINDINGS OF SIGNIFICANCE

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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)?</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Less Than Significant Impact With Mitigation Incorporated. As discussed in Section 4.4, Biological Resources, the project site consists of paved roadways and dirt shoulders adjacent to mixed pine forest and native grassland habitat. The proposed development footprint would be confined within the existing roadway ROWs and disturbed dirt shoulders along North Shore Lane, SR-38, and Stanfield Cutoff. As such, the project would not result in direct impacts to any sensitive species or wildlife habitat and impacts to sensitive biological resources would be less than significant. The project is not anticipated to 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 With Mitigation Incorporated. As discussed in Section 4.4, Biological Resources, the project site consists of paved roadways and dirt shoulders adjacent to mixed pine forest and native grassland habitat. The proposed development footprint would be confined within the existing roadway ROWs and disturbed dirt shoulders along North Shore Lane, SR-38, and Stanfield Cutoff. As such, the project would not result in direct impacts to any sensitive species or wildlife habitat and impacts to sensitive biological resources would be less than significant. The project is not anticipated to 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.

In addition, as described within Section 4.5, Cultural Resources, a 3.7-mile segment of the Rim of the World Highway Historic District (P36-007049) was determined eligible for the National Register of Historic Places (NRHP) and listed in the California Register of Historical Resources (CRHR). However, the project does not propose any changes to the character-defining features for which the Rim of the World Highway Historic District was determined eligible for listing in the NRHP and listed in the CRHR and would not detract from the setting or other character-defining features of the historic property that would affect the integrity or the historic property’s ability to convey its significance. Therefore, the project would have a less than significant impact on the Rim of the World Highway Historic District. While no significant archaeological resources were identified in the proposed Area of Direct Impact (ADI), given the high volume of cultural resources identified in the project vicinity and significance of the project area with the San Manuel Band of Mission Indians, the potential remains that ground-disturbing activities associated with the project could impact previously undiscovered cultural and tribal cultural resources. Mitigation Measures CUL-1, CUL-2, CUL-3, CUL-4, TCR-1, and

April 2020 4.21-1 Mandatory Findings of Significance
TCR-2 are included to ensure impacts to potentially significant archaeological and tribal cultural resources are reduced to less than significant levels. Thus, impacts in this regard would be reduced to less than significant levels with mitigation incorporated.

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 With Mitigation Incorporated.** Given the project is a gas pipeline replacement project, the project may incrementally affect resources that were determined to be less than significant or less than significant with mitigation incorporated, the project’s contribution to these effects is not considered “cumulatively considerable,” in consideration of the relatively nominal impacts of the project and mitigation measures provided. Implementation of mitigation measures at the project-level would reduce the project’s incremental effects to less than considerable levels, when viewed in connection with the effects of past projects, current projects, or probable future projects.

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

**Less Than Significant Impact With Mitigation Incorporated.** Previous sections of this Initial Study reviewed the proposed project’s potential impacts related to aesthetics, air quality, geology and soils, greenhouse gases, hydrology/water quality, noise, hazards and hazardous materials, traffic, and other issues. As concluded in these previous discussions, the proposed project would result in less than significant environmental impacts with implementation of the recommended mitigation measures. Therefore, with incorporation of the recommended mitigation measures, the proposed project would not result in environmental impacts that would cause substantial adverse effects on human beings.
4.22 REFERENCES

The following references were utilized during preparation of this Initial Study/Mitigated Negative Declaration. These documents are available for review at the County of San Bernardino Land Use Services Department – Planning Division, 385 North Arrowhead Avenue, First Floor, San Bernardino, California 92415, or accessed at the indicated web page.


25. Michael Baker International, *North Shore Drive Project City of Big Bear Lake, San Bernardino County, Cultural Resources Identification Study*, November 2018 [NOT AVAILABLE FOR PUBLIC REVIEW];

26. Michael Baker International, *North Shore Drive Project City of Big Bear Lake, San Bernardino County, Extended Phase I Testing Plan*, December 2018 [NOT AVAILABLE FOR PUBLIC REVIEW]; and


4.23 REPORT PREPARATION PERSONNEL

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   Kurt Edwards, Distribution Engineer  
   Sarah Bousquet, Environmental Advisor  
   Edward Schmults, Manager/Environmental  
   Phillip Petteruto, Superintendent Operations/Big Bear District

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Big Bear Lake, California 92315

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San Bernardino, California 92401

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   Jose Fernandez, Jr.

United States Forest Service
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Fawnskin, California 92333

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   Jay Marshall  
   Tasha Hernandez  
   Daniel Grijalva  
   Marc Stamer  
   Jay Marshall  
   Odell Tucker
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Dennis Poland, PG, CEG, Principal Engineering Geologist
5.0 INVENTORY OF MITIGATION MEASURES

AESTHETICS

AES-1 To minimize construction-related impacts to scenic vistas as well as visual character or quality of the site and its surroundings, the project contractor shall ensure that all materials, heavy-duty equipment, and debris piles are clustered in the project’s designated construction staging area(s). Staging locations shall be identified on final development plans and shall be verified and approved by the County of San Bernardino. Compliance with this measure shall be subject to periodic field inspections.

AES-2 To minimize project-related light and glare to the maximum extent feasible, color-corrected halide lights shall be used during project construction. Portable lights shall be operated at the lowest allowable wattage and shall be raised to a height no greater than 20 feet. All lights shall be screened and directed downward toward work activities and away from the night sky and nearby uses to the maximum extent possible. The number of nighttime lights used shall be minimized to the greatest extent possible. This measure would be subject to verification by the County of San Bernardino Building and Safety Division, City of Big Bear Lake Building and Safety Department, and/or California Department of Transportation.

AIR QUALITY

AQ-1 Prior to the commencement of construction, the developer/applicant shall submit for review and obtain approval from the County Land Use Services Department – Planning Division of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements and submitting documentation of compliance to ensure that project plans stipulate that all non-road construction equipment greater than 50 horsepower shall meet the Environmental Protection Agency (EPA) Tier 3 emission standards.

AQ-2 Prior to the commencement of construction, the developer/applicant shall submit for review and obtain approval from the County Land Use Services Department – Planning Division of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements and submitting documentation of compliance to ensure that all project plans and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD’s Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust;
- Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;
- Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;
- On-site vehicle speed shall be limited to 15 miles per hour; and
• All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site.

**CULTURAL RESOURCES**

CUL-1 In the event that cultural resources are discovered, or historic properties are inadvertently affected, during project implementation, all work in the vicinity of the resource (within a 60-foot buffer) shall cease, and a San Bernardino National Forest (SBNF) Heritage staff shall be notified immediately. A qualified archaeologist meeting Secretary of Interior standards shall be hired by the developer/applicant to assess the find and/or effects. SBNF shall identify acceptable mitigation or treatment measures in order to resolve the effects.

CUL-2 Should inadvertent effects to or unanticipated discoveries of human remains be made, the County Coroner and San Bernardino National Forest (SBNF) Heritage staff shall be notified immediately. If the remains are determined to be Native American or if Native American (Indian) cultural items pursuant to Native American Graves Protection and Repatriation Act (NAGPRA) are uncovered, the provisions of NAGPRA and its regulations at 43 CFR 10 and Archaeological Resources Protection Act of 1979 (ARPA) at 43 CFR 7 shall be followed on federal lands.

CUL-3 Resource awareness training shall be provided for non-archaeologist field and construction crews working on the project prior to ground-disturbing activities.

CUL-4 During site disturbance activities, an archaeological monitor shall be present for the lateral line trenching at station 50+50 and to ensure directional drilling launch and receiving pit locations are placed outside of mapped resource boundaries.

**GEOLOGY AND SOILS**

GEO-1 If paleontological resources are encountered during ground disturbing activities, work in the immediate area shall halt and the construction contract shall contact the County of San Bernardino. With direction from the County, the Applicant shall retain a qualified paleontologist, defined as a paleontologist who meets the Secretary of the Interior’s Professional Qualification Standards for paleontology, to immediately evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts.

**HAZARDS AND HAZARDOUS MATERIALS**

HAZ-1 No less than one hour prior to working on replacing the natural gas line, notify the State Warning Center at (800) 852-7550 of a threatened release of natural gas at the proposed location with any and all information asked for during the phone call. In addition, email Greg Zeigler (gzeigler@sbcfire.org), or his equivalent, no less than one hour prior to working on placing the natural gas line, with the same information provided to the State Warning Center.

HAZ-2 If unknown wastes or suspect materials (such as stained soils, odors, and/or unknown debris) are discovered during construction by the contractor that he/she believes may involve hazardous waste/materials, the contractor shall:

• Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
• Notify the County Director of Public Works;

• Secure the areas as directed by the County;

• Notify the implementing agency’s Hazardous Waste/Materials Coordinator; and

• Perform remedial activities (as required per the implementing agency, and dependent upon the nature of the hazardous materials release) as required under existing regulatory agency standards.

HAZ-3 Prior to issuance of a grading permit, a Soil Management Plan (SMP) shall be prepared by a qualified environmental professional with Phase II/Site Characterization experience. The SMP shall be made available to the contractor and County Land Use Services Department – Planning Division for use during grading activities. The SMP shall include recommendation and guidelines for the testing of any soil import/export of soils to ensure no contamination is present. The SMP shall also include safety measures and soil management procedures in the event that contaminated soils are to be disturbed, and for handling soil during any planned earthwork activities. The SMP shall also include a decision framework and specific risk management measures for managing soil in a manner protective of human health and consistent with applicable regulatory requirements.

NOISE

NOI-1 Prior to the initiation of construction, the County of San Bernardino Director of Public Works shall ensure that all project plans and specifications stipulate that:

• All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State-required noise attenuation devices;

• A construction notice shall be mailed to residents within a 500-foot radius of the project and shall indicate the dates and duration of construction activities, as well as provide County of San Bernardino, City of Big Bear Lake, and California Department of Transportation staff contact names and a telephone numbers where residents can inquire about the construction process and register complaints.

• During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

• Construction equipment staging areas shall be located away from adjacent sensitive receptors.

• All construction, maintenance, and demolition activities associated with the proposed project shall be limited to the hours between 7:00 a.m. and 7:00 p.m. Mondays through Saturdays; construction on Sundays and Federal holidays shall be prohibited; and

• Construction haul routes shall be chosen to avoid sensitive uses (i.e., residences, hospitals, etc.), to the extent feasible.

NOI-2 Prior to initiation of construction, the developer/applicant shall submit for review and obtain approval from the County Land Use Services Department – Planning Division of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements and submitting documentation of
compliance to ensure that construction plans prohibit the use of vibratory compactor/roller equipment within 26 feet of any structure to minimize vibration impacts.

**TRIBAL CULTURAL RESOURCES**

TCR-1 The San Manuel Band of Mission Indians (SMBMI) Cultural Resources Department shall be contacted, as detailed in Mitigation Measure CUL-1, of any pre-contact and/or post-contact cultural resources discovered during ground-disturbing activities and be provided information regarding the nature of the find, so as to provide tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by the California Environmental Quality Act, a cultural resources Monitoring and Treatment Plan shall be prepared by the qualified archaeologist (Mitigation Measure CUL-2), in coordination with SMBMI, and all subsequent finds shall be subject to the Monitoring and Treatment Plan. The Monitoring and Treatment Plan shall allow for a monitor to be present that represents SMBMI for the remainder of all ground-disturbing activities, should SMBMI elect to place a monitor on-site.

TCR-2 Any and all archaeological/cultural documents prepared as part of the project (e.g., isolate records, site records, survey reports, and testing reports) shall be supplied to the applicant and lead agency for dissemination to the San Manuel Band of Mission Indians (SMBMI). The lead agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

**TRANSPORTATION/TRAFFIC**

TRA-1 Prior to issuance of construction permits, a Traffic Control Plan shall be prepared for the proposed project for approval by the County of San Bernardino (County) Public Works Department, California Department of Transportation, U.S. Forest Service, and City of Big Bear Lake. The Traffic Control Plan shall address the sequence of construction; construction activities to be performed; and the routes that shall be utilized by all movements of traffic during each phase of construction. The Traffic Control Plan shall provide specific details regarding the construction signage, placement of traffic controls, emergency access, warning devices, limitations on timing for temporary lane closures to avoid peak hours, the need for a construction flagger to direct traffic during heavy equipment use or lane closures, and (if necessary) any detours, as deemed appropriate by the County’s Public Works Department staff. The County’s Public Works Department staff shall verify that these requirements are incorporated into the construction plans and specifications prior to final plan approval.

TRA-2 Prior to construction activities, Southwest Gas Corporation shall consult with Mountain Transit and the County of San Bernardino to determine an acceptable temporary relocation for the Highway 18 at Discovery Center/Serrano Campground bus stop along Mountain Transit’s “Big Bear Off the Mountain Route 5” that would be temporarily impacted by project construction in order to maintain adequate bus service within the project area.
6.0 CONSULTANT RECOMMENDATION

Based on the information and environmental analysis contained in the Initial Study, we recommend that the County of San Bernardino prepare a Mitigated Negative Declaration for the North Shore Pipeline Replacement Project. We find that the proposed project could have a significant effect on a number of environmental issues, but that mitigation measures have been identified that reduce such impacts to a less than significant level. We recommend that the second category be selected for the County’s determination (see Section 7.0, Lead Agency Determination).

April 17, 2020
Date

Kristen Bogue, Project Manager
Michael Baker International
7.0 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 3.5 have been added. A MITIGATED NEGATIVE DECLARATION will be prepared. ☑

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

I find that the proposal MAY have a significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

Signature: Jim Morrissey
Title: Planner
Printed Name: Jim Morrissey
Agency: County of San Bernardino
Date: 4/17/20
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