

MINUTE ITEM

This Calendar Item No. 001 was approved as
Minute Item No. 01 by the California State Lands
Commission by a vote of 3 to 0 at its
8-14-02 meeting.

**Minute Item
01**

08/14/02
PRC 7509, PRC 7512, W25855
W25856, W30121
M. Hays
C. Oggins

**KERN RIVER GAS TRANSMISSION COMPANY
(APPLICANT)**

Regular Item 01: The recommendation of staff, relative to Regular Calendar Item 01 was approved by unanimous vote of 3-0 by Commissioners.

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**CALENDAR ITEM
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A 34

08/14/02

W30121, W25855, W25856
PRC 7509.2 and PRC 7512.2

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M. Hays
C. Oggins

**THE CERTIFICATION OF A FINAL ENVIRONMENTAL IMPACT REPORT, THE
ISSUANCE OF TWO GENERAL LEASES-RIGHT OF WAY USE, AND THE
ASSIGNMENT IN THE GENERAL PARTNERSHIP OF TWO GENERAL LEASES-
RIGHT OF WAY USE**

APPLICANT/LESSEE:

Kern River Gas Transmission Company

ASSIGNORS/PARTNERS:

Kern River Corporation
Williams Western Pipeline Company

ASSIGNEES/PARTNERS:

KR Acquisition 1, LLC
KR Acquisition 2, LLC

AREA, LAND TYPE, AND LOCATION:

One parcel of State school land located in Section 36, T14N, R6E, SBM and one
parcel of State school land located in Section 16, T17N, R14E, SBM, San
Bernardino County.

EXISTING AUTHORIZED USE:

Use and maintenance of an existing 36-inch diameter natural gas pipeline for the
transport of natural gas for a term of 30 years, beginning March 7, 1991.

PROPOSED AUTHORIZED USE:

Construction, use and maintenance of a 36-inch diameter steel natural gas
pipeline that will be used for transporting natural gas and the temporary use of a
construction work area.

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PROPOSED LEASE TERMS:

19 years, beginning August 1, 2002.

PROPOSED CONSIDERATION:

\$3,384 per year; with the State reserving the right to fix a different rent periodically during the lease term, as provided in the lease, and \$1,000 for the temporary construction work area. (W 25855)

\$3,826 per year; with the State reserving the right to fix a different rent periodically during the lease term, as provided in the lease, and \$1,000 for the temporary construction work area. (W 25856)

PROPOSED SPECIFIC LEASE PROVISIONS:

Insurance for each Lease:

General Liability – Each Occurrence	\$ 1,000,000
General Aggregate	\$ 2,000,000
Pollution and Spill – Each Occurrence	\$ 1,000,000
General Aggregate	\$ 2,000,000
Personal Liability –	\$ 1,000,000
Excess Liability – Each Occurrence	\$10,000,000
General Aggregate	\$10,000,000

Surety Bond for each Lease - \$ 50,000

Construction Performance Bond
for each Lease - \$ 450,000

Construction Phase Mitigation
Monitoring Bond - \$ 450,000

Reclamation Bond - \$ 1,334,000

Corporate Guarantee - MidAmerican Energy Holdings
Company to provide a Corporate
Guarantee for the performance of the
lease obligations of its subsidiary, Kern
River Gas Transmission

BACKGROUND INFORMATION:

On March 6, 1991, the California State Lands Commission (CSLC) approved the issuance of two General Leases - Right of Way Use (Lease Nos. PRC 7509.2 and PRC 7512.2) to Kern River Gas Transmission Company, a General Partnership (KRG T), for the construction, use and maintenance of a 36-inch natural gas pipeline that crosses two parcels of State school land in San

CALENDAR ITEM NO. C01 (CONT'D)

Bernardino County. The existing natural gas pipeline is an interstate pipeline that begins in Wyoming and terminates in California.

PROPOSED PROJECT INFORMATION:

1. KRGT is now proposing to expand its existing natural gas transmission pipeline system from Opal, Wyoming to Mojave, California, and proposes to install approximately 717.5 miles of new pipeline through Wyoming, Utah, Nevada, and California. In California, 104 miles of 36-inch pipe would be installed and 82 miles of 42-inch would be installed. Additionally, underground pipeline loops, one underground pipeline lateral, three new natural gas compressor stations, modifications to existing compressor stations and existing meter stations, and other related facilities, are proposed to be constructed and operated in California.
2. Of the new pipeline proposed to be installed and operated in California, approximately 1.7 miles will cross two State school land parcels in San Bernardino County that are under the jurisdiction of the CSLC.
3. On July 27, 2001, KRGT submitted an application to the CSLC for the proposed Kern River Expansion Project that involves the two school land parcels.
4. KRGT has the right to use the lands that adjoin the Lease Premises.
5. The proposed project would provide an additional 885,626 dekatherms per day of natural gas transportation capacity from Central Rocky Mountain gas supplies to the existing and proposed natural gas-fired power plants along the existing KRGT system. KRGT anticipates that over 95 percent of the natural gas capacity will be used for delivery points in California to serve existing or new power generation markets.

SAFETY INFORMATION:

1. Transportation of natural gas by pipeline involves some risk to the public in the event of an accident or release of gas with the greatest hazard being fire or explosion following a rupture. The pipeline will be designed, constructed, inspected, tested, operated, and maintained to meet or exceed, U. S. Department of Transportation (DOT) construction and safety standards outlined in Title 49 Code of Federal Regulations (CFR) Part 192, *Transportation and Other Gas by Pipeline: Minimum Federal Safety Standards*. These regulations, which are intended to protect the public

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and to prevent natural gas facility accidents and failures, include specifics for material selection and qualification; odorization of gas; minimum design requirements; and protection of the pipeline from internal, external, and atmospheric corrosion. While primary focus of the federal standards is prevention of accidents, the Applicant has in place safety related policies and procedures, an emergency response plan that would be coordinated and tested through drills and exercises, with local fire/police departments and emergency management agencies.

2. KRGT will incorporate current seismological engineering standards such as the *Guidelines for the Design of Buried Steel Pipe* (American Lifeline Alliance), *Guidelines for the Seismic Design of Oil and Gas Pipeline Systems* (American Society of Civil Engineers), and other recognized industry standards at all fault crossings and liquefaction potential zones in California.
3. Once constructed, the pipeline system will be operated and maintained in accordance with all applicable Federal and State regulations. KRGT will monitor and control the pipeline 24 hours per day via a centralized Gas Control Center located in Salt Lake City, Utah. Operation and maintenance workforce will be located in the KRGT district office in Las Vegas, Nevada.

ASSIGNMENT INFORMATION:

1. When the CSLC approved the issuance of the two Right of Way Leases to KRGT, the two general partners in KRGT were Kern River Corporation and Williams Western Pipeline Company. Each of the two general partners held a 50 percent interest in KRGT's General Partnership. Subsequently, Kern River Corporation assigned its 50 percent interest in the General Partnership to Kern River Acquisition and on March 27, 2002, each of the general partners assigned it's respective 50 percent interest in the General Partnership for KRGT to KR Acquisition 1, LLC, and KR Acquisition 2, LLC.
2. Pursuant to the lease terms for both leases, any transfer of any interest in the General Partnership is deemed to be an assignment. Therefore, the assignment by the two general partners in the General Partnership to KR Acquisition 1, LLC, and KR Acquisition 2, LLC, requires the review and approval of the CSLC.

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3. Even though the interest in the General Partnership is being assigned, this assignment will not change the CSLC's Lessee. KRGT will remain as the CSLC's Lessee and will be responsible for complying with the terms and conditions of the leases for the new and existing natural gas pipeline systems. KRGT continues to operate as a general partnership with new general partners, KR Acquisition 1, LLC and KR Acquisition 2, LLC, under the umbrella of the parent company, MidAmerican Energy Holdings Company.

ENVIRONMENTAL INFORMATION:

1. The staffs of the Federal Energy Regulatory Commission (FERC) and the CSLC, joint federal and state lead agencies, have completed work on a joint Final Environmental Impact Statement /Environment Impact Report (FEIS/EIR). The FEIS/EIR was prepared as required by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).
2. The FEIS/EIR includes a California Reclamation Plan that identifies the impacts to vegetation and outlines the mitigation measures necessary to achieve a successful reclamation of yucca, cactus and agave within the construction area of the pipeline on non-federal land in California. KRGT is required by the CSLC to provide a reclamation bond, in an amount of \$1,334,000, for a term of ten years to ensure that the California segment of the Reclamation Plan will be successfully completed.
3. On August 1, 2001, KRGT filed an application with the FERC for a Certificate of Public Convenience and Necessity for the Kern River 2003 Expansion Project. On July 17, 2002, the FERC issued its Certificate of Public Convenience and Necessity to KRGT.
4. On July 9, 2002, the United States Fish and Wildlife Service (Service) issued a Biological Opinion (BO) for the project (File No. 1-5-02-F-476), concluding that, "After reviewing the current status of the desert tortoise and the Utah prairie dog, the environmental baseline for the action area, the effects of the activities associated with the Kern River 2003 Expansion Project and the cumulative effects, it is the Service's biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the desert tortoise or Utah prairie dog, and is not likely to destroy or adversely modify designated critical habitat for the desert tortoise to the extent that it no longer serves as recovery areas. Because no critical

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habitat has been designated for the Utah prairie dog, no critical habitat will be destroyed or adversely modified.”

Staff of the CSLC and the California Department of Fish and Game (CDFG) has reviewed the BO. The CDFG will rely on the FEIS/EIR, in combination with the BO, to review and condition its permit to KRG T pursuant to Section 2081 of the Fish and Game Code. CDFG will monitor all future pipeline maintenance activity with rare, threatened, endangered species and species of concern and their habitats. The mitigation measures contained in the FEIS/EIR and the BO are contained in the Mitigation Monitoring Program for the proposed expansion project.

CEQA INFORMATION:

1. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Title 14, California Code of Regulations, section 15025), the staff has prepared an EIR identified as CSLC EIR No. 710, State Clearinghouse No. 2001071035. Such EIR was prepared and circulated for public review pursuant to the provisions of the CEQA. A Mitigation Monitoring Program has been prepared in conformance with the provisions of the CEQA (Public Resource Code section 21081.6), is contained in Exhibit D, and incorporated as part of the proposed leases.
2. Findings made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15091) are contained in Exhibit C, attached hereto.
3. A Statement of Overriding Considerations regarding the pipeline's significant remaining impact to special concern vegetation communities (yucca, cactus and agave communities), made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15093) is contained in Exhibit E, attached hereto.
4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

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APPROVALS OBTAINED:

Federal Energy Regulatory Commission

FURTHER APPROVALS REQUIRED:

United States Department of Agriculture, Forest Service
United States Department of the Air Force, Edwards Air Force Base
United States Department of the Interior, Bureau of Land Management
United States Fish and Wildlife Service
United States Environmental Protection Agency
United State Army Corps of Engineers
United States Department of the Treasury, Bureau of Alcohol, Tobacco, Firearms
California Department of Fish and Game
California Department of Transportation, District 8, District 6
California State Water Quality Control Board
California State Historic Preservation Office
Lahontan River Basin Regional Water Quality Control Board
Mojave Desert Air Quality Management District
San Bernardino County Flood Control District
San Bernardino County Franchise Authority Special District Department
Kern County Road Department

EXHIBITS:

- A. Site Map W25855/PRC 7509.2
- B. Site Map W25856/PRC 7512.2
- C. CEQA Findings
- D. Mitigation Monitoring Program
- E. Statement of Overriding Considerations

PERMIT STREAMLINING ACT DEADLINE:

November 22, 2002

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDING:

CERTIFY THAT AN EIR, NO. 710, STATE CLEARINGHOUSE NO. 2001071035, WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF THE CEQA, THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED

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THEREIN AND THAT THE EIR REFLECTS THE COMMISSION'S INDEPENDENT JUDGEMENT AND ANALYSIS.

ADOPT THE FINDINGS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15091, AS CONTAINED IN EXHIBIT C, ATTACHED HERETO.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT D, ATTACHED HERETO.

ADOPT THE STATEMENT OF OVERRIDING CONSIDERATIONS, AS CONTAINED IN EXHIBIT E, ATTACHED HERETO.

SIGNIFICANT LANDS INVENTORY FINDING:

FIND THAT THE ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCE CODE SECTIONS 6370, ET SEQ.

AUTHORIZATION:

1. AUTHORIZE ISSUANCE TO KERN RIVER GAS TRANSMISSION COMPANY, OF A GENERAL LEASE-RIGHT OF WAY USE, BEGINNING AUGUST 1, 2002, FOR A TERM OF 19 YEARS, FOR THE CONSTRUCTION, USE AND MAINTENANCE OF A 36-INCH DIAMETER STEEL PIPELINE THAT WILL TRANSPORT NATURAL GAS AND THE TEMPORARY USE OF A CONSTRUCTION WORK AREA ON THE LANDS SHOWN ON EXHIBIT A ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF; ANNUAL RENT IN THE AMOUNT OF \$3,384, WITH THE STATE RESERVING THE RIGHT TO FIX A DIFFERENT RENT PERIODICALLY DURING THE LEASE TERM, AS PROVIDED IN THE LEASE; AND \$1,000 FOR THE AREA THAT WILL BE USED TEMPORARILY DURING THE CONSTRUCTION PHASE OF THE PROJECT; GENERAL LIABILITY INSURANCE COVERAGE OF NO LESS THAN \$1,000,000 PER OCCURRENCE WITH A GENERAL AGGREGATE OF NO LESS THAN \$2,000,000; SPILL AND POLLUTION INSURANCE OF NO LESS THAN \$1,000,000 PER OCCURRENCE WITH A GENERAL AGGREGATE OF NO LESS THAN \$2,000,000; PERSONAL LIABILITY INSURANCE IN THE AMOUNT OF NO LESS THAN \$1,000,000; EXCESS GENERAL LIABILITY INSURANCE OF NO LESS THAN \$10,000,000 PER OCCURRENCE WITH A GENERAL

CALENDAR ITEM NO. C01 (CONT'D)

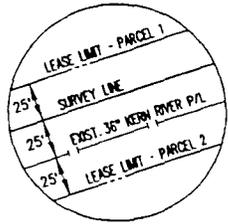
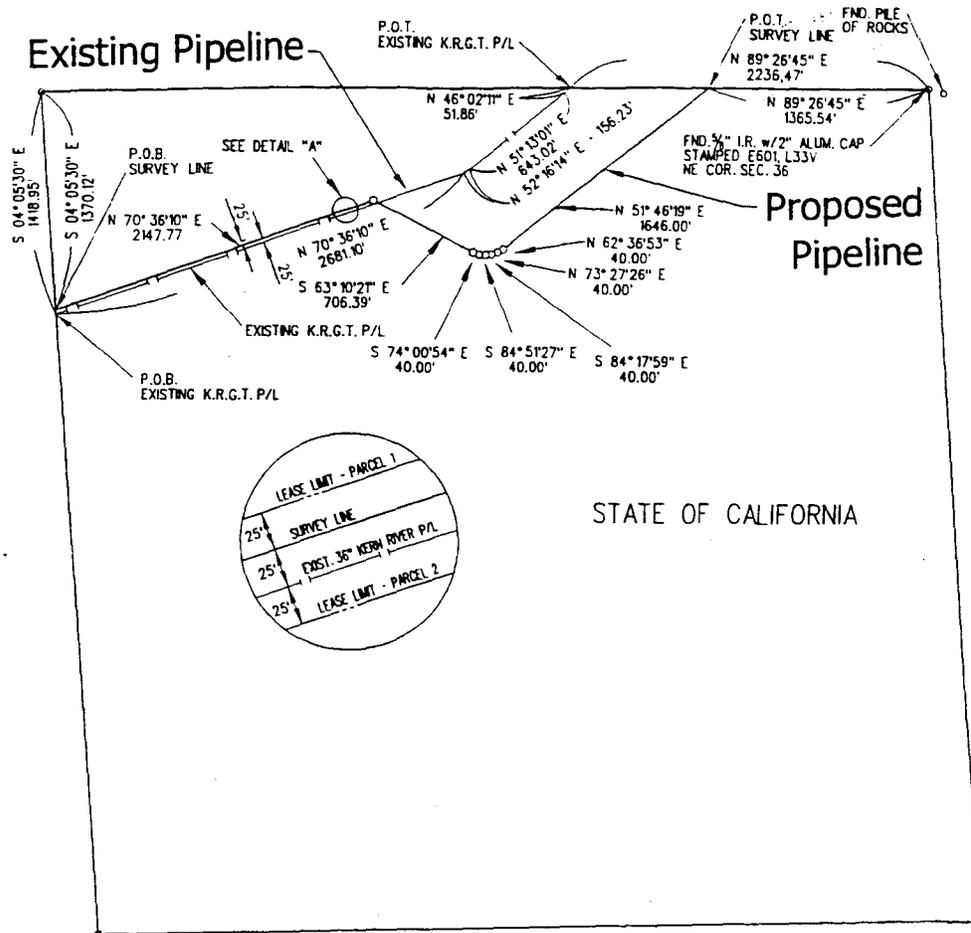
AGGREGATE OF NO LESS THAN \$10,000,000; SURETY BOND IN THE AMOUNT OF \$50,000; AND CONSTRUCTION PERFORMANCE BOND IN THE AMOUNT OF \$450,000. (W25855)

2. AUTHORIZE ISSUANCE TO KERN RIVER GAS TRANSMISSION COMPANY, OF A GENERAL LEASE-RIGHT OF WAY USE, BEGINNING AUGUST 1, 2002, FOR A TERM OF 19 YEARS, FOR THE CONSTRUCTION, USE AND MAINTENANCE OF A 36-INCH DIAMETER STEEL PIPELINE THAT WILL TRANSPORT NATURAL GAS AND THE TEMPORARY USE OF A CONSTRUCTION WORK AREA ON THE LANDS SHOWN ON EXHIBIT B ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF; ANNUAL RENT IN THE AMOUNT OF \$3,826, WITH THE STATE RESERVING THE RIGHT TO FIX A DIFFERENT RENT PERIODICALLY DURING THE LEASE TERM, AS PROVIDED IN THE LEASE; AND \$1,000 FOR THE AREA THAT WILL BE USED TEMPORARILY DURING THE CONSTRUCTION PHASE OF THE PROJECT; GENERAL LIABILITY INSURANCE COVERAGE OF NO LESS THAN \$1,000,000 PER OCCURRENCE WITH A GENERAL AGGREGATE OF NO LESS THAN \$2,000,000; SPILL AND POLLUTION INSURANCE OF NO LESS THAN \$1,000,000 PER OCCURRENCE WITH A GENERAL AGGREGATE OF NO LESS THAN \$2,000,000; PERSONAL LIABILITY INSURANCE OF NO LESS THAN \$1,000,000; EXCESS GENERAL LIABILITY INSURANCE OF NO LESS THAN \$10,000,000 PER OCCURRENCE WITH A GENERAL AGGREGATE OF NO LESS THAN \$10,000,000; SURETY BOND IN THE AMOUNT OF \$50,000; CONSTRUCTION PERFORMANCE BOND IN THE AMOUNT OF \$450,000; CONSTRUCTION PHASE MITIGATION MONITORING BOND IN THE AMOUNT OF \$450,000; AND RECLAMATION BOND IN THE AMOUNT OF \$1,334,000. (W25856)

3. AUTHORIZE THE ASSIGNMENT OF WILLIAMS WESTERN PIPELINE COMPANY'S 50 PERCENT INTEREST AND KERN RIVER ACQUISITION CORPORATION'S 50 PERCENT INTEREST IN THE GENERAL PARTNERSHIP FOR KERN RIVER GAS TRANSMISSION COMPANY TO KERN RIVER ACQUISITION COMPANY 1, LLC, A GENERAL PARTNER AND KERN RIVER ACQUISITION COMPANY 2, LLC, A GENERAL PARTNER, LEASE NOS. PRC 7509.2 AND PRC 7512.2, EFFECTIVE AUGUST 1, 2002 ON THE LANDS AS SHOWN ON EXHIBIT A AND B ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF.

NO SCALE

SITE

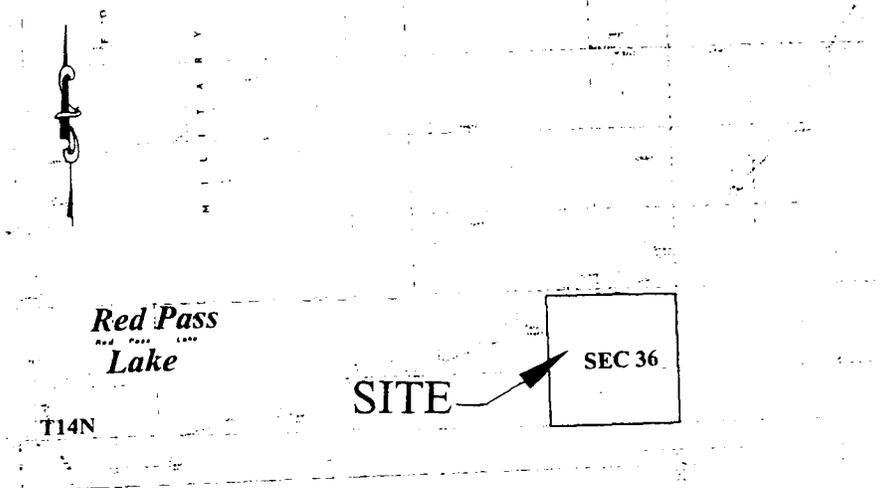


STATE OF CALIFORNIA

Sec.36, T14N, R6E, SBM

NO SCALE

LOCATION



Map Source: USGS Quad

Exhibit A
 W25855/PRC7509.2
 School Lands
 San Bernardino County



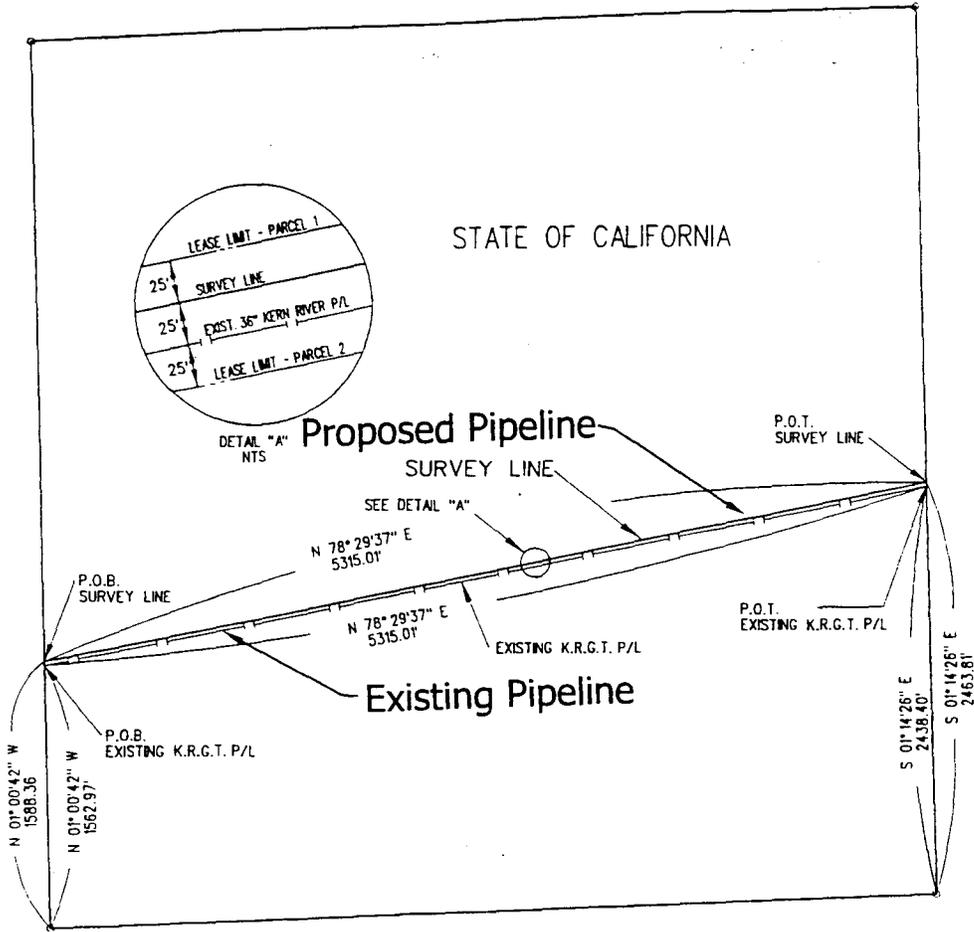
This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the lessee or other parties and is not intended to nor shall it be construed as, a waiver or limitation of any state interest in the subject or any other property.

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NO SCALE

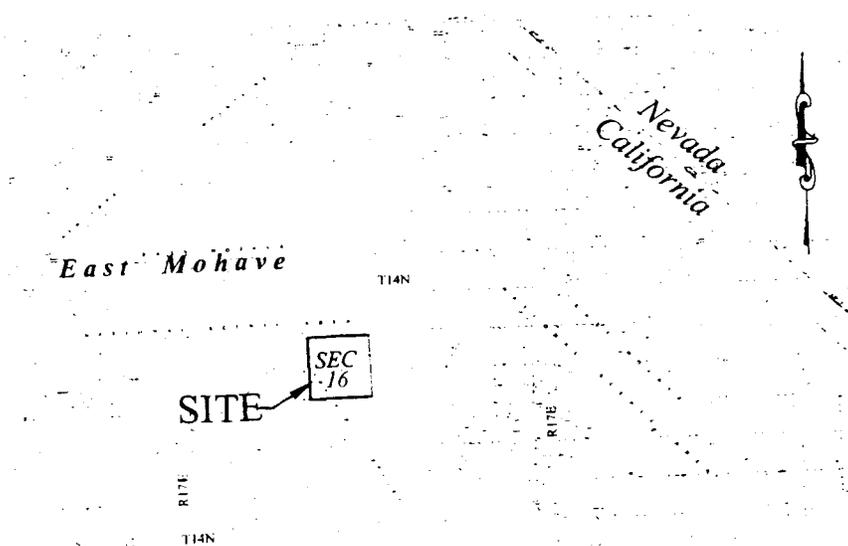
SITE



Sec.16 T17N R14E, SBM

NO SCALE

LOCATION



Map Source: USGS Quad

Exhibit B

W25856/PRC7512.2

School Lands

San Bernardino County



This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the lessee or other parties and is not intended to be nor shall it be construed as, a waiver or limitation of any state interest in the subject any other property.

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EXHIBIT C

CEQA Findings

INTRODUCTION

These findings on Kern River Gas Transmission Company's (KRGT) proposed Kern River 2003 Expansion Project are made by the California State Lands Commission (CSLC), pursuant to the Guidelines for the California Environmental Quality Act (CEQA) (California Code of Regulations, Title 14, Section 15091). All significant adverse impacts of the project in California identified in the Final Environmental Impact Statement/Environmental Impact Report (Final EIS/EIR) are included herein and organized according to the resource affected.^{1/}

For discussion of impacts, significance is classified according to the following definitions:

- Class I – Significant, adverse impact that cannot be mitigated to insignificant.
- Class II – Significant, adverse impact that can be mitigated to insignificant.
- Class III – Adverse but insignificant impact.
- Class IV – Beneficial impact.

Class III and Class IV impacts require neither mitigation nor findings.

For each significant impact (*i.e.*, Class I or II) a finding has been made as to one or more of the following, as appropriate:

- A. Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- B. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- C. Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIS/EIR.

^{1/} The CEQA Findings are numbered in accordance with the mitigation number identified in the Mitigation Monitoring Program table (Table 5.1-1) in the Final EIS/EIR. Table 5.1-1 covers the project in Wyoming, Utah, Nevada, and California. The CEQA Finding numbers are not numbered sequentially because some of the mitigation measures identified in the table do not apply in California and are not subject to CEQA, or the impact was either less than significant before mitigation (Class III) or a beneficial impact (Class IV). Mitigation measures are classified as follows:

- Measures that begin with the prefix KRGT are measures that KRGT has proposed pursuant to its application or supplemental filings to the Federal Energy Regulatory Commission (FERC), including responses to CSLC and FERC staff data requests.
- Measures that begin with the prefix ARM are additional Agency Recor

A narrative of the facts supporting them follows the findings.

Whenever Finding B occurs, the agencies with jurisdiction have been specified. These agencies, within their respective spheres of influence, have the ultimate responsibility to adopt, implement, and enforce the mitigation discussed within each type of impact that could result from project implementation. However, under the CEQA (Public Resources Code Section 21081.6), the CSLC, as CEQA Lead Agency, has the responsibility to ensure that mitigation measures contained in an EIR are effectively implemented. For the Kern River 2003 Expansion Project, other specified State, local, regional, and federal public agencies include, but are not necessarily limited to the following:

- California Department of Fish and Game (CDFG);
- California Department of Transportation (Caltrans);
- California Department of Water Resources (CDWR);
- California Regional Water Quality Control Board, Lahontan Region (Lahontan RWQCB);
- Kern County Office of Emergency Services, Environmental Health Services Department, and Road Department;
- San Bernardino County Fire Department—Office of Emergency Services, Environmental Health Services Department, and Transportation Department;
- Mojave Desert Air Quality Management District (AQMD);
- Mojave Water Agency;
- Federal Energy Regulatory Commission (FERC), which is the lead federal agency pursuant to the National Environmental Policy Act (NEPA);
- Bureau of Land Management (BLM);
- National Park Service (NPS);
- U.S. Army Corps of Engineers (COE);
- U.S. Department of Transportation (DOT);
- U.S. Environmental Protection Agency (EPA); and
- U.S. Fish and Wildlife Service (FWS).

Whenever Finding C is made, the CSLC has determined that sufficient mitigation is not practicable to reduce the impact to a level of insignificance and, even after implementation of all feasible mitigation measures, there will or could be an unavoidable significant adverse impact due to the project. The Statement of Overriding Considerations applies to all such unavoidable impacts as required by CEQA Guidelines Sections 15092 and 15093. One C-level Finding is associated with the proposed project (CEQA Finding No. KRG57).

CEQA FINDING NO. KRGT1

GEOLOGIC RESOURCES: Natural Topography

Impact: Effects from construction could include disturbances to the natural topography along the right-of-way and at aboveground facilities due to grading and trenching activities.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Over most of the project area, natural topographic slope and contours would be temporarily altered by the small-scale grading of the construction right-of-way that is necessary to provide a level and safe work surface for equipment. As mitigation, after completion of construction, KRGT shall restore topographic contours and drainage conditions as closely as feasible to their pre-construction condition.

Restoring topographic contours and drainage conditions after construction would result in a more natural appearance consistent with the existing topography, reduce new erosion by restoring pre-construction drainage features, and facilitate revegetation.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT2/ARM1

GEOLOGIC RESOURCES: Blasting During Construction

Impact: Where hard bedrock is encountered, blasting would be required to complete the excavation. If blasting is not controlled properly, it can cause damage to existing structures and pipelines, wells, and springs. Temporary effects of blasting can include hazards posed by uncontrolled fly-rock and nuisances caused by noise, increased dust, and venting of gases following blasts.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

The Kern River 2003 Expansion Project would cross a variety of physiographic and geologic terrains that would require a wide range of construction techniques. The depth of the trench that would be necessary to install the pipeline is about 7 feet. At this depth, soft bedrock typically can be excavated with conventional construction equipment. Where hard bedrock is encountered, blasting would be required to complete excavation. KRGT shall conduct blasting for grade or trench excavation only after all other reasonable means of excavation have been used and are unsuccessful in achieving the required results. The pipeline route in California crosses 42.4 miles of shallow bedrock; blasting would likely be necessary in some of these locations.

As mitigation, KRGT has prepared a project Blasting Plan to minimize the effects of blasting and ensure safety during blasting operations. The plan provides guidelines, requirements, and specifications for the use and storage of blasting materials and for the safety of personnel and nearby facilities. All blasting-related operations shall comply with federal, state, and local regulations and permit conditions and shall be conducted by or under the direct supervision of experienced personnel legally licensed and certified to perform such activity in the jurisdiction where blasting occurs. KRGT's Blasting Plan also stipulates the following:

- KRGT shall not store explosives on federal land without prior written permission from the BLM; copies of this permission shall be posted on each magazine;
- KRGT shall give at least 72 hours advance notice of blasting activities to the BLM, railroads, highway departments, and local communities; occupants of nearby residences, buildings, and businesses; and local farmers;
- KRGT shall erect and maintain warning signs at all approaches to the blast areas and flaggers shall be stationed on all roadways passing within 1,000 feet of blasting activities;

Exhibit C: CEQA Findings

- KRGT shall not prime or fuse explosives until just before use;
- KRGT shall conduct blasting during daylight hours and shall monitor blasting activities with three-axis seismographs to ensure that safe vibration levels are not exceeded. Limits of vibration measured as peak particle velocity shall not exceed 4 inches per second adjacent to an underground pipeline and 2 inches per second for any aboveground structure (including water wells); and
- if an aboveground structure or water well is damaged by blasting, KRGT shall compensate the owner.

In addition, to avoid injury to personnel and damage to site-specific structures or other features such as water wells and the existing pipeline, KRGT's Blasting Plan stipulates that the blasting contractor must prepare individual, site-specific blasting plans. Among other requirements, these plans shall identify the distance and orientation to the nearest structure (both aboveground and underground) and the procedures to be used for storing, handling, transporting, loading, and firing explosives. The site-specific blasting plans must be reviewed by the company engineer, and the company inspector's approval must be received before each blast.

To ensure that potential impacts associated with blasting are minimized through skillful operations and the use of site-specific plans, before commencement of any blasting in California, KRGT shall submit to the CSLC for approval:

- a copy of the license of the person(s) conducting or supervising the blasting operations and evidence that the person is certified to perform such activity in the jurisdiction where blasting occurs; and
- a copy of the contractor-prepared site-specific blasting plans. The site-specific plans shall include a contingency plan that includes safe methods and procedures to identify any misfired detonations and to proceed with further work after misfires.

KRGT's implementation of its Blasting Plan, and the additional recommendation to provide a copy of the license of the person(s) conducting or supervising the blasting operations and a copy of the contractor-prepared site-specific blasting plans, will ensure that blasting operations are conducted by professional technicians in consideration of site-specific conditions. Proper blasting procedures would avoid uncontrolled fly-rock and nuisances caused by noise, increased dust, and venting of gases following blasts, as well as damage to existing structures and pipelines, wells, and springs.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT3

GEOLOGIC RESOURCES: Mineral Resources

Impact: The construction and operation of a pipeline near or over mineral resources could affect existing and future production at active or currently inactive mineral resource areas by restricting activities within the pipeline right-of-way. In general, potential significant effects include diminished mineral land value, loss of mineral land access, and loss of revenues generated by future mineral production.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

For about 2 miles of the Goodsprings Loop (between mileposts (MPs) 590.0 and 592.0) and 1 mile of the Daggett Loop (MPs 7.5 and 8.5), the pipeline would cross areas designated as Mineral Resource Zone (MRZ)-2. Lands classified as MRZ-2 have significant measured economic or subeconomic mineral resources. The Goodsprings Loop would also cross a borrow pit at MP 681.0 and a sand pit is located about 225 feet north of the Daggett Loop at MP 66.5. All four of these areas are considered inactive. Therefore, the project would not affect the integrity or operation of these areas.

Nearly all of KRGT's pipeline route is adjacent to existing pipelines or other utilities that have already precluded further mineral development. Additionally, impacts on future mineral development are not expected to constitute a significant loss of a mineral resource or mineral availability because of the narrow nature of the right-of-way relative to the expanse of areas with mineral resource potential. In the event any conflicts between the pipeline and other mineral resource operations are identified, as mitigation, KRGT shall compensate the owners of these resources for potential losses.

KRGT's commitment to compensate the owners of mineral resources for loss of access or recovery associated with construction and operation of the project would minimize the potential for significant effects on the use of these resources.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

**CEQA FINDING NO. KRGT5
KRGT6/ARM2
KRGT7**

GEOLOGIC RESOURCES: Seismicity
Faults
Ground Shaking Resulting from Earthquakes

Impacts: Much of the project route is located within areas of past seismic activity. Potential seismic hazards include active faults, earthquakes/ground shaking, and soil liquefaction.

The pipeline route would cross three faults or fault zone areas in California where the potential for surface fault rupture exists. The potential impact of any fault on the pipeline would depend on the fault activity, the expected magnitude of displacement, the geometry of the fault crossing, and the proximity to population. The potential for large differential ground movements leading to surface rupture would require special design considerations.

Ground shaking resulting from earthquakes is a potential hazard to the pipeline facilities, especially in California, primarily along the Daggett Loop. Damage to buried pipelines is most often caused by the differential movements of geologic material as opposed to shaking itself. Aboveground structures would more likely be damaged by ground shaking.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC, DOT)

FACTS SUPPORTING THE FINDING:

The Mojave Desert and San Joaquin Valley in southern California historically have exhibited moderate to high seismicity. Faults in this region are potentially capable of generating large-magnitude earthquakes and associated strong ground motions. The pipeline route would cross three faults or fault zone areas in California where the potential for surface fault rupture exists. These faults include the Calico Subsidiary at MP 674.8 (Goodsprings Loop), the Calico Fault at MPs 675.3 and 675.8 (Goodsprings Loop), and the Lenwood Fault at MP 13.0 (Daggett Loop). Other active faults within the vicinity of the project have the potential to generate earthquakes that could cause strong ground motions. Damage to buried pipelines is most often caused by the differential movements of geologic material as opposed to shaking itself. Aboveground structures would be more likely damaged by ground shaking. Ir

crossings of the Mojave River (MP 676.7 of the Goodsprings Loop and MP 18.0 of the Daggett Loop) have been identified as susceptible to soil liquefaction.

For the entire project, KRGT has committed to construct and test project facilities to meet federal standards outlined in the DOT regulations in Title 49 Code of Federal Regulations (CFR) Part 192, *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*. KRGT has also committed to design all project facilities to meet or exceed the latest edition of the Uniform Building Code, International Building Code, and recognized industry standards under the direction of certified professional engineers.

Further, KRGT shall adhere to the following additional CSLC requirements for the pipeline within California:

- KRGT shall incorporate current seismological engineering standards such as the *Guidelines for the Design of Buried Steel Pipe* (American Lifeline Alliance), *Guidelines for the Seismic Design of Oil and Gas Pipeline Systems* (American Society of Civil Engineers), and other recognized industry standards for seismic-resistant design at all fault crossings and liquefaction potential zones in California.
- KRGT shall ensure that all engineered structures in California—including pipeline alignment sheets, buildings and other structures, profile drawings wherever necessary, and other appurtenances and associated facilities—shall be designed, signed, and sealed by California-registered professionals certified to perform such activities in the jurisdiction where the facilities will be located.

Along with the general safety and design measures described above, KRGT has incorporated additional measures into the final design of its pipeline at fault crossings in California. Specifically, KRGT shall:

- orient the pipe at the fault crossing to produce tension in the pipe material in lieu of compression;
- provide a substantial unanchored length of pipe across the fault;
- create ditch geometries (deeper or wider dependent on fault type and orientation) to minimize forces on the pipe;
- place medium dense sandy backfill around the pipe at the fault crossing;
- use heavy-wall pipe at the fault crossing;
- avoid pipe wall-thickness transitions near fault traces;
- use a certified engineering geologist to observe the construction excavation in the vicinity of the fault crossings to verify that the design assumptions are valid and the treatments are centered in the correct locations; and
- equip the mainline valves (MLVs) located upstream and downstream of the faults with remotely operated actuators.

Should an earthquake occur, KRGT shall also incorporate the following measure into its pipeline operations and maintenance procedures. Following an earthquake within the parameters shown in the table below, KRGT operations personnel shall inspect all parts of the pipeline alignment that fall within the specified distance of the earthquake epicenter for evidence of permanent ground deformation (e.g., cracks or displacements).

Exhibit C: CEQA Findings

Earthquake Magnitude (Richter scale)	Epicentral Distance (miles)
6	5
6.5	10
7	15
7.5	20

If surface fault rupture is reported or observed, the pipeline alignment within at least 1,000 feet of the rupture shall be inspected. KRGT shall submit reports of its findings to the CSLC.

KRGT's design of the project facilities and incorporation of current seismological engineering standards for seismic-resistant design at all fault crossings and liquefaction potential zones in California would enhance public health and safety and minimize the potential for damage to the pipeline from seismic hazards by utilizing proven soil preparation techniques, strengthening potentially affected structures, and avoiding soils subject to liquefaction. In addition, KRGT's incorporation of the requirement to inspect all parts of the pipeline alignment that fall within the specified distance of an earthquake epicenter into its pipeline operations and maintenance procedures would ensure that any future damage to the pipeline associated with earthquakes and ground shaking is expeditiously and adequately addressed.

SUMMARY: These impacts are found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT8

GEOLOGIC RESOURCES: Soil Liquefaction

Impact: Soil liquefaction can affect a pipeline by causing lateral spreading, loss of bearing strength, flow failures, subsidence, and flotation.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, DOT, FERC)

FACTS SUPPORTING THE FINDING:

See the background discussion on seismicity and faults in CEQA Finding Nos. KRGT5/KRGT6/ARM2/KRGT7.

Mitigation measures for soil liquefaction hazards are similar to those used at active fault crossings. KRGT's commitment to meet or exceed the design standards for project facilities in seismically active areas and its measures to mitigate for surface fault rupture/displacement hazards (see CEQA Finding Nos. KRGT5/KRGT6/ARM2/KRGT7) would minimize the potential effects of soil liquefaction, including lateral spreading, loss of bearing strength, flow failures, subsidence, and flotation to the pipeline and ensure the structural and operational integrity of the pipeline.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT9

GEOLOGIC RESOURCES: Slope Instability/Landslides

Impact: In areas of slope instability, construction and operation of pipeline facilities could cause landslides. Significant landslides, rockfalls, and debris flows have the potential to damage pipeline facilities.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Substantial portions of the pipeline route in California would cross terrain of relatively gentle slopes and low relief. Less than 1% of the slopes crossed along the Goodsprings Loop are greater than 20%. The steepest slopes are located along the north end of the Clark Mountains. Field reconnaissance conducted in March 2002 confirmed landslide deposits were absent from this area, and previous studies did not identify landslide deposits in positions where they would pose a threat to the pipeline. Although no landslide deposits were identified, KRGT proposes three minor route deviations between MPs 626.2 and 642.6 to avoid steep side slopes.

Slope stability evaluations performed along the Daggett Loop in 1990, before construction of the KRGT/Mojave Common System, concluded that slopes of less than 5 degrees from horizontal (about 9%) are characteristic of most of the Daggett Loop. Some slopes greater than 5 degrees exist east of Barstow. Geotechnical reconnaissance performed in 2001 observed these slopes as stable with little potential for instability.

The arid regional conditions (less than 12 inches of normal annual precipitation) mean that relatively little water is available that could facilitate instability in areas of high relief. Therefore, the potential for slope instability associated with operation of the pipeline is not considered significant along the pipeline route in California.

To prevent or minimize potential hazards associated with construction-induced slope instability within California, KRGT shall retain a California-certified Engineering Geologist to oversee construction activities (e.g., excavation) in areas of potentially unstable ground as well as oversee the attempts to locate traces of Quaternary faults during excavation.

KRGT's avoidance of landslide-prone areas in California and its commitment to retain a California-certified Engineering Geologist to oversee construction activities would prevent or minimize the potential for slope instability and landslides associated with pipeline construction and operation, and better ensure the structural and operational integrity of the pipeline.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT11/ARM3

GEOLOGIC RESOURCES: Subsidence Due to Excessive Groundwater Withdrawal

Impact: Subsidence due to excessive groundwater withdrawal could occur along the pipeline route in the western Mojave Desert.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDWR, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The pipeline route lies within the South Lahontan Hydrologic Region, which encompasses the Antelope Valley and Barstow and extends north and east to the California-Nevada Border. The CDWR predicts that the annual overdraft (the additional extraction from a groundwater basin over a long period of time that exceeds the annual perennial yield or recharge) for the South Lahontan Hydrologic Region will remain steady at 89,000 acre-feet between 1995 and 2020. Although the subsidence potential associated with future groundwater withdrawal to support future expansion of farmland is considered to be minor, groundwater withdrawal for urban and environmental uses is expected to increase and a steady overdraft is predicted by the CDWR in the coming years. With this overdraft, groundwater levels will continue to decrease and some associated subsidence can be expected over the projected 50-year life of the pipeline.

Because of the relation of subsidence to lowering of the water table, subsidence occurs over a broad area and is expected to continue slowly. Subsidence rates were estimated for five benchmarks in the Lancaster, California area about 25 miles south of MP 78.0, where subsidence is well documented. Subsidence rates averaged between 0.1 and 0.3 feet per year between 1955 and 1992. Analysis indicates that there are fewer water wells and generally thinner unconsolidated deposits along the pipeline route as compared to the Lancaster area; therefore, the maximum subsidence rates along the pipeline route should be less than those in the Lancaster area. The expected magnitude of potential subsidence distributed over broad areas does not appear to be sufficient to damage the pipeline in the western Mojave Desert. To verify this, tension and compression strains were calculated using finite element stress analyses. Results indicate that the pipeline could tolerate up to 5 feet of subsidence and remain within the elastic range of strain. Larger amounts of subsidence could be tolerated without risk to pressure integrity of the pipeline.

Based on the documented subsidence rates in the western Mojave Desert, the amount of subsidence likely to occur along the pipeline route during a 50-year design life is probably less than 5 feet. However, groundwater pumping rates may increase in response to future development, which could increase the potential for subsidence. Therefore, analysis indicates that an operational treatment would be appropriate to address potential subsidence concerns, rather than a design treatment.

Exhibit C: CEQA Findings

As mitigation, KRGT shall check for evidence of subsidence during routine pipeline operations overflights and other maintenance activities along the entire pipeline route. Repairs, such as excavating sections of the pipeline, adding additional backfill, and/or replacing sections of the pipeline, shall be made as necessary to ensure that local conditions do not exceed the design and operational safety parameters of the pipeline. In addition, KRGT shall conduct a reassessment of the subsidence hazard in California after every 15 years of operation. Regions of subsidence that approach 5 feet shall be identified and the pipeline condition and performance shall be evaluated. KRGT shall submit a report of its evaluation to the CSLC and appropriate action shall be taken based on the CSLC's findings.

Implementation of KRGT's proposed operational treatment and the additional recommendation to reassess the subsidence hazard in California after every 15 years of operation would minimize the potential effects associated with subsidence due to excessive groundwater withdrawal in the western Mojave Desert.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT12

GEOLOGIC RESOURCES: Flash Flooding/Debris Flow

Impact: Flash flooding or debris flows along the pipeline could create a rupture if long, unsupported sections of the pipeline become exposed.

Class: II

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

The pipeline route in California crosses approximately 32 ephemeral drainages (see CEQA Finding No. KRGT32). These ephemeral drainages are susceptible to flash flooding during heavy rain events, and could be subject to debris flows. Debris flows may be generated when hillside colluvium or landslide material becomes rapidly saturated with water and flows into a channel. Intense rainfall, rapid snowmelt, and high levels of groundwater flowing through fractured bedrock can trigger the movement. Such areas are typically limited to drainages, which originate in unconsolidated sediments or landslide deposits.

As mitigation, KRGT shall install the pipeline at least 5 feet below the natural bottoms of susceptible drainages and channels.

By installing the pipeline at least 5 feet below the natural bottoms of susceptible drainages and channels, KRGT would minimize the potential for flash flooding or debris flows to expose the pipeline and create a rupture.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT16

GEOLOGIC RESOURCES: Paleontological Resources

Impact: Paleontological resources could be affected by construction of the pipeline and associated aboveground facilities, as well as by the resulting increased public access to these resources. Without mitigation, ground disturbance during construction could cause significant impact on paleontological resources.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

The pipeline route in California crosses various geologic formations that are known or have the potential to contain paleontological resources. Direct physical modifications of paleontological resources could occur during project construction by activities such as grading or trenching. Indirect impact on fossil beds could result from erosion caused by slope regrading, vegetation clearing, and unauthorized collection. Avoidance is the most effective mitigation method to protect significant fossil localities. If avoidance is not possible, scientific excavation to recover fossil materials would reduce the impact to an acceptable level.

To mitigate potential impacts on paleontological resources, KRGT has developed a Paleontological Resource Mitigation Plan (PRM Plan) for the Kern River 2003 Expansion Project. In accordance with the PRM Plan, KRGT shall conduct pre-construction surveys in areas where the proposed pipeline alignment deviates from the existing right-of-way in areas of high paleontological sensitivity. During construction, KRGT shall monitor sedimentary units where previous field surveys identified scientifically significant fossils along the pipeline route and all areas that have a high paleontological sensitivity where trenching would be conducted outside the previously disturbed construction right-of-way. Specific mitigation measures in the PRM Plan include:

- Before construction, KRGT shall obtain all applicable permits for the monitoring and recovery of paleontological specimens on property managed by the BLM. On State and private lands, KRGT shall notify the CSLC before construction and obtain necessary permits;
- KRGT shall monitor sedimentary units where previous and new field surveys identified scientifically significant fossils along the proposed pipeline route and for those route deviations or alternatives in areas of high paleontological sensitivity identified in table 4.1.5-1 (page 4-29 of the Final EIS/EIR). An approved, qualified paleontological monitor shall be present during ground-disturbing activities. Disturbed areas shall be checked immediately after brushing and trenching, and before the pipe is installed and the trench

is backfilled. The paleontologist and CSLC/FERC monitors shall also be present to monitor when fossils or fossiliferous sediments are encountered during ground-disturbing activities. The paleontological monitor shall identify the diagnostic elements of any fossils and be equipped to preserve unearthed fossils. The paleontological monitor shall have the authority to temporarily divert construction equipment in the event significant paleontological resources are discovered.

In addition, KRGT shall:

- educate workers about the potential discovery and importance of paleontological resources and spot-checks by paleontologists in non-monitored areas;
- notify the paleontologist in the event of a find in a non-monitored area;
- determine and verify the paleontological sensitivity of additional workspace areas before ground disturbance;
- prepare, identify, preserve, and curate recovered fossils; and
- prepare reports to document findings.

KRGT shall provide copies of all paleontological permits to the CSLC before construction in California. All phases of mitigation shall be conducted under the direct supervision of a qualified paleontologist and in accordance with applicable permits. Recovered fossils shall be prepared to the point of identification and preserved for curation at a museum or as set forth in the repository agreement.

Upon completion of excavation and grading activities, a final monitoring report shall be prepared by KRGT that shall include a summary of field observations, recoveries, and an itemization of all specimens collected. Within 90 days of the completion of construction of the pipeline and associated facilities, KRGT shall provide copies of the final paleontological resources monitoring report to the FERC, the CSLC (for lands in California), and the BLM and other appropriate federal land management agencies.

KRGT's adherence to the provisions of its PRM Plan would ensure protection and preservation of sensitive paleontological resources by requiring the presence of an approved, qualified paleontological monitor; authorizing the monitor to divert construction activities in the event significant paleontological resources are discovered; and specifying accepted procedures for resource protection or preservation.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT17

SOIL RESOURCES: Soil Erosion

Impact: Clearing, grading, and the movement of equipment on the right-of-way would remove the protective vegetative cover and expose soils to the effects of wind, rain, and runoff.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Lahontan RWQCB, CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

Pipeline construction activities such as clearing, grading, trench excavation, backfilling, and the movement of construction equipment along the right-of-way would impact soil resources. Erosion is a continuing, natural process that can be accelerated by human activities. Clearing, grading, and the movement of equipment on the right-of-way would remove the protective vegetative cover and expose soils to the effects of wind, rain, and runoff. The effects would accelerate the erosion process and, without adequate protection, could result in discharges of sediment to waterbodies and could lower soil fertility. Although all soils would be prone to erosion to some degree, factors that would influence the rate of erosion include soil texture and structure, the length and percent of slope, vegetative cover, and rainfall or wind intensity. The most erosion-prone soils are generally bare or sparsely vegetated, non-cohesive, fine textured, and situated on moderate to steep slopes. Soils more resistant to erosion include those that are well vegetated, well structured with high percolation rates, and located on flat to nearly level terrain. In California, 393.5 acres of the pipeline route are susceptible to water erosion; 1,029.8 acres are susceptible to wind erosion.

As mitigation, KRGT shall implement the erosion control measures detailed in its Upland Erosion Control, Revegetation, and Maintenance Plan (UECRM Plan) and its site-specific California Reclamation Plan (see CEQA Finding Nos. KRGT50/KRGT55). Incorporated into the UECRM Plan is a Lahontan RWQCB requirement that construction activities shall be conducted consistent with KRGT's Stormwater Pollution Prevention Plan, which includes California project-specific procedures for California's General Statewide Construction National Pollutant Discharge Elimination System Permit No. 99-08-DWQ. The California Reclamation Plan has been reviewed and approved by the CDFG.

To summarize, during construction KRGT shall install and maintain various erosion control measures. These include temporary slope breakers on slopes and temporary sediment barriers such as straw bales or silt fence across the right-of-way during construction at the base of slopes, adjacent to waterbodies and roadways, and along the edge of the right-of-way as necessary to prevent sediment from flowing off the right-of-way. KRGT shall install erosion control netting on waterbody banks, very steep slopes, and in drainages that may be

Exhibit C: CEQA Findings

susceptible to erosion. To protect topsoil from wind erosion, KRGT shall apply water and/or a water-based non-toxic, organic tackifier to the topsoil piles in all areas identified as highly susceptible to wind erosion and in other areas where soil conditions warrant. CEQA Finding Nos. KRGT45/KRGT48/KRGT79 and KRGT90/ARM6 provide additional discussion on the use of these measures and the potential impact on surface waters and the desert tortoise, respectively. KRGT shall implement reclamation efforts to enhance revegetation and address soils with poor revegetation potential. These efforts shall include topsoil segregation, recontouring, applying erosion control mulch on slopes, respreading cut vegetation or preserved rock mulch, imprinting the surface of the right-of-way, installing permanent slope breakers, and seeding with species adaptable to the climate.

The erosion control measures specified in KRGT's UECRM Plan and site-specific California Reclamation Plan would minimize the loss of soil resources due to the effects of wind, rain, and runoff through the installation of erosion control devices and the implementation of reclamation efforts to enhance revegetation.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT18

SOIL RESOURCES: Soil Compaction

Impact: Construction equipment operating and traveling on the construction right-of-way, especially during wet periods and on poorly drained soils, can compact the soil.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Construction equipment operating and traveling on the construction right-of-way, especially during wet periods and on poorly drained soils, can compact the soil. Soil compaction can also result from the storage of heavy spoil piles on certain types of soil for extended periods of time. Soil compaction destroys soil structure, reduces pore space and the moisture holding capacity of the soil, and increases runoff potential. If unmitigated, compaction results in soils with a reduced revegetation potential and an increased erosion hazard. The degree of compaction depends on the moisture content and texture of the soil. Wet soils with fine clay textures are the most susceptible to compaction. In California, 7.6 acres of the pipeline route are susceptible to compaction.

As mitigation, KRGT shall implement its UECRM Plan, Wetland and Waterbody Construction and Mitigation Procedures (WWCM Procedures), and site-specific California Reclamation Plan (see CEQA Finding Nos. KRGT50/KRGT55). To summarize, KRGT shall minimize compaction by adjusting construction schedules to avoid compaction-prone areas during short-term weather events. Rutting and compaction shall be avoided or minimized by operating heavy construction equipment on timber mats across minor tributaries, adjacent wetlands, and other areas as deemed necessary during construction. The CSLC/FERC monitors and KRGT environmental inspector (EI) will assess the potential for compaction given the soil type, hydrologic conditions, and current and predicted weather events. After construction, KRGT shall test disturbed soils for compaction using a cone penetrometer or other appropriate device in comparison with adjacent undisturbed soils. Should compaction occur, soils shall be plowed with a paratill, paraplow, or other deep tillage device to alleviate compaction.

KRGT's implementation of the mitigation measures identified in its UECRM Plan, WWCM Procedures, and site-specific California Reclamation Plan would avoid or minimize rutting and soil compaction and would alleviate compaction by the methods described above.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT19

SOIL RESOURCES: Mixing of Soil Horizons

Impact: In addition to erosion and compaction, construction activities such as grading, trenching, and backfilling can cause mixing of soil horizons.

Class: II

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Mixing of topsoil with subsoil, particularly in agricultural lands, leaves less productive soil in the root zone, which lowers soil fertility and the ability of disturbed areas to revegetate successfully. Another result of soil mixing and disturbance can be a change in appearance of the surface of disturbed soils when viewed in comparison with adjacent undisturbed soils. The visual contrast can be especially evident in areas where a desert varnish is present on rock/desert pavement.

As mitigation, to reduce the mixing of soil horizons on its construction right-of-way, KRGT shall segregate topsoil in accordance with its UECRM Plan and site-specific California Reclamation Plan (see CEQA Finding Nos. KRGT50/KRGT55). At a minimum, KRGT shall segregate topsoil in all annually cultivated or rotated agricultural lands, hay fields, residential areas, and other lands where the landowner requests that it occur. To ensure that all affected landowners are aware of their right to request topsoil segregation, KRGT sent letters to affected landowners requesting that they notify KRGT of their desire to have this treatment performed on their land.

In deep soils, KRGT shall segregate at least 12 inches of topsoil. Where shallow soils (with topsoil less than 12 inches deep), or soils with stony subsoil are encountered, KRGT shall make every effort to segregate the entire topsoil layer. KRGT shall segregate topsoil from the full work area (full right-of-way), the trench and subsoil storage area, or the trench and working side. The determination of where each topsoil segregation method shall be used shall be finalized before construction and included in the BLM's Construction, Operation, and Maintenance Plan (COM Plan), private landowner agreements, and other applicable permits. Topsoil shall be stockpiled separately from subsoil and the two stockpiles shall be replaced in the proper order during backfilling and final grading. Topsoil segregation treatments for rangeland and native habitats are described in more detail in CEQA Finding Nos. KRGT50/KRGT55; KRGT's UECRM Plan addresses topsoil segregation in residential and agricultural lands.

KRGT's implementation of topsoil segregation as specified in its UECRM Plan and site-specific California Reclamation Plan would avoid or minimize the mixing of topsoil with subsoil and aid in the successful revegetation of the construction right-of-way.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

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CALENDAR PAGE

001468

MINUTE PAGE

CEQA FINDING NO. KRGT20

SOIL RESOURCES: Stony or Shallow Bedrock Soils

Impact: Trenching, ripping, or blasting of stony or shallow bedrock soils can bring stones or rock fragments to the surface, which could interfere with agricultural practices and hinder restoration of the right-of-way.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Stony soils are identified as soils that have either a cobbly, stony, bouldery, gravelly, shaly, or slaty modifier to their textural class, or have greater than 5% (weight basis) of stones larger than 3 inches in the surface layer. The pipeline route in California crosses 45.6 acres of stony soils. Shallow soils are identified as soils where more resistant or hard bedrock occurs at depths of less than 7 feet. Approximately 271.8 acres of soils with shallow depths to bedrock would be crossed. Construction through these soils sometimes requires blasting and often results in excess rock being brought to the surface of the right-of-way. Other construction-related activities such as trenching and ripping could also bring stones or rock fragments to the surface.

As mitigation, in all actively cultivated or rotated cropland and improved pastures, KRGT shall minimize these impacts by segregating topsoil and removing (picking) excess rock from the top 12 inches of soil so that the size, density, and distribution of rock on the right-of-way are similar to adjacent undisturbed areas. On rangelands, KRGT anticipates rocks may be disposed of along the right-of-way by scattering them in a natural pattern, as permitted by the landowner or BLM. If caliche is found in the subsoil, small pieces shall be buried on the right-of-way with at least 24 inches of cover while larger pieces of caliche may be disposed of in an appropriate landfill.

KRGT's implementation of these measures would reduce the amount of stones or rock fragments brought to the surface during construction activities and, if these items are brought to the surface, would effectively distribute the excess rock along the right-of-way or dispose of it so that the rock does not interfere with agricultural practices or hinder restoration.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT21**

SOIL RESOURCES: Establishment of Noxious or Invasive Weeds

Impact: Construction can facilitate the establishment of noxious or invasive weeds where none or few existed. The clearing of existing perennial vegetation provides an opportunity for weed species to invade the right-of-way, and the movement of equipment along the right-of-way could transport weed seed and plant parts from one location to another.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The seriousness of the effects associated with the establishment of noxious or invasive weeds would depend on the prevalence of weeds in the area of the pipeline route, the type of weed and its method of reproduction and dispersal, the loss of potential natural barriers such as a diversity of vegetation, and the weed's effect on current or future land use. Invasive, non-native species identified along the pipeline route in California included Russian thistle, red brome, *Schismus* species (including Mediterranean grass), cheatgrass, Asian mustard, tansy mustard, and tamarisk. Of these, Russian thistle, Mediterranean grass, and Asian mustard were the most prevalent, occurring along the Goodsprings Loop between MPs 580.0 and 681.0.

As mitigation, to minimize and control the spread of noxious weeds, KRGT shall implement its Noxious Weed Plan (see CEQA Finding Nos. KRGT60 and ARM5) and its site-specific California Reclamation Plan (see CEQA Finding Nos. KRGT50/KRGT55).

KRGT's implementation of the mitigation measures identified in its revised Noxious Weed Plan and CDFG-approved site-specific California Reclamation Plan would avoid or minimize the establishment of noxious or invasive weeds where none or few existed, would limit the opportunity for weed species to invade the right-of-way, and would enhance restoration of native vegetation.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT22

SOIL RESOURCES: Soil Contamination

Impact: Contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment could have an impact on soils.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Lahontan RWQCB, Kern County Office of Emergency Services, San Bernardino Office of Emergency Services, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The potential impact on soils associated with contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment is expected to be minor because of the typically low frequency, volume, and extent of spills or leaks on pipeline construction projects. Implementation of KRGT's Spill Plan (see CEQA Finding No. KRGT27) shall reduce the impacts of soil contamination from spills or leaks to less than significant levels.

The most effective protection of soil resources from contamination is prevention, including training of construction personnel in the proper methods of handling and using potentially hazardous materials on site and in the type of incidents that could lead to such contamination. The second level of protection consists of the knowledge and means to contain and clean up materials and restore the site to its former condition in the event of an incident involving hazardous materials.

The Lahontan RWQCB reviewed KRGT's Spill Plan and provided comments. KRGT incorporated the suggested additions provided by the Lahontan RWQCB into its Spill Plan. KRGT would report all off-site releases of hazardous materials to either the San Bernardino or Kern County Office of Emergency Services depending on the location of the release.

KRGT's implementation of its Spill Plan would ensure that each of the above circumstances occurs, and ensure either the prevention of contamination or rapid and thorough cleanup of such contamination.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT24**
KRGT25

WATER RESOURCES: Groundwater
Trench Dewatering

Impacts: Construction of the pipeline and aboveground facilities could affect groundwater in several ways. Clearing, grading, trenching, and soil stockpiling activities could temporarily alter overland flow and groundwater recharge patterns. Near-surface soil compaction caused by heavy construction equipment/vehicles could reduce the soil's ability to absorb water, which could increase surface runoff and the potential for ponding.

Trenching and trench dewatering could cause temporary fluctuations in the elevation of the water table.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Lahontan RWQCB, CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

Large-scale aquifer systems formed in consolidated and unconsolidated sedimentary strata, unconsolidated basin-fill deposits, carbonate rock, and non-carbonate consolidated rocks underlie the project area. Water from these aquifers is generally suitable for most uses, except in natural discharge, geothermal areas, or areas impacted by industrial, mining, and agricultural activities. The major aquifer system that underlies the Kern River 2003 Expansion Project facilities in southeastern California is the Basin and Range Aquifer system. Locally, thin alluvial aquifers would also be crossed. Although groundwater is not typically withdrawn from these thin alluvial aquifers, they are important to the quality of surface waters and wetlands.

The basin-fill aquifers are the most commonly used aquifers in the Basin and Range Aquifer system. These aquifers exist in thick deposits of basin-fill consisting primarily of unconsolidated to moderately consolidated gravel, sand, silt, and clay, bounded by mountain ranges of relatively impermeable bedrock. The thickness of the basin-fill deposits is not well known but can range from 0 feet at basin margins to greater than 10,000 feet, with an average thickness of several thousand feet. Recharge of these aquifers is primarily derived from precipitation in the mountains and surrounding basins. Depth to groundwater can vary from several feet to 30 feet below the ground surface in valleys, to more than 30 feet below the ground surface in the mountain regions. The primary uses of groundwater from these aquifers are irrigation and public water supply.

Exhibit C: CEQA Findings

The duration and magnitude of the effects of the project on groundwater would be temporary and minor. Construction in any one area would be completed in a matter of weeks. As further mitigation, KRGT shall implement the measures identified for soils (see CEQA Finding Nos. KRGT17, KRGT18, and KRGT19), which would also reduce the impacts on groundwater resources.

Trench dewatering shall be conducted only in limited areas (primarily areas with a high water table), and the duration of these operations shall be short, typically several days or less. To further minimize impacts, KRGT shall discharge water from the trench into well-vegetated upland areas or properly constructed dewatering structures or filter bags, which would allow the water to infiltrate back into the soil and return to the underlying aquifer. Trench dewatering shall be conducted in compliance with applicable permits.

KRGT shall obtain a Construction Dewatering Permit from the Lahontan RWQCB. The Lahontan RWQCB would consider issuance of a permit to discharge intruded water from construction excavation to land or United States waters. To mitigate for soil erosion, KRGT shall implement its California Reclamation Plan. The California Reclamation Plan has been reviewed and approved by the CDFG.

The relatively short duration of construction; the restoration of topographic contours and drainage conditions as closely as feasible to their pre-construction condition (see CEQA Finding No. KRGT1); and KRGT's implementation of the measures to mitigate for soil erosion and compaction identified in its UECRM Plan, WWCM Procedures, and site-specific California Reclamation Plan would avoid or minimize the temporary alteration of overland flow and groundwater recharge patterns and ensure the continuing integrity of groundwater aquifers and their local usage. Similarly, the short duration of dewatering activities and allowing the water to infiltrate back into the soil and return to the underlying aquifer would minimize the effects of trench dewatering on groundwater resources.

SUMMARY: These impacts are found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT26

WATER RESOURCES: Groundwater Pathways

Impact: The alteration of the natural soil strata by trenching and other earthwork could eliminate some existing groundwater pathways or result in new migration pathways for groundwater, particularly in wetland areas.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Lahontan RWQCB, BLM, FERC)

FACTS SUPPORTING THE FINDING:

See the groundwater resources background discussion in CEQA Finding Nos. KRGT24/KRGT25.

As mitigation, following installation of the pipeline, KRGT shall backfill the trench with previously excavated materials, restoring confining soils breached during construction. KRGT shall place trench breakers (sand bags installed around the pipe) in the trench, on slopes, and at the base of slopes adjacent to wetlands and waterbodies as necessary to prevent groundwater migration along the pipeline/trench. Upon completion of construction, KRGT shall restore surface contours to ensure that the original overland flow and recharge patterns are reestablished.

Backfilling the trench with previously excavated materials and installing trench breakers would prevent the flow of groundwater along new migration pathways and restoring surface contours to pre-construction conditions would ensure existing groundwater pathways are maintained.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT27

WATER RESOURCES: Groundwater Contamination

Impact: Accidental spills or leaks of hazardous liquids could contaminate groundwater and affect aquifers.

Class: II

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Lahontan RWQCB, Kern County Office of Emergency Services, San Bernardino Office of Emergency Services, BLM, FERC)

FACTS SUPPORTING THE FINDING:

See the groundwater resources background discussion in CEQA Finding Nos. KRGT24/KRGT25.

Accidental spills or leaks of hazardous materials associated with equipment failures; the refueling or maintenance of vehicles; or the storage of fuel, oil, and other fluids during construction pose the greatest risk to groundwater resources. If not cleaned up, contaminated soils could continue to leach and add pollutants to the groundwater long after a spill has occurred. Impacts associated with spills or leaks of hazardous liquids could be avoided or minimized by restricting the location of refueling and storage facilities and by requiring cleanup in the event of a spill or leak.

As mitigation, KRGT has prepared a Spill Plan to address preventive and mitigative measures that shall be used to minimize the potential impact of a hazardous spill during construction of the project facilities. Some pertinent measures in KRGT's Spill Plan include:

- training of contractor personnel on the contents and requirements of the Spill Plan;
- a requirement for routine inspections and maintenance of equipment to prevent accidental spills or leaks;
- specifications for the storage, proper labeling, and secondary containment of oil and other hazardous liquids in containers;
- a requirement for daily inspection of containers for leaks and deterioration;
- a requirement to replace leaky or deteriorated containers immediately after an inadequate condition is detected;
- a requirement that vehicle-mounted tanks be equipped with flame/spark arrestors or vents to prevent self ignition;

Exhibit C: CEQA Findings

- specifications that prevent or restrict the transfer of liquids or the refueling of equipment within 100 feet of waterbodies and wetlands, 200 feet of water supply wells, and 400 feet of municipal or community wells or protected wellhead or watershed areas;
- a requirement that service vehicles used to transport lubricants and fuel be equipped with emergency spill response kits, chemical response kits, and other equipment such as shovels, brooms, polyethylene sheeting, and fire protection equipment;
- notification, response, and cleanup procedures in the event of a spill;
- the names and telephone numbers of state and local officials to be contacted in the event of a spill; and
- state reporting requirements (*i.e.*, reportable quantity).

The most effective protection of groundwater resources from contamination is prevention, including training of construction personnel in the proper methods of handling and using potentially hazardous materials on site and in the type of incidents that could lead to such contamination. The second level of protection consists of the knowledge and means to contain and clean up materials and restore the site to its former condition in the event of an incident involving hazardous materials.

The Lahontan RWQCB reviewed KRGT's Spill Plan and provided comments. KRGT incorporated the suggested additions provided by the Lahontan RWQCB into its Spill Plan. KRGT would report all off-site releases of hazardous materials to either the San Bernardino or Kern County Office of Emergency Services depending on the location of the release.

KRGT's implementation of its Spill Plan would ensure that each of the above circumstances occurs, and ensure either the prevention of contamination or rapid and thorough cleanup of such contamination.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT28

WATER RESOURCES: Water Supply Wells/Springs

Impact: Construction activities such as trenching, dewatering, and blasting near water supply wells or springs could cause temporary damage or changes in water levels and turbidity.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Lahontan RWQCB, Kern County Environmental Health Services Department, San Bernardino County Environmental Health Services Department, BLM, FERC)

FACTS SUPPORTING THE FINDING:

A total of 158 water supply wells or springs have been identified as potentially occurring within 200 feet of the construction right-of-way in California. As many as 62 of these water supply wells or springs are in locations where blasting for pipeline placement may be necessary.

KRGT shall conduct final identification and confirmation of groundwater resources through final field surveys and contacts with local landowners within the project corridor before construction. These surveys shall also verify water wells within groundwater source protection areas crossed by the pipeline route.

To determine whether pipeline construction activities have affected groundwater quality or yield, KRGT shall implement its Groundwater Monitoring Plan. With landowner permission, wells and springs within 150 feet of the construction right-of-way shall be sampled before construction to obtain water quality and yield data for each sampling point. Any isolated springs that sustain a riparian community and/or provide a wildlife benefit shall be delineated using current U.S. Army Corps of Engineers (COE) methodology. Sampling of water wells or springs outside the 150-foot monitoring area shall be done at landowner request.

Following construction, if blasting or other construction activities have diminished a water supply, KRGT shall arrange for a temporary water supply through a local supplier and make the necessary repairs to the affected water well, or install another comparable well. KRGT shall obtain permits from the Lahontan RWQCB and/or the Kern County or San Bernardino County Environmental Health Services Departments before repairing or replacing any water wells and for any temporary domestic water supplies. Specific mitigation measures shall be coordinated with the landowner in order to meet the landowner's specific needs. KRGT shall conduct biological monitoring at isolated springs to determine any adverse impact on the riparian community or diminishment of its value to wildlife. Post-construction well monitoring shall be conducted as requested by the well owner or for disputed situations.

Within 30 days of placing the facilities in-service, KRG T shall file a report with the FERC and the CSLC describing any complaints received from landowners about water quality or yield, the results of the biological monitoring at any isolated springs, and the remedial action taken to address concerns.

KRG T's adherence to its Groundwater Monitoring Plan would evaluate whether a well was disturbed during construction of the project. If analysis indicates that a well was affected by construction of the project, KRG T's commitment to arrange for a temporary water supply and make the necessary repairs or install another comparable well would guarantee that sufficient water supplies would be maintained. Biological monitoring at isolated springs and any necessary remedial action taken by KRG T, which would require approval from the CSLC and the FERC, would reduce to a level of insignificance any adverse impacts on the riparian community or diminishment of its value to wildlife that occur as a result of construction.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT30

WATER RESOURCES: Groundwater and/or Soil Contamination Sites

Impact: Two potential sources of groundwater and/or soil contamination have been identified near the proposed pipeline facilities in California.

Class: II

Finding:

- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Lahontan RWQCB, Kern County Office of Emergency Services, San Bernardino Office of Emergency Services, BLM, EPA, FERC)

FACTS SUPPORTING THE FINDING:

Along the Daggett Loop in California, a Comprehensive Environmental Response, Compensation, and Liability Act Area of Concern (CAOC) 7 site was identified at the Barstow Marine Corps Logistics Base 1.19 miles north of the route between MPs 4.0 and 7.0. Contaminants of concern at the CAOC 7 site include trichloroethene and its byproducts in soil and groundwater. Groundwater monitoring and site remediation is ongoing. Groundwater generally occurs at 180 feet below the ground surface.

The Boron Sanitary Landfill is currently operating about 0.2 mile south of the Daggett Loop near MP 49.0. The landfill is located in the area of the former Boron Burn Dump where trash was burned between about 1955 and 1973. It is approximately 6 acres in size and located 0.5 mile south of Twenty Mule Team Road.

Although contaminated soils and/or groundwater leaching from these sites could be encountered, it is unlikely based on the distance of the pipeline route from the sites and the depth of the underlying groundwater associated with the individual sites. However, if contaminated groundwater and/or sediments (based on evidence of land-filled debris, subsoil discoloration, or odor) are encountered along the pipeline route or at aboveground facility sites during construction, KRGT shall implement the following steps:

- halt all construction work in the immediate vicinity of areas where hazardous or unknown wastes are encountered;
- evacuate all construction, oversight, and observing personnel to a road-accessible, up-wind location until the types and levels of potential contamination can be verified;
- notify KRGT's Chief Inspector, EI, CSLC/FERC monitors, and the BLM's Authorized Officer. Following consultation with onsite personnel and the BLM hazardous materials coordinator, the EI, in conjunction with the CSLC/FERC monitor, shall be responsible for implementing follow-up actions, including mobilizing emergency response personnel and coordinating with the EPA, or state or local agencies such as the San Bernardino and Kern County Office of Emergency Services.

Exhibit C: CEQA Findings

- notify and mobilize an emergency response contractor if an immediate or imminent threat to human health or the environment exists;
- if the BLM Authorized Officer or his/her designee has determined that an immediate or imminent threat to human health or the environment does not exist, or has been abated, KRGT or a qualified subcontractor shall collect representative samples of the waste and surrounding materials for laboratory analysis; and
- remove and properly dispose of contaminated materials, if feasible. If the extent of contamination is too widespread for economical removal, or if disposal options are technically infeasible or cost-prohibitive, backfilling of that portion of the trench shall be suspended until appropriate mitigation options are approved by the FERC and the CSLC.

Implementation of KRGT's proposed mitigation measures, including halting construction if contaminated groundwater and/or sediments are encountered along the pipeline route or at aboveground facility sites during construction, would avoid or minimize the potential effects associated with contaminated sites.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT32**

WATER RESOURCES: Waterbodies

Impact: Clearing and grading of streambanks, in-stream blasting (if required), in-stream trenching, trench dewatering, and backfilling could affect waterbodies through modification of aquatic habitat, increased sedimentation, increased turbidity, decreased dissolved oxygen concentrations, stream warming, releases of chemical and nutrient pollutants from sediments, or introduction of chemical contamination such as fuel and lubricants.

Class: II

- Finding:
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, Lahontan RWQCB, BLM, COE, FERC)

FACTS SUPPORTING THE FINDING:

No perennial waterbodies or wetlands would be crossed in California. The project would require 32 intermittent waterbody crossings. One intermittent waterbody, the Mojave River, would be crossed twice (MP 676.7 along the Goodsprings Loop and MP 18.0 along the Daggett Loop). The Mojave River measures greater than 100 feet between its recognizable riverbanks; however, at the proposed crossing locations, the Mojave River is typically a broad, dry wash that includes several smaller, braided washes with no riparian vegetation. In those portions of the Mojave River that have surface flow, the river is classified as having several beneficial uses including municipal/domestic supply, agriculture, groundwater recharge, water recreation, commercial and sport fishing, warm and cold freshwater habitat, and wildlife habitat. The Mojave River is also listed as an impaired waterbody due to organic loads.

KRGT shall minimize impacts on surface waters by implementing the waterbody construction and restoration measures contained in its WWCM Procedures. The WWCM Procedures are applicable to any stream or river with perceptible flow at the time of crossing and other permanent waterbodies such as ponds and lakes.

Some of the relevant mitigation measures pertaining to waterbody crossings specified in KRGT's WWCM Procedures include:

- locating all extra work areas at least 50 feet away from waterbody boundaries in non-cultivated areas where topographic conditions permit, otherwise extra work areas shall be a minimum of 10 feet from the waterbody;
- limiting clearing of vegetation between extra work areas and the edge of the waterbody to preserve riparian vegetation;
- maintaining adequate flow rates throughout construction to protect aquatic life and prevent the interruption of existing downstream uses;

Exhibit C: CEQA Findings

- restricting storage and refueling activities near surface waters;
- restricting spoil placement near surface waters;
- limiting use of equipment operating in the waterbody to that needed to construct the crossing;
- requiring construction across waterbodies to be completed as quickly as possible and during the windows specified in the WWCM Procedures or required by applicable permits;
- developing and submitting to the FERC site-specific construction procedures for each waterbody greater than 100 feet wide at the crossing location (major waterbody);
- requiring temporary erosion and sediment control measures to be installed across the entire width of the construction right-of-way after clearing and before ground disturbance;
- requiring maintenance of temporary erosion and sediment control measures throughout construction until streambanks and adjacent upland areas are stabilized;
- requiring bank stabilization and reestablishment of bed and bank contours and riparian vegetation after construction; and
- limiting post-construction maintenance of vegetated buffer strips adjacent to streams.

KRGT shall also obtain a waterbody crossing permit from the COE under Section 404 of the Clean Water Act (CWA), its state water quality certification from the Lahontan RWQCB under Section 401 of the CWA, and its Streambed Alteration Agreement (SAA) from the CDFG. These permits could include additional mitigation measures.

KRGT's adherence to the provisions of its WWCM Procedures and other permit requirements would ensure protection of waterbodies through implementation of several measures, including limiting vegetation clearing, completing construction as quickly as possible, and maintaining erosion control measures throughout construction until the streambanks and adjacent upland areas are stabilized.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

The Lahontan RWQCB reviewed KRGT's Spill Plan and provided comments. KRGT incorporated the suggested additions provided by the Lahontan RWQCB into its Spill Plan. KRGT would report all off-site releases of hazardous materials to either the San Bernardino or Kern County Office of Emergency Services depending on the location of the release.

KRGT's implementation of its Spill Plan would ensure that each of the above circumstances occurs, and ensure either the prevention of contamination or rapid and thorough cleanup of such contamination.

SUMMARY: These impacts are found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT34**
KRGT38

WATER RESOURCES: Dry Washes/Mojave River

Impacts: Impacts on dry washes would be limited to temporary alteration of beds and banks, loss of wildlife habitat, and possibly increased sediment load during initial storm events following construction.

The Mojave River would be crossed twice by the proposed project.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, Lahontan RWQCB, BLM, COE, FERC)

FACTS SUPPORTING THE FINDING:

See the waterbody background discussion in CEQA Finding No. KRGT32.

Although neither surface flow nor a defined channel is evident at either of the two crossing locations of the Mojave River (MP 676.7 of the Goodsprings Loop and MP 18.0 of the Daggett Loop), it is classified as an intermittent waterbody. The area consists of a broad, dry wash that includes several smaller, braided washes with no riparian vegetation at either of the crossing locations.

KRGT proposes to install the pipeline across the Mojave River using the open-cut method in accordance with its waterbody crossing permits. KRGT shall restore the areas to pre-construction contours following construction.

Because the Mojave River would be dry at the crossing locations and KRGT would restore the areas to pre-construction contours following construction, the installation of the pipeline would not result in significant impact on the waterbody.

The majority of other waterbodies that would be crossed by the pipeline are intermittent washes, creeks, and canals that are expected to be dry at the time of construction (dry washes). These waterbodies do not typically support fisheries, or provide critical aquatic habitat or migratory passage for aquatic organisms. KRGT proposes to cross dry washes using conventional upland construction methods.

KRGT shall avoid construction in intermittent waterbodies during periods of high flow and monitor weather conditions up to 2 days in advance of waterbody crossings to minimize the potential for construction across intermittent waterbodies to occur during runoff events. If perceptible flow conditions develop during construction, KRGT shall:

Exhibit C: CEQA Findings

- remove all equipment from within the streambanks;
- restore the banks to their original shape (as close as possible) to keep the flow within the banks of the stream by utilizing soil, straw bales, silt fence, or other means deemed appropriate by regulatory agencies;
- continually monitor the banks where the crossing was attempted and restore any banks that are eroded by flow; and
- defer construction for hours or days to allow flow to subside before resuming work.

If it becomes apparent that the waterbody may continue flowing for weeks or months, KRGT shall reenter the waterbody using the same methods proposed for perennial waterbodies.

KRGT shall adhere to the provisions of its WWCM Procedures and its SAA from the CDFG. If perceptible flow is present during construction, KRGT's implementation of these provisions and the mitigation measures described above would ensure that adequate precautions are taken to protect these features.

SUMMARY: These impacts are found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT36

WATER RESOURCES: Revegetation of Waterbody Banks

Impact: Revegetation of waterbody banks following construction could be slow due to low annual rainfall or hindered by use of riprap or gabions.

Class: II

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, Lahontan RWQCB, BLM, COE, FERC)

FACTS SUPPORTING THE FINDING:

See the waterbody background discussion in CEQA Finding No. KRGT32.

During restoration of waterbody banks, KRGT shall use natural erosion control techniques (e.g., fiber mats, seeding, plantings) wherever feasible. KRGT shall minimize the use of riprap or gabions in accordance with its WWCM Procedures (see CEQA Finding No. KRGT32) and as stipulated in its waterbody crossing permits. KRGT shall only use stone riprap or gabions as a restoration measure on steep banks at perennial and intermittent waterbody crossings where erosion cannot be effectively controlled with native materials or a combination of erosion control matting and vegetation.

KRGT's use of natural erosion control techniques wherever feasible and adherence to its WWCM Procedures and measures specified in KRGT's SAA from the CDFG would ensure that revegetation of waterbody banks following construction is accomplished.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT41**
KRGT81

WATER RESOURCES: In-stream Blasting

Impact: All of the waterbodies crossed by the project in California are expected to be dry during construction of the crossing. However, if water is present and in the unlikely event it is required, blasting could injure or kill aquatic organisms, displace organisms during blast-hole drilling operations, and temporarily increase stream turbidity.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, Lahontan RWQCB, BLM, COE, FERC)

FACTS SUPPORTING THE FINDING:

See background discussions in CEQA Finding Nos. KRGT2/ARM1 and KRGT32.

Based on information obtained during construction of KRGT's existing pipeline, KRGT does not anticipate that blasting would be necessary to remove bedrock during in-stream construction. If blasting is required, KRGT shall implement its Blasting Plan (see CEQA Finding No. KRGT2/ARM1. KRGT's Blasting Plan includes techniques such as scare charges or banging on a piece of pipe before the blast to scare aquatic organisms from the blast area before blasting is conducted. It is anticipated that the preparation of the rock for blasting (*i.e.*, drilling shot holes) would cause enough disturbance to displace most aquatic organisms from the immediate vicinity of the blast. Immediately following blasting, KRGT shall remove shot rock that impedes stream flow.

KRGT's implementation of its Blasting Plan and the techniques to scare aquatic organisms from the blast area would adequately control in-stream blasting operations and avoid injuring or killing aquatic organisms, displacing organisms during blast-hole drilling operations, and temporarily increasing stream turbidity.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT42

WATER RESOURCES: Streambed Scour

- Impact: Streambed scour and bank erosion could expose the pipeline.
- Class: II
- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, Lahontan RWQCB, BLM, COE, FERC)

FACTS SUPPORTING THE FINDING:

See the waterbody background discussion in CEQA Finding No. KRGT32.

Based on information collected during construction of the existing KRGT pipeline, locations have been identified where potential scour could expose the proposed pipeline. Additionally, the pipeline route in California would cross numerous ephemeral well-defined channels as well as alluvial fans where there are no well-defined channels, but where channels could be cut by flows resulting from runoff events in upstream watersheds. In these situations, the integrity of the pipeline requires that it be buried below the expected depth of channel scour and degradation. In the lateral direction, the pipeline must also be buried at a depth sufficient to protect it from the effects of lateral erosion by the channel banks. Based on the results of the scour calculations performed during construction of the existing KRGT pipeline, three locations in California (the Mojave River at MP 676.7 of the Goodsprings Loop, Daggett Wash at MP 3.5 of the Daggett Loop, and the Mojave River at MP 18.2 of the Daggett Loop) have the potential for scour that may require deeper than normal pipeline burial depth at the crossing.

KRGT shall implement one or a combination of the following measures to protect against scour and bank erosion at these locations: (1) burial below scour depth; (2) use of concrete-coated pipe or set-on concrete weights; (3) use of rock shield around the pipe; and/or (4) installation of erosion control measures.

KRGT shall use natural erosion control techniques (e.g., fiber mats, seeding, plantings) wherever feasible. KRGT shall minimize the use of riprap or gabions in accordance with its WWCM Procedures (see CEQA Finding No. KRGT32) and as stipulated in its waterbody crossing permits. KRGT shall only use stone riprap or gabions as a restoration measure on steep banks at perennial and intermittent waterbody crossings where erosion cannot be effectively controlled with native materials or a combination of erosion control matting and vegetation.

By implementing one or a combination of these measures, KRGT would minimize the potential for exposure of the pipeline due to scouring and bank erosion.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT45**
KRGT48
KRGT79

WATER RESOURCES: Hydrostatic Test Water Appropriation
Water Withdrawals for Dust Control
Dust Control

Impacts: The appropriation of large volumes of hydrostatic test water from surface water sources could temporarily affect the recreational and biological uses of the resource if the diversions constitute a large percentage of the source's total flow or volume. The diversion of large volumes of water from waterbodies could also result in the temporary loss of habitat, changes in water temperature and dissolved oxygen levels, and entrainment or impingement of fish or other aquatic organisms. The withdrawal of large amounts of water from private or public water supply wells could exceed the delivery capacity of the system or well.

KRGT's use of water to mitigate losses of topsoil due to wind erosion and to control dust generated by construction activities could temporarily affect beneficial uses and water quality if the diversions constitute a large percentage of the source's total flow or volume.

The impacts of the water withdrawals for dust control would be the same as those for hydrostatic test water withdrawals.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Mojave Water Agency, BLM, FERC)

FACTS SUPPORTING THE FINDING:

KRGT would verify the integrity of the pipeline before placing it into service by conducting a series of hydrostatic tests. These tests involve filling the pipeline with water, pressurizing it, and then checking for pressure losses due to pipeline leakage. KRGT has identified the Mojave Water Agency, which is the governmental body with primary responsibility for the management of water resources over a 4,900-square-mile area of the Mojave Desert, as the source of water in California for both hydrostatic testing and to implement dust control measures. KRGT shall limit the rate of water withdrawal from the Mojave Water Agency so as not to exceed the delivery capacity of the system. KRGT's use of the Mojave Water Agency would ensure that there would be no impact on ground and surface water resources and that the rate of water withdrawn would not exceed the delivery capacity of the system.

SUMMARY: These impacts are found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT50**
KRGT55

VEGETATION RESOURCES: Vegetation Removal/California Reclamation Plan

Impacts: The primary impact of the project on vegetation would be the cutting, clearing, and/or removal of existing vegetation within the construction work area. The degree of impact would depend on the type and amount of vegetation affected, the rate at which the vegetation would regenerate after construction, and the frequency of vegetation maintenance by the pipeline company during operation. Secondary effects associated with disturbances to vegetation would include increased soil erosion, increased potential for the introduction and establishment of invasive weedy species, and a local reduction in available wildlife habitat.

The cutting, clearing, and/or removal of existing vegetation within the construction work area in California.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The primary vegetation community crossed by the proposed route in California is Mojave creosote-bursage. The Mojave creosote-bursage community is dominated by *Larrea tridentata* (creosote bush) and *Ambrosia dumosa* (white bursage) and is the most common association of plants in the Mojave Desert, covering as much as 70% of the desert. This community occurs primarily on lower portions of valley floors and bajadas (geologic formations created by the lateral merging and blending of a series of alluvial fans). Other shrubs commonly occurring with these species include *Menodora spinescens* (spiny menodora), *Lycium spp.* (wolfberries), *Ephedra viridis* (Mormon tea), *Krameria spp.* (ratany), *Acamptopappus* (goldenhead), *Dalea mollissima* (dalea), and *Psilostrophe cooperi* (yellow paper daisy). Yucca and cacti are also common within the Mojave creosote-bursage community.

KRGT has developed three strategies to minimize and mitigate impacts on vegetation. The first strategy is avoidance. To reduce impacts on vegetation, KRGT designed its route to minimize areas of dense vegetation and sensitive species. About 98% of the pipeline route in California is within or adjacent to existing rights-of-way.

The second strategy that KRGT shall employ is the permanent preservation of a significant acreage of desert vegetation as part of its efforts to compensate for impacts on desert tortoise habitat (see CEQA Finding No. KRGT90/ARM6).

The third strategy that KRGT shall employ as mitigation is the implementation of its site-specific Reclamation Plans. The California Reclamation Plan, which was reviewed and approved by the CDFG, prescribes a variety of reclamation treatments to reduce or mitigate impacts on vegetation, including those listed below.

KRGT shall segregate topsoil to a depth of 4 to 6 inches except where soils have a high content of cobble, rocks, or boulders. Where there is little plant growth, vegetation shall be crushed rather than bladed. KRGT shall dispose of rock brought to the surface during trenching operations in agricultural areas at an approved area. In non-agricultural areas, KRGT may distribute excess rock on the surface in a manner that matches natural conditions or use it to create berms as off-highway vehicle (OHV) control. Where caliche material is present in the subsoil, KRGT shall bury the material within the subsoil or remove it to an appropriate landfill. KRGT's remediation efforts in California shall include seeding in all disturbed areas of California. A portion of the seed shall be pelletized to add macrobiotic components developed specifically for Mojave Desert habitats. At dry washes, KRGT shall minimize the width of the native area to be disturbed and the amount of vegetation removed, topsoil segregation and imprinting shall be omitted, the depth of the pipeline shall be increased to a minimum of 5 feet, and banks shall be armored with riprap as necessary.

No desert wash species (e.g., desert willow, smoke trees, or mesquite) have been identified within the construction work area; however, if it is determined that any of these species would be affected by construction, KRGT shall notify the CDFG before disturbance and the CDFG shall establish mitigation for the affected species. Four different seed mixes were developed specifically for California in consultation with the BLM. All seed shall be locally collected native species purchased from commercial vendors. KRGT shall submit seed bag tags to the CSLC, CDFG, FERC, and BLM confirming the species and origin of the seed. The seed shall be tested or certified to ensure compliance with federal and state seed requirements before use. Certificates of the seed analysis shall also be provided to the CSLC, CDFG, FERC, and BLM.

Several state-listed plant species have been identified during surveys within the right-of-way in California. KRGT has developed plans in consultation with the BLM and the CDFG to protect listed species within the project area. KRGT shall:

- minimize the areas of disturbance;
- flag or fence sensitive populations adjacent to but outside the construction work area;
- monitor the segregation of topsoil; and
- collect and plant seed onto the right-of-way after construction.

All succulent species within the disturbed areas in California shall be salvaged. Fifty percent of the succulents to be salvaged, generally the individuals considered by KRGT to be too large or too small to be feasibly transplanted, shall be moved to a BLM nursery. The remaining 50% of salvaged succulents shall be transplanted back onto the right-of-way whether alive or dead to aid revegetation efforts and to provide OHV control. At the request of the BLM, all transplanted Joshua trees shall be treated with Superthrive™ root hormone to promote root development. Only very large, multi-branched Joshua trees that are not feasible to plant upright would be laid down within the right-of-way. Intact, large shrubs with root crowns removed from areas of grading shall be windrowed at the edge of the right-of-way and transplanted back onto the right-of-way at road crossings and visually sensitive areas during restoration. The primary benefits of using these shrubs would be as a form of vertical mulch, enhancement of visually sensitive areas, and OHV deterrence; however, some may survive. All high visibility road crossings and traveled wash crossings shall receive visual mitigation treatments.

Because of the difficulty in handling larger specimens, Joshua trees over 6 to 8 feet in height and cholla cactus over 3 feet in height would not be transplanted but shall be moved to a BLM nursery. Smaller species, such as button cactus and agave less than 6 inches in height, would be considered too small to feasibly transplant and shall be moved to a BLM nursery. The transplants that do not survive would also be beneficial to the reclamation process as vertical mulch. Vertical mulching would encourage the recruitment of native seeds, provide forage and cover habitat for native species, discourage colonization by invasive or exotic species, and reduce OHV use along the right-of-way. The processes of identification, removal, storage, and transplanting shall be under the direction of a contracted reclamation specialist. KRGT shall perform an accounting of all succulents to be disturbed along the right-of-way, to document the plants' treatment (*i.e.*, as either transplants or as vertical mulch). KRGT shall provide a summary of this information to the CDFG, FERC, and BLM for review.

In desert tortoise critical habitat areas, cattle grazing shall be controlled or eliminated from the right-of-way. Where necessary, Permeon™ shall be applied to site-specific areas to enhance the natural desert varnish. Seed species used for these areas shall be the same as proposed for the Mojave Desert in California and shall be collected within or in the vicinity of desert tortoise critical habitat areas. Seed bag tags shall be saved and submitted to the jurisdictional agencies within 30 days after completion of seeding. Signs shall be installed at locations identified by the BLM or the FWS to deter OHV use in all restored areas of desert tortoise critical habitat (see CEQA Finding No. KRGT153).

For desert habitats, KRGT has adopted qualitative and quantitative procedures and protocols from the BLM's *Draft Restoration Success Standards and Monitoring Plan*. In addition to percent cover, qualitative monitoring in the first 5 years following construction shall assess soil erosion, natural recruitment of native plant species, exotic plant species, and animal use. Additional quantitative monitoring shall occur in the sixth year following construction. In those areas within California, restoration shall be considered successful if in the sixth year following construction, cover, density, and the richness of native perennial vegetation is equal to or exceeds 70% for these parameters in undisturbed reference areas. Annual monitoring reports shall be provided to the CSLC, CDFG, FERC, and BLM.

Where the results of the annual monitoring indicate that the success criteria are not being met, remedial action shall be taken. Areas where restoration is noted as being unsuccessful (*e.g.*, areas of active erosion, poor vegetative cover, or noxious weed infestation) shall be identified by milepost. These locations and any remedial actions taken shall be documented in reports that shall be provided to the CSLC, BLM, and FERC within 3 months following the inspections. Remedial actions shall include additional seedbed preparation, temporary grazing exclusion fencing, reseeding, and replanting. The treatments employed shall be determined on a site-specific basis and in consultation with the landowner or the BLM and the applicable resource management agency. Should the success criteria not be met by the end of the monitoring period, KRGT shall coordinate with the landowner or the BLM, the applicable resource management agency, and the CSLC to take corrective actions as appropriate. Coordination with these agencies could include extending the monitoring period until success is obtained.

Other general measures identified in KRGT's California Reclamation Plan include:

- In areas where topsoil segregation would not be conducted (*i.e.*, the working side of the right-of-way where the trench plus spoilsite topsoil segregation method is used, the spoilsite of the right-of-way where the trench plus working side method is used, and the entire right-of-way width in areas where no topsoil segregation is conducted), vegetation shall be mowed, scalped, or crushed, leaving plant root systems intact. Native vegetation removed shall be retained for use as mulch during restoration activities. The

remaining plant root systems would aid in holding the undisturbed topsoil in place, aid in moisture retention, help to retain organic matter within the soil, and potentially provide a seed source. The width of surface disturbance shall be kept to a minimum in order to maximize the benefit of this treatment. This treatment would aid in minimizing soil disturbance, which would improve the restoration potential of disturbed areas.

- Surface rock, where present and appropriate for restoration activities, shall be conserved during construction and spread over the topsoil during restoration to visually blend disturbed and undisturbed areas or for erosion control. In desert areas where a surface varnish is present, large rocks and boulders shall be placed to face the varnish side upwards. Rock mulching would aid in stabilizing disturbed soils, reducing erosion, and minimizing visual impacts. Stockpiled surface rock may also be used as mulch where appropriate for the terrain or habitat type.
- Severely compacted soils (except sandy soils) shall be scarified to a depth of 6 inches. The need for scarification shall be determined by an EI, in conjunction with a CSLC/FERC monitor. This treatment would mitigate soil compaction caused by construction.
- Recontouring shall occur in all treatment areas. The contours shall be reshaped following backfilling of the trench and replacement of the topsoil to restore pre-construction contours and natural drainage patterns. This treatment would reduce erosion and minimize visual impacts.
- Imprinting of soils shall be conducted in most areas. Following the respreading of topsoil and mulching, the disturbed area shall be driven over by an imprinting device such as a sheepsfoot (or other equipment). Small depressions shall be made in the soil surface in a non-directional pattern. Exceptions to this treatment would be areas where imprinting is not deemed beneficial or in areas inaccessible to equipment. Examples of areas where imprinting would not be conducted include dry washes and steeply sloped banks. Imprinting would aid in the collection of water, windblown seeds, and organic matter and would help to firm the soil surface and reduce the potential for wind and water erosion.
- Specific areas designated as visually sensitive shall receive additional treatments to mitigate visual impacts. In the desert areas, transplanted species shall be limited to salvaged Joshua trees, cactus, agave, and yucca. In these areas, an emphasis shall be placed on preserving the existing rock mulch and ensuring the desert varnish is exposed. The different treatments shall be employed on a site-specific basis in consideration of the visual classification, and the specific requirements of the BLM or the landowner. KRGT's stated goal is to return the land to its predisturbance appearance within 5 years. Restoration of the Mojave Desert areas to predisturbance appearance, however, would likely take a longer time.
- Measures shall be taken to protect the right-of-way restoration efforts through natural and constructed barriers and signage where past problems have occurred on the pipeline.

Implementation of KRGT's site-specific California Reclamation Plan would minimize impacts on most vegetation communities in California and would ensure that successful restoration of the right-of-way is accomplished. Vegetation communities of special concern or value are discussed in CEQA Finding No. KRGT57.

SUMMARY: This impact is found to be less than significant following mitigation (Class III)

CEQA FINDING NO. **KRGT57**

VEGETATION RESOURCES: Yucca, Cactus, and Agave

Impact: Pipeline construction would result in a long-term reduction or alteration of special concern vegetation, particularly areas of native yucca, cactus, and agave species along the Goodsprings and Daggett Loops in California.

Class: I

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)
- c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIS/EIR.

FACTS SUPPORTING THE FINDING:

See the vegetation background discussion in CEQA Finding Nos. KRGT50 /KRGT55.

Although not considered threatened or endangered, the dominant species within yucca, cactus, and agave communities are generally protected under various Desert Native Plant Acts in the states crossed by the project, including California. Field surveys identified areas of native yucca, cactus, and agave species along the Goodsprings and Daggett Loops.

The genus *Yucca* includes about 40 species, most of which occur in the southwestern United States and Mexico. Three species of yuccas were identified along the proposed route during field surveys in 2001: *Yucca schidigera* (Mojave yucca), *Yucca baccata* (banana yucca), and *Yucca brevifolia* (Joshua trees). These yucca species are a component of the other recognized desert shrub communities, including Mojave creosote bush scrub, blackbush, and Mojave mixed scrub. Based on surveys, approximately 60 miles of the proposed pipeline route in California crosses desert shrub communities with yuccas present and 53 miles with Joshua trees present. In general, yuccas were absent from the previously disturbed right-of-way.

As with the yucca species, cactus and agave are components of other desert shrub communities. Cacti were identified in varying densities along 128 miles of the pipeline route that crosses the Mojave Desert in California. Common cactus species observed include *Opuntia basilaris* (beavertail cactus), *Opuntia echinocarpa*, *O. acanthocarpa* var. *coloradensis*, *O. ramos* (cholla), *Ferocactus cylindraceus* (barrel cactus), *Echinocereus engelmannii* (hedgehog), and *Echinocactus polycephalus* (clustered barrel cactus). A population of high-density *Agave utahensis* (Clark Mountain agave) was noted near MP 592.0 along the Goodsprings Loop. As

with the yuccas, cacti and agave were mostly absent from the areas that had been disturbed by the previous pipeline construction.

KRGT shall implement specific conservation measures for yucca, cactus, and agave communities. These conservation measures include pre-construction identification of species suitable for salvage within the construction right-of-way and temporary workspace areas. Salvagable plants shall be dug up and temporarily stored in non-construction areas. Following construction, KRGT shall transplant these plants back onto the right-of-way. The discussions of the measures common to all of the Reclamation Plans and the site-specific California Reclamation Plan contain a more detailed description of transplanting methods (see CEQA Finding Nos. KRGT50/KRGT55). Survival rates for the large plants, particularly Joshua trees, can be low; however, it is anticipated that some plants would survive. KRGT shall implement additional treatments to improve the success of transplanting Joshua trees, such as the use of DriWater™ time release gels and the use of Superthrive™ rooting hormone. Additionally, the plants that do not survive would be beneficial to the reclamation process as vertical mulch. Vertical mulching would encourage the recruitment of native seeds, provide forage and cover habitat for native species, discourage colonization by invasive or exotic species, and reduce OHV use along the right-of-way. In California, all succulents within the disturbed area shall be salvaged. Fifty percent of the succulents to be salvaged, generally the individuals considered by KRGT to be too large or too small to be feasibly transplanted, shall be moved to a BLM nursery with the remaining 50% transplanted back onto the right-of-way.

KRGT shall implement its revised Noxious Weed Plan to control noxious weeds along the construction right-of-way. Controlling noxious weeds would reduce the likelihood that weed infestations would out-compete with the yucca, cactus, and agave communities, prohibiting the successful reclamation of the construction right-of-way (see CEQA Finding Nos. KRGT60 and ARM5).

The mitigation measures for yucca, cactus, and agave communities as described in the California Reclamation Plan would reduce impacts on these species. In addition, KRGT shall adopt the qualitative and quantitative procedures and protocols from the BLM's *Draft Restoration Success Standards and Monitoring Plan*. However, based on the low survival rate of these communities after the previous construction and the uncertainty of the success of KRGT's proposed transplantation efforts for these species, a long-term reduction in special concern vegetation communities could occur. Therefore, the potential impact on these species could be significant. Approval of the project is subject to a Statement of Overriding Considerations due to this significant unavoidable impact that could remain after mitigation is applied.

SUMMARY: This impact is found to be significant following mitigation (Class I).

CEQA FINDING NO. **KRGT60**
ARM5

VEGETATION RESOURCES: Noxious Weeds
Noxious Weed Plan

Impact: Noxious weeds are likely to invade disturbed grounds and may continue to invade for many years after the initial disturbance. The removal of existing vegetation and the disturbance of soils during construction could create optimal conditions for the invasion and establishment of invasive, non-native species. Construction equipment traveling from weed-infested areas into weed-free areas could also facilitate the dispersal of invasive weed seeds and propagules, and result in the establishment of noxious weeds in previously weed-free areas.

Weed control before seed dispersal is most effective and would reduce the amount of chemicals and resources required for treatment. Further, noxious weed competition with desirable species can be highly detrimental to restoration efforts.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, Kern Mountain Weed Management Area, Mojave Weed Management Area, BLM, FERC)

FACTS SUPPORTING THE FINDING:

Noxious weed control is a critical element in the restoration of the construction right-of-way. The seriousness of the effects associated with the establishment of noxious or invasive weeds would depend on the prevalence of weeds in the area of the pipeline route, the type of weed and its method of reproduction and dispersal, the loss of potential natural barriers such as a diversity of vegetation, and the weed's effect on current or future land use. Invasive, non-native species identified along the pipeline route in California include Russian thistle, red brome, *Schismus* species (including Mediterranean grass), cheatgrass, Asian mustard, tansy mustard, and tamarisk. Of these, Russian thistle, Mediterranean grass, and Asian mustard are the most prevalent, occurring along the Goodsprings Loop between MPs 580.0 and 681.0.

In comments on the Draft EIS/EIR, the California Native Plant Society stressed the importance of treating noxious weeds before seed maturation/dispersal. Weed control before seed dispersal is most effective and would reduce the amount of chemicals and resources required for treatment. Further, noxious weed competition with desirable species can be highly detrimental to restoration efforts.

Noxious weeds have proliferated in many locations on the existing right-of-way because a noxious weed plan was not implemented during construction of KRGT's existing pipeline. Therefore, there were no controls to limit the spread of weed propagules before or during construction of the existing pipeline and weeds became established. To avoid many of the problems encountered by its previous project, KRGT has developed and shall implement a Noxious Weed Plan for the proposed project.

Pursuant to its Noxious Weed Plan, KRGT shall treat both the new right-of-way and the existing right-of-way for noxious weeds where the rights-of-way are adjacent (93% of the route). Before construction, KRGT shall provide information and training regarding noxious weed identification and control to its contractors. Existing areas of noxious weed infestation shall be flagged in the field. KRGT shall prohibit equipment access to areas of weed infestations until weed control measures have been implemented. Herbicides or other control methods, such as mowing or discing, shall be performed by KRGT in these areas before construction to control or prevent the spread or proliferation of weeds. Mechanical treatments that would disturb the soil surface shall be avoided in native habitats. Following the initial treatment of known infestations, KRGT shall implement the following preventive measures throughout construction:

- Vehicles shall be required to arrive at the work site clean and weed free. The contractor and the EI shall ensure that vehicles are free of soil and debris capable of transporting weed seeds or other propagules.
- In areas with existing noxious weed infestations, vegetation, soil, and trench spoil material shall be stockpiled in a location adjacent to where they were removed and following construction shall be returned to their previous location.
- Following work at identified infested sites, the contractor shall use compressed air to remove soil and propagules from machinery and vehicles before transport offsite.
- Materials used for erosion control shall be obtained from state-cleared sources that are free of noxious weeds.
- Reclamation of disturbed areas shall occur immediately following construction as described in the site-specific California Reclamation Plan.

If noxious weeds become established following construction despite the precautions outlined above, KRGT shall implement the following:

- In non-native habitats, mechanical treatments, which may include mowing or discing of weed vegetation, shall be employed. Where mechanical treatments are used, subsequent seeding would occur in accordance with the site-specific California Reclamation Plan to minimize the reestablishment of weeds. Mechanical treatments that would disturb the soil surface shall be avoided in native habitats.
- Herbicide applications shall be either spot treatments or larger broad-scale treatments. Where broad-scale applications occur, subsequent seeding shall occur in accordance with the site-specific California Reclamation Plan.

KRGT's Noxious Weed Plan states that certain noxious weed species (e.g., cheatgrass and Schismus species) are so widespread that control is not feasible, especially where areas adjacent to the right-of-way are similarly infested; therefore, KRGT does not plan to repeatedly treat such areas. While the eradication of certain weed species may not be feasible, these species must be controlled to a point that they do not create a considerable hindrance to reclamation efforts.

KRGT's treatment of noxious weeds shall be in accordance with federal and state laws, and BLM requirements. For sites occurring on BLM lands, KRGT shall notify the appropriate BLM Field Office before implementing the treatment. The target species, method, and timing of controls shall be determined in consultation with BLM personnel. KRGT shall provide funds for county personnel to provide weed control services where there are cooperative agreements between the BLM and the local county. If these agreements are not in place, KRGT shall perform or contract the weed control services. Under a special agreement with the BLM, KRGT shall submit a Pesticide Use Proposal annually to the BLM, the Kern Mountain Weed Management Area, and the Mojave Weed Management Area. Following chemical application, KRGT shall submit Pesticide Application Records to the Kern Mountain Weed Management Area, the Mojave Weed Management Area, and the BLM.

As mitigation, before construction, KRGT shall also file with the CSLC a revised Noxious Weed Plan. The revised plan shall include provisions for KRGT to:

- update its list of known noxious weed infestations to include the data acquired during its noxious weed surveys conducted in 2002;
- treat all weeds deemed noxious by federal, state, and/or county weed control agencies to the extent that they do not present a significant hindrance to reclamation efforts; and
- schedule its weed control efforts to occur before seed maturation/development.

Once construction is complete, KRGT shall monitor for and treat noxious weed infestations. Noxious weed monitoring shall occur concurrent with the site-specific California Reclamation Plan monitoring. Monitoring shall begin the year following construction and thereafter shall occur every other year for 5 years. In addition, areas of known infestations shall be inspected annually and treated as necessary. Monitoring data collected shall include the noxious weed species, their location, and the extent of the infestation. The results of the monitoring shall be provided to the local regulatory agencies (*i.e.*, the CSLC, the Kern Mountain Weed Management Area, the Mojave Weed Management Area, and the BLM).

KRGT's implementation of its revised Noxious Weed Plan and site-specific California Reclamation Plan before, during, and after construction, and the treatment of the adjacent existing right-of-way, would avoid or minimize the establishment of noxious or invasive weeds where none or few existed and would limit opportunities for new or existing weed species to invade the right-of-way both during and after construction.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT61

VEGETATION RESOURCES: Herbicide Application

Impact: The use of herbicides to treat noxious weeds has the potential to impact environmental resources on or adjacent to the construction work area due to improper use or accidental spills.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Kern Mountain Weed Management Area, Mojave Weed Management Area, BLM, EPA, FERC)

FACTS SUPPORTING THE FINDING:

See the noxious weed background discussion in CEQA Finding Nos. KRGT60/ARM5.

The severity of potential impacts associated with the use of herbicides would depend on the type and formulation of chemical used, and the method of application. Improper application of herbicides could result in chemical drift, which occurs when chemicals are applied when wind is strong enough to move the chemical beyond the target vegetation. Impacts could also occur from excessive use or a spill of the herbicide, which could allow for runoff or seepage of the chemical to non-target areas. The resulting impacts could include damage to non-target vegetation and adjacent terrestrial and biological resources, and the degradation of surface and groundwater quality.

To minimize the potential impacts associated with improper herbicide application or accidental spills, KRGT shall implement specific herbicide application, handling, and cleanup guidelines. These guidelines are included in KRGT's Noxious Weed Plan (see CEQA Finding Nos. KRGT60/ARM5). KRGT shall consult with the Kern Mountain Weed Management Area, the Mojave Weed Management Area, and the BLM to determine the appropriate product and application method. KRGT shall use a licensed contractor or provide funds for county personnel to provide weed control services. Applications shall follow EPA label instructions and be performed in accordance with federal, state, and local laws and regulations. The measures KRGT shall implement include, but are not limited to, the following:

- Suspend herbicide applications when:
 - wind velocities exceed 6 miles per hour (mph) for the application of liquid materials and 15 mph for the application of granular materials;
 - ice covers the target vegetation; or
 - precipitation is occurring or imminent.

Exhibit C: CEQA Findings

- Only the quantity of herbicide required for 1 day of work shall be transported to the construction site. Herbicides shall be transported only in approved containers that shall be inspected daily for leaks.
- Mixing of herbicides shall be performed offsite and at a distance of 200 feet from wetlands, waterbodies, or other sensitive resources.
- All herbicide contractors shall be required to maintain spill kits at herbicide storage areas and on their trucks and copies of material safety data sheets.

Implementation of KRGT's specific herbicide application, handling, and cleanup guidelines included as part of its Noxious Weed Plan would avoid or minimize the potential impacts associated with the application of herbicides.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT62**
KRGT63

WILDLIFE AND AQUATIC RESOURCES: Wildlife Habitat/Removal of Desert Vegetation

Impacts: Cutting, clearing, and/or removal of existing desert vegetation within the construction work area would have a localized but long-term impact on wildlife. The arid environment characteristic of desert habitat is not conducive to plant growth and would slow the regeneration of vegetation following construction. The reestablishment of woody desert plants may take decades, and in some areas may take over 50 years.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

See the vegetation background discussion in CEQA Finding Nos. KRGT50/KRGT55.

The pipeline route crosses five major non-agricultural wildlife habitat types in California. These include Mojave creosote-bursage/blackbrush scrub/Mojave mixed scrub, desert saltbush scrub, juniper woodland/pinyon-juniper woodland, sagebrush/sagebrush scrub, and Utah grassland/desert grassland. All of these habitat types support several wildlife species. The impact on wildlife species and their habitats from construction and operation of the Kern River 2003 Expansion Project would vary depending on the requirements of each species and the existing habitat present along the pipeline route. Construction and operation of the pipeline would directly impact wildlife through disturbance, displacement, and mortality. The project would also result in short- and long-term alterations of available habitats.

As mitigation, KRGT shall limit the size of its right-of-way by locating as much of the construction right-of-way as possible within areas that were previously disturbed during construction of its existing pipeline or other utility projects. In addition, KRGT shall implement its site-specific California Reclamation Plan to reduce impacts on vegetation and wildlife habitat (see CEQA Finding Nos. KRGT50/KRGT55).

By limiting the size of the construction right-of-way as much as possible to those areas disturbed during construction of its existing pipeline or other utility projects, and by implementing its site-specific California Reclamation Plan, KRGT would minimize impacts on wildlife associated with the cutting, clearing, and/or removal of existing vegetation.

SUMMARY: These impacts are found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT65**

WILDLIFE AND AQUATIC RESOURCES: Displacement of Wildlife

Impact: Clearing the construction right-of-way would result in the displacement of wildlife from areas on or adjacent to the right-of-way. Depending on the season, construction could also disrupt wildlife movements on or adjacent to the right-of-way. Smaller, less mobile wildlife, such as small mammals and reptiles, could be crushed by construction equipment or trapped in trenches.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

See the wildlife habitat background discussion in CEQA Finding Nos. KRGT62/KRGT63.

KRGT shall reduce impacts associated with wildlife displacement by placing earthen trench plugs, with ramps on either side, at maximum 1-mile intervals along the trench and at well-defined livestock and wildlife trails intersected by the trench. KRGT's EIs, in conjunction with the CSLC/FERC monitors, shall reduce trench plug spacing (*i.e.*, add more plugs) if the proposed spacing is determined to be insufficient to facilitate animal escape from the trench. These plugs would provide a means for wildlife to escape if they fall into the trench and also provide a bridge for other wildlife to cross the open trench. The pipeline trench shall be inspected on a regular basis during construction and immediately before backfilling to identify entrapped animals. Wildlife found in trenches during construction shall be coaxed to the nearest ramp and either encouraged to exit the trench, removed by net, or trapped (if other methods are unsuccessful). If any animal in the trench is determined to be a sensitive species (*e.g.*, desert tortoise), only authorized individuals shall be allowed to remove it from the trench.

Installation of earthen trench plugs, with ramps on either side, would facilitate wildlife movement across the trench and would allow wildlife to escape from the trench should they become trapped.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT66**

WILDLIFE AND AQUATIC RESOURCES: Level of Human-Wildlife Interaction

Impact: A potential long-term or permanent impact of the project would be the increased level of human-wildlife interaction in the project area. By expanding the existing right-of-way, the project could add to the existing matrix of open desert, jeep trails, dry washes, and cleared rights-of-way currently attracting OHV users.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

See the wildlife habitat background discussion in CEQA Finding Nos. KRGT62/KRGT63.

The impact associated with additional OHV use would be lessened because about 98% of the pipeline route in California is within or adjacent to existing rights-of-way. In addition, KRGT shall only use existing roads as access to the construction right-of-way and shall implement OHV blocking measures in sensitive areas as determined by the landowner or the BLM (see CEQA Finding No. KRGT153).

KRGT's use of only existing access roads and implementation of OHV blocking measures would minimize the potential for unauthorized OHV use along the right-of-way and an increase in human-wildlife interaction.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT67

WILDLIFE AND AQUATIC RESOURCES: Fires

Impact: Fires inadvertently started by construction equipment or personnel could impact wildlife in the project area by reducing the amount of available habitat. This habitat loss could cause crowding in adjacent habitats reducing productivity and increasing stress-induced mortality.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

See the wildlife habitat background discussion in CEQA Finding Nos. KRGT62/KRGT63.

KRGT shall implement a Wildfire Protection Plan to minimize the potential impacts associated with project-related fires. The plan describes measures KRGT shall implement for prevention, pre-suppression, and suppression of fires during construction of the proposed project.

Implementation of KRGT's Wildfire Protection Plan would minimize the chances of a fire to be inadvertently started by construction equipment or personnel. If a fire is inadvertently started, the suppression measures identified in the plan would minimize habitat loss associated with the fire.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT69

WILDLIFE AND AQUATIC RESOURCES: Migratory Birds

Impact: Some impact on migratory birds could result from habitat loss and disturbance of nesting individuals associated with construction of the Kern River 2003 Expansion Project.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC, FWS)

FACTS SUPPORTING THE FINDING:

See the wildlife habitat background discussion in CEQA Finding Nos. KRGT62/KRGT63.

Migratory birds are species that nest in the United States and Canada during the summer, then migrate south to the tropical regions of Mexico, Central and South America, and the Caribbean for the non-breeding season. Various migratory bird species use the vegetation communities identified along the proposed pipeline route. Bird diversity increases in the southern portion of the project area during spring and fall when neotropical migrants (e.g., flycatchers, warblers, etc.) pass through en route to summer breeding or wintering grounds, and in winter when summer resident birds from the north (e.g., robins) arrive to spend the winter.

In its comments on the draft EIS/EIR, the FWS recommended that KRGT not be authorized to begin construction until after August 1 to reduce the possibility of take of migratory birds. KRGT's current construction schedule is to begin construction in California in November, clear vegetation by the end of February, and complete construction before May. This schedule would avoid impacting nesting migratory birds because chicks and nesting adults will have left their nests by November. Additionally, because clearing, which is scheduled to occur in February, would temporarily remove nesting habitat, it is unlikely that birds would attempt to nest on the right-of-way in late winter or early spring.

Because construction in California is scheduled to occur outside the breeding season, impacts on migratory birds would be minimized.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT74

WILDLIFE AND AQUATIC RESOURCES: Sedimentation and Turbidity

Impact: Increased sedimentation and turbidity from construction are the greatest threats to fishery resources. Sedimentation can adversely affect fish eggs and juvenile fish survival, benthic community diversity and health, and spawning habitat.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, Lahontan RWQCB, BLM, COE, FERC)

FACTS SUPPORTING THE FINDING:

See the waterbody background discussion in CEQA Finding No. KRGT32.

The Kern River 2003 Expansion Project would cross one waterbody in California (the Mojave River) that is known to support or capable of supporting fisheries. The Mojave River would be crossed twice, once at MP 676.7 of the Goodsprings Loop and once at MP 18.0 of the Daggett Loop. The Mojave River measures greater than 100 feet between its recognizable riverbanks; however, at the proposed crossing locations, the Mojave River is typically a broad, dry wash that includes several smaller, braided washes with no riparian vegetation. Representative fish species in the portion of the river with perennial flow (not at the proposed crossing locations) include reaside shiner, fathead minnow, mosquito fish, catfish, and striped bass. KRGT proposes to open cut the two crossings of the Mojave River.

Of the proposed crossing methods, the open-cut crossing method has the greatest potential to increase sedimentation and adversely affect fishery resources. However, an open cut is typically the quickest crossing method, involving 1 day or less of in-stream construction for small streams, and 2 to 3 days for larger waterbodies. Therefore, sedimentation and increased turbidity in waterbodies would be temporary.

KRGT's use of proper construction techniques outlined in its WWCM Procedures and its waterbody crossing permits (see CEQA Finding No. KRGT32) would further minimize the impacts of open-cut crossings. Each crossing shall be completed in accordance with KRGT's WWCM Procedures, SAA from the CDFG, and other applicable permit conditions to reduce soil erosion into the waterbody. KRGT shall store trench spoil above and set back from the streambank. KRGT shall also use sediment barriers such as silt fence to prevent or significantly reduce runoff into a stream. Construction shall be completed as quickly as possible to shorten the duration of sedimentation and turbidity. KRGT shall stabilize the construction site, including the streambanks, immediately following completion of construction. If circumstances require a construction delay, adequate site stabilization measures shall be employed in accordance with KRGT's WWCM Procedures and SAA.

Exhibit C: CEQA Findings

The likelihood that the Mojave River would be dry at the proposed crossing locations, the relatively fast crossings of the river using the open-cut method, and implementation of KRGT's WWCM Procedures would minimize impacts on fishery resources associated with sedimentation and turbidity.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT75

WILDLIFE AND AQUATIC RESOURCES: Erosion along Streambanks

Impact: During construction, clearing and grading of vegetative cover could increase erosion along streambanks and turbidity levels in the waterbodies. Alteration of the natural drainage ways or compaction of soils by heavy equipment near streambanks during construction may accelerate erosion of the banks, runoff, and the transportation of sediment into waterbodies.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, Lahontan RWQCB, BLM, COE, FERC)

FACTS SUPPORTING THE FINDING:

See the waterbody background discussion in CEQA Finding No. KRGT32.

To minimize impacts, KRGT shall use equipment bridges, mats, and pads to support equipment that must cross the waterbody or work in saturated soils adjacent to the waterbody. In accordance with its WWCM Procedures and where topography allows, during clearing and grading, KRGT shall preserve a minimum of 10 feet of vegetation along the waterbody banks. At intermittent waterbody crossings where no riparian vegetation is present, including the two crossings of the Mojave River, KRGT shall locate extra workspaces 10 feet from the edge of the water. KRGT shall also install and maintain sediment barriers, such as silt fence, across the right-of-way at the edge of waterbodies throughout construction except for short periods when removal of these sediment barriers is necessary to dig the trench, install the pipeline, or restore the right-of-way.

The use of equipment bridges, mats, and pads and the placement of extra workspaces at least 10 feet from the edge of waterbodies would minimize compaction, erosion, runoff, and transportation of sediment into waterbodies.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT83

SPECIAL STATUS SPECIES: General Impacts on Special Status Species (Desert Tortoise, Swainson's Hawk, Golden Eagle, Prairie Falcon, Red-tailed Hawk, Bendire's Thrasher, LeConte's Thrasher, Burrowing Owl, Desert Kangaroo Rat, Merriam's Kangaroo Rat, Nelson's Bighorn Sheep, Gila Monster, Mojave Fringe-Toed Lizard, Parish's Phacelia, Rusby's Desert Mallow, Mohave Ground Squirrel, Scaly Cloak Fern)

Impact: In general, the impacts of the project on special status species would be the same as described for vegetation, wildlife, and aquatic resources. However, the magnitude and duration of these impacts could be greater for special status species, because their distribution and relative abundance usually are more limited. Special status plants in the pipeline right-of-way would be lost when the right-of-way is cleared, and special status animals could be affected by the temporary loss of habitat during construction. Mobile individuals would likely be displaced to other habitat but could be lost because of intra-specific competition, predation, or other stresses. Immobile species and juveniles could be killed. Construction of aboveground facilities would result in a permanent loss of habitat. Special status species could also be affected where blasting is required.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, California Native Plant Society (CNPS), BLM, FERC, FWS)

FACTS SUPPORTING THE FINDING:

With assistance from KRGT, the FERC and CSLC staffs informally consulted with the FWS, the CDFG, CNPS, and the BLM to assess impacts on special status species. These consultations resulted in the identification of 48 special status species that might occur in the project area in California. Biologists conducted focused habitat evaluations and species surveys between April and July 2001 to determine the potential for the occurrence of these special status species or their habitats in the project area in California. The design and methodology of all of the special status species surveys were based on established protocols and/or were developed in consultation with biologists from the FWS, BLM, and the CDFG. Detailed reports presenting the results of the special status species surveys were provided to the FWS, the BLM, and the CDFG.

Based on survey results, and additional information provided by KRGT and the jurisdictional agencies, it has been determined that 31 of the 48 special status species originally identified by the FWS, the BLM, and the CDFG do not warrant further consideration because they are not known to occur or lack suitable habitat in the project area leading to a "no effect" determination.

or have transient habits (*i.e.*, migratory or highly mobile over large territories) that make any effects from the temporary or permanent impacts associated with the proposed facilities either insignificant or discountable. The remaining 17 species (listed in the heading above) either are known or likely to occur in the project area in California and could potentially be affected by the project or were identified as species of particular interest during the public scoping process.

KRGT shall implement general minimization and conservation measures to reduce the impact of the project on all special status species. KRGT shall develop a construction environmental awareness program to educate contractors and inspectors of the species that have the potential to occur along the project, explain that wildlife must not be harassed or harmed, explain that all project traffic must be restricted to approved access roads and work areas, and explain all agency requirements. Contractors shall be informed during training sessions that they are not authorized to handle or otherwise move listed or other special status species at any time. Also, KRGT shall employ at least two EIs per construction spread who would be responsible for overseeing project environmental protection measures, including those for special status species.

Implementation of these measures would reduce most impacts on special status species. Impacts would be further reduced by the implementation of species-specific conservation measures. Additional species-specific conservation measures are discussed in CEQA Finding Nos. KRGT90/ARM6, KRGT93, KRGT96/ARM8, KRGT98, KRGT100, KRGT101, KRGT106, KRGT107, KRGT113, KRGT114, KRGT116, and ARM9.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRG90/ARM6

SPECIAL STATUS SPECIES: Desert Tortoise

Impact: Construction of the project would contribute to a decline in value of a linear strip of desert tortoise habitat. In addition to the loss of potential habitat, tortoises could be killed or injured as a result of being crushed by vehicles, movement of soil, or entrapment in burrows or open trenches. The application of water for dust control in desert areas could attract desert tortoises to the construction right-of-way. Ongoing operation and maintenance of the pipeline could also adversely affect the desert tortoise. Pipeline markers could provide perches for aerial predators in areas where natural perches are not available and therefore increase the threat of predation, primarily for juvenile tortoises.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC, FWS)

FACTS SUPPORTING THE FINDING:

The desert tortoise is a federally and California-listed threatened species. The desert tortoise requires friable soil for burrow and nest construction, and is widely distributed throughout the Mojave Desert from below sea level to elevations of about 4,130 feet or higher. The desert tortoise is most common in desert scrub, desert wash, and Joshua tree habitats, but occurs in almost every desert habitat except on the most precipitous slopes. The highest tortoise densities are achieved in creosote bush communities with extensive annual wildflower blooms.

The CDFG, the FWS, and the BLM did not require desert tortoise surveys as part of the 2001 field survey effort. Instead, potential impacts on the desert tortoise were assessed using historical data and the data that were collected in 1990 for the original KRG90 project. Based on these data, the proposed route crosses approximately 184.5 miles of potential desert tortoise habitat in California. Desert tortoise habitat was also identified along access roads between MPs 579.4 and 681.9 (Goodsprings Loop) and MPs 0.0 and 81.7 (Daggett Loop), and within several proposed off right-of-way yards.

All 184.5 miles of desert tortoise habitat identified in California are classified as Category 1, 2, or 3 areas by the BLM. The BLM defines the most important desert tortoise habitat according to its relative importance, manageability, and the density of tortoises it supports. The goals of Category 1 habitat are to maintain viable populations, protect existing habitat values, and increase tortoise populations where possible. The goals of Category 2 habitat are to maintain viable populations and halt further declines in tortoise habitat values. The goal of Category 3 habitat is to limit tortoise habitat and population declines to the extent possible by mitigating impacts.

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MINUTE PAGE

About 57.0 miles of the 184.5 miles of desert tortoise habitat in California are recognized by the FWS as critical habitat. Critical habitat areas for the desert tortoise were delineated in the *1994 Recovery Plan for Desert Tortoise* and are considered essential to maintain viable populations of the species.

To compensate for desert tortoise habitat affected during construction, KRGT shall implement the following measures:

- Impacts on desert tortoise habitat shall be offset through either an acceptable land acquisition or an assessed financial contribution. Compensation rates shall be as follows:
 - 5:1 for new disturbance in tortoise critical habitat;
 - 3:1 where overlapping previously disturbed tortoise critical habitat; and
 - 1:1 for all non-critical habitat.
- KRGT shall provide funding to a third party to be used for desert tortoise habitat acquisition, including enhancement and management (endowment) fees. In California, KRGT shall provide monetary compensation to the CDFG through a third party. KRGT is currently in negotiations with the Desert Tortoise Preserve Committee (DTPC) to develop a third-party agreement between the DTPC, KRGT, and the CDFG outlining KRGT's commitment to use the DTPC for meeting desert tortoise compensation requirements on private lands crossed by the project. KRGT shall pay compensation fees directly to the BLM for public lands crossed in California. If required, KRGT shall post the necessary bond or letter of credit to guarantee with the BLM and the CDFG and/or the CSLC to ensure that mitigation would be implemented. The final mitigation acreage would be based on actual construction impacts.

In order to minimize the extent of injury, death, and harassment of tortoises during construction of the proposed project, KRGT shall conduct an agency-approved pre-construction survey in areas of suitable habitat to identify actual tortoise locations and take appropriate measures, in accordance with specified guidelines, to either protect or relocate burrows and tortoises. KRGT developed 39 conservation measures to minimize potential impacts on desert tortoises during construction. These proposed conservation measures are listed in their entirety in appendix S of the Final EIS/EIR. Some of the measures are summarized below.

- KRGT shall designate a field contact representative (FCR) who would be responsible for overseeing compliance with protective stipulations for listed species. The FCR shall be onsite during all project activities. The FCR shall have the authority to halt all activities that are in violation of the stipulations. The FCR shall have a copy of all stipulations when work is being conducted on the site. The FCR could be a project manager, KRGT representative, or a contract biologist.
- KRGT shall submit the names and a statement of qualifications of all proposed authorized biologists to the BLM, the FWS, the CSLC, and the CDFG for review and approval at least 30 days before initiation of any desert tortoise clearance surveys. Project activities would not begin until authorized biologists have been approved.
- KRGT shall restrict all activities to the right-of-way and approved access roads/storage areas. If unforeseen circumstances require expansion of this width, the potential expanded work areas shall be surveyed for desert tortoise before use of the area.
- Within desert tortoise range, authorized biologists shall conduct pre-construction surveys of the right-of-way as follows:

- Within suitable tortoise habitat: During the tortoise active season (March 1 - October 31), or when temperatures and environmental conditions are conducive to tortoise activity, as determined by the authorized biologist, two surveys shall occur. The first survey would be conducted within 14 days before surface disturbance. The second survey would occur immediately before surface disturbance. During the inactive season (November 1 - February 28) and as noted above, one survey would occur within 72 hours of surface disturbance.
- Outside suitable tortoise habitat: During the desert tortoise active season, or as stipulated above, a survey shall be conducted between 7 and 21 days before surface disturbance. A second survey would occur immediately before surface disturbance unless the BLM, the FWS, the CSLC, and the CDFG concur that a second survey is not required. During the inactive season, one survey would occur within 72 hours of surface disturbance. The jurisdictional federal land manager would determine which areas are suitable desert tortoise habitat on federal land.
- All desert tortoise burrows or pallets in the construction zone that cannot be avoided shall be excavated by an authorized biologist or blocked. All desert tortoise burrows and pallets that fall outside of the right-of-way but within 50 feet of the construction work area, shall be flagged for avoidance. All handling of desert tortoises and their eggs and excavation of burrows shall be conducted by an authorized biologist in accordance with recommended protocol (Desert Tortoise Council, 1999).
- Desert tortoises that are found aboveground and need to be moved from harm's way shall be placed in the shade of a shrub in adjacent undisturbed habitat a minimum of 300 feet from the right-of-way where access is available. Where access is restricted, tortoises shall be placed under a shrub as far from the right-of-way as possible. All desert tortoises removed from burrows shall be placed in an unoccupied burrow of approximately the same size as the one from which it was removed.
- Desert tortoises shall only be moved by an authorized biologist and solely for the purpose of moving the tortoises out of harm's way. Tortoises excavated from unavoidable burrows along the route shall be relocated to unoccupied natural or artificially constructed burrows immediately following excavation. The artificial or natural burrow shall be located 150 to 300 feet from the original burrow and shall be similar in size, shape, and orientation to the original burrow. Relocated tortoises shall not be placed in existing occupied burrows. Procedures for handling tortoises shall follow those described in *Guidelines for Handling Desert Tortoises During Construction Projects* (Desert Tortoise Council, 1999).
- Desert tortoises moved during inactive periods shall be monitored for at least 2 days after their placement in the new burrows to ensure their safety. The authorized biologist shall be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely.
- Whenever a vehicle or construction equipment is parked in desert tortoise habitat longer than 2 minutes, the ground around and under the vehicle or equipment shall be inspected for desert tortoises before the vehicle or equipment is moved. If a desert tortoise is observed, it shall be left to move on its own. If this does not occur within 15 minutes, an authorized biologist shall remove and relocate the tortoise.
- Within desert tortoise habitat, any construction pipe, culverts, or similar structures with a diameter of greater than 3 inches stored less than 8 inches above the ground on the construction site for one or more nights shall be inspected for tortoises before the

material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored on the construction site.

- Open trenches and other open excavations shall be fenced with temporary tortoise-proof fencing, covered at the close of each working day, or provided with tortoise escape ramps. All excavations in tortoise habitat shall be inspected periodically throughout and at the end of each work day and immediately before backfilling. Temporary tortoise-proof fencing shall consist of silt fence buried at least 6 inches and supported by wooden stakes.

If active construction in desert tortoise habitat would continue after January 31, KRGT shall coordinate with the CDFG, the FWS, and the BLM to identify site-specific locations where KRGT shall install temporary tortoise-proof fence or cover open trenches at the end of each work day. The results of these consultations shall be filed with the CSLC before construction in desert tortoise habitat may continue after January 31.

KRGT would apply water to the construction right-of-way for dust control and to the topsoil piles as necessary to prevent the loss of topsoil due to wind erosion. KRGT may be able to reduce the applications of water to the construction right-of-way by adding a non-toxic, organic tackifier to the dust control water in desert tortoise habitat during the tortoise active season (generally March 1 to October 31). KRGT does propose to apply tackifier to segregated topsoil piles in areas designated as highly susceptible to wind erosion. An authorized biologist shall be assigned to patrol each area being watered. The biological monitor shall patrol the area immediately after the water is applied and at approximate 60-minute intervals until the ground is no longer wet enough to attract tortoises.

To supplement its Desert Tortoise Assessment, KRGT prepared a Maintenance Addendum that discusses conservation measures that shall be implemented during various potential maintenance activities (see appendix S of the Final EIS/EIR). The conservation measures to be applied during maintenance are generally consistent with those to be implemented during construction and would minimize impacts on desert tortoises during maintenance activities or provide a mechanism to mitigate for unavoidable impacts.

KRGT shall fit all pipeline marker signs within desert tortoise habitat with "bird-be-gone" or similar bird repellent devices to minimize the potential for increased predation from aerial predators during operation of the proposed pipeline.

The above measures seek to minimize physical disturbance to and mortality of the desert tortoise and its habitat and compensate for losses by ensuring that other areas of comparable resources are set aside in public ownership to guarantee its preservation and function as undisturbed wildlife habitat.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT93

SPECIAL STATUS SPECIES: Raptors (Swainson's's Hawk, Golden Eagle, Prairie Falcon, and Red-tailed Hawk)

Impact: Construction near raptor nests along the corridor during brood rearing could result in nest abandonment; overheating, chilling, or desiccation of unattended young causing nestling mortality; premature fledging; and ejection of eggs or young from the nest.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

Four raptor species could potentially occur in the vicinity of the proposed pipeline route in California. One of these raptors, the Swainson's hawk, is listed by the BLM a sensitive species. The remaining three raptors, the golden eagle, prairie falcon, and red-tailed hawk are considered sensitive based on federal protection afforded raptors under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The Swainson's hawk is a California-listed threatened species, the golden eagle is state-fully protected in California, and the prairie falcon is listed as a species of special concern by the CDFG. The red-tailed hawk does not have a state-designated status.

To ensure nesting raptors are not disturbed during construction along the Mojave Desert portion of the project, KRGT shall conduct pre-construction surveys for raptors in the Mojave Desert in accordance with methods and timing recommendations obtained through consultation with the CDFG, the FWS, and the BLM. If nesting raptors are identified during these surveys, KRGT shall follow the *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances*, unless other site-specific conservation measures are approved by the CDFG, the FWS, and the BLM.

KRGT's proposed surveys would identify raptor nests that could potentially be affected by pipeline construction. If any nests are found during the surveys, implementation of the *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances* and/or specific treatment approved by the CDFG, the FWS, and the BLM would minimize the potential for nest abandonment, nestling mortality, premature fledging, and ejection of eggs or young from the nest.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT96/ARM8

SPECIAL STATUS SPECIES: Bendire's Thrasher and LeConte's Thrasher

Impact: Construction of the pipeline project would involve clearing of suitable habitat for the Bendire's and LeConte's thrashers and could result in destruction of nests and, if nests are occupied, direct mortality of individuals.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The Bendire's and LeConte's thrashers are listed as species of special concern by the CDFG and sensitive species by the BLM. The Bendire's thrasher uses both desert habitats with fairly large shrubs or cacti and open ground, and open woodland habitats with scattered shrubs and trees. The Bendire's thrasher generally avoids dense vegetation habitats (e.g., riparian woodland, uninterrupted brushy cover) and continuous grasslands. The LeConte's thrasher is found in arid habitats, particularly cholla and creosote bush scrub communities, where it frequents open, desert washes and flats with scattered shrubs and large areas of open, sandy, or alkaline terrain. The Bendire's thrasher breeds from late February into early August, and the LeConte's thrasher breeds from late January into early June with a peak from mid March through mid April.

Neither species was observed during spring 2001 field surveys; however, potential habitat was identified along the pipeline route and along access roads for both species in California. Habitat for the Bendire's thrasher was noted near the Clark Mountains, and habitat for the LeConte's thrasher was found near the end of the Goodsprings Loop and the beginning of the Daggett Loop. The CDFG reported several historical records of previous sightings for each species in these respective areas.

KRGT included both of these thrasher species in its formal application submitted to the CDFG for a Section 2081 Incidental Take Permit. It is expected that specific protection measures would be included in the Section 2081 Permit issued by the CDFG. However, to avoid contributing to a further decline in Bendire's thrashers in California, KRGT shall conduct pre-construction surveys for nesting Bendire's's thrashers in areas of suitable habitat that would be disturbed by construction activities. If any active Bendire's's thrasher nests are found, KRGT shall adhere to the CDFG-recommended 1,000-foot buffer unless otherwise permitted by the CDFG. Additionally, KRGT's implementation of mitigation for desert tortoise impacts could indirectly benefit the Bendire's's and LeConte's's thrashers through the reestablishment and long-term protection of desert habitats (see CEQA Finding No. KRGT90/ARM6).

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Exhibit C: CEQA Findings

KRGT's adherence to the CDFG-recommended 1,000-foot buffer from any active Bendire's thrasher nests found during pre-construction surveys would avoid the destruction of nests and, if nest are occupied, direct mortality of individuals. In addition, preservation of desert tortoise habitat would ensure comparable resources are set aside to function as undisturbed wildlife habitat for this species as well.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

000082

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MINUTE PAGE

CEQA FINDING NO. KRGT98

SPECIAL STATUS SPECIES: Burrowing Owls

Impact: The potential impacts of the project on burrowing owls include disturbance of habitat and destruction of active burrows. Destruction of burrows could result in displacement of owls into less suitable habitats, potentially increasing susceptibility to predation, reducing cover or forage habitat, or reducing reproductive success. Direct mortality could result if active burrows are occupied at the time of destruction.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC, FWS)

FACTS SUPPORTING THE FINDING:

The burrowing owl is considered a species of special concern by the CDFG, a species of concern by the FWS, and a sensitive species by the BLM. The historic range of the owl is throughout much of the western United States. Burrowing owls inhabit open, dry grasslands, deserts, and scrublands characterized by low-growing vegetation. Burrowing owls are subterranean nesters that typically use burrows made by small mammals or desert tortoises.

In accordance with agency recommendations in California, pre-construction burrowing owl surveys shall be conducted concurrently with desert tortoise surveys. In areas where tortoise surveys would not occur until after February 2003, burrowing owl surveys shall be conducted separate from and before the desert tortoise surveys. To minimize the potential for impacts on owls, KRGT shall relocate burrowing owls from their burrows during pre-construction surveys. Burrowing owls shall be relocated to artificial burrows constructed by KRGT or to naturally occurring, abandoned desert tortoise burrows. KRGT shall crush all burrows on the right-of-way following relocations, unless owl surveys are separate from tortoise surveys, in which case active desert tortoise burrows shall be treated during tortoise surveys.

Pre-construction surveys would identify burrowing owls that could potentially be affected by pipeline construction. The relocation of burrowing owls from their burrows during these surveys would minimize the potential for direct mortality and other construction-related effects.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

Exhibit C: CEQA Findings

KRGT's adherence to the CDFG-recommended 1,000-foot buffer from any active Bendire's thrasher nests found during pre-construction surveys would avoid the destruction of nests and, if nest are occupied, direct mortality of individuals. In addition, preservation of desert tortoise habitat would ensure comparable resources are set aside to function as undisturbed wildlife habitat for this species as well.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

000084

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001521

MINUTE PAGE

CEQA FINDING NO. KRGT98

SPECIAL STATUS SPECIES: Burrowing Owls

Impact: The potential impacts of the project on burrowing owls include disturbance of habitat and destruction of active burrows. Destruction of burrows could result in displacement of owls into less suitable habitats, potentially increasing susceptibility to predation, reducing cover or forage habitat, or reducing reproductive success. Direct mortality could result if active burrows are occupied at the time of destruction.

Class: II

- Finding:
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC, FWS)

FACTS SUPPORTING THE FINDING:

The burrowing owl is considered a species of special concern by the CDFG, a species of concern by the FWS, and a sensitive species by the BLM. The historic range of the owl is throughout much of the western United States. Burrowing owls inhabit open, dry grasslands, deserts, and scrublands characterized by low-growing vegetation. Burrowing owls are subterranean nesters that typically use burrows made by small mammals or desert tortoises.

In accordance with agency recommendations in California, pre-construction burrowing owl surveys shall be conducted concurrently with desert tortoise surveys. In areas where tortoise surveys would not occur until after February 2003, burrowing owl surveys shall be conducted separate from and before the desert tortoise surveys. To minimize the potential for impacts on owls, KRGT shall relocate burrowing owls from their burrows during pre-construction surveys. Burrowing owls shall be relocated to artificial burrows constructed by KRGT or to naturally occurring, abandoned desert tortoise burrows. KRGT shall crush all burrows on the right-of-way following relocations, unless owl surveys are separate from tortoise surveys, in which case active desert tortoise burrows shall be treated during tortoise surveys.

Pre-construction surveys would identify burrowing owls that could potentially be affected by pipeline construction. The relocation of burrowing owls from their burrows during these surveys would minimize the potential for direct mortality and other construction-related effects.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT100

SPECIAL STATUS SPECIES: Desert Kangaroo Rat and Merriam's Kangaroo Rat

Impact: Construction of the project could affect the desert kangaroo rat and Merriam's kangaroo rat either by disturbing their habitat or by direct mortality of individuals (e.g., the crushing of occupied burrows).

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

The desert kangaroo rat and the Merriam's kangaroo rat are BLM-sensitive species. Both species are primarily nocturnal and generally occupy low deserts with sandy soil and sparse creosote bush scrub vegetation. They prefer sandier wash areas because the substrate is more amenable to digging burrows. Species-specific surveys for these species were not conducted; however, scattered areas of suitable habitat were identified in California.

Because the range of this species generally overlaps with that of the desert tortoise, KRGT's implementation of conservation measures for the desert tortoise (see CEQA Finding No. KRGT90/ARM6) would also minimize potential impacts on these species. In addition, preservation of desert tortoise habitat would ensure comparable resources are set aside to function as undisturbed wildlife habitat for these species as well.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **KRGT101**

SPECIAL STATUS SPECIES: Nelson's Bighorn Sheep

Impact: Nelson's bighorn sheep could be indirectly affected if construction activities temporarily block the migration corridor and expose the bighorn sheep to periods of heavy snowfall at higher elevations, thereby increasing their susceptibility to predation, starvation, and freezing. Construction could also restrict access to a water source or limit travel corridors.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

The Nelson's bighorn sheep is listed as a sensitive species by the BLM. Nelson's bighorn sheep usually occur in small herds of about 10 animals in open, rocky, steep areas with available water and herbaceous forage. The sheep generally have two distinct, separate ranges in summer and winter, with corresponding spring and fall migrations. The summer ranges for Nelson's bighorn sheep are typically smaller than winter ranges due to their dependence on water sources in the summer. Potential habitat for the Nelson's bighorn sheep was identified along the Goodsprings Loop.

In the location where the Goodsprings Loop traverses the Clark Mountains in California, the right-of-way would cross through Keeney Pass and avoid the higher elevations generally inhabited by bighorn sheep. The National Park Service (NPS) raised concerns about the project crossing a known migration route along the boundary of the Mojave National Preserve. This migration route is used in winter by sheep avoiding heavy snowfall at higher elevations. Direct impacts on individuals are not expected because Nelson's bighorn sheep would likely avoid construction activities. However, sheep could be indirectly affected if construction activities temporarily block the migration corridor during winter and expose the bighorn sheep to periods of heavy snowfall at higher elevations, thereby increasing their susceptibility to predation, starvation, and freezing.

KRGT shall install trench plugs at a maximum of 1-mile intervals and at well-defined wildlife and livestock trails along the route. KRGT's EIS, in conjunction with a CSLC/FERC monitor, would reduce trench plug spacing (*i.e.*, add more plugs) if the proposed spacing is determined to be insufficient to facilitate animal escape from the trench. Additionally, construction in the area of the bighorn sheep's migration route would occur only during daylight hours.

The installation of trench plugs at the spacing specified above or adjusted by the EIS and CSLC/FERC monitors would allow Nelson's bighorn sheep to cross the open trench during

Exhibit C: CEQA Findings

pipeline installation. As a result, access to existing migration corridors and water sources would be maintained.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT106

SPECIAL STATUS SPECIES: Gila Monster

Impact: Construction of the proposed project could result in temporary displacement or direct mortality of individual Gila monsters, and temporary alteration of habitat.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The Gila monster is considered a species of special concern in California. It is also classified as a species of concern by the FWS and a sensitive species by the BLM. The Gila monster is a stout-bodied lizard that occupies desert and semi-arid shrublands with gravelly and sandy soils. Surveys were not specifically conducted for this reclusive, nocturnal species. However, based on its habitat requirements, the Gila monster has the potential to occur in desert habitats crossed by the proposed route and access roads along the Goodsprings and Daggett Loops.

To minimize impacts on Gila monsters, KRGT shall:

- relocate individuals identified along the right-of-way using measures that include the use of long-handled instruments to coax an individual into an open bucket or box;
- submit a report to the CDFG, the FWS, and the BLM following construction detailing the locations where Gila monsters were found and released; and
- incorporate the following specific provisions into its construction environmental awareness program:
 - procedures to identify Gila monsters and distinguish them from other lizards such as chuckwallas and banded geckos;
 - a requirement that observations in California should also be reported to the CDFG; and
 - consequences of a bite resulting from carelessness or unnecessary harassment of Gila monsters.

Implementation of these measures would minimize the potential for temporary displacement or direct mortality of individual Gila monsters if they are encountered during construction of the project.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

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CEQA FINDING NO. KRGT107

SPECIAL STATUS SPECIES: Mojave Fringe-Toed Lizards

Impact: Impacts on Mojave fringe-toed lizards could include direct mortality, increased susceptibility to predation during displacement to adjacent habitats, and temporary loss of habitat.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The Mojave fringe-toed lizard is designated a species of special concern by the CDFG and is classified as a sensitive species by the BLM. The Mojave fringe-toed lizard occupies fine, loose, wind-blown deposits in sand dunes, dry lakebeds, riverbanks, desert washes, sparse alkali scrub, and creosote bush and desert shrub habitats.

During rare plant surveys conducted from April through early June 2001, potential habitat for the Mojave fringe-toed lizard was identified throughout the Mojave River wash system. Surveys were then conducted for the lizard in four suitable habitat locations according to the approved CDFG protocol on June 18 and 19, 2001. Individual Mojave fringe-toed lizards were identified at two of the four locations: between MPs 676.6 and 677.2 of the Goodsprings Loop and between MPs 17.0 and 18.0 of the Daggett Loop.

KRGT shall implement the following species-specific conservation measures:

- resurvey areas of suitable habitat before construction in the summer of 2002 to confirm the extent of the Mojave fringe-toed lizard in the vicinity of the project;
- in areas where lizards are observed during pre-construction surveys, in consultation with the CDFG, evaluate the potential to install fencing along the right-of-way to prevent lizards from entering the construction area, and
- have a qualified biologist inspect the right-of-way immediately before the onset of trenching or other surface-disturbing activities in areas of suitable Mojave fringe-toed lizard habitat.

Implementation of these species-specific conservation measures for the Mojave fringe-toed lizard would minimize the potential for direct mortality and increased susceptibility to predation during displacement to adjacent habitats.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT113

SPECIAL STATUS SPECIES: Parish's Phacelia

Impact: Parish=s phacelia could be disturbed during construction.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CNPS, BLM, FERC, FWS)

FACTS SUPPORTING THE FINDING:

Parish's phacelia is listed as a CNPS list 1B species. It is also listed as a species of concern by the FWS and a sensitive species by the BLM. This species occurs in creosote bush scrub, Joshua tree woodland, salt desert shrublands, and dry lakebeds on desert alkaline flats. Spring 2001 botanical surveys identified a single population of this species, estimated to contain more than 5,000 individual plants, in a dry lakebed adjacent to the right-of-way near MP 665.5 along the Goodsprings Loop. Direct impacts on these plants would be avoided because they are outside of the construction right-of-way. KRGT shall protect this large population from indirect impacts by placing exclusion fencing along the right-of-way near the existing population. If individuals are identified within the right-of-way during pre-construction surveys, KRGT shall collect ripe seed from individuals occurring within the proposed construction right-of-way before construction and distribute the collected seeds after construction over the approximate area where the plants were located before disturbance.

The installation of exclusion fencing along the right-of-way near the existing population of Parish's phacelia would avoid direct or indirect impacts on these species during construction. If other individuals are identified within the right-of-way, the collection and distribution of seeds after construction would minimize long-term impacts on this species.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

Exhibit C: CEQA Findings

Implementation of these mitigation measures, including the installation of exclusion fencing and the collection and distribution of ripe seeds, would minimize impacts on the Rusby's desert mallow.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

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MINUTE PAGE

CEQA FINDING NO. KRGT116

SPECIAL STATUS SPECIES: Mohave Ground Squirrel

Impact: If occupied Mohave ground squirrel burrows are crushed during construction, mortality of individuals could result. Loss of burrows could also increase ground squirrel susceptibility to predation.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, FERC)

FACTS SUPPORTING THE FINDING:

The Mohave ground squirrel is a California-listed threatened species that typically inhabits areas with deep sandy or gravelly friable soils and abundant herbaceous vegetation interspersed with creosote bush and/or Joshua trees. Although suitable habitat for the Mohave ground squirrel is found throughout the Mojave Desert in California, the Daggett Loop is the only proposed KRGT facility that would be located within the generally accepted range of this species.

Surveys for the Mohave ground squirrel were not conducted because it was determined through consultation with the CDFG that a species-specific survey would not confirm the presence or absence of the species. Based on the presence of suitable habitat and through consultation with the CDFG, it was determined that Mohave ground squirrels may occur between MPs 18.1 and 82.4 along the Daggett Loop, including associated access roads.

Given that the Mohave ground squirrel's general area of occurrence overlaps with that of the desert tortoise, KRGT shall:

- implement the recommendation of the CDFG to mitigate for impacts on the Mohave ground squirrel as part of its desert tortoise mitigation by providing additional compensation to the CDFG through a third party for each acre of desert tortoise habitat affected within the area defined as Mohave ground squirrel range (about 667 acres) to cover additional ground squirrel research and study; and
- notify the CDFG if a dead Mohave ground squirrel is encountered during pre-construction botanical and desert tortoise surveys or during construction.

By mitigating for impacts on the Mohave ground squirrel as part of its desert tortoise mitigation, KRGT would minimize impacts and ensure comparable resources are set aside to function as undisturbed wildlife habitat for this species.

SUMMARY: This impact is found to be less than significant following mitigation (Class III)

CEQA FINDING NO. KRGT119

SPECIAL STATUS SPECIES: Scaly Cloak Fern

Impact: Construction would directly impact the scaly cloak fern by crushing and, where grading is necessary, uprooting individual plants located within the construction right-of-way. Construction may also result in the permanent loss of habitat. The limestone outcrop that supports the plants would be damaged during construction and it is not likely that KRGT would be able to recreate the exact pre-construction conditions.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, CNPS, FERC)

FACTS SUPPORTING THE FINDING:

Scaly cloak fern is a CNPS list 2 species. Scaly cloak fern occurs in the project area on limestone slopes and in crevices in the Clark Mountains. Surveys conducted during the spring of 2001 identified a population of about 600 individual plants along the route north of the Mojave National Preserve. This population was found on a limestone outcrop along with the Rusby's desert mallow. Suitable habitat was identified along two access roads near the Clark Mountains.

As approved by the CDFG, KRGT shall mitigate for construction impacts on the scaly cloak fern by:

- providing funding to the CDFG, or to a fund identified by the CDFG, for native plant research based on the work effort required to adequately research and monitor affected species. The amount and type of compensation in California shall be determined in consultation with the CDFG and pursuant to the Incidental Take Permit under Section 2081 and/or pursuant to the SAA under Section 1600, respectively, of the California Fish and Game Code. KRGT shall provide the CDFG with the agreed upon compensation before construction through scaly cloak fern habitat in the Clark Mountains.

By providing funding to the CDFG, or to a fund identified by the CDFG, KRGT would minimize impacts associated with the project on the scaly cloak fern.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

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001531

CEQA FINDING NO. ARM9

SPECIAL STATUS SPECIES: Compliance with the Endangered Species Act (ESA) and the California Endangered Species Act (CESA)

Impact: Potential adverse effects on federal and state-listed endangered and threatened species and compliance with the ESA and CESA.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (CDFG, CNPS, BLM, FERC, FWS)

FACTS SUPPORTING THE FINDING:

To ensure that potential impacts on special status species would be avoided or mitigated to less than significant levels, as well as to comply with the ESA and the CESA, KRGT shall not begin construction activities in California until:

- KRGT completes any outstanding species-specific surveys in California and the FERC and the CSLC receive comments from the FWS and the CDFG regarding the applicable pre-construction survey reports;
- the FERC completes formal consultation with the FWS;
- the CDFG makes a consistency determination on the FWS= Biological Opinion pursuant to Section 2080.1 of the California Fish and Game Code or issues an Incidental Take Permit that covers both federally and state-listed species that may be affected;
- KRGT obtains an Incidental Take Permit under Section 2081 of the California Fish and Game Code for all state-listed species that may be affected, or receives concurrence from the CDFG that an Incidental Take Permit is not required;
- KRGT has completed and filed with the FERC and the CSLC the results of consultations with the BLM regarding measures to avoid or minimize impacts on special status species on lands managed by the BLM in California; and
- KRGT has received written notification from the Director of Office of Energy Projects (OEP) and the CSLC that construction or use of conservation measures may begin in California.

These measures would prohibit the start of the project in California until responsible agencies determine that its potential impacts on special status species are sufficiently mitigated and the project is in compliance with the ESA and the CESA.

SUMMARY: This impact is found to be less than significant following mitigation (Class III)

CEQA FINDING NO. KRG120

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Construction and Permanent Rights-of-Way

Impact: Land use impacts associated with the project would include disturbance of existing land uses within the construction right-of-way during construction and retention of an expanded or new permanent right-of-way for operation of the pipeline. Of the 2,516.9 acres of land affected by construction of the pipeline facilities in California, about 634.0 acres would be retained as new permanent right-of-way.^{2/}

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

The land retained as permanent right-of-way shall be allowed to revert to former use; however, tree crops such as orchards and aboveground structures would be prohibited on the permanent right-of-way. The remaining 1,882.9 acres used for temporary construction right-of-way and temporary extra workspace shall be allowed to revert to prior uses following construction with no restrictions. The right-of-way associated with the proposed pipeline facilities would not result in the conversion of more than 1% of agricultural lands to a non-agricultural use or impair the productivity of more than 1% of rangeland or agricultural land in a county. The project would also not result in the loss of more than 1% of the acreage planted in a county=s most valuable crop.

Existing land uses, to the extent that such uses do not conflict with access to or use of the pipeline, would be retained following pipeline construction.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

^{2/} The pipeline right-of-way crossing California State School Lands is granted through a lease for right-of-way use with a term of 30 years.

CEQA FINDING NO. KRGT122

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Grazing Allotments

Impact: Construction of the project could impact grazing allotments by resulting in the loss carrying capacity of an allotment, damaging or removing fences or other natural barriers used for livestock control, and trapping or harming livestock that enter into the construction work area.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Rangeland is the predominant land use along the Kern River 2003 Expansion Project. One of the major uses of rangeland in the project area is livestock grazing. Grazing allotments are areas of land where individuals graze their livestock. An allotment generally consists of federal rangelands but may also include intermingled parcels of private or state lands. The BLM stipulates the number of livestock and season of use for each allotment. In California, the Clark Mountain Area, Valley Wells, Cronese Lake Area, and Stoddard Mountain Area grazing allotments would be crossed.

To minimize impacts on grazing allotments, KRGT shall implement the following mitigation measures:

- Each fence crossed shall be braced and secured before cutting the opening needed for construction to prevent slacking of the wire. The created opening shall be closed by temporary gates as necessary to prevent passage of livestock.
- On federal lands, all damaged livestock fences, gates, cattleguards, and brace panels shall be repaired or replaced to BLM standards.
- Where construction results in damage or removal of a natural barrier used for livestock control, the barrier shall be replaced or a fence shall be constructed in its place.
- Ramps shall be constructed to allow for escape of livestock from the trench at all well-defined livestock trails (as determined by the EI, in conjunction with a CSLC/FERC monitor) and at 1-mile intervals.
- Trench plugs shall be constructed at all well-defined livestock trails (as determined by the EI, in conjunction with a CSLC/FERC monitor) and at maximum 1-mile intervals to allow for livestock to cross the open trench. The EI, in conjunction with a CSLC/FERC monitor, would reduce trench plug spacing (*i.e.*, add more plugs) if the proposed spacing is determined to be insufficient to facilitate animal movement or escape from the trench.

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001534

CEQA FINDING NO. KRGT123

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Irrigated Crop and Hay Lands

Impact: Several activities could damage or interrupt irrigation during construction, including trenching, grading, stringing, welding, and backfilling. If the flow of irrigation water is disrupted for a prolonged period, crops could be damaged and crop yields reduced.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Of the 2.7 miles of agricultural land crossed by the pipeline in California, about 1.6 miles are irrigated crop and hay lands. The types of irrigation systems that would be crossed include wheel (1.4 miles) and pivot (0.2 mile).

To minimize the potential for impacts on irrigated lands, KRGT shall maintain the flow of irrigation systems or coordinate the temporary shutoff of systems with affected landowners or tenants. KRGT shall compensate the landowner for damages and lost production and include the agreement as a special right-of-way stipulation in the construction contract. Disturbed drainage furrows, water piping, or heads shall be restored, repaired, or replaced as soon as possible and monitored for problems after construction is completed. Where pivot irrigation is active, KRGT shall complete construction and restoration within a time frame negotiated with the landowner or tenant. As part of restoration of the right-of-way, survey controls shall be implemented to restore the surface to more precise elevations. In addition, KRGT shall communicate with the landowners or tenants following construction and restoration to ensure the irrigation systems are functioning properly. Additional repair or remedial work shall be performed if requested by the landowner. KRGT shall also coordinate with the landowner to assess crop productivity for a period of at least 2 years, and provide compensation where crop yields show decline. Impact and mitigation would be site-specific and based on agreements and/or easement conditions with the affected landowner or tenants. Based on negotiations between the landowner and KRGT, mitigation may include additional compensation for portions of fields that may be taken out of production for all or part of the season.

These mitigation measures, including KRGT's commitment to compensate landowners for damage and lost production, would minimize impacts on irrigation systems and the associated cropland caused by construction of the project.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT125

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Road and Railroad Crossings

Impact: Construction across highways, roads, railroad tracks, and powerlines could disrupt the existing transportation system.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Caltrans, Kern County Road Department, San Bernardino County Transportation Department, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The proposed pipeline route crosses or is adjacent to several linear transportation and utility rights-of-way including highways, roads, railroad tracks, and powerlines. The majority of the pipeline route would be in remote rural areas where existing traffic volumes are low. Major highways, such as state routes or interstates, would be crossed at 10 locations in California.

KRGT shall apply for the permits necessary for road and railroad crossings from Caltrans, San Bernardino County Transportation Department, and/or the Kern County Road Department. Major or improved roads and railroads shall be crossed by boring to avoid disrupting traffic. Unsurfaced, lightly traveled, or rural roads shall be crossed by the open-cut method if approved by the owner or the BLM. Where open-cut road crossings are conducted, KRGT shall detour or control traffic during construction to minimize traffic delays at these locations. If reasonable detours are not feasible, at least one lane of traffic shall be left open. No new roadways shall be created. Most open-cut road crossings shall be completed in 1 day. All roadways shall be maintained in such a way to allow access for emergency and private vehicles. KRGT shall place and maintain flag persons, signs, barricades, guard rails, safety fence, and signals at road crossings as required by city, county, and state regulations and right-of-way and permit stipulations. In the absence of such regulations, KRGT shall place danger signs that would be visible in both directions during darkness at the crossing location and also 500 feet in each direction from the crossing. At a minimum, the danger signs shall be legible at 100 feet and flashers shall run continuously from 30 minutes before sundown until 30 minutes after sunrise.

KRGT's implementation of these mitigation measures would minimize disruptions on the existing transportation system and ensure safe conditions at all road crossings during construction.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT146

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Stateline, Mesquite, Kingston, and Hollow Hills Wilderness Areas

Impact: Due to the close proximity of the Stateline, Mesquite, Kingston Range, and Hollow Hills Wilderness Areas, these areas may be indirectly affected by traffic, noise, and dust during pipeline construction.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Caltrans, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The Goodsprings Loop would be constructed about 1 mile south of the Stateline (between MPs 580.0 and 584.5), Mesquite (between MPs 584.5 and 598.0), and Kingston Range (between MPs 598.0 and 614.0) Wilderness Areas. The Hollow Hills Wilderness Area is located about 0.25 mile south of the route between MPs 618.0 and 623.6. The pipeline route is located adjacent to three existing powerlines within designated Utility Corridor D throughout this entire area.

Because these wilderness areas are not crossed by the proposed pipeline route, the designated use or purpose of the areas would not be directly affected by pipeline construction. In addition, the pipeline would be consistent with the designated use of Utility Corridor D. However, due to the close proximity, the areas may be indirectly affected by traffic, noise, and dust during pipeline construction. Any effects would be short term and temporary in nature. The delivery of construction equipment and materials would not prevent access to any of these areas (see CEQA Finding Nos. KRGT165/KRGT166). KRGT would use the existing powerline access road as the primary access to the construction right-of-way in this area. The pipeline would cross several trails/roads during construction adjacent to these wilderness areas. To maintain access to these wilderness areas during construction, KRGT shall allow only one trail/road crossing to be closed at any given time. Each trail/road shall be open cut and out of service for a maximum of 1 day. KRGT shall implement the measures described in CEQA Finding No. KRGT125 to maintain safe passage at each of the trail/road crossings.

By only allowing one trail/road crossing to be closed at any given time, KRGT would minimize indirect impacts and maintain access to these wilderness areas during construction. In addition, the implementation of KRGT's traffic safety measures would ensure safe passage at each of the trail/road crossings during construction.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT147

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Mojave National Preserve

Impact: The Goodsprings Loop would not cross but would be located near the Mojave National Preserve. Construction could restrict access to this area.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Caltrans, BLM, FERC, NPS)

FACTS SUPPORTING THE FINDING:

The existing KRGT pipeline right-of-way is located within the boundaries of the Mojave National Preserve for about 1.8 miles beginning at MP 590.4. At this location, the existing pipeline is south of four existing powerlines and just inside of the northern boundary of the preserve. This area was designated a national preserve and placed under the jurisdiction of the NPS in October 1994 after the installation of the existing KRGT pipeline. The preserve encompasses 1.6 million acres in the center of the Mojave Desert and was designated to protect the rare and unique environments within the desert. In response to a request from NPS staff, KRGT routed the proposed pipeline to the opposite, or north side, of the existing powerlines within designated Utility Corridor D. As a result, the proposed Goodsprings Loop would be outside the boundaries of the Mojave National Preserve.

The NPS, Mojave National Preserve, has commented on the need to maintain access to the preserve during construction for recreationists and to allow preserve personnel to conduct field monitoring activities. The proposed alignment of the Goodsprings Loop along the north side of the existing powerline corridor would cross five existing unimproved roads, including the service road extending along the powerline corridor. Four of these roads extend south into the preserve and are used by the public and preserve personnel to access the preserve. During construction, KRGT shall close only one road at a time leaving at least three roads open into the Mojave National Preserve at any given time. The main access to the preserve is provided by Kingston Road and other improved or major public roads. KRGT shall maintain safe passage at each of these road crossings as described in CEQA Finding No. KRGT125.

By only allowing one road crossing to be closed at any given time, KRGT would maintain access to the Mojave National Preserve during construction. In addition, the implementation of KRGT's traffic safety measures would ensure safe passage at each of the road crossings during construction.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

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CEQA FINDING NO. KRGT149

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Soda Mountains and South Avawatz Wilderness Study Areas (WSA)

Impact: Due to the close proximity, the Soda Mountains and South Avawatz WSAs may be indirectly affected by traffic, noise, and dust during pipeline construction.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Caltrans, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The Goodsprings Loop would be adjacent to two statutory WSAs as defined in the California Desert Protection Act of 1994. These are the Soda Mountains WSA and the South Avawatz WSA. The Soda Mountains WSA is south of the proposed route between MPs 624.0 and 652.4. The northern boundary of the Soda Mountains WSA is defined as 0.25 mile south of the southernmost powerline within designated Utility Corridor D. For the majority of the route in this area, the proposed pipeline would be adjacent to the existing KRGT pipeline and a minimum of 300 feet north of the northernmost powerline within the utility corridor. In these areas, the proposed route would be about 0.4 mile north of the Soda Mountains WSA boundary. However, between MPs 637.0 and 638.0, the proposed pipeline would deviate from the existing pipeline and crossover to the south of the existing powerlines to avoid rocky, mountain terrain and severe side slopes. In this area, the pipeline route would be located a maximum of 750 feet south of the southernmost powerline and about 0.1 mile north of the boundary of the Soda Mountains WSA. The pipeline route then crosses back over to the north of the powerlines.

The South Avawatz WSA is north of the proposed pipeline route between MPs 627.8 and 639.2. The southern boundary of this WSA is defined as 0.5 mile north of the northernmost powerline within designated Utility Corridor D. With the exception of the segment between MPs 637.0 and 638.0, the proposed route in this area is about 300 feet north of the northernmost powerline within the utility corridor. This alignment would put the route about 0.4 mile south of the South Avawatz WSA boundary. Between MPS 637.0 and 638.0 where the alignment is south of the existing powerlines, the pipeline would be about 0.8 mile south of the South Avawatz WSA boundary.

Because these WSAs are not crossed by the proposed pipeline routes, the designated use or purpose of the areas would not be directly affected by pipeline construction. In addition, the pipeline would be consistent with the designated use of Utility Corridor D. However, due to the close proximity, the areas may be indirectly affected by traffic, noise, and dust during pipeline construction. Any effects would be short term and temporary in nature. The delivery of construction equipment and materials would not prevent access to any of these public interest

Exhibit C: CEQA Findings

areas (see CEQA Finding Nos. KRGT165/KRGT166). KRGT shall use the existing powerline access road as the primary access to the construction right-of-way in this area. The pipeline would cross several trails/roads during construction adjacent to these WSAs. To maintain access to these WSAs during construction, KRGT shall allow only one trail/road crossing to be closed at any given time. Each trail/road would be open cut and out of service for a maximum of 1 day. KRGT shall implement the measures described in CEQA Finding No. KRGT125 to maintain safe passage at each of the trail/road crossings.

By only allowing one trail/road crossing to be closed at any given time, KRGT would minimize indirect impacts and maintain access to these WSAs during construction. In addition, the implementation of KRGT's traffic safety measures would ensure safe passage at each of the trail/road crossings during construction.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

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CEQA FINDING NO. KRGT150

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Fort Irwin National Training Center (NTC)

Impact: Construction could impact the purpose for which the Fort Irwin NTC was established.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Fort Irwin NTC, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The Goodsprings Loop would be within the current boundary of the Fort Irwin NTC between MPs 642.8 and 643.0 and would be close to or adjacent to the boundary until about MP 653.2. Fort Irwin was designated in 1981 as the Army's NTC with the mission "to train brigades in tough, realistic battlefield scenarios to meet the needs of tomorrow's army." The Fort Irwin NTC currently covers more than 642,000 acres of the Mojave Desert. There are plans underway to expand the NTC by about 132,000 acres in three parcels. The first parcel is located southwest of the NTC and contains about 64,000 acres. The second parcel includes about 46,000 acres directly east of and contiguous with the NTC. The southern boundary of this parcel would be California Desert Conservation Area (CDCA)-designated Utility Corridor D (Boulder Power Corridor). The proposed Goodsprings Loop would be within or adjacent to this parcel between about MPs 627.0 and 642.8. The remaining 22,000 acres are currently set aside on the NTC and would be returned to training use.

The entire portion of the proposed route in this area would be immediately adjacent to the existing KRGT pipeline within designated Utility Corridor D. KRGT shall implement the general mitigation measures identified for the project. Site-specific mitigation measures required by Fort Irwin shall be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.

Implementation of KRGT's general mitigation measures for the project would minimize impacts on this special management area and would avoid impacting the purpose for which the area was established. In addition, KRGT would implement any site-specific mitigation measures required by Fort Irwin and included as stipulations of the COM Plan.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT151

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Marine Corps Firing Range

Impact: Construction could impact the purpose for which the Marine Corps Firing Range was established.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Marine Corps, BLM, FERC)

FACTS SUPPORTING THE FINDING:

About 3.1 miles of the Marine Corps Firing Range would be crossed by the Daggett Loop between MPs 3.7 and 6.8. The facility includes a pistol/rifle firing range south of the proposed right-of-way.

As construction approaches the Marine Corps Firing Range, KRGT shall coordinate with the Military Police, Ranger Officer, and the Environmental Division concerning security, access, live fire range safety, and special status species protections. Additional site-specific mitigation measures required by the Marine Corps shall be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.

By coordinating with Marine Corps Firing Range personnel as construction approaches the base, KRGT would minimize impacts on this special management area and would avoid impacting the purpose for which this area was established. In addition, KRGT would implement any additional site-specific mitigation measures required by the Marine Corps and included as stipulations of the COM Plan.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT152

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Edwards Air Force Base (AFB)

Impact: Construction could impact the purpose for which the Edwards AFB was established.

Class: II

- Finding:
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Edwards AFB, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The Daggett Loop would be within the boundaries of Edwards AFB in two locations (between MPs 41.0 and 42.5 and MPs 51.2 and 51.4) and would be north of the AFB boundary between MPs 42.5 and 67.8. No aboveground facilities would be located within the AFB. Edwards AFB covers 301,000 acres and is home of the Air Force Flight Test Center, NASA Dryden Flight Research Center, and the Air Force Research Laboratory.

During the scoping process, Edwards AFB identified several items that KRGT would need to implement both before and during construction within the AFB. KRGT shall:

- arrange a pre-construction conference at least 30 days before the start of construction on Edwards AFB lands;
- coordinate with base personnel before beginning any activities within the base;
- register all personnel and vehicles operating in conjunction with the project with base security before entering base lands;
- coordinate ingress and egress routes to the construction site with base security; and
- before excavation, clear all areas where the possibility of encountering ordnance associated with past test and training activities exists using qualified ordnance disposal personnel and in consultation with Edwards AFB personnel.

Additional site-specific mitigation measures required by Edwards AFB shall be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.

Implementation of these mitigation measures, and any others specified in the COM Plan, would minimize impacts on Edwards AFB and would avoid impacting the purpose for which this special management area was established.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

Exhibit C: CEQA Findings

Implementation of these measures would minimize the potential for the pipeline right-of-way to increase the accessibility for OHV use into previously restricted, inaccessible, or environmentally sensitive areas.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

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CEQA FINDING NO. KRGT155

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES: Visual Impact

Impact: Construction-related visual impacts would be caused by vegetation removal, earthwork and grading scars, staging areas, heavy equipment tracks, trenching, blasting, rock formation alteration or removal, and temporary support machinery and tool storage.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Unless an approved resource management plan (RMP) is in effect, the BLM uses a Visual Resource Management (VRM) system to identify and manage scenic values on federal lands. The VRM system includes a visual resource inventory, which classifies resources on BLM land in one of four categories: class I, II, III, or IV, with class I having the highest visual sensitivity and class IV being the least sensitive. Of the 105.9 miles of BLM-administered lands crossed by the project in California, the proposed pipeline route crosses 38.8 miles in VRM class II and 1.1 miles in VRM class III. The remaining 66.0 miles are unclassified. The degree of modification allowed to the basic elements of the landscape in these classes includes:

- class II: modification should not be evident in the landscape. Contrasts are seen, but should not attract attention of the casual observer; and
- class III: modifications are evident, but should remain subordinate to the existing landscape.

The 105.9 miles of BLM-administered lands in California, which are within the BLM's California Desert District (CDD), are subject to the CDCA Plan (the functional equivalent of a BLM RMP). CDD scenic resources are subject to management provisions of the CDD's multiple-use class (MUCs). BLM lands crossed by the project within the CDD are assigned MUCs L (Limited) and M (Moderate). Within MUCs L and M, new transmission facilities are only allowed within designated corridors. The proposed pipeline would be located entirely within designated Utility Corridors D and G and is in conformance with the management objectives of the CDCA Plan.

The California portion of the Goodsprings Loop is characterized as wide open, desert habitat with terrain ranging from flat dry lakebeds, rolling hills, and bajada slopes to jagged mountains with rocky peaks. After crossing into California, the pipeline route would cross the Clark Mountains north of the Mojave National Preserve. Vegetative cover in the Clark Mountain area consists of creosote bush, diverse cactus, and yucca species, as well as a wide variety of perennial flowers. Numerous large bajada slopes drop down from the mountains and hills into

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Exhibit C: CEQA Findings

dry lakebeds. The western end of the Goodsprings Loop from Highway 127 to Barstow is a combination of flat, barren dry lakebeds, and rolling hills. The vegetation consists primarily of creosote bush scrub. Few houses exist in the area, and the only green agricultural fields are located about 2 miles east of the end of the loop. BLM lands crossed by the California portion of this loop are within a designated utility corridor with the surrounding areas having VRM classifications of II (38.8 miles) and III (1.1 miles) or are unclassified (42.5 miles).

Low, rolling hills are found between MPs 3.7 and 7.0 of the Daggett Loop. Broad, flat plains characterize the remainder of the loop. Elevation ranges from 2,100 to 3,060 feet. Vegetation is sparse with expanses of bare ground between individual plants and is largely represented by creosote bush and various saltbush species. The 23.5 miles of BLM lands crossed are within a designated utility corridor and are unclassified.

The visual impact of the pipeline loops would be primarily temporary or short term because most of the proposed route would be constructed adjacent to the existing KRGT pipeline or KRGT/Mojave Common System pipeline rights-of-way. Where the proposed route is adjacent to existing rights-of-way, project construction would temporarily redefine the existing line and result in an incremental increase of visual impact of the previously disturbed area. To further minimize visual impacts, KRGT shall implement general mitigation measures as described below.

- The new pipeline loops shall typically overlap existing pipeline rights-of-way, thereby minimizing the amount of clearing needed for construction workspace and permanent right-of-way. Parallel placement of the loops with existing rights-of-way would also minimize visual impacts by minimizing vegetation fragmentation.
- As few landings and turnouts as possible shall be created, and these areas of temporary extra workspace shall not be located on the noses of ridges or exposed slopes.
- Felled trees shall be left as close as possible to the downhill side of the right-of-way.
- Grading during restoration shall be done in a manner that minimizes erosion and conforms to the natural topography.
- Soils and rock that are excavated, but not used to backfill the trench or restore contours, shall be evenly spread onto the cleared area in non-agricultural areas.
- In areas where blasting is required, native soils and materials shall be used to reclaim the construction right-of-way. Any rock introduced into the surface soil that is visually incompatible with the surrounding areas shall be buried on the right-of-way or hauled to an approved disposal site. Site-specific measures shall also be implemented, such as: the use of native soils, vegetation, and materials to recreate pre-construction conditions; application of a coloration product such as Permeon™ where natural Adesert varnish® has been removed; or rebuilding rim-rock disturbed during construction.
- The permanent pipeline right-of-way markers shall adhere to the color-coding scheme for buried utilities developed by the American Public Works Association (yellow markers for natural gas, oil, steam, petroleum, or other gaseous material pipelines). KRGT=s existing pipeline is identified by yellow markers; similar markers would be used for the proposed pipeline. Pursuant to DOT requirements, KRGT shall install markers wherever necessary to identify the pipeline location in order to reduce the possibility of damage.

Implementation of these measures would minimize impacts on visual resources in California and would result in the project being in conformance with applicable BLM VRM classifications.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

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CEQA FINDING NO. **KRGT165**
KRGT166

SOCIOECONOMICS: Influx of Construction Workers and Delivery of Construction Equipment

Impacts: Construction activities, such as the influx of construction workers to the project area, could result in traffic congestion and roadside parking hazards.

The delivery of construction equipment and materials could also temporarily congest existing transportation networks at specific locations.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Caltrans, BLM, FERC)

FACTS SUPPORTING THE FINDING:

The proposed pipeline route crosses or is adjacent to several linear transportation and utility rights-of-way including highways, roads, railroad tracks, and powerlines. The majority of the pipeline route would be in remote rural areas where existing traffic volumes are low. Major highways, such as state routes or interstates, would be crossed at 10 locations in California.

To minimize the potential effects associated with the influx of construction workers, KRGT shall require that construction workers use contractor yards as the primary parking area for employees' personal vehicles. Workers would be transported from contractor yards to the construction site in buses provided by the contractor. Only company (*i.e.*, contractor and/or KRGT) vehicles shall be allowed on the right-of-way. To minimize disruption to traffic associated with the delivery of construction equipment and materials, KRGT has sited its contractor yards at locations that have existing adequate roadway access to the pipeline construction areas.

By requiring construction workers to use contractor yards as the primary parking area for employees' personal vehicles, KRGT would reduce the number of vehicles on roadways in the project area and minimize traffic congestion associated with these vehicles. Implementation of this measure would also minimize roadside parking hazards. The use of contractor yards would also centralize the areas where construction equipment and materials would be delivered, thereby minimizing traffic congestion along the entire pipeline route.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. **ARM10**

CULTURAL RESOURCES: Protection of Cultural Resources

Impact: Project impacts or effects on cultural resources include not only the physical disturbance of a historic property, but may also include the introduction, removal, or alteration of various visual or auditory elements, which could alter the traditional setting or ambience of the property.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (California State Historic Preservation Office (SHPO), BLM, FERC)

FACTS SUPPORTING THE FINDING:

Surveys in California located six new cultural resources and one isolated find. Two historic-period sites, an airport and a railroad industrial complex, were recommended as eligible for listing on the National Register of Historic Places (NRHP). The remaining four cultural resources and one isolated find were recommended as not eligible for listing on the NRHP.

Seventy-six previously recorded cultural resources located within the survey corridor and yards were revisited. Of these, 52 were recommended as not eligible for listing, were not relocated during survey, or had been destroyed. One site, a prehistoric rock cairn (Silver Lake Rock Cairn Site), is listed on the NRHP, and the remaining 23 are eligible for listing. Of the 23 cultural resources recommended as eligible, 5 are historic-period sites including 3 railroads, 1 road, and 1 transmission line; 16 are prehistoric sites representing locations of prehistoric occupation or use activities; and the remaining 2 sites include both prehistoric and historic components.

Cultural resources in California that are eligible for listing on the NRHP are also eligible for listing on the California Register of Historical Resources (CRHR). In addition, sites that are not eligible for listing on the NRHP may be eligible for listing on the CRHR. The CSLC has determined that one site in California that was recommended as not eligible for the NRHP is eligible for the CRHR for CEQA purposes. The remaining sites in California that were recommended as not eligible for the NRHP are also recommended as not eligible for the CRHR. Archaeological resources in California that are not eligible for the CRHR may be classified as "unique archaeological resources" if they meet specified criteria. No sites met the specified criteria. Four sites in California are wholly or partially on state land. For purposes of the CEQA, three sites (Route 66; the Atchison, Topeka and Santa Fe railroad; and a transmission line) may qualify as historical resources and "structures" and one site (rock features) may qualify as a non-unique archaeological resource. For any historical resources located on state land, the CSLC must consult with the SHPO as specified under Section 15064.5(b)(5). The CSLC has begun consultation with the SHPO for these sites.

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Exhibit C: CEQA Findings

KRGT shall defer construction and use of its facilities and any staging, storage, or temporary work areas and new or to-be-improved access roads until:

- KRGT prepares and files with the FERC and the CSLC, and submits to the consulting parties, as appropriate, any outstanding cultural resources reports and necessary treatment plans;
- KRGT files with the FERC and the CSLC the comments of the consulting parties on all cultural resources reports and plans submitted for review;
- the CSLC reviews and approves all cultural resources reports and plans prepared for the California portion of the project and notifies KRGT in writing that construction may proceed; and
- the Director of OEP reviews and approves all cultural resources reports and plans and notifies KRGT in writing that construction may proceed.

These measures would prohibit the start of the project in California until responsible agencies determine that its potential impacts on cultural resources are sufficiently mitigated and the project is in compliance with the applicable federal and state regulations.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT169

AIR QUALITY AND NOISE: Air Emissions from Temporary Construction Activities

Impact: The proposed project would generate air emissions from temporary construction activities.

Class: II

Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Mojave Desert AQMD, BLM, FERC)

FACTS SUPPORTING THE FINDING:

Construction emissions associated with the project would include equipment exhaust and fugitive dust. Construction activities, and hence construction emissions, would take place mainly during the hours of 7 a.m. to 7 p.m. each day for a total period of about 11 months, after which they would cease. Pipeline construction is a linear process where equipment does not stay at one location for an extended period of time as the project progresses.

To reduce construction emissions, KRGT shall implement emission control measures developed in consultation with the Mojave Desert AQMD. These measures include:

- properly maintaining and tuning equipment to manufacturers= specification;
- transporting workers from contractor yards to the construction site in buses provided by the contractor to reduce vehicle emissions;
- limiting the extent of a visible dust plume to less than 100 yards from the source;
- limiting opacity of fugitive dust to 20% or less;
- applying water and/or a non-toxic, organic tackifier as a dust suppressant on non-paved roads and construction work areas, including topsoil piles, to limit excessive airborne particulates as a result of construction activities (see CEGQA Finding Nos. KRGT45/KRGT48/KRGT79 and KRGT90/ARM6);
- cleaning equipment traveling from a non-paved road to a paved road;
- installing construction entrances to prevent tracking of soil onto paved roads;
- cleaning soil tracked onto paved roads more than 50 feet from the point of origin within 1 hour of discovery and cleaning soil tracked onto paved roads less than 50 feet from the point of origin at the end of each work day;
- using tarps or other means to enclose material on haul trucks;
- limiting blast footprints to a size that can be stabilized after the blast

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Exhibit C: CEQA Findings

- requiring the contractor to obtain approval from KRGT before blasting if wind speeds are 25 mph or greater; and
- keeping daily records of all dust control measures taken, including:
- the date, time, location, and dust control measures that were taken;
- inspection of all paved/non-paved intersections for trackouts with descriptions of conditions and any required clean-up; and
- weather conditions and wind speed and direction.

Before construction, KRGT shall submit a Dust Control Plan to the Mojave Desert AQMD.

KRGT's implementation of these mitigation measures and its Dust Control Plan would minimize air emissions associated with temporary construction activities.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT171

AIR QUALITY AND NOISE: Noise

Impact: Noise would be generated during the construction and operation phase of the pipeline project.

Class: II

- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (BLM, FERC)

FACTS SUPPORTING THE FINDING:

Noise would be generated during the construction phase of the pipeline project and during the construction and operation of the compressor stations. Pipeline construction is like having an assembly line, with crews conducting separate but sequential activities, each generally proceeding at rates ranging from several hundred feet to 1 mile per day. Depending on the distance between each crew in the assembly line, construction activities in any one area could last from several weeks to several months on an intermittent basis. KRGT shall operate construction equipment on an as-needed basis during this period. While individuals in the immediate vicinity of the construction activities would experience an increase in noise, this effect would be temporary and local. The noise levels from pipeline and compressor station construction equipment are not expected to exceed 78.8 decibels of the A-weighted scale (dBA) and 81.9 dBA at a distance of 100 feet from the construction site. This equates to noise levels of approximately 58.8 dBA for pipeline construction and 61.9 dBA for compressor station construction at a distance of 1,000 feet. Nighttime noise is not expected to increase during construction because most construction activities would be limited to daytime hours.

At any location, both the magnitude and frequency of environmental noise may vary considerably over the course of the day and throughout the week. Variation is caused in part by changing weather conditions, the effects of seasonal vegetative cover, and human activities. Two measures used by federal agencies for the time-varying quality of environmental noise known to affect people are the 24-hour equivalent sound level ($L_{eq(24)}$) and the day-night sound level (L_{dn}). The $L_{eq(24)}$ is the level of steady sound with the same total (equivalent) energy as the time-varying sound of concern, averaged over a 24-hour period. The L_{dn} is the $L_{eq(24)}$ with 10 dBA added to nighttime sound levels between the hours of 10 p.m. and 7 a.m. to account for people's greater sensitivity to sound during nighttime hours.

The existing Daggett Compressor Station is located in San Bernardino County, California, approximately 2 miles east of Daggett. There are nine noise-sensitive areas (NSAs) within 1 mile of the compressor station. The closest NSA (NSA #4) is a future noise receptor located approximately 2,000 feet to the northwest of the compressor station site. The existing L_{dn} at NSA #4 is 42.4 dBA, which corresponds to an L_{dn} of 48.8 dBA.

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Exhibit C: CEQA Findings

Facilities at the existing Daggett Compressor Station include one electric motor-driven compressor. KRGT proposes to restage and derate the existing motor from 8,000 horsepower (hp) to 4,000 hp. This modification is expected to reduce the existing noise levels.

The estimated noise attributable to the Daggett Compressor Station after the proposed modifications are completed would be an L_{eq} of 37.6 dBA at the nearest NSA. This equates to an L_{dn} attributable to the compressor station of 44 dBA at the nearest NSA. This noise level is 4 dBA below the existing noise levels and 11 dBA below the FERC limit of 55 dBA L_{dn} .

To ensure that the actual noise resulting from the operation of the Daggett Compressor Station is below an L_{dn} of 55 dBA, KRGT shall conduct a noise survey to verify that the noise from the Daggett Compressor Station operated at full load does not exceed an L_{dn} of 55 dBA at any NSAs, and file the results of the noise survey with the FERC and the CSLC no later than 60 days after placing the modified compressor station into service. If the noise attributable to the operation of the compressor station at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, KRGT shall file a report on what changes are needed and shall install additional noise controls to meet that level within 90 days of completing the survey. KRGT shall confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the FERC and the CSLC no later than 60 days after it installs the additional noise controls.

By operating construction equipment on an as-needed basis, KRGT would minimize noise impacts associated with construction of the pipeline. Implementation of a noise survey and any required follow-up mitigation would ensure that the noise from the Daggett Compressor Station does not exceed allowable limits.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

CEQA FINDING NO. KRGT173/ARM11

SAFETY AND RELIABILITY: Public Safety

Impact: The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas.

Class: II

- Finding:**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
 - b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (DOT, FERC)

FACTS SUPPORTING THE FINDING:

The pipeline and aboveground facilities associated with the Kern River 2003 Expansion Project shall be designed, constructed, operated, and maintained in accordance with or to exceed the DOT Minimum Federal Safety Standards in Title 49 CFR Part 192. The spacing for all of KRGT's proposed MLVs meets the DOT's requirements. KRGT shall upgrade the pipeline design when an increase in population density adjacent to the right-of-way indicates a change in class location for the pipeline.

The pipe shall have a coating of 12 millimeters of thickness (mils) fusion bond epoxy coating and 8 mils abrasion resistant coating. In addition, the pipe shall be internally coated to reduce friction.

Before construction, KRGT shall inspect the pipe at the mill where it is manufactured to ensure that it meets specifications and quality standards. During construction, the integrity of coating designed to protect against corrosion shall be checked and imperfections shall be corrected. Welds shall be quality checked with x-rays. KRGT shall test the pipe with water to a pressure ranging from 125 to 180% of the maximum allowable operating pressure.

Before placing the pipeline into service, KRGT shall perform post-construction geometry pig surveys, which would locate any construction-related dents.

KRGT shall install a cathodic protection system to prevent or minimize corrosion of the buried pipeline. The cathodic protection system would impress a direct current on the pipe thus providing a ground-bed anode that would corrode instead of the pipeline.

KRGT shall clearly mark the pipeline facilities at line-of-sight intervals and at crossings of roads, railroads, and other key points. The markers shall clearly indicate the presence of the pipeline and provide a telephone number and address where a company representative may be reached in the event of an emergency or before any excavation in the area of the pipeline by a third party. KRGT participates in all communication and notification services to prevent damage to underground utilities (One-Call systems).

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Exhibit C: CEQA Findings

The pipeline system shall be inspected by air to observe right-of-way conditions and identify indications of leaks, evidence of pipeline damage, evidence of encroachment (*i.e.*, landowners building permanent structures on the permanent right-of-way), or damage to erosion controls resulting from erosion or washouts.

The proposed pipeline shall be operated from Gas Control Centers in Salt Lake City, Utah and Colorado Springs, Colorado.

KRGT=s compressor station crews shall perform operation and maintenance of the new and existing equipment. KRGT shall perform routine checks of the facilities, including calibration of equipment and instrumentation, inspection of critical components, and scheduled and routine maintenance of equipment. Safety equipment, such as pressure relief devices, fire detection and suppression systems, and gas detection systems, shall be periodically tested for proper operation.

All of these operation and maintenance procedures are documented in a written plan KRGT developed in accordance with Title 49 CFR Part 192. To ensure implementation of maximum feasible mitigation and to assist the CSLC in reviewing KRGT=s project for consistency with the CSLC=s action on the new or amended leases across California School Lands, before placing the pipeline system into service in California, KRGT shall submit to the CSLC for approval a revised operation and maintenance plan. The revised plan shall address internal and external maintenance inspections of the completed facility, including details of integrity testing methods to be applied, corrosion monitoring and testing of the cathodic protection system, and leak monitoring. The plan shall also specify that KRGT shall, unless expressly prohibited by DOT regulations, conduct an internal inspection with a high-resolution instrument on a periodic basis, at a minimum of one inspection every 10 years, or sooner if the evidence suggests that significant corrosion or defects exist or if any new federal or state regulations require more frequent or comparable inspections. Within 3 months following the promulgation of any new federal or state regulations, KRGT shall update the plan and submit a revised copy to the CSLC.

While KRGT=s primary safety focus is accident prevention, KRGT has, in accordance with Part 192, developed an emergency response plan for the proposed project based on its current plan, which shall be coordinated and tested (through drills and exercises) with local fire/police departments and emergency management agencies. This plan shall also be reviewed by the DOT Office of Pipeline Safety and is subject to DOT rules and regulations. KRGT has provided its emergency response plan to the CSLC. Key elements of the emergency response plan include procedures for:

- receiving, identifying, and classifying emergency events, gas leakage, fires, explosions, and natural disasters;
- establishing and maintaining communications with local fire, police, and public officials, and coordinating emergency response;
- making personnel, equipment, tools, and materials available at the scene of an emergency;
- protecting people first and then property, and making them safe from actual or potential hazards; and
- emergency shutdown of the system and safe restoration of service.

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Exhibit C: CEQA Findings

KRGT maintains 24-hour emergency response capabilities, including an emergency-only toll-free telephone number. The number is included in informational mail-outs, posted on all pipeline markers, and provided to local emergency agencies in the vicinity of the pipeline.

KRGT currently meets with the emergency services departments of the municipalities and counties along its existing pipeline facilities. Fire and safety equipment is maintained along the pipeline system, and KRGT personnel and local emergency response groups are trained in response procedures. KRGT personnel consult with local fire departments and emergency response agencies to determine if additional equipment, training, and preparedness support are needed and provide additional equipment, training, and support where the needs are identified. KRGT provides these departments with the 24-hour emergency numbers and verbal, written, and mapping descriptions of the pipeline system. KRGT representatives also meet with all local emergency service units on an on-going basis. These procedures shall continue for the Kern River 2003 Expansion Project.

To assist the CSLC in reviewing the project for consistency with its action to issue to KRGT new right-of-way leases or to amend the existing leases across California School Lands, KRGT shall provide the following documents pertaining to the California portion of the project to the CSLC within 120 days of the completion of work in California:

- a set of As built construction plans, certified by a California-registered civil/structural engineer, showing all design changes or other amendments to the construction as originally approved;
- certified copies of all completed pipeline integrity test results (hydrostatic tests, gauging runs, etc.) including copies of any failed test results with an explanation of the reason for failure; and
- a post-construction written narrative report confirming completion of the project with discussion of any significant field changes or other modifications to the approved design or execution plan, and providing details of any extraordinary occurrences such as spill incidents and accidents involving serious injury or loss of life, and a summary of a quality control and weld inspection program including all failed and repaired welds.

The purpose of the above provisions is to reduce, to the maximum extent feasible, risks to the public inherent in the construction and operation of a natural gas pipeline.

SUMMARY: This impact is found to be less than significant following mitigation (Class III).

EXHIBIT D

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF THE STAFFS' ENVIRONMENTAL ANALYSIS

The conclusions and recommendations presented in this section are those of the environmental staffs of the FERC and the CSLC (Agency Staffs). The BLM will present, in its ROD for the Kern River 2003 Expansion Project, its own conclusions and recommendations that incorporate the concurrence or non-concurrence of the other affected Federal land management agencies.

Review of the information provided by KRGT and further developed from data requests; field investigations; scoping; literature research; alternatives analysis; and contacts with Federal, Tribal, state, and local agencies, and individual members of the public indicates that the proposed project would result in limited adverse environmental impact. The Agency Staffs have concluded that if the project is constructed and operated in accordance with applicable laws and regulations, KRGT's proposed mitigation, and the Agency Staffs' additional mitigation recommendations, it would be an environmentally acceptable action. Although many factors were considered in this determination, the principal reasons are:

- 93 percent of the proposed pipeline would be located adjacent to KRGT's existing pipeline and 99 percent would be within or adjacent to existing rights-of-way;
- the project would be consistent with or in conformance with all identified resource management plans, land and resource management plans, general management plans, and local land management plans;
- KRGT would implement its Blasting Plan, Spill Plan, Drilling Mud Release Contingency Plan, Groundwater Monitoring Plan, UECRM Plan, WWCM Procedures, PRM Plan, site-specific Reclamation Plans, Noxious Weed Plan, Wildfire Protection Plan, and COM Plan to protect natural resources during construction and operation of the project;
- use of the directional drill method would avoid disturbances to the beds and banks of the Bear River, East Branch Weber River, and Weber River and associated wetlands;
- the appropriate consultations with the FWS, the SHPOs, the BLM, the FS, other affected land management agencies, and Native Americans, and any appropriate compliance actions resulting from these consultations, would be completed before KRGT would be allowed to begin construction in any given area; and
- an environmental inspection and mitigation monitoring program would ensure compliance with all mitigation measures that become conditions of certification.

In addition, the Agency Staffs developed specific mitigation measures to further reduce the environmental impact that would otherwise result from construction of the project. The Agency Staffs are recommending that these mitigation measures be attached as conditions to any authorization issued by the FERC or the CSLC. These mitigation measures are presented in section 5.6.

Table 5.1-1 (page 5-10), presents a summary of the potential environmental impacts from the project as well as the mitigation that would be applied to reduce environmental impacts and lists the agency(ies) responsible for monitoring each of the mitigation requirements. With one exception, discussed in section 5.4, KRGT's proposed and the Agency Staffs' recommended mitigation would reduce potential environmental impacts to less than significant levels. Table 5.1-1 forms the basis for the detailed mitigation

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5.3 ENVIRONMENTALLY PREFERABLE PROJECT

The Agency Staffs have determined that KRG T's proposed route is the environmentally preferable project.

5.4 SIGNIFICANT UNAVOIDABLE IMPACTS/STATEMENT OF OVERRIDING CONSIDERATIONS

Effects on all resources were evaluated to determine any significant impact that would remain so after mitigation. As shown in table 5.1-1 (page 5-10), with one exception, all environmental impacts would be reduced to less than significant levels by KRG T's proposed or the Agency Staffs' recommended mitigation. The Agency Staffs have determined that a long-term reduction in special concern vegetation communities (*i.e.*, yucca, cactus, and agave communities) could occur and that potential impacts on these species could be significant. Approval of the project would be subject to a Statement of Overriding Considerations under the CEQA due to this significant unavoidable impact that could remain after mitigation is applied.

5.5 IRREVERSIBLE/IRRETRIEVABLE COMMITMENT OF RESOURCES; SHORT- AND LONG-TERM USES OF THE ENVIRONMENT

The major nonrenewable resources that would be consumed by the proposed project are fossil fuels used to power construction vehicles and, over the life of the project, the pipeline itself (the proposed compressor stations would be natural-gas powered). Theoretically, the pipeline components could be reclaimed at the end of the pipeline's operational life. However, there would be a number of irretrievable resources committed to the proposal if the necessary authorizations are granted. The primary resources irretrievably lost would include soils (resulting from water and wind erosion in disturbed areas); water (used for dust control); crop production (lost or reduced for one season); land use (aboveground facilities would replace rangeland and agricultural land for the life of the project); wildlife habitat (temporary to long-term loss); and yucca, cactus, and agave communities (long-term loss). The loss of cultural resources also would be irretrievable, if allowed to occur.

As discussed in section 4.12, the proposed project has been designed to meet or exceed all safety requirements, and the potential for irreversible damage to the environment during operation is slight.

The proposed project would transport significant volumes of natural gas to customers in Utah, Nevada, and southern California. Its operation would be consistent with Federal policies encouraging competitive natural gas transportation services. For these reasons, the limited irreversible and irretrievable resource commitments are acceptable.

5.6 FERC AND CSLC STAFFS' RECOMMENDED MITIGATION

If the FERC and the CSLC approve the Kern River 2003 Expansion Project, the Agency Staffs recommend that the following measures be included as specific conditions of the Certificate/permit to further mitigate the environmental impact associated with the construction and operation of the proposed project and to assist the agencies in their compliance monitoring activities:

1. Kern River Gas Transmission Company (KRG T) shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff data requests), and as identified in the environmental impact statement/environmental impact report (EIS/EIR), unless modified by the FERC Order. KRG T must:

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- a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the FERC (Secretary) and the California State Lands Commission (CSLC);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) and, for the lands under the CSLC's jurisdiction, the Executive Officer of the CSLC **before using that modification.**
2. The Director of OEP has delegation authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the project. This authority shall allow:
- a. the modification of conditions of the FERC Order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from project construction and operation.
3. **Prior to any construction**, KRGT shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before becoming involved** with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EIS/EIR, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, KRGT shall file with the Secretary revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the FERC Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

KRGT's exercise of eminent domain authority granted under Natural Gas Act (NGA) Section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. KRGT's right of eminent domain granted under NGA Section 7(h) does not authorize it to increase the size of its natural gas pipeline to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. KRGT shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that will be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction** in or near that area.

This requirement does not apply to route variations recommended herein or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
 - b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. KRGT shall file with the CSLC for review and approval, a set of final engineering design drawings as issued for construction for the portion of the project in California, certified by a California-registered civil/structural engineer. In addition to the pipeline alignments and profiles, the drawings shall provide information such as tie-in details, pipeline grade and material specifications, wall thickness, weight and corrosion coating, minimum bend radius (wherever applicable, such as directional drilling installations), normal and maximum operating pressure, hydrostatic test information, cathodic protection and test stations, and location and details of the nearest upstream pipeline flow emergency shutdown equipment, etc.
7. **Within 60 days of the acceptance of this Certificate and before construction begins**, KRGT shall file an initial Implementation Plan with the Secretary and the CSLC for the review and written approval of the Director of OEP and the CSLC describing how KRGT will implement the mitigation measures required by the FERC Order and the CSLC mitigation monitoring program. KRGT must file revisions to the plan as schedules change. The plan shall identify:
- a. how KRGT will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
 - b. the number of EIs assigned per spread and a description of how KRGT will ensure that sufficient personnel are available to implement the environmental mitigation;
 - c. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
 - d. the training and instructions KRGT will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
 - e. the company personnel (if known) and specific portion of KRGT's organization having responsibility for compliance;
 - f. the procedures (including use of contract penalties) KRGT will follow if noncompliance occurs; and
 - g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the mitigation training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.

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8. KRG T shall file updated status reports with the Secretary and, for the portion of the project in California, the CSLC on a **weekly basis until** all construction-related activities, including restoration, are complete. On request, these status reports will also be provided to other Federal and state agencies with permitting responsibilities. Status reports shall include:
- a. the current construction status of each spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - b. a listing of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period (both for the conditions imposed by the FERC and any environmental conditions/permit requirements imposed by other Federal, state, or local agencies);
 - c. a description of any corrective actions implemented in response to all instances of noncompliance, and their cost;
 - d. the effectiveness of all corrective actions implemented;
 - e. a description of any landowner/resident complaints that may relate to compliance with the requirements of the FERC Order and the CSLC mitigation monitoring program, and the measures taken to satisfy their concerns; and
 - f. copies of any correspondence received by KRG T from other Federal, state, or local permitting agencies concerning instances of noncompliance, and KRG T's response.
9. KRG T must receive written authorization from the Director of OEP **before commencing service from the project**. Such authorization will only be granted following a determination that rehabilitation/restoration of the right-of-way is proceeding satisfactorily.
10. **Within 30 days of placing the certificated facilities in service**, KRG T shall file an affirmative statement with the Secretary, certified by a senior company official:
- a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the Certificate conditions KRG T has complied with or will comply with. This statement shall also identify any areas along the right-of-way where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
11. **Before commencement of any blasting**, KRG T shall submit to the FERC and the CSLC (for the portion of the project in California) for approval:
- a. a copy of the license of the person(s) conducting or supervising the blasting operations and evidence that the person is certified to perform such activity in the jurisdiction where blasting occurs; and
 - b. a copy of the contractor-prepared site-specific blasting plans. The site-specific plans shall include a contingency plan that includes safe methods and procedures to identify any misfired detonations and to proceed with further work after misfires. (ARM1)^{1/}
12. KRG T shall incorporate the following measure into its pipeline operations and maintenance procedures. **Following an earthquake within the parameters shown in the table below**, KRG T

^{1/} Designates the agency-recommended mitigation measure for the mitigation monitoring program as listed in table 5.1-1 (page 5-10).

operations personnel shall inspect all parts of the pipeline alignment that fall within the specified distance of the earthquake epicenter for evidence of permanent ground deformation (*e.g.*, cracks or displacements). If surface fault rupture is reported or observed, the pipeline alignment within at least 1,000 feet of the rupture shall be inspected. KRGT shall submit reports of its findings to the FERC and the CSLC.

Earthquake Magnitude (Richter scale)	Epicentral Distance (miles)
6	5
6.5	10
7	15
7.5	20

(ARM2)

13. KRGT shall conduct a reassessment of the subsidence hazard in California **after every 15 years of operation**. Regions of subsidence that approach 5 feet shall be identified and the pipeline condition and performance shall be evaluated. KRGT shall submit a report of its evaluation to the CSLC and appropriate action shall be taken based on the CSLC's findings. (ARM3)
14. **Before construction of the Bear and Weber River crossings may begin**, KRGT shall file with the FERC for the review and written approval of the Director of OEP revised site-specific horizontal directional drill (HDD) crossing plans for these rivers that show all workspace requirements for the drilling operations and the wetlands that would be affected by each workspace. If surveys indicate no wetlands are present, KRGT shall file the survey documentation that supports the finding. (ARM4)
15. **Before construction**, KRGT shall file with the FERC and the CSLC a revised Noxious Weed Plan. The revised plan shall include provisions for KRGT to:
 - a. update its list of known noxious weed infestations to include the data acquired during its noxious weed surveys conducted in 2002;
 - b. treat all weeds deemed noxious by Federal, state, and/or county weed control agencies to the extent that they do not present a significant hindrance to reclamation efforts; and
 - c. schedule its weed control efforts to occur before seed maturation/development. (ARM5)
16. If active construction in desert tortoise habitat would continue after January 31, KRGT shall coordinate with the U.S. Fish and Wildlife Service (FWS), the Bureau of Land Management (BLM), and the California Department of Fish and Game (CDFG) (in California) to identify site-specific locations where KRGT would install temporary tortoise-proof fence or cover open trenches at the end of each work day. The results of these consultations shall be filed with the FERC and the CSLC **before construction in desert tortoise habitat may continue after January 31**. (ARM6)
17. If a population of Ute ladies'-tresses is identified at mileposts 0.63, 0.83, 1.33, 27.3, or 34.9, KRGT shall bore the area or adjust its route to avoid impacting this species, unless otherwise permitted by the FWS. Such route modifications shall be filed with the FERC for the review and written approval of the Director of OEP **before construction**. (ARM7)
18. KRGT shall conduct preconstruction surveys for nesting Bendire's thrashers in areas of suitable habitat that would be disturbed by construction activities. If any active Bendire's thrasher nests are

found, KRGT shall adhere to the CDFG-recommended 1,000-foot buffer unless otherwise permitted by the CDFG. (ARM8)

19. KRGT shall not begin construction activities **until**:

- a. KRGT completes any outstanding species-specific surveys and the FERC receives comments from the FWS regarding the preconstruction survey reports;
- b. the FERC completes formal consultation with the FWS;
- c. KRGT has completed and filed with the FERC the results of consultations with the Utah Division of Wildlife Resources regarding measures to avoid or minimize impacts on special status species in Utah;
- d. KRGT has completed and filed with the FERC the results of consultations with the BLM regarding measures to avoid or minimize impacts on special status species on lands managed by the BLM; and
- e. KRGT has received written notification from the Director of OEP that construction or use of conservation measures may begin. (ARM9)

20. **In California**, KRGT shall not begin construction activities **until**:

- a. KRGT completes any outstanding species-specific surveys in California and the FERC and the CSLC receive comments from the FWS and the CDFG regarding the applicable preconstruction survey reports;
- b. the FERC completes formal consultation with the FWS;
- c. the CDFG makes a consistency determination on the FWS' Biological Opinion pursuant to Section 2080.1 of the California Fish and Game Code or issues an Incidental Take Permit that covers both federally and state-listed species that may be affected;
- d. KRGT obtains an Incidental Take Permit under Section 2081 of the California Fish and Game Code for all state-listed species that may be affected, or receives concurrence from the CDFG that an Incidental Take Permit is not required;
- e. KRGT has completed and filed with the FERC and the CSLC the results of consultations with the BLM regarding measures to avoid or minimize impacts on special status species on lands managed by the BLM in California; and
- f. KRGT has received written notification from the Director of OEP and the CSLC that construction or use of conservation measures may begin in California. (ARM9)

21. KRGT shall defer construction and use of its facilities and any staging, storage, or temporary work areas and new or to-be-improved access roads **until**:

- a. KRGT prepares and files with the FERC and the CSLC (for the California portion of the project), and submits to the consulting parties, as appropriate, any outstanding cultural resources reports and necessary treatment plans;
- b. KRGT files with the FERC and the CSLC (for the California portion of the project) the comments of the consulting parties on all cultural resources reports and plans submitted for review;
- c. the CSLC reviews and approves all cultural resources reports and plans prepared for the California portion of the project and notifies KRGT in writing that construction may proceed; and
- d. the Director of OEP reviews and approves all cultural resources reports and plans and notifies KRGT in writing that construction may proceed.

All material filed with the FERC and the CSLC containing **location, character, and ownership information** about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: **"CONTAINS PRIVILEGED INFORMATION - DO NOT RELEASE."** (ARM10)

22. **Before placing the pipeline system into service in California, KRGT shall submit to the CSLC for approval a revised operation and maintenance plan. The revised plan shall address internal and external maintenance inspections of the completed facility, including details of integrity testing methods to be applied, corrosion monitoring and testing of the cathodic protection system, and leak monitoring. The plan shall also specify that KRGT shall, unless expressly prohibited by U.S. Department of Transportation regulations, conduct an internal inspection with a high-resolution instrument on a periodic basis, at a minimum of one inspection every 10 years, or sooner if the evidence suggests that significant corrosion or defects exist or if any new Federal or state regulations require more frequent or comparable inspections. Within 3 months following the promulgation of any new Federal or state regulations, KRGT shall update the plan and submit a revised copy to the CSLC. In addition, the revised plan shall include procedures for implementing the operational mitigation measures for conditions 12 and 13 above. (ARM11)**

TABLE 5.1-1

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
GEOLOGY						
KRGT1	Effects from construction could include disturbances to the natural topography along the right-of-way and at aboveground facilities due to grading and trenching activities (section 4.1.2).	Significant (CEQA Class II)	After completion of construction, Kern River Gas Transmission Company (KRGT) would restore topographic contours and drainage conditions as closely as feasible to their preconstruction condition.	Less than significant (CEQA Class III)	All <u>c/</u>	Federal Energy Regulatory Commission (FERC), California State Lands Commission (CSLC), and Bureau of Land Management (BLM) monitors would verify mitigation is followed.
KRGT2 ARM1	Where hard bedrock is encountered, blasting would be required to complete the excavation. If blasting is not controlled properly, it can cause damage to existing structures and pipelines, wells, and springs. Temporary effects of blasting can include hazards posed by uncontrolled fly-rock and nuisances caused by noise, increased dust, and venting of gases following blasts (section 4.1.2).	Significant (CEQA Class II)	<p>KRGT would conduct blasting for grade or trench excavation only after all other reasonable means of excavation have been used and are unsuccessful in achieving the required results.</p> <p>KRGT has prepared a Blasting Plan to minimize the effects of blasting and ensure safety during blasting operations. The plan provides guidelines, requirements, and specifications for the use and storage of blasting materials and for the safety of personnel and nearby facilities. All blasting-related operations would comply with Federal, state, and local regulations and permit conditions and would be conducted by or under the direct supervision of experienced personnel legally licensed and certified to perform such activity in the jurisdiction where blasting occurs.</p> <p>To avoid injury to personnel and damage to structures or other features like water wells and the existing pipeline, KRGT's Blasting Plan stipulates that the blasting contractor must prepare site-specific blasting plans. Among other requirements, these plans would identify the distance and orientation to the nearest structure (both aboveground and underground) and the procedures to be used for storing, handling, transporting, loading, and firing explosives. The site-specific blasting plans must be</p>	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRG2 ARM1 (cont'd)			<p>reviewed by the company engineer, and the company inspector's approval must be received before each blast.</p> <p>KRG2's Blasting Plan also stipulates the following:</p> <ul style="list-style-type: none"> • KRG2 would not store explosives on Federal land without prior written permission from the land management agency; copies of this permission would be posted on each magazine; • KRG2 would give at least 72 hours advance notice of blasting activities to the land management agency, railroads, highway departments, and local communities; occupants of nearby residences, buildings, and businesses; and local farmers; • KRG2 would erect and maintain warning signs at all approaches to the blast areas and flaggers would be stationed on all roadways passing within 1,000 feet of blasting activities; • KRG2 would not prime or fuse explosives until just before use; • KRG2 would conduct blasting during daylight hours and would monitor blasting activities with three-axis seismographs to ensure that safe vibration levels are not exceeded. Limits of vibration measured as peak particle velocity would not exceed 4 inches per second adjacent to an underground pipeline and 2 inches per second for any aboveground structure (including water wells); and • If an aboveground structure or water well is damaged by blasting, KRG2 would compensate the owner. <p>To ensure that potential impacts associated with blasting are minimized through skillful operations and the use of site-specific plans, before commencement of any blasting, KRG2 would submit to the FERC and the CSLC (for the portion of the project in California) for approval:</p> <ul style="list-style-type: none"> • a copy of the license of the person(s) conducting or supervising the blasting operations and evidence that the person is certified to perform such activity 			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT2 ARM1 (cont'd)			<ul style="list-style-type: none"> In the jurisdiction where blasting occurs; and a copy of the contractor-prepared site-specific blasting plans. The site-specific plans would include a contingency plan that includes safe methods and procedures to identify any misfired detonations and to proceed with further work after misfires. 			
KRGT3	The construction and operation of a pipeline near or over mineral resources could affect existing and future production at active or currently inactive mineral resource areas by restricting activities within the pipeline right-of-way. In general, potential significant effects include diminished mineral land value, loss of mineral land access, and loss of revenues generated by future mineral production (section 4.1.3.1).	Significant (CEQA Class II)	Analysis indicates that nearly all of KRGT's pipeline route is adjacent to existing pipelines or other utilities that have already precluded further mineral development. Additionally, impacts on future mineral development would be negligible and would not constitute a significant loss of a mineral resource or mineral availability because of the narrow nature of the right-of-way relative to the expanse of areas with mineral resource potential. In the event any conflicts between the pipeline and other mineral resource operations are identified, KRGT would compensate the owners of these resources for potential losses.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT4	The pipeline route crosses various gathering and transmission pipelines (foreign lines) associated with oil and gas production areas located between mileposts (MP) 0.0 and 80.0 of the Muddy Creek Loop and Coyote Creek Loop 1. Construction of the project could cause damage or disruption to these foreign lines (section 4.1.3.1).	Significant (CEQA Class II)	<p>To avoid damage or disruption to any foreign lines crossed by the proposed pipeline, KRGT would:</p> <ul style="list-style-type: none"> contact and provide the necessary advance notice (no less than 72 hours) to one-call utility location programs before construction; continually probe the depth of cover over foreign line(s) during trench excavation and hand excavate the final 2 feet; and install the pipeline with a normal vertical separation from foreign pipelines of 2 feet. In no case would the pipeline be installed with less than 1 foot of separation from a foreign pipeline. 	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT5	Much of the project route is located within areas of past seismic activity. Potential seismic hazards include active faults, earthquakes/ground shaking, and soil liquefaction (section 4.1.4.1).	Significant (CEQA Class II)	<p>KRGT would construct and test project facilities to meet Federal standards outlined in the U.S. Department of Transportation's (DOT) regulations in Title 49 Code of Federal Regulations (CFR) Part 192, <i>Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards</i>.</p> <p>KRGT has also committed to design all project facilities to meet or exceed the latest edition of the Uniform Building Code (UBC), International Building Code (IBC), and recognized industry standards under the direction of certified professional engineers. However, the UBC, IBC, and DOT (Title 49 CFR Part 192) requirements do not necessarily address all seismic design criteria required in California, particularly at fault crossings and liquefaction potential zones.</p> <p>In California, the CSLC requires the incorporation of current seismological engineering standards such as the <i>Guidelines for the Design of Buried Steel Pipe</i> (American Lifeline Alliance), <i>Guidelines for the Seismic Design of Oil and Gas Pipeline Systems</i> (American Society of Civil Engineers), and other recognized industry standards for seismic-resistant design at all fault crossings and liquefaction potential zones in California. The CSLC also requires all engineered structures, including pipeline alignment sheets, buildings and other structures, profile drawings wherever necessary, and other appurtenances and associated facilities in California, to be designed, signed, and sealed by California-registered professionals certified to perform such activities in the jurisdiction where the facilities would be located.</p>	Less than significant (CEQA Class III)	All	<p>KRGT certified compliance with the DOT Minimum Federal Safety Standards in its application to the FERC.</p> <p>FERC, CSLC, and BLM monitors would verify mitigation is followed.</p>
KRGT6 ARM2	The pipeline route would cross seven faults or fault zone areas where the potential for surface fault rupture exists. The potential impact of any fault on the pipeline would depend on the fault activity, the expected	Significant (CEQA Class II)	<p>See KRGT5.</p> <p>Mitigation measures KRGT incorporated into the final design include the following:</p> <ul style="list-style-type: none"> orient the pipe at the fault crossing to produce tension in the pipe material in lieu of compression; provide a substantial unanchored length of pipe across the fault; 	Less than significant (CEQA Class III)	Utah California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility										
KRGT6 ARM2 (cont'd)	magnitude of displacement, the geometry of the fault crossing, and the proximity to population. The potential for large differential ground movements leading to surface rupture would require special design considerations (section 4.1.4.1).		<ul style="list-style-type: none"> create ditch geometries (deeper or wider dependent on fault type and orientation) to minimize forces on the pipe; place medium dense sandy backfill around the pipe at the fault crossing; use heavy-wall pipe at the fault crossing; avoid pipe wall-thickness transitions near fault traces; use a certified engineering geologist to observe the construction excavation in the vicinity of the fault crossings to verify that the design assumptions are valid and the treatments are centered in the correct locations; and equip the mainline valves (MLVs) located upstream and downstream of the faults with actuators. <p>KRGT would incorporate the following measure into its pipeline operations and maintenance procedures. Following an earthquake within the parameters shown in the table below, KRGT operations personnel would inspect all parts of the pipeline alignment that fall within the specified distance of the earthquake epicenter for evidence of permanent ground deformation (e.g., cracks or displacements). If surface fault rupture is reported or observed, the pipeline alignment within at least 1,000 feet of the rupture would be inspected. KRGT would submit reports of its findings to the FERC and the CSLC.</p> <table border="1"> <thead> <tr> <th>Earthquake Magnitude (Richter scale)</th> <th>Epicentral Distance (miles)</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>5</td> </tr> <tr> <td>6.5</td> <td>10</td> </tr> <tr> <td>7</td> <td>15</td> </tr> <tr> <td>7.5</td> <td>20</td> </tr> </tbody> </table>	Earthquake Magnitude (Richter scale)	Epicentral Distance (miles)	6	5	6.5	10	7	15	7.5	20			
Earthquake Magnitude (Richter scale)	Epicentral Distance (miles)															
6	5															
6.5	10															
7	15															
7.5	20															
KRGT7	Ground shaking resulting from earthquakes is a potential hazard to the pipeline facilities, especially in the northern parts of Utah and in California, primarily along	Significant (CEQA Class II)	KRGT's commitment to meet or exceed the proper design standards for project facilities in seismically active areas (see KRGT5) and its measures to mitigate for surface fault rupture/displacement hazards (see KRGT6/ARM2) would reduce the potential effects of ground shaking associated with earthquakes to less than significant levels.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.										

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT7 (cont'd)	the Daggett Loop. Damage to buried pipelines is most often caused by the differential movements of geologic material as opposed to shaking itself. Aboveground structures would more likely be damaged by ground shaking (section 4.1.4.1).					
KRGT8	Soil liquefaction can affect a pipeline by causing lateral spreading, loss of bearing strength, flow failures, subsidence, and flotation (section 4.1.4.1).	Significant (CEQA Class II)	Mitigation measures for soil liquefaction hazards are similar to those used at active fault crossings (see KRGT5 and KRGT6/ARM2).	Less than significant (CEQA Class III)	Utah Nevada California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT9	In areas of slope instability, construction and operation of pipeline facilities could cause landslides. Significant landslides, rockfalls, and debris flows have the potential to damage pipeline facilities (section 4.1.4.2).	Significant (CEQA Class II)	KRGT has sited the pipeline route to avoid landslide-prone areas wherever possible and has avoided areas of slope instability for the vast majority of the pipeline route. In areas that cannot be avoided, the potential for slope instability would be mitigated by KRGT's implementation of the temporary and permanent erosion control and restoration practices in its Upland Erosion Control, Revegetation, and Maintenance Plan (UECRM Plan), Wetland and Waterbody Construction and Mitigation Procedures (WWCM Procedures), and site-specific recommendations from Sargent, Hauskins & Beckwith. These include: <ul style="list-style-type: none"> • Installation of slope breakers and sediment barriers across the right-of-way; and • Installation of ditch plugs (trench breakers) at vertical intervals of 100 feet or less for slope gradients of 20 percent or more near MP 45.5 of the Muddy Creek Loop and between MPs 65.0 and 73.0 of the Coyote Creek Loop. In addition to the above measures, to prevent or minimize potential hazards associated with construction-induced slope instability within California, KRGT would retain a	Less than significant (CEQA Class III)	Wyoming Utah California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT9 (cont'd)			California-certified Engineering Geologist to oversee construction activities (e.g., excavation) in areas of potentially unstable ground as well as oversee the attempts to locate traces of Quaternary faults during excavation.			
KRGT10	Some areas in the vicinity of the project have the potential for subsidence resulting from hydrocompaction (section 4.1.4.3).	Significant (CEQA Class II)	To reduce the potential for hydrocompaction, KRGT would: <ul style="list-style-type: none"> restore natural drainage patterns that intersect the right-of-way to prevent ponding over the trenchline; and conduct post-construction surveillance and monitoring of areas susceptible to collapse-induced settlement to identify areas where pipeline maintenance would be necessary to relieve stresses on the pipe. 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT11 ARM3	Subsidence due to excessive groundwater withdrawal could occur along the route in the Escalante Desert near Milford, Utah, and in the Las Vegas Valley and Dry Valley in Nevada. The potential for subsidence due to groundwater withdrawal also exists in the western Mojave Desert (section 4.1.4.3).	Significant (CEQA Class II)	KRGT would check for evidence of subsidence during routine pipeline operations overflights and other maintenance activities along the entire pipeline route. Repairs would be made as necessary. KRGT would conduct a reassessment of the subsidence hazard in California after every 15 years of operation. Regions of subsidence that approach 5 feet would be identified and the pipeline condition and performance would be evaluated. KRGT would submit a report of its evaluation to the CSLC and appropriate action would be taken based on the CSLC's findings.	Less than significant (CEQA Class III)	Utah Nevada California	No monitoring required in Utah or Nevada. CSLC monitors would verify mitigation is followed in California
KRGT12	Flash flooding or debris flows along the pipeline could create a rupture if long, unsupported sections of the pipeline become exposed (section 4.1.4.4).	Significant (CEQA Class II)	KRGT would install the pipeline at least 5 feet below the natural bottoms of susceptible drainages and channels.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
RGT13	Hazards associated with volcanic activity include eruptions, lava flows, glowing avalanches, ash flows, volcanic mudflows	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	Utah Nevada	No monitoring required.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT13 (cont'd)	(lahars), tephra falls, and emission of volcanic gases, some of which could jeopardize the integrity of the pipeline and/or aboveground facilities (section 4.1.4.5).					
KRGT14	Avalanches could jeopardize the integrity of the pipeline and/or aboveground facilities (section 4.1.4.6).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	Wyoming Utah	No monitoring required.
KRGT15	The proposed Salt Lake Compressor Station site at MP 132.0 is located within the West Valley Fault Zone and within an area of high soil liquefaction potential (section 4.1.4.7).	Significant (CEQA Class II)	Excavations during construction of the compressor station would be inspected for evidence of fault traces. If such evidence is discovered, a qualified engineering geologist would evaluate the potential impact on the proposed structures and develop means to mitigate the risk posed by fault rupture. Final design approval and construction would comply with the Salt Lake County Natural Hazards Ordinance, Chapter 19.75 of the Counties Zoning Ordinance, local building permits, and current building codes for seismic design.	Less than significant (CEQA Class III)	Utah	FERC monitors would verify mitigation is followed.
KRGT16	Paleontological resources could be affected by construction of the pipeline and associated aboveground facilities, as well as by the resulting increased public access to these resources. Without mitigation, ground disturbance during construction could cause significant impact on paleontological resources (section 4.1.5.1).	Significant (CEQA Class II)	To mitigate potential impacts on paleontological resources, KRGT has developed a Paleontological Resource Mitigation Plan (PRM Plan) for the Kern River 2003 Expansion Project. In accordance with the PRM Plan, KRGT would conduct preconstruction surveys in areas where the proposed pipeline alignment deviates from the existing right-of-way in areas of high paleontological sensitivity. During construction, KRGT would monitor sedimentary units where previous field surveys identified scientifically significant fossils along the pipeline route and all areas that have a high paleontological sensitivity where trenching would be conducted outside the previously disturbed construction right-of-way. Specific mitigation measures in the PRM Plan include: <ul style="list-style-type: none"> obtaining a permit for the monitoring and recovery of paleontological specimens on property managed 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRG16 (cont'd)			<p>by the BLM or other Federal land management agencies (on private lands, KRG1 would notify the agency/entity having jurisdiction over paleontological resources (<i>e.g.</i>, permitting and archiving in each state) before construction and obtain necessary permits);</p> <ul style="list-style-type: none"> • monitoring sedimentary units where previous and new field surveys identified scientifically significant fossils along the proposed pipeline route and for those route deviations or alternatives in areas of high paleontological sensitivity identified in table 4.1.5-1 (page 4-29). An approved, qualified paleontological monitor would be present during ground-disturbing activities. Disturbed areas would be checked immediately after brushing and trenching, and before the pipe is installed and the trench is backfilled. The paleontologist would also be present to monitor when fossils or fossiliferous sediments are encountered during ground-disturbing activities. The monitor would identify the diagnostic elements of any fossils and be equipped to preserve unearthed fossils. The monitor would have the authority to temporarily divert construction equipment in the event significant paleontological resources are discovered. • educating workers about the potential discovery and importance of paleontological resources and spot-checks by paleontologists in non-monitored areas; • notification of the paleontologist in the event of a find in a non-monitored area; • determination and verification of the paleontological sensitivity of additional workspace areas before ground disturbance; • preparation, identification, preservation, and curation of recovered fossils; and • preparation of reports to document findings. <p>All phases of mitigation would be conducted under the direct supervision of a qualified paleontologist and in accordance with applicable permits. Recovered fossils</p>			

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT16 (cont'd)			<p>would be prepared to the point of identification and preserved for curation at a museum or as set forth in the repository agreement.</p> <p>To assist the CSLC's third-party monitors with implementation of the mitigation monitoring program, KRGT would provide copies of all paleontological permits to the CSLC before construction in California.</p> <p>Upon completion of excavation and grading activities, a final monitoring report would be prepared by KRGT that would include a summary of field observations, recoveries, and an itemization of all specimens collected. Within 90 days of the completion of construction of the pipeline and associated facilities, KRGT would provide copies of the final paleontological resources monitoring report to the FERC, the CSLC (for lands in California), and the BLM and other appropriate Federal land management agencies.</p>			
SOILS						
KRGT17	Clearing, grading, and the movement of equipment on the right-of-way would remove the protective vegetative cover and expose soils to the effects of wind, rain, and runoff (section 4.2.3.1).	Significant (CEQA Class II)	Erosion control measures proposed for the Kern River 2003 Expansion Project are detailed in both KRGT's UECRM Plan and its site-specific Reclamation Plans (see KRGT50 to 55). To summarize, during construction KRGT would install and maintain various erosion control measures. These include temporary slope breakers on slopes and temporary sediment barriers such as straw bales or silt fence across the right-of-way during construction at the base of slopes, adjacent to waterbodies, wetlands, and roadways, and along the edge of the right-of-way as necessary to prevent sediment from flowing off the right-of-way. KRGT would install erosion control netting on waterbody banks, very steep slopes, and in drainages that may be susceptible to erosion. To protect topsoil from wind erosion, KRGT would apply water and/or a water-based non-toxic, organic tackifier to the topsoil piles in all areas identified as highly susceptible to wind erosion and in other areas where soil conditions warrant. KRGT48 and 90/ARM6 provide additional discussion on the use of these measures and the potential impact on surface waters and the desert tortoise, respectively.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT17 (cont'd)			KRGT would implement reclamation efforts to enhance revegetation and address soils with poor revegetation potential. These efforts would include topsoil segregation, recontouring, applying erosion control mulch on slopes, respreading cut vegetation or preserved rock mulch, imprinting the surface of the right-of-way, installing permanent slope breakers, and seeding with species adaptable to the climate.			
KRGT18	Construction equipment operating and traveling on the construction right-of-way, especially during wet periods and on poorly drained soils, can compact the soil (section 4.2.3.1).	Significant (CEQA Class II)	KRGT addresses compaction in its UECRM Plan, WWCM Procedures, and site-specific Reclamation Plans (see KRGT50 to 55). To summarize, KRGT would minimize compaction by adjusting construction schedules to avoid compaction-prone areas during short-term weather events. Rutting and compaction would be avoided or minimized by operating heavy construction equipment on timber mats across minor tributaries, adjacent wetlands, and other areas as deemed necessary during construction. It would be the responsibility of the environmental inspector (EI), in conjunction with the agencies' compliance monitor, to assess the potential for compaction given the soil type, hydrologic conditions, and current and predicted weather events. After construction, KRGT would test disturbed soils for compaction using a cone penetrometer or other appropriate device in comparison with adjacent undisturbed soils. Should compaction occur, soils would be plowed with a paratill, paraplow, or other deep tillage device to alleviate compaction.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
IGT19	In addition to erosion and compaction, construction activities such as grading, trenching, and backfilling can cause mixing of soil horizons (section 4.2.3.1).	Significant (CEQA Class II)	To reduce the mixing of soil horizons on its construction right-of-way, KRGT would segregate topsoil in accordance with its UECRM Plan and site-specific Reclamation Plans (see KRGT50 to 55). At a minimum, KRGT would segregate topsoil in all annually cultivated or rotated agricultural lands, hay fields, and residential areas. KRGT would also segregate topsoil in those other lands where the landowner requests that it occur. To ensure that all landowners affected by the project are aware of their right to request topsoil segregation, KRGT sent letters to all landowners requesting that they notify KRGT of their desire to have this treatment performed on their land.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT19 (cont'd)			<p>In deep soils, KRGT would segregate at least 12 inches of topsoil. Where shallow soils (with topsoil less than 12 inches deep), or soils with stony subsoil are encountered, KRGT would make every effort to segregate the entire topsoil layer. KRGT would segregate topsoil using one of the following methods: from either the full work area (full right-of-way method), from the trench and subsoil storage area (trench plus spoilsite method), or from the trench and working side (trench plus working site method). The determination of where each topsoil segregation method would be used would be finalized before construction and included in the Construction, Operation, and Maintenance Plan (COM Plan) for the BLM, private landowner agreements, and other applicable permits.</p> <p>Topsoil would be stockpiled separately from subsoil and the two stockpiles would be replaced in the proper order during backfilling and final grading. Topsoil segregation treatments for rangeland and native habitats are described in more detail in KRGT50 to 55; KRGT's UECRM Plan addresses topsoil segregation in residential and agricultural lands.</p>			
KRGT20	Trenching, ripping, or blasting of stony or shallow bedrock soils can bring stones or rock fragments to the surface, which could interfere with agricultural practices and hinder restoration of the right-of-way (section 4.2.3.1).	Significant (CEQA Class II)	In all actively cultivated or rotated cropland and improved pastures, KRGT would minimize these impacts by segregating topsoil and removing (picking) excess rock from the top 12 inches of soil so that the size, density, and distribution of rock on the right-of-way is similar to adjacent undisturbed areas. On rangelands, KRGT anticipates rocks may be disposed of along the right-of-way by scattering them in a natural pattern, as permitted by the landowner or land management agency. If caliche is found in the subsoil, small pieces would be buried on the right-of-way with at least 24 inches of cover while larger pieces of caliche may be disposed of in an appropriate landfill.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT21	Construction can facilitate the establishment of noxious or invasive weeds where none or few existed. The clearing of existing perennial vegetation provides an opportunity for weed species to invade the right-of-way, and the movement of equipment along the right-of-way could transport weed seed and plant parts from one location to another (section 4.2.3.1).	Significant (CEQA Class II)	To minimize and control the spread of noxious weeds, KRGT would implement its Noxious Weed Plan (see KRGT60 and ARM5) and its site-specific Reclamation Plans (see KRGT50 to 55).	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT22	Contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment could have an impact on soils (section 4.2.3.1).	Significant (CEQA Class II)	Implementation of KRGT's Spill Plan (see KRGT27) would reduce the impacts of soil contamination from spills or leaks to less than significant levels.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT23	Impacts on soils associated with the new aboveground facilities would be permanent (section 4.2.3.2).	Less than significant (CEQA Class III)	No specific mitigation proposed. Mitigation measures implemented in these locations would be limited to erosion control measures as described in both KRGT's UECRM Plan and its site-specific Reclamation Plans (see KRGT50 to 55).	Less than significant (CEQA Class III)	All	No monitoring required.
WATER RESOURCES						
KRGT24	Construction of the pipeline and aboveground facilities could affect groundwater in several ways. Clearing, grading, trenching, and soil stockpiling activities could temporarily alter overland flow and groundwater recharge patterns. Near-surface soil compaction caused by heavy	Significant (CEQA Class II)	Implementation of KRGT's mitigation measures identified for soils (see KRGT17 to 23) would reduce these impacts on groundwater to less than significant levels.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT24 (cont'd)	construction equipment/vehicles could reduce the soil's ability to absorb water, which could increase surface runoff and the potential for ponding (section 4.3.1.1).					
KRGT25	Trenching and trench dewatering could cause temporary fluctuations in the elevation of the water table (section 4.3.1.1).	Significant (CEQA Class II)	KRGT would discharge water from the trench into well-vegetated upland areas or properly constructed dewatering structures or filter bags, which would allow the water to infiltrate back into the soil and return to the underlying aquifer. Trench dewatering would be conducted in compliance with applicable permits.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT26	The alteration of the natural soil strata by trenching and other earthwork could eliminate some existing groundwater pathways or result in new migration pathways for groundwater, particularly in wetland areas (section 4.3.1.1).	Significant (CEQA Class II)	Following installation of the pipeline, KRGT would backfill the trench with previously excavated materials, restoring confining soils breached during construction. KRGT would place trench breakers (sand bags installed around the pipe) in the trench, on slopes, and at the base of slopes adjacent to wetlands and waterbodies as necessary to prevent groundwater migration along the pipeline/trench. Upon completion of construction, KRGT would restore surface contours to ensure that the original overland flow and recharge patterns are reestablished.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT27	Accidental spills or leaks of hazardous liquids could contaminate groundwater and affect aquifers (section 4.3.1.1).	Significant (CEQA Class II)	KRGT has prepared a Spill Plan to address preventive and mitigative measures that would be used to minimize the potential impact of a hazardous spill during construction of the project facilities. Some pertinent measures in KRGT's Spill Plan include: <ul style="list-style-type: none"> • training of contractor personnel on the contents and requirements of the Spill Plan; • a requirement for routine inspections and maintenance of equipment to prevent accidental spills or leaks; • specifications for the storage, proper labeling, and secondary containment of oil and other hazardous liquids in containers; • a requirement for daily inspection of containers for leaks and deterioration; • a requirement to replace leaky or deteriorated 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT27 (cont'd)			<p>containers immediately after an inadequate condition is detected;</p> <ul style="list-style-type: none"> • a requirement that vehicle-mounted tanks be equipped with flame/spark arrestors or vents to prevent self ignition; • specifications that prevent or restrict the transfer of liquids or the refueling of equipment within 100 feet of waterbodies and wetlands, 200 feet of water supply wells, and 400 feet of municipal or community wells or protected wellhead or watershed areas; • a requirement that service vehicles used to transport lubricants and fuel be equipped with emergency spill response kits, chemical response kits, and other equipment such as shovels, brooms, polyethylene sheeting, and fire protection equipment; • notification, response, and cleanup procedures in the event of a spill; • the names and telephone numbers of state and local officials to be contacted in the event of a spill; and • state reporting requirements (<i>i.e.</i>, reportable quantity). 			
KRGT28	A total of 247 water supply wells or springs have been identified as potentially occurring within 200 feet of the construction right-of-way. As many as 79 of these water supply wells or springs are in locations where blasting for pipeline placement may be necessary. Although adverse impacts on groundwater resources are not anticipated, blasting near water supply wells or springs could cause temporary damage or	Significant (CEQA Class II)	<p>KRGT would conduct final identification and confirmation of groundwater resources through additional field surveys and contacts with local landowners within the project corridor before construction. These surveys would also verify water wells within groundwater source protection areas crossed by the pipeline route.</p> <p>To determine whether pipeline construction activities have affected groundwater quality or yield, KRGT would implement its Groundwater Monitoring Plan. With landowner permission, wells and springs within 150 feet of the construction right-of-way would be sampled before construction to obtain water quality and yield data for each sampling point. Any isolated springs that sustain a riparian community and/or provide a wildlife benefit would be delineated using current U.S. Army Corps of Engineers (COE) methodology. Sampling of water wells or springs</p>	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT28 (cont'd)	changes in water levels and turbidity. Similar impacts may occur for water wells near other construction activities such as trenching and dewatering (section 4.3.1.2).		<p>outside the 150-foot monitoring area would be done at landowner request.</p> <p>If it is determined that blasting or other construction activities have diminished a water supply, KRGT would arrange for a temporary water supply through a local supplier and make the necessary repairs to the affected water well, or install another comparable well. KRGT would obtain the applicable state and local permits before repairing or replacing any water wells and for any temporary domestic water supplies. Specific mitigation measures would be coordinated with the landowner or land management agency in order to meet the landowner's specific needs. KRGT would conduct biological monitoring at isolated springs to determine any adverse impact on the riparian community or diminishment of its value to wildlife. Post-construction well monitoring would be conducted as requested by the well owner or for disputed situations.</p> <p>Within 30 days of placing the facilities in-service, KRGT would file a report with the FERC and the CSLC (in California) describing any complaints received from landowners about water quality or yield, the results of the biological monitoring at any isolated springs, and the remedial action taken to address concerns.</p>			
KRGT29	Shallow groundwater could affect the buoyancy of the pipe (<i>i.e.</i> , the pipeline would be more likely to float) and increase the potential for corrosion (section 4.3.1.3).	Significant (CEQA Class II)	In areas where the positive buoyancy of the pipeline may exceed the combined uplift resistance of backfill soil and soil adjacent to the ditch, KRGT would install weights, use concrete-coated pipe, or anchor the pipeline. In addition to the use of externally coated pipe, KRGT would install cathodic protection where necessary to guard against corrosion.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
KRGT30	Seven potential sources of groundwater and/or soil contamination have been identified near the proposed pipeline facilities. The precise location of the historic landfill associated with the Beaver County	Significant (CEQA Class II)	<p>If contaminated groundwater and/or sediments (based on evidence of land-filled debris, subsoil discoloration, or odor) are encountered along the pipeline route or at aboveground facility sites during construction, KRGT would implement the following steps:</p> <ul style="list-style-type: none"> halt all construction work in the immediate vicinity of areas where hazardous or unknown wastes are 	Less than significant (CEQA Class III)	Utah Nevada California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG T30 (cont'd)	Special Service #5 Landfill relative to the pipeline route has not been determined (section 4.3.1.4).		<p>encountered;</p> <ul style="list-style-type: none"> • evacuate all construction, oversight, and observing personnel to a road-accessible, up-wind location until the types and levels of potential contamination can be verified; • notify KRG T's Chief Inspector, EI, and land management agency Authorized Officer. Following consultation with onsite personnel and the land management agency hazardous materials coordinator, the EI, in conjunction with the agencies' compliance monitor, would be responsible for implementing follow-up actions, including mobilizing emergency response personnel and coordinating with the U.S. Environmental Protection Agency, or state or local agencies; • notify and mobilize an emergency response contractor if an immediate or imminent threat to human health or the environment exists; • if the land management agency Authorized Officer or his/her designee has determined that an immediate or imminent threat to human health or the environment does not exist, or has been abated, KRG T or a qualified subcontractor would collect representative samples of the waste and surrounding materials for laboratory analysis; and • remove and properly dispose of contaminated materials, if feasible. If the extent of contamination is too widespread for economical removal, or if disposal options are technically infeasible or cost-prohibitive, backfilling of that portion of the trench would be suspended until appropriate mitigation options are approved by the FERC and the CSLC (in California). <p>Before construction, KRG T would consult with the owner/operator of the Beaver County Services #5 Landfill in Utah to determine the extent of the historic landfill. If land filled materials are encountered during subsurface excavation, KRG T would dispose of the material in a permitted landfill and replace it with engineered fill.</p>			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT30 (cont'd)			KRGT would also coordinate with Nellis Air Force Base (AFB) to confirm that the cap associated with Landfill LF-34 is not disturbed during construction activities.			
KRGT31	Existing surface water features at the proposed Salt Lake Compressor Station site include a canal (Brighton Canal) that once crossed the site from the southeast to the northwest but has been rerouted along the south and west boundary of the proposed facility location (section 4.3.2.2).	Significant (CEQA Class II)	KRGT would direct drainage from the site to the west and north. KRGT would obtain necessary permits for construction of project facilities and comply with Federal, state, and local regulations.	Less than significant (CEQA Class III)	Utah	FERC monitors would verify mitigation is followed.
KRGT32	Clearing and grading of streambanks, in-stream blasting (if required), in-stream trenching, trench dewatering, and backfilling could affect waterbodies through modification of aquatic habitat, increased sedimentation, increased turbidity, decreased dissolved oxygen concentrations, stream warming, releases of chemical and nutrient pollutants from sediments, or introduction of chemical contamination such as fuel and lubricants (sections 4.3.2.3 and 4.3.2.4).	Significant (CEQA Class II)	<p>KRGT would minimize impacts on surface waters by implementing the waterbody construction and restoration measures contained in its WWCM Procedures. The WWCM Procedures are applicable to any stream or river with perceptible flow at the time of crossing and other permanent waterbodies such as ponds and lakes.</p> <p>Some of the relevant mitigation measures pertaining to waterbody crossings specified in KRGT's WWCM Procedures include:</p> <ul style="list-style-type: none"> • locating all extra work areas at least 50 feet away from waterbody boundaries in non-cultivated areas where topographic conditions permit, otherwise extra work areas would be a minimum of 10 feet from the waterbody; • limiting clearing of vegetation between extra work areas and the edge of the waterbody to preserve riparian vegetation; • maintaining adequate flow rates throughout construction to protect aquatic life and prevent the interruption of existing downstream uses; • restricting storage and refueling activities near surface waters; • restricting spoil placement near surface waters; 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG T32 (cont'd)			<ul style="list-style-type: none"> • limiting use of equipment operating in the waterbody to that needed to construct the crossing; • requiring construction across waterbodies to be completed as quickly as possible and during the windows specified in the WWCM Procedures or required by applicable permits; • developing and submitting to the FERC site-specific construction procedures for each waterbody greater than 100 feet wide at the crossing location (major waterbody); • requiring temporary erosion and sediment control measures to be installed across the entire width of the construction right-of-way after clearing and before ground disturbance; • requiring maintenance of temporary erosion and sediment control measures throughout construction until streambanks and adjacent upland areas are stabilized; • requiring bank stabilization and reestablishment of bed and bank contours and riparian vegetation after construction; and • limiting post-construction maintenance of vegetated buffer strips adjacent to streams. <p>KRG T would also obtain waterbody crossing permits from the COE under Section 404 of the Clean Water Act (CWA) and state water quality certifications under Section 401 of the CWA. These and other permits required by individual states for waterbody crossings could include additional mitigation measures. All construction activities at waterbody crossings would be in accordance with Federal, state, and local permit requirements.</p>			
KRG T33	Refueling of vehicles and storage of fuel, oil, or other hazardous materials near surface waters creates a potential for contamination if a spill were to occur. Immediate downstream users of the water could experience a degradation	Significant (CEQA Class II)	KRG T's Spill Plan, developed in accordance with Federal, state, and local regulations, would adequately prevent and mitigate the potential impact of a spill during construction (see KRG T27).	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT33 (cont'd)	in water quality. Acute and chronic toxic effects on aquatic organisms could result from such a spill (section 4.3.2.4).					
KRGT34	The majority of waterbodies that would be crossed by the pipeline are intermittent washes, creeks, and canals that are expected to be dry at the time of construction (dry washes). Impacts on dry washes would be limited to temporary alteration of beds and banks, loss of wildlife habitat, and possibly increased sediment load during initial storm events following construction (section 4.3.2.4).	Significant (CEQA Class II)	<p>KRGT proposes to cross dry washes using conventional upland construction methods unless other methods are required by the applicable agencies.</p> <p>KRGT proposes to avoid construction in intermittent waterbodies during periods of high flow and to monitor weather conditions up to 2 days in advance of waterbody crossings to minimize the potential for construction across intermittent waterbodies to occur during runoff events. If perceptible flow conditions develop during construction, KRGT would:</p> <ul style="list-style-type: none"> • remove all equipment from within the streambanks; • restore the banks to their original shape (as close as possible) to keep the flow within the banks of the stream by utilizing soil, straw bales, silt fence, or other means deemed appropriate by regulatory agencies; • continually monitor the banks where the crossing was attempted and restore any banks that are eroded by flow; and • defer construction for hours or days to allow flow to subside before resuming work. <p>If it becomes apparent that the waterbody may continue flowing for weeks or months, KRGT would reenter the waterbody using the same methods proposed for perennial waterbodies.</p>	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT35	KRGT proposes to use the open-cut method for 23 perennial waterbody crossings. Impacts associated with construction using the open-cut method include	Significant (CEQA Class II)	Impacts associated with these open-cut crossings would be less than significant with KRGT's implementation of its WWCM Procedures (see KRGT32).	Less than significant (CEQA Class III)	Wyoming Utah Nevada	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT35 (cont'd)	temporary alteration of beds and banks, temporary loss of wildlife habitat, and increased sediment load during construction (section 4.3.2.4).					
KRGT36	Revegetation of waterbody banks following construction could be slow due to low annual rainfall (section 4.3.2.4).	Significant (CEQA Class II)	During restoration of waterbody banks, KRGT would use natural erosion control techniques (e.g., fiber mats, seeding, plantings) wherever feasible. KRGT would minimize the use of riprap or gablons in accordance with its WWCM Procedures (see KRGT32) and as stipulated in its waterbody crossing permits from the COE and applicable state agencies. KRGT would only use stone riprap or gablons as a restoration measure on steep banks at perennial and intermittent waterbody crossings where erosion cannot be effectively controlled with native materials or a combination of erosion control matting and vegetation.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT37	Two of the perennial waterbodies that KRGT proposes to cross using the open-cut method, the Surplus Canal (MP 129.8) and the Sevier River (MP 224.4), are major waterbodies (greater than 100 feet wide at the crossing location) (section 4.3.2.6).	Significant (CEQA Class II)	In accordance with its WWCM Procedures, KRGT has provided site-specific crossing plans for the Surplus Canal and the Sevier River. KRGT proposes to open cut these waterbodies using mechanical excavators operating from each bank. KRGT would minimize impact by limiting the in-stream work at these waterbodies and by completing the crossings in accordance with its WWCM Procedures (see KRGT32). If temporary equipment bridges are determined to be necessary by the construction contractor and the EI, a flexifloat-type bridge would likely be installed across the waterbodies. After installation of the pipe and backfill, KRGT would return the streambanks to the original contours and stabilize them using stone riprap.	Less than significant (CEQA Class III)	Utah	FERC monitors would verify mitigation is followed.
KRGT38	Although neither surface flow nor a defined channel are evident at either of the two crossing locations of the Mojave River (MP 676.7 of the Goodsprings Loop and MP 18.0 of the	Significant (CEQA Class II)	KRGT proposes to construct the crossings of the Mojave River using the open-cut method in accordance with its state waterbody crossing permits. KRGT would restore the areas to preconstruction contours following construction. See KRGT32.	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)						
Mitigation Monitoring Program for the Kern River 2003 Expansion Project						
Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT38 (cont'd)	Daggett Loop), it is classified as an intermittent waterbody. The area consists of a broad, dry wash that includes several smaller, braided washes with no riparian vegetation at either of the crossing locations (section 4.3.2.6).					
KRGT39 ARM4	Both the Bear River (MP 47.5) and the Weber River (MP 87.6) support coldwater fisheries and Federal and/or state sensitive fish species and are considered sensitive waterbodies (section 4.3.2.6).	Significant (CEQA Class II)	KRGT proposes to cross these rivers using the horizontal directional drill (HDD) method. KRGT has submitted site-specific HDD crossing plans that show the drill entry and exit workspaces, drill profiles, and workspace requirements for the pipe fabrication and stringout areas. Before construction of the Bear and Weber River crossings may begin, KRGT would file with the FERC for the review and written approval of the Director of Office of Energy Projects (OEP) revised site-specific HDD crossing plans for these rivers that show all workspace requirements for the drilling operations and the wetlands that would be affected by each workspace. If surveys indicate no wetlands are present, KRGT would file the survey documentation that supports the finding.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
KRGT40	The primary impact that could occur as a result of directional drilling is an inadvertent release of drilling mud (frac-out) directly or indirectly into the waterbody (section 4.3.2.6).	Significant (CEQA Class II)	KRGT has prepared a Drilling Mud Release Contingency Plan that describes how KRGT would conduct and monitor the drilling operations to minimize the potential for inadvertent drilling mud releases. The plan also includes procedures for cleanup of drilling mud releases and for sealing the hole if a drill cannot be completed.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
KRGT41	In the unlikely event it is required, blasting could injure or kill aquatic organisms, displace organisms during blast-hole drilling operations, and temporarily increase stream turbidity (section 4.3.2.7).	Significant (CEQA Class II)	See KRGT81.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>g</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT42	Based on the results of the scour calculations performed during construction of the existing KRGT pipeline, 23 locations, in addition to Yellow Creek, have the potential for scour that may require deeper than normal pipeline burial depth at the crossing (section 4.3.2.8).	Significant (CEQA Class II)	KRGT would implement one or a combination of the following measures to protect against scour and bank erosion at these locations: <ul style="list-style-type: none"> • burial below scour depth; • use of concrete-coated pipe or set-on concrete weights; • use of rock shield around the pipe; and/or • installation of erosion control measures (such as gabions and riprap). 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT43	The Muddy River (MP 477.1) is listed as an impaired waterbody based on total phosphorus and metals. Shallow groundwater underlying the Muddy River floodplain may contain elevated concentrations of inorganic salts, although at levels that do not present a health concern to construction workers (section 4.3.2.9).	Significant (CEQA Class II)	KRGT proposes to cross the Muddy River using the flume method. If phosphorus is present in the Muddy River, implementation of KRGT's UECRM Plan and WWCM Procedures (see KRGT32) and the additional measures described below would minimize the potential for sediment resuspension, sediment transport, and erosion of banks. Specifically, to minimize resuspension of any potentially contaminated sediments in the Muddy River, KRGT proposes to cross the Muddy River using the flume method and would stockpile excavated material in the adjacent upland staging area or temporary extra workspace as needed to minimize handling of sediments. Use of the flume method would minimize the potential for dispersing contaminated sediments in the Muddy River by limiting in-stream activities in flowing water. KRGT would complete trenching and backfilling activities in a "dry" area within the waterbody and return the streambottom profile to preconstruction conditions, including replacement of subsurface sediments and streambottom materials before returning the stream to normal flow conditions. In addition, KRGT would incorporate any special COE or state conditions regarding handling of potentially contaminated sediments into its crossing plans and would adhere to all National Pollutant Discharge Elimination System (NPDES) permit stipulations when handling potentially contaminated sediments at the Muddy River.	Less than significant (CEQA Class III)	Nevada	FERC monitors would verify mitigation is followed.
KRGT44	The COE Utah Regional Office and the Utah Department of	Significant (CEQA Class II)	KRGT would cross Bingham Creek using the bore method unless KRGT obtains documentation from the UDEQ that the potential for contaminated sediments no longer exists	Less than significant (CEQA Class III)	Utah	FERC monitors would verify mitigation is

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT44 (cont'd)	Environmental Quality (UDEQ) have identified Bingham Creek (MP 147.0) as contaminated with elevated levels of copper and zinc due to activities at the Kennecott facility (section 4.3.2.9).		at the crossing location.			followed.
KRGT45	The appropriation of large volumes of hydrostatic test water from surface water sources could temporarily affect the recreational and biological uses of the resource if the diversions constitute a large percentage of the source's total flow or volume. The diversion of large volumes of water from waterbodies could also result in the temporary loss of habitat, changes in water temperature and dissolved oxygen levels, and entrainment or impingement of fish or other aquatic organisms. The withdrawal of large amounts of water from private or public water supply wells could exceed the delivery capacity of the system or well (section 4.3.2.10).	Significant (CEQA Class II)	KRGT would acquire the necessary permits from state agencies before withdrawing hydrostatic test water, including specific approvals from applicable resource agencies. KRGT would minimize the potential for these effects by adhering to the hydrostatic testing measures included in its WWCM Procedures (see KRGT32). These measures include screening intake hoses and regulating the withdrawal of hydrostatic test water at a rate that would not adversely affect aquatic resources or downstream flows. KRGT would limit the rate of water withdrawal from private water wells and county water system wells so as not to exceed the delivery capacity of the system or well. KRGT would be testing only new pipe and would not add any chemicals to the water during hydrostatic testing.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT46	The potential impacts resulting from the discharge of hydrostatic test waters onto land would include soil erosion and	Significant (CEQA Class II)	KRGT would acquire the necessary permits from state agencies before discharging hydrostatic test water, including specific approvals from applicable resource agencies.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT46 (cont'd)	subsequent degradation of water quality, including increased turbidity and sedimentation from hydrostatic test water runoff. High velocity flows could also cause erosion of the streambanks and streambottom, resulting in a temporary increase of sediment load and destruction of habitat (section 4.3.2.10).		KRGT would use energy-dissipating devices and/or filter bags to prevent erosion, streambed scour, suspension of sediments, and excessive streamflow.			
KRGT47	Two of KRGT's proposed hydrostatic test water sources, the Bear River and Weber River, support coldwater fisheries and offer habitat to Federal and/or state-listed special status species (section 4.3.2.10).	Significant (CEQA Class II)	Hydrostatic test water intakes at these two waterbodies would be equipped with filtering and screening devices to avoid the pumping of organic debris and the entrainment of aquatic species. Test water intakes would be suspended above the stream bottom. Pursuant to permit conditions, KRGT would determine the allowable rates of withdrawal from surface waters to provide for adequate sustained flow based on conditions at the time that these withdrawals are made.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
KRGT48	KRGT would apply water and/or a water-based, non-toxic, organic tackifier to the construction work area, including topsoil piles, to control dust generated by construction activities. The impacts on water resources due to the water withdrawals for dust control are the same as those outlined in KRGT45 for hydrostatic test water withdrawals (see section 4.3.2.11).	Significant (CEQA Class II)	KRGT would store the water in storage tanks located in extra work areas along the construction right-of-way. Trucks would fill up at the storage locations and then travel the right-of-way applying water as necessary to control dust. If the withdrawals are conducted according to KRGT's WWCM Procedures and its proposed mitigation measures for hydrostatic test water withdrawals (see KRGT45), and in compliance with applicable permit requirements, the impacts of dust control measures on water resources would be less than significant.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
WETLANDS						
KRGT49	The primary impact of pipeline construction activities on wetlands would be the short-term alteration of wetland vegetation. Other types of impacts associated with construction of the pipeline could include temporary changes in wetland hydrology and water quality, temporary lowering of the water table, and increased turbidity during trenching and restoration activities. During construction, failure to segregate topsoil over the trenchline in nonsaturated wetlands could result in the mixing of the topsoil with the subsoil, which could lower biological recruitment of native wetland vegetation after restoration. In addition, inadvertent compaction and furrowing of soils during construction could result from the temporary stockpiling of soil and the movement of heavy machinery, which could in turn alter the natural hydrologic patterns of the wetlands, inhibit seed germination, or increase the potential for siltation. Construction clearing activities and disturbance	Significant (CEQA Class II)	<p>KRGT would minimize impacts on wetlands by complying with the COE's Section 404 permit conditions and state-issued Section 401 water quality certifications or waivers, and by implementing the wetland construction and restoration measures contained in its WWCM Procedures.</p> <p>KRGT's proposed wetland mitigation is designed to minimize the area and duration of wetland disturbance, reduce the disturbance of wetland soils, and enhance wetland restoration following construction. These measures include, but are not limited to:</p> <ul style="list-style-type: none"> limiting the width of the construction right-of-way in non-cultivated wetlands to 75 feet unless a wider right-of-way is expressly permitted by the FERC; limiting the operation of construction equipment within wetlands to that equipment essential for clearing, excavation, pipe installation, backfilling, and restoration activities; limiting grading activities to directly over the trenchline, except where additional grading is necessary to ensure safety; using low ground weight construction equipment, or operating equipment off of timber riprap, prefabricated timber mats, or geotextile fabric overlain with gravel in saturated or standing water wetlands; installing trench breakers or sealing the trench bottom as needed to prevent draining of a wetland and to maintain original wetland hydrology; prohibiting storage of hazardous materials, chemicals, fuels, and lubricating oils within a wetland or within 100 feet of a wetland boundary; consulting with the appropriate land management or state agencies to develop plans for revegetating wetlands and, where necessary, preventing the invasion or spread of undesirable exotic vegetation; limiting post-construction maintenance of vegetation within wetlands to removal of trees that are greater than 15 feet in height and are within 15 feet of the 	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT49 (cont'd)	of wetland vegetation could also temporarily affect the wetland's capacity to buffer flood flows and/or control erosion (section 4.4.3).		<p>pipeline centerline, and maintenance of a 10-foot-wide strip of vegetation centered over the pipeline in herbaceous vegetation; and</p> <ul style="list-style-type: none"> monitoring the success of wetland revegetation annually for a period of 3 to 5 years after construction, and developing and implementing remedial revegetation plans for wetlands that are not successfully revegetated. 			
VEGETATION						
KRGT50	The primary impact of the project on vegetation would be the cutting, clearing, and/or removal of existing vegetation within the construction work area. The degree of impact would depend on the type and amount of vegetation affected, the rate at which the vegetation would regenerate after construction, and the frequency of vegetation maintenance by the pipeline company during operation. Secondary effects associated with disturbances to vegetation would include increased soil erosion, increased potential for the introduction and establishment of invasive weedy species, and a local reduction in available wildlife habitat (section 4.5.2.1).	Significant (CEQA Class II)	<p>KRGT has developed three strategies to minimize and mitigate impacts on vegetation. The first strategy is avoidance. To reduce impacts on vegetation, KRGT designed its route to minimize areas of dense vegetation and sensitive species.</p> <p>The second strategy KRGT proposes is the permanent preservation of a significant acreage of desert vegetation as part of its efforts to compensate for impacts on desert tortoise habitat (see KRGT90/ARM6).</p> <p>The third strategy that KRGT would employ is the implementation of its site-specific Reclamation Plans. KRGT has developed separate plans for each of the four states crossed by the pipeline and a fifth plan for the Dixie National Forest (see KRGT51 to 55). Each of the five site-specific Reclamation Plans prescribes a variety of reclamation treatments to reduce or mitigate impacts on vegetation. The treatments between plans vary depending on the terrain, climate, native vegetation type, and recommendations from the applicable land and resource management agencies. The following treatments, however, would be common throughout the project area.</p> <ul style="list-style-type: none"> Before construction, an inspection of the right-of-way would be made by one or more reclamation specialist(s). The locations of vegetation useful for transplanting to specified high visibility areas, special use areas, and riparian areas would be flagged. Individual plants that are determined suitable for transplanting would be removed from 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG750 (cont'd)			<p>the right-of-way and stored for use during restoration in areas specified in the site-specific Reclamation Plans.</p> <ul style="list-style-type: none"> • Topsoil segregation would be conducted in accordance with KRG7's UECRM Plan or as requested by the land management agency/landowner (see KRG719). The maximum depth of topsoil to be segregated differs between each plan. • In areas where topsoil segregation would not be conducted (<i>i.e.</i>, the working side of the right-of-way where the trench plus spoilside topsoil segregation method is used, the spoilside of the right-of-way where the trench plus working side method is used, and the entire right-of-way width in areas where no topsoil segregation is conducted), the vegetation would be mowed, scalped, or crushed, leaving plant root systems intact. Native vegetation removed would be retained for use as mulch during restoration activities. The remaining plant root systems would aid in holding the undisturbed topsoil in place, aid in moisture retention, help to retain organic matter within the soil, and potentially provide a seed source. The width of surface disturbance would be kept to a minimum in order to maximize the benefit of this treatment. This treatment would aid in minimizing soil disturbance, which would improve the restoration potential of disturbed areas. • Surface rock, where present and appropriate for restoration activities, would be conserved during construction and spread over the topsoil during restoration to visually blend disturbed and undisturbed areas or for erosion control. In desert areas where a surface varnish is present, large rocks and boulders would be placed to face the varnish side upwards. Rock mulching would aid in stabilizing disturbed soils, reducing erosion, and minimizing visual impacts. Stockpiled surface rock may also be used as mulch where appropriate for the terrain or habitat type. 			

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG50 (cont'd)			<ul style="list-style-type: none"> • Severely compacted soils (except sandy soils) would be scarified to a depth of 6 inches. The need for scarification would be determined by an EI, in conjunction with the agencies' compliance monitor. This treatment would mitigate soil compaction caused by construction. • Recontouring would occur in all treatment areas. The contours would be reshaped following backfilling of the trench and replacement of the topsoil to restore preconstruction contours and natural drainage patterns. This treatment would reduce erosion and minimize visual impacts. • Imprinting of soils would be conducted in most areas. Following the respreading of topsoil and mulching, the disturbed area would be driven over by an imprinting device such as a sheepsfoot (or other equipment). Small depressions would be made in the soil surface in a non-directional pattern. Exceptions to this treatment would be areas where imprinting is not deemed beneficial or in areas inaccessible to equipment. Examples of areas where imprinting would not be conducted include dry washes, wetland/riparian areas, and steeply sloped banks. Imprinting would aid in the collection of water, windblown seeds, and organic matter and would help to firm the soil surface and reduce the potential for wind and water erosion. • Seeding would occur throughout the disturbed areas of the project. Within the Mojave Desert, a portion of the seed would be pelletized to add macrobiotic components developed specifically for Mojave Desert habitats. • In desert areas, KRG50 would salvage and transplant Joshua trees, yucca, cactus, and agave. Before construction, these species would be identified, removed, heeled-in, and irrigated in areas outside of the construction right-of-way, and then transplanted back onto the right-of-way as part of restoration activities. KRG50 would locate transplant sites randomly along the right-of-way and/or at locations specified by the BLM. The north 			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG50 (cont'd)			<p>orientation of all cactus to be salvaged would be recorded and restored at the time of transplanting. KRG50 would water the transplants at the time of initial planting. A second watering would occur 1 to 2 weeks following transplanting. KRG50 proposes to use time release gels such as Dri-Water™ in the transplanting of succulent species to improve the success rate over its previous efforts. These time-release gels generally consist of starch-based substances that hold water and allow for its slow release over a period of time (typically 90 days).</p> <p>Because of the difficulty in handling larger specimens, Joshua trees over 6 to 8 feet in height and cholla cactus over 3 feet in height would not be transplanted but would be placed on the right-of-way during restoration and used as vertical mulch. Smaller species, such as button cactus and agave less than 6 inches in height, would be considered too small to feasibly transplant and would be used as vegetative mulch. The transplants that do not survive would also be beneficial to the reclamation process as vertical mulch. Vertical mulching would encourage the recruitment of native seeds, provide forage and cover habitat for native species, discourage colonization by invasive or exotic species, and reduce off-highway vehicle (OHV) use along the right-of-way. The processes of identification, removal, storage, and transplanting would be under the direction of a contracted reclamation specialist. KRG50 would perform an accounting of all succulents to be disturbed along the right-of-way, to document the plants' treatment (<i>i.e.</i>, as either transplants or as vertical mulch). KRG50 would provide a summary of this information to the FERC, the BLM, and the California Department of Fish and Game (CDFG) (in California) for review.</p> <ul style="list-style-type: none"> • Specific areas designated as visually sensitive would receive additional treatments to mitigate visual impacts. These treatments would include 			

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRG750 (cont'd)			<p>transplanting of species salvaged from the right-of-way. In the mountains, high desert, and forested areas, transplanted species may include pinyon pine and juniper. These areas may also be planted with containerized plants, rootings, or cuttings. The species would be selected to complement the adjacent vegetation. In the desert areas, transplanted species would be limited to salvaged Joshua trees, cactus, agave, and yucca. In these areas, an emphasis would be placed on preserving the existing rock mulch and ensuring the desert varnish is exposed. Other treatments in visually sensitive areas may include the rebuilding of rimrock or the restoration of rockfaces. The different treatments would be employed on a site-specific basis in consideration of the visual classification, and the specific requirements of the land management agency or the landowner. KRG7's stated goal is to return the land to its predisturbance appearance within 5 years. Restoration of the Mojave desert areas to predisturbance appearance, however, would likely take a longer time.</p> <ul style="list-style-type: none"> • Riparian/wetland crossings would be restored as quickly as possible following construction. Where excessive scouring is expected, banks would be armored with riprap. Riprap would extend above the high waterline and would be backfilled with topsoil and revegetated. Cuttings and rootings would be used to revegetate riparian woodlands in addition to the proposed seeding. • Measures would be taken to protect the right-of-way restoration efforts through natural and man-made barriers and signage where past problems have occurred on the pipeline. • Monitoring would begin 1 year following construction and continue annually. The length of the monitoring period varies by vegetation type. In general, monitoring in Wyoming, non-desert areas of Utah, and the Dixie National Forest would occur for 5 years following construction. The monitoring 			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT50 (cont'd)			<p>period for desert areas, including the southern part of Utah, and all parts of Nevada and California, would occur for 6 years. Monitoring data would be collected through field visits and aerial surveys. Success criteria would vary by state (see the site-specific discussion below). Annual reports would be provided to the appropriate agencies.</p> <p>Where the results of the annual monitoring indicate that the success criteria are not being met, remedial action would be taken. Areas where restoration is noted as being unsuccessful (e.g., areas of active erosion, poor vegetative cover, or noxious weed infestation) would be identified by milepost. These locations and any remedial actions taken would be documented in reports that would be provided to the BLM, the FERC, the CSLC in California, and other appropriate land and resource management agencies within 3 months following the inspections. Remedial actions would include additional seedbed preparation, temporary grazing exclusion fencing, reseeded, and replanting. The treatments employed would be determined on a site-specific basis and in consultation with the landowner or land management agency and the applicable resource management agency. Should the success criteria not be met by the end of the monitoring period, KRGT would coordinate with the landowner or land management agency, the applicable resource management agency, and the CSLC in California to take corrective actions as appropriate. Coordination with these agencies could include extending the monitoring period until success is obtained.</p>			
RGT51	The cutting, clearing, and/or removal of existing vegetation within the construction work area in Wyoming (section 4.5.2.1).	Significant (CEQA Class II)	The Wyoming Reclamation Plan covers the pipeline route in Wyoming. KRGT would segregate up to 12 inches of topsoil. KRGT would reduce the depth of topsoil segregation to 6 inches where shallow soils or soils with stony subsoils occur. Where soils have a high content of cobble, rocks, or boulders, topsoil segregation may not occur. Rock brought to the surface during trenching operations on BLM or agricultural lands would be either	Less than significant (CEQA Class III)	Wyoming	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT51 (cont'd)			<p>backfilled in the trench or removed to an approved area. KRGT would conduct seeding throughout the state using the species and application rates determined in consultation with the BLM and the Natural Resources Conservation Service (NRCS). Seed would be purchased commercially, and tested or certified to ensure compliance with Federal and state seed requirements. KRGT would only use locally adapted ecotypes of native shrub seed. KRGT would perform remedial actions as necessary following post-construction monitoring. These actions may include reseeding, replanting, supplemental mulching, and livestock fencing depending on the requirements of the individual site.</p> <p>Revegetation efforts would be considered successful 1 year after construction if a 3 percent cover of desirable species is achieved over 80 percent of the right-of-way. Revegetation efforts would be considered successful in the second year if a 10 percent cover is achieved over 80 percent of the right-of-way. The success criteria would increase by 10 percent each year until the fifth year when revegetation would be considered successful if 40 percent cover is achieved over 80 percent of the right-of-way. Revegetation efforts for woody plants used for visual or habitat restoration in riparian areas would be considered successful when an 80 percent survival rate is achieved. Annual monitoring reports would be provided to the FERC and the BLM.</p>			
RGT52	The cutting, clearing, and/or removal of existing vegetation within the construction work area in Utah (section 4.5.2.1).	Significant (CEQA Class II)	The Utah Reclamation Plan covers the pipeline route in Utah with the exception of the Dixie National Forest, which is covered under a separate plan (see KRGT53). Topsoil segregation in Utah would be the same as described for Wyoming (see KRGT51). Rock brought to the surface during trenching operations on agricultural lands would be disposed of at an approved area. Seeding would be conducted throughout the state. Seeded species and application rates have been determined in consultation with the BLM and the NRCS. Seed would be acquired from commercial seed producers, meet state seed laws, be tested for germination and purity by a certified tester, and used within 9 months of testing. Seed species for	Less than significant (CEQA Class III)	Utah	FERC and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG52 (cont'd)			<p>desert habitats, beginning at about MP 418.5, would be acquired from local sources in southern Utah and Nevada. Transplanted succulents (<i>i.e.</i>, Joshua trees, yucca, cactus, and agave) would enhance the revegetation efforts in desert habitats.</p> <p>In desert tortoise critical habitat areas, cattle grazing would be controlled or eliminated from the right-of-way. Where necessary, Permeon™ would be applied to site-specific areas to enhance the natural desert varnish. Seed species used for these areas would be the same as proposed for the Mojave Desert in Utah and would be collected within or in the vicinity of desert tortoise critical habitat areas. Seed bag tags would be saved and submitted to the jurisdictional agencies within 30 days after completion of seeding. Signs would be installed at locations identified by the BLM or the FWS to deter OHV use in all restored areas of desert tortoise critical habitat (see KRG5153).</p> <p>In non-desert habitats, revegetation efforts would be considered successful 1 year after construction if a 3 percent cover of desirable species is achieved over 80 percent of the right-of-way. Revegetation efforts would be considered successful in the second year if a 10 percent cover is achieved over 80 percent of the right-of-way. The success criteria would increase by 10 percent each year until the fifth year when revegetation would be considered successful if up to 40 percent cover is achieved over 80 percent of the right-of-way. Revegetation efforts for woody plants used for visual or habitat restoration in riparian areas would be considered successful when an 80 percent survival rate is achieved.</p> <p>For desert habitats, KRG5 has adopted qualitative and quantitative procedures and protocols from the BLM's <i>Draft Restoration Success Standards and Monitoring Plan</i> (BLM, 2001a). In addition to percent cover, qualitative monitoring in the first 5 years following construction would assess soil erosion, natural recruitment of native plant species, exotic plant species, and animal use. Additional quantitative monitoring would occur in the sixth year following</p>			

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT52 (cont'd)			construction. Revegetation efforts would be considered successful in the Mojave Desert and desert tortoise critical habitat if in the sixth year following construction, cover, density, and the richness of native perennial vegetation is equal to or exceeds 60 percent for these parameters in undisturbed reference areas. Annual monitoring reports would be provided to the FERC, the BLM, and the U.S. Department of Agriculture, Forest Service (FS).			
KRGT53	The cutting, clearing, and/or removal of existing vegetation within the construction work area in the Dixie National Forest (section 4.5.2.1).	Significant (CEQA Class II)	The Reclamation Plan for the Dixie National Forest covers the pipeline route between MPs 382.5 and 404.1. Topsoil segregation requirements would be the same as for Wyoming and Utah (see KRGT51 and 52). KRGT would dispose of rock brought to the surface during trenching operations in agricultural lands at an approved area. Seeding would be a part of the revegetation efforts throughout the Dixie treatment area where topsoil or surface fines are available. Seed would be applied using a rangeland seed drill with the exception of areas where drill seeding would be unsafe or physically impossible; in these locations seed would be broadcast. Seeded species and application rates have been determined in consultation with the reclamation specialists from the Dixie National Forest. Seed would be acquired from commercial seed producers and would be certified or tested before application to meet Federal and state seed requirements. Additional restoration treatments are prescribed for Hiway Spring, Magotsu Creek, and Moody Wash. Reestablishment of rock ledges, and willow plantings at Hiway Spring, and boulder placement and bank armoring at Magotsu Creek and Moody Wash would be coordinated with the FS. Disturbed riparian areas may be revegetated with willow cuttings from local riparian areas as requested by District Rangers. KRGT would perform remedial actions including reseeding, replanting, supplemental mulching, and livestock fencing. Revegetation efforts would be considered successful 1 year after construction if a 3 percent cover of desirable species is achieved over 80 percent of the right-of-way. Revegetation efforts would be considered successful in the second year if a 10 percent cover is achieved over 80	Less than significant (CEQA Class III)	Utah (Dixie National Forest)	FERC and FS monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT53 (cont'd)			percent of the right-of-way. The success criteria would increase by 10 percent each year until the fifth year when revegetation would be considered successful if up to 40 percent cover is achieved over 80 percent of the right-of-way. Revegetation efforts for woody plants used for visual or habitat restoration in riparian areas would be considered successful when an 80 percent survival rate is achieved. Annual monitoring reports would be provided to the FERC and the FS.			
KRGT54	The cutting, clearing, and/or removal of existing vegetation within the construction work area in Nevada (section 4.5.2.1).	Significant (CEQA Class II)	<p>The Nevada Reclamation Plan covers the pipeline route in Nevada. KRGT would segregate topsoil to a depth of 4 to 6 inches except where soils have a high content of cobble, rocks, or boulders. Where there is little plant growth, vegetation would be crushed rather than bladed. KRGT would dispose of rock brought to the surface during trenching operations in agricultural areas at an approved area. In non-agricultural areas, KRGT may distribute excess rock on the surface in a manner that matches natural conditions or use it to create berms as OHV control. Where caliche material is present in the subsoil, KRGT would bury the material within the subsoil or remove it to an appropriate landfill. KRGT's remediation efforts in Nevada would include seeding in all disturbed areas of Nevada. Salvage and transplanting of Joshua trees, yucca, cactus, and agave would occur in Nevada as described above in the description of treatments common throughout the project area (see KRGT50). All succulents removed from the Dry Lake Compressor Station site would be relocated to a BLM-approved storage facility for holding until the material could be transplanted back on the right-of-way.</p> <p>In areas of desert tortoise critical habitat, treatments would occur in Nevada in the same manner as described for desert tortoise critical habitat in Utah. Additionally, KRGT would plant shrubs and install deterrence signage adjacent to major road crossings for the purposes of OHV control in desert tortoise critical habitat. Shrub species and planting locations would be coordinated with the BLM. Additional discussion on OHV control is provided in KRGT153.</p>	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG54 (cont'd)			<p>In addition to the Desert Tortoise Critical Habitat, the Nevada Reclamation Plan prescribes additional treatments for five sub-areas. Two of these sub-areas are the Red Rock Canyon National Conservation Area (NCA) between MPs 552.0 and 557.4 and the Humboldt-Toiyabe National Forest/Spring Mountains National Recreation Area (NRA) between MPs 557.4 and 558.3. KRG54's proposed treatments for these two areas emphasize redistribution of rock mulch and the placement of rock clusters or outcrops to restore the natural desert varnish. KRG54 would also transplant selected woody species, primarily <i>Coleogyne ramosissima</i> (black brush), creosote bush, and succulents, salvaged from the disturbed portions of the right-of-way. KRG54 developed the following additional specific treatments for these areas in consultation with the BLM:</p> <ul style="list-style-type: none"> • use the seed mix developed in consultation with the BLM. The seed would be collected from local sources in southern Nevada. KRG54 would collect additional seed from existing native shrub species located along the right-of-way within the Red Rock Canyon NCA and Humboldt-Toiyabe National Forest/Spring Mountains NRA during the spring of 2002. KRG54 would coordinate the selection of species and collection methods with the BLM. A baseline survey would be conducted during the spring of 2002 in cooperation with the BLM to identify and inventory plant communities in order to finalize the site-specific plans for seed collection, salvage, and transplanting; • propagate a portion of the collected native shrub seed to be grown in "tall pots" for transplanting on the right-of-way. "Tall pots" are nursery plant containers, generally 24 to 30 inches deep, that are often used for revegetation purposes because they allow for significant root development before transplanting. Propagation and growing would be conducted by a qualified nursery; • extend restoration treatments and seeding to cover the entire existing right-of-way including areas that would be outside of the current proposed right-of- 			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG54 (cont'd)			<p>way that were disturbed by construction of KRG54's existing pipeline;</p> <ul style="list-style-type: none"> • salvage woody plants (notably black brush and creosote bush) from the construction work area that would otherwise be crushed or cleared during construction using a qualified contractor. The salvaged plants would be grown for a minimum of 4 months in containers before transplantation back onto the right-of-way. KRG54 would replant the salvaged plants in natural appearing groups toward the edges of the new and existing right-of-way to break up the existing linear appearance as a primary means to mitigate residual visual impacts as well as to provide vertical habitat structure. The BLM would provide additional transplants for use within the Red Rock Canyon NCA; • transplant additional salvaged succulents provided by the BLM on the existing right-of-way; • treat the north-facing slope (MP 556.6) in the vicinity of Wilson Tank and the areas at MPs 557.3 and 558.2 with Permeon™ to reduce visual contrast. Permeon™ may also be used in other areas as required on a case by case basis; • reshape existing berms and lines of boulders across the existing right-of-way and naturally arrange and treat new berms with Permeon™; and • increase performance standards. Restoration of the Red Rock Canyon NCA and Humboldt-Toiyabe National Forest/Spring Mountains NRA would be considered successful if plant cover, density, and richness of native perennial vegetation is equal to or exceeds 80 percent in 6 years. <p>The third sub-area addressed by the Nevada Reclamation Plan is dry wash crossings. At dry washes in Nevada, KRG54 would minimize the width of the native area to be disturbed and the amount of vegetation removed, topsoil segregation and imprinting would be omitted, the depth of the pipeline would be increased to a minimum of 5 feet, and banks would be armored with riprap as necessary.</p>			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT54 (cont'd)			<p>The fourth sub-area discussed in the Nevada Reclamation Plan is the Meadow Valley Wash area, between MPs 473.10 to 474.60, where mesquite woodlands have been identified. To mitigate impacts on this habitat, KRGT would seed disturbed areas with <i>Prosopis glandulosa</i> (mesquite) and <i>Atriplex lentiformis</i> (quail bush) species as requested by the BLM and the U. S. Fish and Wildlife Service (FWS). Additionally, KRGT would plant mesquite seedlings acquired from local commercial sources to enhance existing stands of mesquite.</p> <p>The fifth sub-area discussed in the Nevada Reclamation Plans are the locations where special status plant species have been identified. KRGT has developed specific reclamation treatments for three special status species: three-cornered milkvetch, yellow two-tone beardtongue, and rosy two-tone beardtongue (see KRGT111). In the locations where these plants are identified, the area of disturbance would be kept to the absolute minimum. Plants adjacent to but outside the construction zone would be protected by flagging or fencing. Where available, seed would be collected from special status species in the local vicinity in accordance with the measures outline in KRGT111.</p> <p>In Nevada the success criteria would be the same as described for Utah in desert habitats (see KRGT52). KRGT has adopted the BLM's <i>Draft Restoration Success Standards and Monitoring Plan</i>. Revegetation efforts would be considered successful in the Mojave Desert and desert tortoise critical habitat if in the sixth year following construction, cover, density, and the richness of native perennial vegetation is equal to or exceeds 60 percent for these parameters in undisturbed reference areas. Annual monitoring reports would be provided to the FERC and the BLM.</p>			
KRGT55	The cutting, clearing, and/or removal of existing vegetation within the construction work area in California (section 4.5.2.1).	Significant (CEQA Class II)	The California Reclamation Plan covers the pipeline route in California and includes treatments that are generally the same as Nevada (see KRGT54). KRGT's treatments for dry wash crossings would be the same as in Nevada (see KRGT54). No desert wash species (e.g., desert willow,	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG55 (cont'd)			<p>smoke trees, or mesquite) have been identified within the construction work area; however, if it is determined that any of these species would be affected by construction, KRG55 would notify the CDFG before disturbance and mitigation for the affected species would be established by the CDFG. Four different seed mixes were developed specifically for California in consultation with the BLM. All seed would be locally collected native species purchased from commercial vendors. KRG55 would submit seed bag tags to the FERC, the BLM, the CSLC, and the CDFG confirming the species and origin of the seed. The seed would be tested or certified to ensure compliance with Federal and state seed requirements before use. Certificates of the seed analysis would also be provided to the FERC, the BLM, the CSLC, and the CDFG.</p> <p>Several state-listed plant species have been identified during surveys within the right-of-way in California. KRG55 has developed plans in consultation with the BLM and the CDFG to protect listed species within the project area. KRG55 would:</p> <ul style="list-style-type: none"> • minimize the areas of disturbance; • flag or fence sensitive populations adjacent to but outside the construction work area; • monitor the segregation of topsoil; and • collect and plant seed onto the right-of-way after construction. <p>All succulent species within the disturbed areas in California would be salvaged. Fifty percent of the succulents to be salvaged, generally the individuals considered by KRG55 to be too large or too small to be feasibly transplanted, would be moved to a BLM nursery. The remaining 50 percent of salvaged succulents would be transplanted back onto the right-of-way whether alive or dead to aid revegetation efforts and to provide OHV control. At the request of the BLM, all transplanted Joshua trees would be treated with Superthrive™ root hormone to promote root development. Only very large, multi-branched Joshua trees that are not feasible to plant upright would be</p>			

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT55 (cont'd)			laid down within the right-of-way. Intact, large shrubs with root crowns removed from areas of grading would be windrowed at the edge of the right-of-way and transplanted back onto the right-of-way at road crossings and visually sensitive areas during restoration. The primary benefits of using these shrubs would be as a form of vertical mulch, enhancement of visually sensitive areas, and OHV deterrence; however, some may survive. All high visibility road crossings and traveled wash crossings would receive visual mitigation treatments. Monitoring in California would be performed under the same criteria described for desert habitats in Utah and Nevada. Success criteria in California would generally be the same as described for desert habitats in other areas of the project, with the exception of desert tortoise critical habitat. In those areas within California, restoration would be considered successful if in the sixth year following construction, cover, density, and the richness of native perennial vegetation is equal to or exceeds 70 percent for these parameters in undisturbed reference areas. Annual monitoring reports would be provided to the FERC, the BLM, the CSLC, and the CDFG.			
KRGT56	The Coyote Creek Compressor Station would permanently remove about 30.9 acres of sagebrush scrub. The Salt Lake Compressor Station would permanently remove about 32.0 acres of <i>Gutierrezia sarothrae</i> (broom snakeweed), <i>Agropyron intermedium</i> (bunchgrass), <i>Salsola iberica</i> (Russian thistle), and <i>Bromus tectorum</i> (cheat grass). The Dry Lake Compressor Station would permanently remove about 22.9 acres of Mojave creosote-bursage (section 4.5.2.2).	Less than significant (CEQA Class III)	All succulents removed from the Dry Lake Compressor Station site would be relocated to a BLM-approved storage facility for holding until the material could be transplanted back onto the right-of-way (see KRGT54). No other specific mitigation proposed.	Less than significant (CEQA Class III)	Wyoming Utah Nevada	No monitoring required.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRGT57	Although not considered threatened or endangered, the dominant species within yucca, cactus, and agave communities are generally protected under various Desert Native Plant Acts in the states crossed by the project. Field surveys identified areas of native yucca, cactus, and agave species along the Veyo Loop, Dry Lake Loops 1 and 2, Goodsprings Loop, and Daggett Loop (section 4.5.3).	Significant (CEQA Class I)	<p>KRGT proposes to implement specific conservation measures for yucca, cactus, and agave communities. These conservation measures include preconstruction identification of species suitable for salvage within the construction right-of-way and temporary workspace areas. Salvagable plants would be dug up and temporarily stored in non-construction areas. Following construction, KRGT would transplant these plants back onto the right-of-way. The discussion of the site-specific Reclamation Plans contains a more detailed description of transplanting methods (see KRGT50 to 55). Survival rates for the large plants, particularly Joshua trees, can be low; however, it is anticipated that some plants would survive. KRGT has included additional treatments to improve the success of transplanting Joshua trees, such as the use of DriWater™ time release gels and in California, the use of Superthrive™ rooting hormone. Additionally, the plants that do not survive would be beneficial to the reclamation process as vertical mulch. Vertical mulching would encourage the recruitment of native seeds, provide forage and cover habitat for native species, discourage colonization by invasive or exotic species, and reduce OHV use along the right-of-way. All succulents removed from the Dry Lake Compressor Station site would be relocated to a BLM-approved storage facility for holding until the material could be transplanted back onto the right-of-way. In California, all succulents within the disturbed area would be salvaged. Fifty percent of the succulents to be salvaged, generally the individuals considered by KRGT to be too large or too small to be feasibly transplanted, would be moved to a BLM nursery with the remaining 50 percent transplanted back onto the right-of-way.</p> <p>In addition, KRGT has agreed to adopt the qualitative and quantitative procedures and protocols from the BLM's <i>Draft Restoration Success Standards and Monitoring Plan</i>.</p>	Significant (CEQA Class I)	Utah Nevada California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
GT58	Mesquite woodlands occur near the Meadow Valley Wash between MPs 474.2 and 474.4, which is within	Significant (CEQA Class II)	KRGT would flag any branches overhanging the right-of-way to clearly identify these trees and avoid any indirect impacts. Further, KRGT would reduce impacts on potential habitat in the Meadow Valley Wash area by	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT58 (cont'd)	the Moapa Habitat Management Area. Mesquite was identified along the route during field surveys near the proposed crossing location of the Muddy River (about MP 477.1) and in an agricultural field near MP 477.4. Mesquite woodlands provide important habitat for many plant and animal species in the Mojave Desert (section 4.5.3).		removing tamarisk, seeding disturbed soils with mesquite and quail bush seed, and planting mesquite seedlings to enhance existing stands of mesquite. To address the BLM's concern regarding the potential for the newly cleared right-of-way to increase OHV use, KRGT would install natural and artificial barriers using boulders and/or cleared vegetation, with an emphasis on placing visual obstructions at any existing crossings of the right-of-way (see KRGT153). Specific OHV barrier types and locations would be determined in consultation with the BLM and other landowners in the area.			
KRGT59	Riparian vegetation communities are important in that they provide high quality wildlife habitat that supports a greater species diversity than the more arid vegetative communities. About 163.2 acres of riparian vegetation would be affected by construction (section 4.5.3).	Significant (CEQA Class II)	KRGT would minimize the impact on riparian communities by crossing the Bear, East Branch Weber, and Weber Rivers using the HDD method and by implementing its WWCM Procedures (see KRGT32). KRGT would not clear vegetation between temporary extra workspace areas and the edge of waterbodies and wetlands. Where the pipeline parallels but does not cross the waterbody, KRGT would attempt to maintain at least 15 feet of undisturbed vegetation between the waterbody and the right-of-way. Where possible at wetland crossings, KRGT would cut vegetation at ground level leaving root systems in place. KRGT would also revegetate riparian areas as soon as possible with a variety of grass species, and cuttings, rootings, or shrubs. KRGT would identify the species and planting densities to be used through consultations with the BLM, the COE, the FS, and other appropriate agencies.	Less than significant (CEQA Class III)	Wyoming Utah Nevada	FERC and BLM monitors would verify mitigation is followed.
RGT60	Noxious weeds are likely to invade disturbed grounds and may continue to invade for many years after the initial disturbance. The removal of existing vegetation and the disturbance of soils during	Significant (CEQA Class II)	KRGT's implementation of its Noxious Weed Plan for the proposed project would avoid many of the problems encountered by its previous project. KRGT would treat both the new right-of-way and the existing right-of-way for noxious weeds where the rights-of-way are adjacent (93 percent of the route). Before construction, KRGT would provide information and training regarding noxious weed identification and control to its contractors. Existing areas	Less than significant (CEQA Class III)	All	FERC, CSLC, BLM, and FS monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG60 (cont'd)	<p>construction could create optimal conditions for the invasion and establishment of invasive, non-native species. Construction equipment traveling from weed-infested areas into weed-free areas could also facilitate the dispersal of invasive weed seeds and propagules, and result in the establishment of noxious weeds in previously weed-free areas (section 4.5.4).</p>		<p>of noxious weed infestation would be flagged in the field. KRG60 would prohibit equipment access to areas of weed infestations until weed control measures have been implemented. Herbicides or other control methods, such as mowing or discing, would be performed by KRG60 in these areas before construction to prevent the spread or proliferation of weeds. Mechanical treatments that would disturb the soil surface would be avoided in native habitats. Following the initial treatment of known infestations, KRG60 would implement the following preventive measures throughout construction:</p> <ul style="list-style-type: none"> • Vehicles would be required to arrive at the work site clean and weed free. The contractor and the EI would ensure that vehicles are free of soil and debris capable of transporting weed seeds or other propagules. • In areas with existing noxious weed infestations, vegetation, soil, and trench spoil material would be stockpiled in a location adjacent to where they were removed and following construction would be returned to their previous location. • Following work at identified noxious weed-infested sites, the contractor would use compressed air to remove soil and propagules from machinery and vehicles before transport offsite. • Materials used for erosion control would be obtained from state-cleared sources that are free of noxious weeds. • Reclamation of disturbed areas would occur immediately following construction as described in the site-specific Reclamation Plans. <p>If noxious weeds become established following construction despite the precautions outlined above, KRG60 would implement the following:</p> <ul style="list-style-type: none"> • In non-native habitats, mechanical treatments, which may include mowing or discing of weed vegetation, would be employed. Where mechanical treatments are used, subsequent seeding would 			

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG60 (cont'd)			<p>occur in accordance with the site-specific Reclamation Plans to minimize the reestablishment of weeds. Mechanical treatments that would disturb the soil surface would be avoided in native habitats.</p> <ul style="list-style-type: none"> • Herbicide applications would be either spot treatments or larger broad-scale treatments. Where broad-scale applications occur, subsequent seeding would occur in accordance with the site-specific Reclamation Plans. <p>KRG60's treatment of noxious weeds would be in accordance with Federal and state laws, and land management agency requirements. For sites occurring on BLM lands, KRG60 would notify the appropriate BLM Field Office before implementing the treatment. The target species, method, and timing of controls would be determined in consultation with BLM personnel. KRG60 would provide funds for county personnel to provide weed control services where there are cooperative agreements between the BLM and the local county. If these agreements are not in place, KRG60 would perform or contract the weed control services. Under a special agreement with the BLM, KRG60 would submit a Pesticide Use Proposal annually for each state crossed by the proposed pipeline. Following chemical application, KRG60 would submit Pesticide Application Records.</p> <p>For noxious weed infestation sites on FS lands, KRG60 would notify the appropriate District Ranger office before implementing the treatment. The target species, method and timing of controls would be determined in consultation with the appropriate FS personnel. KRG60 would provide funds for county personnel to provide weed control services where there are cooperative agreements between the FS and local county. If these agreements are not in place, KRG60 would perform or contract the weed control services.</p> <p>Once construction is complete, KRG60 proposes to monitor for and treat noxious weed infestations. Noxious weed monitoring would occur concurrent with the site-specific</p>			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT60 (cont'd)			Reclamation Plan monitoring. Monitoring would begin the year following construction and thereafter would occur every other year for 5 years. In addition, areas of known infestations would be inspected annually and treated as necessary. Monitoring data collected would include the noxious weed species, their location, and the extent of the infestation. The results of the monitoring would be provided to the local regulatory agencies (<i>i.e.</i> , the BLM, the FS, local weed districts, and the CSLC in California).			
KRGT61	The use of herbicides to treat noxious weeds has the potential to impact environmental resources on or adjacent to the construction work area due to improper use or accidental spills (section 4.5.4).	Significant (CEQA Class II)	<p>To minimize the potential impacts associated with improper herbicide application or accidental spills, KRGT has developed specific herbicide application, handling, and cleanup guidelines. These guidelines are included in KRGT's Noxious Weed Plan (see KRGT60 and ARM5). KRGT would consult with local weed districts and land management agencies to determine the appropriate product and application method. KRGT would use a licensed contractor or provide funds for county personnel to provide weed control services. Applications would follow EPA label instructions and be performed in accordance with Federal, state, and local laws and regulations. The measures KRGT would implement include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Suspend herbicide applications when: <ul style="list-style-type: none"> a. wind velocities exceed 6 miles per hour (mph) for the application of liquid materials and 15 mph for the application of granular materials; b. ice covers the target vegetation; or c. precipitation is occurring or imminent. • Only the quantity of herbicide required for 1 day of work would be transported to the construction site. Herbicides would be transported only in approved containers that would be inspected daily for leaks. • Mixing of herbicides would be performed offsite and at a distance of 200 feet from wetlands, waterbodies, or other sensitive resources. • All herbicide contractors would be required to maintain spill kits at herbicide storage areas and on their trucks and copies of material safety data sheets. 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
ARM5	Weed control before seed dispersal is most effective and would reduce the amount of chemicals and resources required for treatment. Further, noxious weed competition with desirable species can be highly detrimental to restoration efforts (section 4.5.4).	Significant (CEQA Class II)	<p>Before construction, KRGT would file with the FERC and the CSLC a revised Noxious Weed Plan. The revised plan would include provisions for KRGT to:</p> <ul style="list-style-type: none"> • update its list of known noxious weed infestations to include the data acquired during its noxious weed surveys conducted in 2002; • treat all weeds deemed noxious by Federal, state, and/or county weed control agencies to the extent that they do not present a significant hindrance to reclamation efforts; and • schedule its weed control efforts to occur before seed maturation/ development. 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
WILDLIFE AND AQUATIC RESOURCES						
KRGT62	The primary impact of the project on wildlife habitat would be the cutting, clearing, and/or removal of existing vegetation within the construction work area (section 4.6.1.1).	Significant (CEQA Class II)	KRGT would implement its site-specific Reclamation Plans to reduce impact on vegetation and wildlife habitat (see KRGT50 to 55).	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT63	The removal of desert vegetation would have a localized but long-term impact on wildlife. The arid environment characteristic of desert habitat is not conducive to plant growth and would slow the regeneration of vegetation following construction. The reestablishment of woody desert plants may take decades, and in some areas may take over 50 years (section 4.6.1.1).	Significant (CEQA Class II)	KRGT proposes to minimize this impact by limiting the size of its right-of-way and by locating as much of the construction right-of-way as possible within areas that were previously disturbed during construction of its existing pipeline or other utility projects. KRGT has developed its site-specific Reclamation Plans in consultation with the BLM, the FS, the CDFG, and other soil authorities. These plans include measures to promote right-of-way restoration after the pipeline is constructed (see KRGT50 to 55).	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT64	Temporary loss of habitat and access to water along the pipeline route in Utah	Significant (CEQA Class II)	KRGT would share in the cost of a wildlife guzzler (water catchment) near MP 402.0 within the Dixie National Forest with the FS, the Utah Division of Wildlife Resources	Less than significant (CEQA Class III)	Utah	FERC and BLM monitors would verify mitigation is

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT64 (cont'd)	could affect wildlife resources (section 4.6.1.1).		(UDWR), and possibly the Mule Deer Foundation. Installation and the specific site design of the guzzler would be completed by the UDWR. KRGT would also provide funding for a guzzler in the Pinnacle Pass area.			followed.
KRGT65	Clearing the construction right-of-way would result in the displacement of wildlife from areas on or adjacent to the right-of-way. Depending on the season, construction could also disrupt the courting or nesting of birds and breeding of other wildlife on or adjacent to the right-of-way. Smaller, less mobile wildlife, such as small mammals and reptiles, could be crushed by construction equipment or trapped in trenches (section 4.6.1.1).	Significant (CEQA Class II)	KRGT would reduce these impacts by placing earthen trench plugs, with ramps on either side, at maximum 1-mile intervals along the trench and at well-defined livestock and wildlife trails intersected by the trench. EIs, in conjunction with the agencies' compliance monitors, would reduce trench plug spacing (<i>i.e.</i> , add more plugs) if the proposed spacing is determined to be insufficient to facilitate animal escape from the trench. These plugs would provide a means for wildlife to escape if they fall into the trench and also provide a bridge for other wildlife to cross the open trench. The pipeline trench would be inspected on a regular basis during construction and immediately before backfilling to identify entrapped animals. Wildlife found in trenches during construction would be coaxed to the nearest ramp and either encouraged to exit the trench, removed by net, or trapped (if other methods are unsuccessful). If any animal in the trench is determined to be a sensitive species (<i>e.g.</i> , desert tortoise), only authorized individuals would be allowed to remove it from the trench.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT66	Another potential long-term or permanent impact of the project would be the increased level of human-wildlife interaction in the project area. By expanding the existing right-of-way, the project could add to the existing matrix of open desert, jeep trails, dry washes, and cleared rights-of-way currently attracting OHV users (section 4.6.1.1).	Significant (CEQA Class II)	KRGT would only use existing roads as access to the construction right-of-way and would implement OHV blocking measures in sensitive areas as determined by the landowner or land management agency (see KRGT153).	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT67	Fires inadvertently started by construction equipment or personnel could also impact wildlife in the project area by reducing the amount of available habitat. This habitat loss could cause crowding in adjacent habitats reducing productivity and increasing stress-induced mortality (section 4.6.1.1).	Significant (CEQA Class II)	KRGT has developed a Wildfire Protection Plan to minimize the potential impacts associated with project-related fires. The plan describes measures KRGT would implement for prevention, pre-suppression, and suppression of fires during construction of the proposed project.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT68	Construction of the aboveground facilities could permanently convert wildlife habitat to an industrial use (section 4.6.1.1).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	All	No monitoring required.
KRGT69	Some impact on migratory birds could result from habitat loss and disturbance of nesting individuals associated with construction of the Kern River 2003 Expansion Project (section 4.6.1.2).	Significant (CEQA Class II)	In its comments on the draft EIS/EIR, the FWS recommended that KRGT not be authorized to begin construction until after August 1 to reduce the possibility of take of migratory birds. Based on the time frame necessary to complete the permitting process for the project, construction would not begin before August 1, 2002. In previous comments, the FWS recommended that KRGT complete construction in riparian areas identified along the proposed route in the Mojave Desert before May to avoid impacting migratory birds that may potentially nest in these areas. The only areas of defined riparian vegetation identified along the project corridor through the desert are along Meadow Valley Wash (MP 474.2) and the Muddy River (477.1). However, through coordination with the FWS and BLM, it was determined that suitable nesting habitat would not be affected near Meadow Valley Wash and only marginal habitat is present near the Muddy River. KRGT's current construction schedule is to begin construction through the Mojave Desert in November, clear vegetation by the end of February, and complete	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT69 (cont'd)			construction before May. This schedule would avoid impacting nesting migratory birds because chicks and nesting adults will have left their nests by November. Additionally, because clearing, which is scheduled to occur in February, would temporarily remove nesting habitat, it is unlikely that birds would attempt to nest on the right-of-way in late winter or early spring.			
KRGT70	Construction through big game crucial wintering ranges could force animals out of the designated ranges and into less suitable habitats. The potential for limited food availability could increase susceptibility to predation or freezing. Construction could temporarily disrupt animals using non-winter ranges, including critical fawning areas (section 4.6.1.3).	Significant (CEQA Class II)	<p>KRGT's proposed schedule is to complete construction in Wyoming and Utah before November 1, which would avoid the period when crucial big game wintering ranges along the pipeline route are occupied. However, if construction continues past November 15 in critical mule deer winter ranges, KRGT would install trench plugs every 0.25 mile. In other areas, KRGT would provide at least one wildlife crossover (e.g., unexcavated breaks or trench plugs) at maximum 1-mile intervals along the trench and at well-defined livestock and wildlife trails to facilitate passage of big game across the right-of-way. Els, in conjunction with the agencies' compliance monitors, would reduce trench plug spacing (i.e., add more plugs) if the proposed spacing is determined to be insufficient to facilitate animal escape from the trench.</p> <p>Based on the time frame necessary to complete the permitting process for the project, construction would not begin until after August 1. Therefore, no impacts on animals using non-winter ranges, including critical fawning areas are anticipated.</p> <p>KRGT proposes to implement conservation measures, including revegetation of the right-of-way with native species, in crucial wintering ranges. Through consultation with applicable state and Federal agencies, KRGT developed appropriate seed mixes for these areas that are discussed in its site-specific Reclamation Plans (see KRGT50 to 55).</p>	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
1	The area generally between Meadow Valley Wash (MP 474.2) and the Muddy River (MP 477.1),	Significant (CEQA Class II)	See KRGT54, 58, and 91.	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT71 (cont'd)	known as the Moapa Valley, is considered to be a wildlife area of special concern because it is one of the few remaining locations with mesquite and defined riparian vegetation in Nevada. The Moapa Valley is also considered sensitive due to the potential presence of special status fish species (<i>i.e.</i> , Moapa speckled dace, Virgin River chub) in the Muddy River (section 4.6.1.3).					
KRGT72	Construction of the pipeline could affect wild horses in the Red Rock Herd Management Area (HMA) by creating a safety hazard, restricting the horses' access to the water source (Wilson Tank at Tunnel Springs), and by creating temporary access ways that may be used by unauthorized OHVs that could intentionally or unintentionally disturb the herd (section 4.6.1.4).	Significant (CEQA Class II)	<p>KRGT would place earthen trench plugs, with ramps on either side, at all well-defined livestock and wildlife trails, including those used by wild horses and burros, and every 0.25 mile within the Red Rock HMA if there is not a well-defined trail. Els, in conjunction with the agencies' compliance monitors, would reduce trench plug spacing (<i>i.e.</i>, add more plugs) if the proposed spacing is determined to be insufficient to facilitate animal escape from the trench. These plugs would provide a means for horses and burros to escape if they fall into the trench and also provide a bridge to cross the open trench.</p> <p>KRGT proposes to minimize the impact on the water source by limiting construction primarily to daylight hours, which would allow horses uninhibited after-hours access to the water tank. KRGT also proposes to transfer some water and create a temporary alternative water source away from the construction right-of-way. In the Red Rock HMA, temporary tanks holding 500 gallons of water would be placed in locations designated by the BLM, Las Vegas Field Office Wild Horse and Burro Specialist. The tanks would be installed and kept full of water 3 weeks before commencement of construction and during construction, and removed after the pipeline trench has been backfilled. KRGT would minimize the potential for increased OHV</p>	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT72 (cont'd)			access by using only existing roads and implementing blocking measures such as placement of large rocks or construction of berms to prevent access following construction (see KRGT153).			
KRGT73	The pipeline route crosses the Clark Mountain HMA between MPs 579.4 and 603.7 on the Goodsprings Loop (section 4.6.1.4).	Less than significant (CEQA Class III)	No specific mitigation proposed.	Less than significant (CEQA Class III)	California	No monitoring required.
KRGT74	Increased sedimentation and turbidity from construction are the greatest threats to fishery resources. Sedimentation can adversely affect fish eggs and juvenile fish survival, benthic community diversity and health, and spawning habitat (section 4.6.2.1).	Significant (CEQA Class II)	KRGT would adhere to construction windows or implement special crossing methods to avoid or minimize potential impacts on coldwater or other sensitive, threatened, or endangered aquatic species during spawning seasons. KRGT's use of proper construction techniques outlined in its WWCM Procedures (see KRGT32) would further minimize the impacts of open-cut crossings. Permits would be obtained from appropriate state agencies before construction. Each crossing would be completed in accordance with KRGT's WWCM Procedures and applicable permit conditions to reduce soil erosion into waterbodies. KRGT would store trench spoil above and set back from the streambank. KRGT would also use sediment barriers such as silt fence to prevent or significantly reduce runoff into a stream. Construction would be completed as quickly as possible to shorten the duration of sedimentation and turbidity. KRGT would stabilize the construction site, including the streambanks, immediately following completion of construction. If circumstances require a construction delay, adequate site stabilization measures would be employed in accordance with KRGT's WWCM Procedures and permit conditions.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
75	During construction, clearing and grading of vegetative cover could increase erosion along streambanks and turbidity levels in the waterbodies. Alteration of the natural drainage ways or compaction of soils by	Significant (CEQA Class II)	To minimize these impacts, KRGT would use equipment bridges, mats, and pads to support equipment that must cross the waterbody or work in saturated soils adjacent to the waterbody. In accordance with its WWCM Procedures and where topography allows, during clearing and grading, KRGT would preserve a minimum of 10 feet of vegetation along the waterbody banks and locate temporary extra workspaces at least 50 feet from the edge of perennial waterbodies and intermittent waterbodies that have	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd),

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT75 (cont'd)	heavy equipment near streambanks during construction may accelerate erosion of the banks, runoff, and the transportation of sediment into waterbodies (section 4.6.2.1).		riparian vegetation present on the banks except where site-specific approval is granted. At the remaining intermittent waterbody crossings, KRGT would locate extra workspaces 10 feet from the edge of the water. KRGT would also install and maintain sediment barriers, such as silt fence, across the right-of-way at the edge of waterbodies throughout construction except for short periods when removal of these sediment barriers is necessary to dig the trench, install the pipeline, or restore the right-of-way.			
KRGT76	For any large construction project, there is the potential for spills of fuel or other hazardous liquids from storage containers, equipment working in or near streams, and fuel transfers. Any spill of fuel or other hazardous liquid that reaches a waterbody would be detrimental to water quality. The chemicals released during spills could have acute, direct effects on fish, or could have indirect effects such as altered behavior, changes in physiological process, or changes in food sources. Fish could be killed if a large volume of hazardous liquid is spilled into a waterbody (section 4.6.2.1).	Significant (CEQA Class II)	To minimize the potential for spills, KRGT would implement the measures in its Spill Plan (see KRGT27). Adherence to the Spill Plan would prevent a large spill from occurring near surface waters. KRGT would prohibit the storage of fuels within 100 feet of the bank of a waterbody. Additionally, the fueling of construction equipment by mobile tankers or mobile tanks would not be allowed within 100 feet of a waterbody bank. KRGT would evaluate these setbacks on a case-by-case basis where agencies require a greater setback for resource protection. An exception to this 100-foot setback would be the refueling of hydrostatic test water pumps. Where this is necessary, temporary containment structures, such as straw bales or earth berms with impervious liners, would be installed around the pumps. Personnel would perform frequent maintenance and inspection of these structures. Should a small spill occur, the measures in the Spill Plan would decrease the response time for control and cleanup of the spill.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT77	Both the Bear and Weber Rivers support coldwater fisheries and are potential sources for hydrostatic test water. Hydrostatic testing could affect aquatic	Significant (CEQA Class II)	See KRGT47.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT77 (cont'd)	resources in these rivers (section 4.6.2.1).					
KRGT78	Downstream sedimentation associated with hydrostatic test water discharges could impact fisheries (section 4.6.2.1).	Significant (CEQA Class II)	Hydrostatic test water would be discharged to stable, upland areas along the construction right-of-way. KRGT would not discharge test water directly into surface waters unless authorized or required by its NPDES permits. Energy-dissipating devices and/or filter bags would be used to prevent erosion, streambed scour, suspension of sediments, and excessive streamflow. KRGT would not use chemical additives during hydrostatic testing. Discharge locations would depend on the length of the test section and applicable Federal, state, and local guidelines.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT79	KRGT expects that the same sources of hydrostatic test water would be used to provide the water for dust control activities. The impacts of the water withdrawals for dust control would be the same as those for hydrostatic test water withdrawals (section 4.6.2.1).	Significant (CEQA Class II)	Implementation of KRGT's measures to reduce impacts associated with hydrostatic test water withdrawals would reduce the impacts of water withdrawals for dust control activities to less than significant levels (see KRGT45).	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
3T80	Pipeline construction could disturb and suspend existing sediments in the water column, temporarily degrading water quality and redistributing contaminants downstream. This may have an impact on aquatic and benthic species, and on downstream water uses (section 4.6.2.1).	Significant (CEQA Class II)	See KRGT43 and 44.	Less than significant (CEQA Class III)	Utah Nevada	FERC monitors would verify mitigation is followed.
T81	If in-stream blasting is required, aquatic organisms close to the	Significant (CEQA Class II)	KRGT would use techniques such as scare charges or banging on a piece of pipe before the blast to scare aquatic organisms from the blast area before blasting is	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRGT81 (cont'd)	blast may be injured or killed (section 4.6.2.1).		conducted. It is anticipated that the preparation of the rock for blasting (<i>i.e.</i> , drilling shot holes) would cause enough disturbance to displace most aquatic organisms from the immediate vicinity of the blast. Immediately following blasting, KRGT would remove shot rock that impedes stream flow. See KRGT2/ARM1.			mitigation is followed.
KRGT82	The degree of impact associated with in-stream activities can be affected by the season of construction and the crossing method. Construction during periods of sensitive fish activity (<i>i.e.</i> , spawning and migration) can have a greater impact on fish than construction during other periods. Of the waterbodies with the potential to contain fisheries, 11 have agency-recommended construction timing restrictions designed to protect sensitive fisheries (section 4.6.2.1).	Significant (CEQA Class II)	<p>KRGT proposes to cross the Bear, East Branch Weber, and Weber Rivers using the HDD method. KRGT prepared a Drilling Mud Release Contingency Plan that includes measures for the prevention, cleanup, and reporting of an inadvertent release of drilling mud (see KRGT40). Implementation of KRGT's Spill Plan (see KRGT27) would minimize the potential for a chemical spill to less than significant levels and would provide for protection of sensitive resources (<i>e.g.</i>, waterbodies) in the event a spill does occur.</p> <p>KRGT would adhere to the recommended timing restrictions for Beaver Dam Wash at MP 431.0 if water is present within this waterbody when encountered by the construction spread during normal progression. If this waterbody is dry when encountered by the construction spread, KRGT proposes to proceed with the crossing outside of the window.</p> <p>The remaining waterbodies are known to contain special status species (see KRGT108 to 110).</p>	Less than significant (CEQA Class III)	Wyoming Utah Nevada	FERC and BLM monitors would verify mitigation is followed.
SPECIAL STATUS SPECIES						
KRGT83	In general, the impacts of the project on special status species would be the same as described for vegetation, wildlife, and aquatic resources. However, the magnitude and duration of these impacts could be greater for special status species, because their distribution and relative abundance	Significant (CEQA Class II)	KRGT would implement general minimization and conservation measures to reduce the impact of the project on all special status species. KRGT would develop a construction environmental awareness program to educate contractors and inspectors of the species that have the potential to occur along the project, explain that wildlife must not be harassed or harmed, explain that all project traffic must be restricted to approved access roads and work areas, and explain all agency requirements. Contractors would be informed during training sessions that they are not authorized to handle or otherwise move listed or other special status species at any time. Also,	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT83 (cont'd)	usually are more limited. Special status plants in the pipeline right-of-way would be lost when the right-of-way is cleared, and special status animals could be affected by the temporary loss of habitat during construction. Mobile individuals would likely be displaced to other habitat but could be lost because of intra-specific competition, predation, or other stresses. Immobile species and juveniles could be killed. Construction of aboveground facilities would result in a permanent loss of habitat. Special status species could also be affected where blasting is required (section 4.7.1).		KRGT would be required to employ at least two EIs per construction spread who would be responsible for overseeing project environmental protection measures, including those for special status species. Site-specific impacts and additional species-specific conservation measures are discussed below (see KRGT84 to 119 and ARM9).			
KRGT84	Direct and indirect impacts on bald eagles could occur depending on proximity of disturbance to an active nest and timing of that disturbance. Removal of an active nest during construction could result in the loss of eggs or death of nestlings. Construction near an active eagle nest could result in nest abandonment; overheating, chilling, or desiccation of unattended young causing nestling mortality;	Significant (CEQA Class II)	KRGT plans to conduct aerial surveys for raptor nests, including bald eagles, during the nesting season before construction in 2002. These surveys would cover 1 mile on either side of the outside edge of the construction work area. If an eagle nest is identified during the surveys, KRGT would follow the <i>Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances</i> to minimize potential impacts of the project on bald eagles, unless site-specific treatment of a nest is approved by the BLM, the local FWS Field Office, and the UDWR (for nests in Utah).	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT84 (cont'd)	premature fledging; and ejection of eggs or young from the nest (section 4.7.2).					
KRGT85	Surveys in 2001 identified potential habitat along the Opal and Muddy Creek Loops (between MPs 0.0 and 26), and identified mountain plovers at three sites along the pipeline route in this area. Indirect impacts could occur in the short term if available forage and shelter are reduced due to clearing or if a lack of vegetation cover along the right-of-way made the plover more susceptible to predation (section 4.7.2).	Significant (CEQA Class II)	KRGT proposes to conduct surveys using FWS-approved survey protocols again during the early breeding season in 2002 to determine if plovers are nesting on or adjacent to the right-of-way. Based on the latest <i>Mountain Plover Survey Guidelines</i> (FWS, 2001), construction after July 10 would not be likely to affect mountain plovers. Because of the time frame necessary to complete the permitting process for the project, construction would not begin before August 1, 2002. Per FWS and Wyoming Game and Fish Department (WGFD) recommendations, KRGT also would return the area of suitable plover habitat to preconstruction conditions using native seed mixes. No aboveground facilities, access roads, or two-tracks would be constructed in mountain plover habitat.	Less than significant (CEQA Class III)	Wyoming	FERC and BLM monitors would verify mitigation is followed.
KRGT86	The removal of even marginal habitat could indirectly affect southwestern willow flycatchers by eliminating potential future forage and nest habitat (section 4.7.2).	Less than significant (CEQA Class III)	No species-specific mitigation proposed (see KRGT83).	Less than significant (CEQA Class III)	Nevada	No monitoring required.
KRGT87	The removal of even marginal habitat could indirectly affect western yellow-billed cuckoos by eliminating potential future forage and nesting habitat (section 4.7.2).	Less than significant (CEQA Class III)	No species-specific mitigation proposed (see KRGT83).	Less than significant (CEQA Class III)	Nevada	No monitoring required.
KRGT88	Impacts of the proposed project on black-footed ferrets would be indirect and limited to temporary	Significant (CEQA Class II)	If construction within any of the areas potentially containing black-footed ferrets would occur after September 23, 2002, KRGT would resurvey the areas to be affected and would consult with the FWS regarding	Less than significant (CEQA Class III)	Wyoming Utah	No monitoring required.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT88 (cont'd)	loss of suitable habitat through crushing of white-tailed prairie dog burrows, which are abundant outside of the proposed construction work area (section 4.7.2).		survey results and the need for mitigation.			
KRGT89	Construction of the project would be expected to directly affect about three or four prairie dogs (3 acres of occupied habitat with 1.12 prairie dogs per acre of occupied habitat). Potential indirect effects of the project on Utah prairie dogs include temporary loss of forage and shelter due to vegetation clearing and collapsing of burrows and temporary disruption of foraging and resting activities due to disturbance associated with construction equipment (section 4.7.2).	Significant (CEQA Class II)	<p>KRGT would conduct preconstruction surveys to determine if the extent of occupied prairie dog habitat and estimate of Utah prairie dogs within the occupied habitat require modification. KRGT would use agency-approved biologists and survey methods, and would survey the proposed right-of-way and access roads through prairie dog habitat.</p> <p>To provide the maximum opportunity for Utah prairie dogs to vacate the right-of-way before construction, in accordance with the recommendations of the BLM, the FWS, and the UDWR, KRGT would:</p> <ul style="list-style-type: none"> begin construction between July 1 and September 30 (the period when prairie dogs are most likely to be found aboveground); and initiate ground disturbance before September 30 in occupied habitat if the full construction spread is not anticipated to reach the area until after September 30. <p>KRGT would further minimize impacts by implementing the following agency-recommended conservation measures:</p> <ul style="list-style-type: none"> provide the BLM and the UDWR 7 to 10 days notification before the initiation of construction within occupied prairie dog habitat; initiate a disturbance regime (e.g., traverse the area with a few pieces of equipment daily) before construction to reduce the potential for prairie dogs to be within the right-of-way during active construction; install fencing (minimum of 3 feet tall, opaque, and durable) along the edge of the right-of-way within 2 	Less than significant (CEQA Class III)	Utah	FERC and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>g/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT89 (cont'd)			<p>days of initial disturbance;</p> <ul style="list-style-type: none"> • extend fencing a minimum of 150 feet beyond the edge of identified occupied habitat; • install escape ramps and trench plugs central to each identified area of prairie dog activity; • inspect the trench daily in prairie dog habitat for the presence of trapped individuals; • encourage trapped individuals to exit the trench via escape ramps or physically remove individuals that do not use escape ramps; • allow only the EI or other qualified biologist to physically remove trapped individuals; and • maintain a speed limit of 15 mph along the construction right-of-way through prairie dog habitat. <p>Following construction, prairie dogs are expected to reoccupy construction work areas. To compensate for impacts on habitat, KRGT would:</p> <ul style="list-style-type: none"> • make a monetary contribution to an account specified by the BLM for restoration of disturbed prairie dog habitat in Iron County, Utah. Compensation would be based on the acres of prairie dog habitat impacted and would be adjusted based on the results of the 2002 preconstruction survey. 			
3T90 v6	Construction of the project would contribute to a decline in value of a linear strip of desert tortoise habitat. In addition to the loss of potential habitat, tortoises could be killed or injured as a result of being crushed by vehicles, movement of soil, or entrapment in burrows or open trenches. The application of water for dust control in desert areas	Significant (CEQA Class II)	<p>To compensate for desert tortoise habitat affected during construction, KRGT would implement the following measures:</p> <ul style="list-style-type: none"> • Impacts on desert tortoise habitat would be offset through either an acceptable land acquisition or an assessed financial contribution. Compensation rates would be as follows: <ul style="list-style-type: none"> a. 5:1 for new disturbance in tortoise critical habitat; b. 3:1 where overlapping previously disturbed tortoise critical habitat; and c. 1:1 for all non-critical habitat. • KRGT would provide funding to a third party to be 	Less than significant (CEQA Class III)	Utah Nevada California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT90 ARM6 (cont'd)	could attract desert tortoises to the construction right-of-way. Ongoing operation and maintenance of the pipeline could also adversely affect the desert tortoise. Pipeline markers could provide perches for aerial predators in areas where natural perches are not available and therefore increase the threat of predation, primarily for juvenile tortoises. In addition, the project would cross a Large Scale (desert tortoise) Translocation Site between MPs 564.8 and 578.5. Tortoise densities within this translocation site are about 10 times greater than densities outside of the area (section 4.7.2).		<p>used for desert tortoise habitat acquisition, including enhancement and management (endowment) fees. KRGT proposes to enter into a Memorandum of Agreement with the FWS and The Conservation Fund, a third-party organization specifically identified by the FWS through which KRGT could implement desert tortoise mitigation for impacts in Utah and Nevada. In California, KRGT proposes to provide monetary compensation to the CDFG through a third party. KRGT is currently in negotiations with the Desert Tortoise Preserve Committee (DTPC) to develop a third-party agreement between DTPC, KRGT, and the CDFG outlining KRGT's commitment to use the DTPC for meeting desert tortoise compensation requirements on private lands crossed by the project. KRGT would pay compensation fees directly to the BLM for public lands crossed in California. If required, KRGT would post the necessary bond or letter of credit to guarantee with the BLM and the CDFG and/or the CSLC to ensure that mitigation would be implemented. The final mitigation acreage would be based on actual construction impacts.</p> <p>In order to minimize the extent of injury, death, and harassment of tortoises during construction of the proposed project, KRGT would conduct an agency-approved preconstruction survey in areas of suitable habitat to identify actual tortoise locations and take appropriate measures, in accordance with specified guidelines, to either protect or relocate burrows and tortoises. KRGT developed 39 conservation measures to minimize potential impacts on desert tortoises during construction. These proposed conservation measures are listed in their entirety in appendix S. Some of the measures are summarized below.</p> <ul style="list-style-type: none"> • KRGT would designate a field contact representative (FCR) who would be responsible for overseeing compliance with protective stipulations 			

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>g</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRG790 ARM6 (cont'd)			<p>for listed species. The FCR would be onsite during all project activities. The FCR would have the authority to halt all activities that are in violation of the stipulations. The FCR would have a copy of all stipulations when work is being conducted on the site. The FCR could be a project manager, KRG7 representative, or a contract biologist.</p> <ul style="list-style-type: none"> • KRG7 would submit the names and a statement of qualifications of all proposed authorized biologists to the BLM and the FWS, and the CSLC and the CDFG in California, for review and approval at least 30 days before initiation of any desert tortoise clearance surveys. Project activities would not begin until authorized biologists have been approved. • KRG7 would restrict all activities to the right-of-way and approved access roads/storage areas. If unforeseen circumstances require expansion of this width, the potential expanded work areas would be surveyed for desert tortoise before use of the area. • Within desert tortoise range, authorized biologists would conduct preconstruction surveys of the right-of-way as follows: <ul style="list-style-type: none"> a. Within suitable tortoise habitat: During the tortoise active season (March 1 - October 31), or when temperatures and environmental conditions are conducive to tortoise activity, as determined by the authorized biologist, two surveys would occur. The first survey would be conducted within 14 days before surface disturbance. The second survey would occur immediately before surface disturbance. During the inactive season (November 1 - February 28) and as noted above, one survey would occur within 72 hours of surface disturbance. b. Outside suitable tortoise habitat: During the desert tortoise active season, or as stipulated above, a survey would be conducted between 7 and 21 days before surface disturbance. A second survey would occur immediately before 			

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG790 ARM6 (cont'd)			<p>surface disturbance unless the BLM and the FWS, and the CSLC and the CDFG in California, concur that a second survey is not required. During the inactive season, one survey would occur within 72 hours of surface disturbance. The jurisdictional Federal land manager would determine which areas are suitable desert tortoise habitat on public land.</p> <ul style="list-style-type: none"> • All desert tortoise burrows or pallets in the construction zone that cannot be avoided would be excavated by an authorized biologist or blocked. All desert tortoise burrows and pallets that fall outside of the right-of-way but within 50 feet of the construction work area, would be flagged for avoidance. All handling of desert tortoises and their eggs and excavation of burrows would be conducted by an authorized biologist in accordance with recommended protocol (Desert Tortoise Council, 1999). • Desert tortoises that are found aboveground and need to be moved from harm's way would be placed in the shade of a shrub in adjacent undisturbed habitat a minimum of 300 feet from the right-of-way where access is available. Where access is restricted, tortoises would be placed under a shrub as far from the right-of-way as possible. All desert tortoises removed from burrows would be placed in an unoccupied burrow of approximately the same size as the one from which it was removed. • Desert tortoises would only be moved by an authorized biologist and solely for the purpose of moving the tortoises out of harm's way. Tortoises excavated from unavoidable burrows along the route would be relocated to unoccupied natural or artificially constructed burrows immediately following excavation. The artificial or natural burrow would be located 150 to 300 feet from the original burrow and would be similar in size, shape, and orientation to the original burrow. Relocated tortoises would not be placed in existing occupied 			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG790 ARM6 (cont'd)			<p>burrows. Procedures for handling tortoises would follow those described in <i>Guidelines for Handling Desert Tortoises During Construction Projects</i> (Desert Tortoise Council, 1999).</p> <ul style="list-style-type: none"> • Desert tortoises moved during inactive periods would be monitored for at least 2 days after their placement in the new burrows to ensure their safety. The authorized biologist would be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely. • The Dry Lake Compressor Station, and any proposed modifications at the Goodsprings Compressor Station, would include a tortoise-proof fence around the facility. Before grading activities, the site would be fenced and surveyed for the presence of desert tortoise. No construction activities would begin until two consecutive surveys yield no individuals. • Whenever a vehicle or construction equipment is parked in desert tortoise habitat longer than 2 minutes, the ground around and under the vehicle or equipment would be inspected for desert tortoises before the vehicle or equipment is moved. If a desert tortoise is observed, it would be left to move on its own. If this does not occur within 15 minutes, an authorized biologist would remove and relocate the tortoise. • Within desert tortoise habitat, any construction pipe, culverts, or similar structures with a diameter of greater than 3 inches stored less than 8 inches above the ground on the construction site for one or more nights would be inspected for tortoises before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored on the construction site. • Open trenches and other open excavations would be fenced with temporary tortoise-proof fencing, covered at the close of each working day, or provided with tortoise escape ramps. All excavations in tortoise habitat would be inspected periodically throughout and at the end of each work 			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRG T90 ARM6 (cont'd)			<p>day and immediately before backfilling. Temporary tortoise-proof fencing would consist of silt fence buried at least 6 inches and supported by wooden stakes.</p> <p>If active construction in desert tortoise habitat would continue after January 31, KRG T would coordinate with the FWS, the BLM, and the CDFG (in California) to identify site-specific locations where KRG T would install temporary tortoise-proof fence or cover open trenches at the end of each work day. The results of these consultations would be filed with the FERC and the CSLC before construction in desert tortoise habitat may continue after January 31.</p> <p>KRG T would apply water to the construction right-of-way for dust control and to the topsoil piles as necessary to prevent the loss of topsoil due to wind erosion. KRG T may be able to reduce the applications of water to the construction right-of-way by adding a non-toxic, organic tackifier to the dust control water in desert tortoise habitat during the tortoise active season (generally March 1 to October 31). KRG T does propose to apply tackifier to segregated topsoil piles in areas designated as highly susceptible to wind erosion. An authorized biologist would be assigned to patrol each area being watered. The biological monitor would patrol the area immediately after the water is applied and at approximate 60-minute intervals until the ground is no longer wet enough to attract tortoises.</p> <p>To supplement its Desert Tortoise Assessment, KRG T prepared a Maintenance Addendum that discusses conservation measures that would be implemented during various potential maintenance activities (see appendix S). The conservation measures to be applied during maintenance are generally consistent with those to be implemented during construction and would minimize impacts on desert tortoises during maintenance activities and provide a mechanism to mitigate for unavoidable impacts.</p>			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT164	Because the non-local workforce would be small relative to the current population, construction of the pipeline would result in minor, temporary, or no impact on local community facilities and services such as police, fire, medical, and waste disposal services. Other construction-related demands on local agencies could include increased enforcement activities associated with issuing permits for vehicle load and width limits, local police assistance during construction at road crossings to facilitate traffic flow, and emergency medical services to treat injuries resulting from construction accidents (section 4.9.4).	Less than significant (CEQA Class III)	No specific mitigation proposed. KRGT would work with local firefighters and other emergency responders to coordinate activities for effective emergency response.	Less than significant (CEQA Class III)	All	No monitoring required.
RGT165	Construction activities, such as the influx of construction workers to the project area, could result in traffic congestion and roadside parking hazards (section 4.9.5).	Significant (CEQA Class II)	To minimize these potential effects, KRGT would require that construction workers use contractor yards as the primary parking area for employee's personal vehicles. Workers would be transported from contractor yards to the construction site in buses provided by the contractor. Only company (<i>i.e.</i> , contractor and/or KRGT) vehicles would be allowed on the right-of-way.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
RGT166	The delivery of construction equipment and materials could also temporarily congest existing transportation networks at specific locations (section 4.9.5).	Significant (CEQA Class II)	To minimize disruption to traffic, KRGT has sited its contractor yards at locations that have existing adequate roadway access to the pipeline construction areas.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT167	To implement KRGT's dust control measures, water trucks would fill up at water storage locations and then travel the right-of-way applying water as necessary to control dust. It is expected that each spread would have roughly 4 water trucks operating and each truck would make approximately 6 round trips per day for a total of 24 round trips along the right-of-way (section 4.9.5).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	All	No monitoring required.
KRGT168	Construction and operation of the proposed pipeline would have a beneficial impact on local tax revenue based on projected tax revenue (section 4.9.7).	Beneficial Impact (CEQA Class IV)	No mitigation proposed.	Beneficial Impact (CEQA Class IV)	All	No monitoring required.
CULTURAL RESOURCES						
ARM10	Project impacts or effects on cultural resources include not only the physical disturbance of a historic property, but may also include the introduction, removal, or alteration of various visual or auditory elements, which could alter the traditional setting or ambience of the property (section 4.10.6).	Significant (CEQA Class II)	KRGT would defer construction and use of its facilities and any staging, storage, or temporary work areas and new or to-be-improved access roads until: <ul style="list-style-type: none"> • KRGT prepares and files with the FERC and the CSLC (for the California portion of the project), and submits to the consulting parties, as appropriate, any outstanding cultural resources reports and necessary treatment plans; • KRGT files with the FERC and the CSLC (for the California portion of the project) the comments of the consulting parties on all cultural resources reports and plans submitted for review; • the CSLC reviews and approves all cultural resources reports and plans prepared for the California portion of the project and notifies KRGT 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation, and the mitigation measures specified in the approved treatment plans, are followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
ARM10 (cont'd)			<ul style="list-style-type: none"> In writing that construction may proceed; and the Director of OEP reviews and approves all cultural resources reports and plans and notifies KRG T in writing that construction may proceed. 			
AIR QUALITY AND NOISE						
KRGT169	The proposed project would generate air emissions from temporary construction activities. The construction emissions from the project would be above the significance threshold established by the Mojave Desert Air Quality Management District (AQMD) for all emissions except sulfur dioxide (SO ₂) and volatile organic compounds (VOC) (section 4.11.1.2).	Significant (CEQA Class II)	<p>To reduce construction emissions, KRGT would implement emission control measures developed in consultation with local AQMDs. These measures include:</p> <ul style="list-style-type: none"> properly maintaining and tuning equipment to manufacturers' specification; transporting workers from contractor yards to the construction site in buses provided by the contractor to reduce vehicle emissions; limiting the extent of a visible dust plume to less than 100 yards from the source; limiting opacity of fugitive dust to 20 percent or less; applying water and/or a non-toxic, organic tackifier as a dust suppressant on non-paved roads and construction work areas, including topsoil piles, to limit excessive airborne particulates as a result of construction activities (see KRGT48 and 90/ARM6); cleaning equipment traveling from a non-paved road to a paved road; installing construction entrances to prevent tracking of soil onto paved roads; cleaning soil tracked onto paved roads more than 50 feet from the point of origin within 1 hour of discovery and cleaning soil tracked onto paved roads less than 50 feet from the point of origin at the end of each work day; using tarps or other means to enclose material on haul trucks; limiting blast footprints to a size that can be stabilized after the blast; requiring the contractor to obtain approval from KRGT before blasting if wind speeds are 25 mph or greater; and keeping daily records of all dust control measures 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT169 (cont'd)			<p>taken, including:</p> <ol style="list-style-type: none"> the date, time, location, and dust control measures that were taken; inspection of all paved/non-paved intersections for trackouts with descriptions of conditions and any required clean-up; and weather conditions and wind speed and direction. <p>Before construction, KRGT would obtain a dust control permit from the Clark County Health District and submit a Dust Control Plan to the Mojave Desert AQMD and the UDEQ for approval.</p>			
KRGT170	<p>During operation, the air emissions from the compressor stations would include the following criteria pollutants: particulate matter less than 10 microns in diameter (PM₁₀), SO₂, nitrogen oxides (NO_x), carbon monoxide (CO), and VOC. The primary pollutants resulting from the combustion of natural gas are NO_x and CO. Because all emission units would burn pipeline quality natural gas, the quantity of PM₁₀ and SO₂ emissions would be very small (section 4.11.1.3).</p>	Significant (CEQA Class II)	KRGT's installation of low NO _x burners on new turbines would greatly limit the NO _x emissions from the compressor stations.	Less than significant (CEQA Class III)	All	FERC and BLM monitors would verify mitigation is followed.
RGT171	Noise would be generated during the construction phase of the pipeline project (section 4.11.2.2).	Significant (CEQA Class II)	KRGT would operate construction equipment on an as-needed basis during this period. Nighttime noise is not expected to increase during construction because most construction activities would be limited to daytime hours.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT172	Noise would be generated during operation of the compressor stations. Primary noise sources during the operation of the compressor stations are the gas turbine air intakes and exhausts and compressor units. Other less significant noise sources include ancillary equipment such as lube oil coolers, gas aftercoolers, and station piping (section 4.11.2.2).	Significant (CEQA Class II)	To ensure that the actual noise resulting from the operation of the Salt Lake and the Daggett Compressor Stations is below a day-night sound level (L_{dn}) of 55 decibels of the A-weighted scale (dBA), KRGT would conduct a noise survey to verify that the noise from the Salt Lake and Daggett Compressor Stations operated at full load does not exceed an L_{dn} of 55 dBA at any noise sensitive areas (NSAs), and file the results of the noise survey with the FERC and the CSLC (for the Daggett Compressor Station) no later than 60 days after placing the compressor stations into service. If the noise attributable to the operation of the compressor stations at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, KRGT would file a report on what changes are needed and would install additional noise controls to meet that level within 90 days of completing the survey. KRGT would confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the FERC and the CSLC (for the Daggett Compressor Station) no later than 60 days after it installs the additional noise controls.	Less than significant (CEQA Class III)	Utah	FERC and CSLC monitors would verify mitigation is followed.
SAFETY AND RELIABILITY						
KRGT173 ARM11	The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas (section 4.12).	Significant (CEQA Class II)	<p>The pipeline and aboveground facilities associated with the Kern River 2003 Expansion Project would be designed, constructed, operated, and maintained in accordance with or to exceed the DOT Minimum Federal Safety Standards in Title 49 CFR Part 192. The spacing for all of KRGT's proposed MLVs meets the DOT's requirements. KRGT would upgrade the pipeline design when an increase in population density adjacent to the right-of-way indicates a change in class location for the pipeline.</p> <p>The pipe would have a coating of 12 millimeters of thickness (mils) fusion bond epoxy coating and 8 mils abrasion resistant coating. In addition, the pipe would be internally coated to reduce friction.</p> <p>Before construction, KRGT would inspect the pipe at the mill where it is manufactured to ensure that it meets specifications and quality standards. During construction, the integrity of coating designed to protect against</p>	Less than significant (CEQA Class III)	All	<p>KRGT certified compliance with the DOT Minimum Federal Safety Standards in its application to the FERC.</p> <p>FERC, CSLC, and BLM monitors would verify mitigation is followed.</p>

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG173 ARM11 (cont'd)			<p>corrosion would be checked and imperfections would be corrected. Welds would be quality checked with x-rays. KRG1 would test the pipe with water to a pressure ranging from 125 to 180 percent of the maximum allowable operating pressure.</p> <p>Before placing the pipeline into service, KRG1 would perform post-construction geometry pig surveys, which would locate any construction-related dents.</p> <p>KRG1 would install a cathodic protection system to prevent or minimize corrosion of the buried pipeline. The cathodic protection system would impress a direct current on the pipe thus providing a ground-bed anode that would corrode instead of the pipeline.</p> <p>KRG1 would clearly mark the pipeline facilities at line-of-sight intervals and at crossings of roads, railroads, and other key points. The markers would clearly indicate the presence of the pipeline and provide a telephone number and address where a company representative may be reached in the event of an emergency or before any excavation in the area of the pipeline by a third party. KRG1 participates in all communication and notification services to prevent damage to underground utilities (One-Call systems).</p> <p>The pipeline system would be inspected by air to observe right-of-way conditions and identify indications of leaks, evidence of pipeline damage, evidence of encroachment (i.e., landowners building permanent structures on the permanent right-of-way), or damage to erosion controls resulting from erosion or washouts.</p> <p>The proposed pipeline would be operated from Gas Control Centers in Salt Lake City, Utah and Colorado Springs, Colorado.</p> <p>KRG1's compressor station crews would perform operation and maintenance of the new and existing equipment. KRG1 would perform routine checks of the</p>			

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG173 ARM11 (cont'd)			<p>facilities, including calibration of equipment and instrumentation, inspection of critical components, and scheduled and routine maintenance of equipment. Safety equipment, such as pressure relief devices, fire detection and suppression systems, and gas detection systems, would be periodically tested for proper operation.</p> <p>All of these operation and maintenance procedures are documented in a written plan KRG1 developed in accordance with Title 49 CFR Part 192. To ensure implementation of maximum feasible mitigation (as defined by the CEQA) and to assist the CSLC in reviewing KRG1's project for consistency with the CSLC's action on the new or amended leases across California School Lands, before placing the pipeline system into service in California, KRG1 would submit to the CSLC for approval a revised operation and maintenance plan. The revised plan would address internal and external maintenance inspections of the completed facility, including details of integrity testing methods to be applied, corrosion monitoring and testing of the cathodic protection system, and leak monitoring. The plan would also specify that KRG1 would, unless expressly prohibited by DOT regulations, conduct an internal inspection with a high-resolution instrument on a periodic basis, at a minimum of one inspection every 10 years, or sooner if the evidence suggests that significant corrosion or defects exist or if any new Federal or state regulations require more frequent or comparable inspections. Within 3 months following the promulgation of any new Federal or state regulations, KRG1 would update the plan and submit a revised copy to the CSLC.</p> <p>While KRG1's primary safety focus is accident prevention, KRG1 has, in accordance with Part 192, developed an emergency response plan for the proposed project based on its current plan, which would be coordinated and tested (through drills and exercises) with local fire/police departments and emergency management agencies. This plan would also be reviewed by the DOT Office of Pipeline Safety and is subject to DOT rules and regulations. KRG1 has provided its emergency response plan to the CSLC</p>			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG173 ARM11 (cont'd)			<p>per its request. Key elements of the emergency response plan include procedures for:</p> <ul style="list-style-type: none"> • receiving, identifying, and classifying emergency events, gas leakage, fires, explosions, and natural disasters; • establishing and maintaining communications with local fire, police, and public officials, and coordinating emergency response; • making personnel, equipment, tools, and materials available at the scene of an emergency; • protecting people first and then property, and making them safe from actual or potential hazards; and • emergency shutdown of the system and safe restoration of service. <p>KRG1 maintains 24-hour emergency response capabilities, including an emergency-only toll-free telephone number. The number is included in informational mail-outs, posted on all pipeline markers, and provided to local emergency agencies in the vicinity of the pipeline.</p> <p>KRG1 currently meets with the emergency services departments of the municipalities and counties along its existing pipeline facilities. Fire and safety equipment is maintained along the pipeline system, and KRG1 personnel and local emergency response groups are trained in response procedures. KRG1 personnel consult with local fire departments and emergency response agencies to determine if additional equipment, training, and preparedness support are needed and provide additional equipment, training, and support where the needs are identified. KRG1 provides these departments with the 24-hour emergency numbers and verbal, written, and mapping descriptions of the pipeline system. KRG1 representatives also meet with all local emergency service units on an on-going basis. These procedures would continue for the Kern River 2003 Expansion Project.</p>			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT173 ARM11 (cont'd)			<p>To assist the CSLC in reviewing the project for consistency with its action to issue to KRGT new right-of-way leases or to amend the existing leases across California School Lands, KRGT would provide the following documents pertaining to the California portion of the project to the CSLC within 120 days of the completion of work in California:</p> <ul style="list-style-type: none"> • a set of "as built" construction plans, certified by a California-registered civil/structural engineer, showing all design changes or other amendments to the construction as originally approved; • certified copies of all completed pipeline integrity test results (hydrostatic tests, gauging runs, etc.) including copies of any failed test results with an explanation of the reason for failure; and • a post-construction written narrative report confirming completion of the project with discussion of any significant field changes or other modifications to the approved design or execution plan, and providing details of any extraordinary occurrences such as spill incidents and accidents involving serious injury or loss of life, and a summary of a quality control and weld inspection program including all failed and repaired welds. 			

a/ KRGT - Kern River Gas Transmission Company-proposed mitigation.
ARM - agency-recommended mitigation.

b/ California Environmental Quality Act (CEQA) Significance Classifications:
Class I - a significant impact that cannot be mitigated to non-significance.
Class II - a significant impact, but one that can be mitigated to non-significance with the application of appropriate mitigation measures.
Class III - a non-significant impact.
Class IV - a beneficial impact.

Applies to all states (Wyoming, Utah, Nevada, and California).

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EXHIBIT E

Statement of Overriding Considerations

The California State Lands Commission (CSLC) adopts this Statement of Overriding Considerations with respect to the impact identified in the Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) that cannot be reduced, with mitigation stipulated in the FEIS/EIR, to a level of insignificance. This includes the following impact:

- Vegetation Resources: Vegetation Communities of Special Concern or Value (Yucca, Cactus, and Agave Communities).

Specifically, the FEIS/EIR found that project construction or operation would disturb a substantial portion of the yucca, cactus, and agave communities within the Mojave Desert region to the point where natural or enhanced regeneration could not restore these communities to their pre-construction condition within 3 years. Although not listed pursuant to the California Endangered Species Act (CESA), the species within these communities are an important part of the desert ecosystem, and provide food, shade and cover for numerous desert-dwelling animals.

Kern River Gas Transmission Company's (KRG T) proposed treatments for yucca, cactus, and agave communities would reduce impacts on these species, and should provide the foundation for long-term restoration of these species. These conservation measures are described in a detailed California Reclamation Plan, which has been reviewed and approved by the California Department of Fish and Game (CDFG). In addition, KRG T would adopt the qualitative and quantitative procedures and protocols from the Bureau of Land Management's (BLM) *Draft Restoration Success Standards and Monitoring Plan*. However, based on the low survival rate of these communities after construction of the original pipeline and the uncertainty of the success of KRG T's proposed transplantation efforts for these species, a long-term reduction in special concern vegetation communities could occur. Therefore, the potential impact on these species could be significant.

The Kern River 2003 Expansion Project is designed to provide transportation service between Central Rocky Mountain region gas supplies in Wyoming, to natural gas markets and pipeline interconnects in Utah, Nevada, and California. Energy shortages in California, coupled with KRG T's access to these gas supplies and attractive transportation rates, have stimulated the development of many new natural gas-fired power plants along the existing KRG T interstate pipeline system. Many of these power plants have start-up dates scheduled for mid 2003. In early 2001, KRG T sought commercial interest for additional expansion capacity. In response, KRG T executed 18 binding transportation service agreements with 17 shippers for 902,626 dekatherms per day of incremental firm service commencing May 1, 2003. Approximately 78% of the capacity is contracted for 15 years; the remainder is contracted for 10 years. Over 95% of the capacity has primary delivery points in California. Nearly all of this capacity is

projected to be used to serve existing and new power generation markets in California and Nevada. The proposed expansion would involve construction of 186.2 miles of pipeline, modification of one existing compressor station, and modification of four existing meter stations in California. Of the 186.2 miles of pipeline, 178.8 miles would be constructed adjacent to the existing pipeline system. Another 2.8 miles would be constructed adjacent to existing powerlines.

The CSLC hereby finds that the Kern River 2003 Expansion Project will have benefits to the State of California, including the following.

- The project will provide increased and more reliable energy supplies, thus helping to alleviate future natural gas shortages in California.
- Addition of construction jobs could benefit the local economy. Specifically, the project will provide employment for:
 - 400 to 450 workers on each pipeline construction spread for the duration of construction (between 4 to 6 months per spread);
 - 50 to 90 workers at the modified Daggett Compressor Station for the duration of construction (about 7 months); and
 - 3 to 10 workers at each of the modified meter stations for the duration of construction (about 3 months at each station).
- The project would provide about \$3.1 million annually in property tax revenue to the State of California.

Furthermore, the CSLC finds that all mitigation measures, developed in conjunction with State and federal resource management agencies and identified in the FEIS/EIR, have been imposed to avoid or lessen impacts on special concern vegetation communities (*i.e.*, yucca, cactus, and agave communities) to the maximum extent possible. These measures include pre-construction identification of species suitable for salvage within the construction right-of-way and temporary extra workspace areas. Salvagable plants would be dug up and temporarily stored in non-construction areas. Following construction, KRGT would transplant these plants back onto the right-of-way. Survival rates for the large plants, particularly Joshua trees, can be low; however, it is anticipated that some plants would survive. KRGT would implement additional treatments to improve the success of transplanting Joshua trees, such as the use of DriWater™ time release gels and Superthrive™ rooting hormone. Additionally, plants that do not survive would be beneficial to the reclamation process as vertical mulch. Vertical mulching would encourage the recruitment of native seeds, provide forage and cover habitat for native species, discourage colonization by invasive or exotic species, and reduce off-highway vehicle use along the right-of-way. In California, all succulents within the disturbed area would be salvaged. Fifty percent of the succulents to be salvaged, generally the individuals considered by KRGT to be too large or too small to be feasibly transplanted, would be moved to a BLM nursery with the remaining 50% transplanted back onto the right-of-way.

The FEIS/EIR evaluated a number of alternatives to the proposed project. None of the alternatives was determined to be environmentally preferable to the proposed project and/or able to meet the project's objectives and were eliminated from further consideration.

Based on the above discussion, the CSLC finds that the benefits of the Kern River 2003 Expansion Project outweigh the significant unavoidable impact on special concern vegetation communities that could remain after mitigation is applied and considers such impact acceptable.

Supplemental Information

Notwithstanding the Commission's adoption of the above finding, the Commission reserves the right to assume control of the Reclamation Plan's implementation should revegetation for the specified species not achieve the success levels in the timeframe outlined in the California Reclamation Plan (Appendix V of the FEIS/EIR). To this end, KRGT has agreed, pursuant to CSLC lease conditions, to provide a non-cancelable reclamation performance bond or letter of credit in the amount of \$1,334,000 prior to the start of construction in California.¹ Although not assured, this additional effort may achieve the restoration levels deemed acceptable by resource agencies as specified in the FEIS/EIR.

¹ The amount of the reclamation performance bond was calculated as follows:

- 78.17 miles of pipeline on non-federal lands in California x 90-foot maximum corridor width = approximately 852.8 acres of non-federal lands to be restored.
- 852.8 acres x \$1,563.49/acre (KRGT's contracted costs for seed, seed application, cactus salvage/transplant, and monitoring) = \$1,333,344, which is rounded up to \$1,334,000

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT90 ARM6 (cont'd)			<p>KRGT has agreed to fit all pipeline marker signs within desert tortoise habitat with "bird-be-gone" or similar bird repellent devices to minimize the potential for increased predation from aerial predators during operation of the proposed pipeline.</p> <p>Through consultation with the FWS, KRGT agreed to implement the conservation measures for critical habitat for construction through the translocation site, even though the area is not critical habitat.</p>			
KRGT91	The FWS recommended avoiding construction in the Muddy River from April 1 through July 31 to avoid the spawning period for the Virgin River chub. Further, the FWS recommended that KRGT complete the Muddy River crossing using a dry crossing method (<i>i.e.</i> , flume or dam and pump) (section 4.7.2).	Significant (CEQA Class II)	KRGT proposes to complete the crossing of the Muddy River using the flume method before April 1. Although sediment could be released into the waterbody during installation and removal of the in-stream barriers associated with the flume method, the resulting temporary changes in water quality and foraging ability would not likely affect the chub.	Less than significant (CEQA Class III)	Nevada	FERC monitors would verify mitigation is followed.
KRGT92 ARM7	Potential habitat was identified along the Opal, Muddy Creek, Coyote Creek 1, Salt Lake, Elberta, and Fillmore Loops. If Ute ladies'-tresses are found during the follow-up surveys, the FWS recommended that KRGT bore under the population or adjust the route (section 4.7.2).	Significant (CEQA Class II)	KRGT agreed to conduct follow-up surveys for Ute ladies'-tresses at the five areas of moderate quality habitat (MPs 0.63, 0.83, 1.33, 27.3, and 34.9). If a population of Ute ladies'-tresses is identified at MPs 0.63, 0.83, 1.33, 27.3, or 34.9, KRGT would bore the area or adjust its route to avoid impacting this species, unless otherwise permitted by the FWS. Such route modifications would be filed with the FERC for the review and written approval of the Director of OEP before construction.	Less than significant (CEQA Class III)	Wyoming	FERC monitors would verify mitigation is followed.
KRGT93	Nine raptors could potentially occur in the vicinity of the proposed pipeline route (ferruginous hawk, northern goshawk, peregrine falcon,	Significant (CEQA Class II)	KRGT proposes to complete aerial surveys during the breeding season in the spring of 2002 to determine if active raptor nests are present near or within the proposed construction right-of-way along the Opal, Muddy Creek, Coyote Creek 1 and 2, Salt Lake, Elberta, and Fillmore Loops. The surveys would cover 1 mile on either side of	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT93 (cont'd)	Swainson's hawk, American kestrel, golden eagle, northern harrier, prairie falcon, and red-tailed hawk). Construction near nests along the corridor during brood rearing could result in nest abandonment; overheating, chilling, or desiccation of unattended young causing nestling mortality; premature fledging; and ejection of eggs or young from the nest (section 4.7.3).		<p>the outside edge of the construction work area. If active nests are identified during aerial surveys, KRGT would follow the FWS' established guidelines (<i>Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances</i>) to protect raptors from human disturbances, unless site-specific treatment of a nest is approved by the local FWS Field Office, the BLM, and the UDWR (for nests in Utah) that takes into account the status of the nest, the proposed construction schedule, and the location of the nest.</p> <p>KRGT proposes to continue coordinating with the state and Federal agencies to develop the appropriate survey dates based on the 2001/2002 winter conditions.</p> <p>To ensure nesting raptors are not disturbed during construction along the Mojave Desert portion of the project, KRGT would conduct preconstruction surveys for raptors in the Mojave Desert in accordance with methods and timing recommendations obtained through consultation with the FWS, the BLM, and applicable state agencies. If nesting raptors are identified during these surveys, KRGT would follow the <i>Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances</i>, unless other site-specific conservation measures are approved by the applicable agencies.</p>			
KRGT94	Installation of powerlines and poles to supply power to the Coyote Creek and Dry Lake Compressor Stations could result in raptor electrocution or collisions with powerline structures (section 4.7.3).	Significant (CEQA Class II)	To avoid raptor collisions and electrocution due to KRGT's associated powerline facilities, KRGT would provide written instructions to the utility companies constructing the powerlines requiring that the powerlines comply with applicable raptor protection guidelines, including <i>Suggested Practices for Raptor Protection on Power Lines: the State of the Art in 1996</i> .	Less than significant (CEQA Class III)	Wyoming Nevada	FERC and BLM monitors would verify mitigation is followed.
RGT95	The project could affect riparian migratory birds including the Arizona Bell's vireo, blue grosbeak, gray flycatcher, Lucy's warbler, phainopepla, summer	Significant (CEQA Class II)	<p>To address this concern, KRGT proposes to locate the pipeline in the Meadow Valley Wash area in a previously disturbed area between the existing KRGT right-of-way and an existing powerline.</p> <p>To minimize potential impacts on nesting birds, KRGT has</p>	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT95 (cont'd)	tanager, and Vermilion flycatcher. Construction activities near an active nest could result in nest abandonment, reduced care of young causing mortality, or ejection of eggs or young from a nest. Additionally, construction near suitable habitat may preclude birds from selecting a nest site or may cause birds to select nest sites in less suitable habitat, potentially reducing nest success (section 4.7.3).		agreed to the FWS' recommendation that construction be completed in areas with defined riparian vegetation before May 1. KRGT proposes to have the majority of construction completed in these areas before March 1. However, access through these areas, as well as some restoration activities, may still be necessary past March 1. These activities would be less disruptive than trenching, lowering-in, and backfilling and would not be expected to preclude nesting in the riparian habitat adjacent to the right-of-way.			
KRGT96 ARM8	Construction of the pipeline project would involve clearing of suitable habitat for the Bendire's thrasher and LeConte's thrasher and could result in destruction of nests and, if nests are occupied, direct mortality of individuals (section 4.7.3).	Significant (CEQA Class II)	KRGT would conduct preconstruction surveys for nesting Bendire's thrashers in areas of suitable habitat that would be disturbed by construction activities. If any active Bendire's thrasher nests are found, KRGT would adhere to the CDFG-recommended 1,000-foot buffer unless otherwise permitted by the CDFG. Additionally, KRGT's implementation of mitigation for desert tortoise impacts could indirectly benefit the Bendire's and LeConte's thrashers through the reestablishment and long-term protection of desert habitats (see KRGT90/ARM6).	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
RGT97	Construction of the project would involve clearing of suitable habitat for the Brewer's sparrow, sage sparrow, and sage thrasher and could result in destruction of nests and, if nests are occupied, direct mortality of individuals (section 4.7.3).	Less than significant (CEQA Class II)	No species-specific mitigation proposed (see KRGT83).	Less than significant (CEQA Class III)	Wyoming Utah	No monitoring required.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT98	The potential impacts of the project on burrowing owls include disturbance of habitat and destruction of active burrows. Destruction of burrows could result in displacement of owls into less suitable habitats, potentially increasing susceptibility to predation, reducing cover or forage habitat, or reducing reproductive success. Direct mortality could result if active burrows are occupied at the time of destruction (section 4.7.3).	Significant (CEQA Class II)	<p>The FWS and UDWR recommended that KRGT resurvey the areas with nesting owls in June or July to determine nesting status and then again immediately before the start of construction in those areas. If nests with unfledged young are identified during the surveys conducted immediately before construction, the FWS and the UDWR would work with KRGT to relocate any active nests.</p> <p>In accordance with agency recommendations in Nevada and California, preconstruction burrowing owl surveys would be conducted concurrently with desert tortoise surveys. In areas where tortoise surveys would not occur until after February 2003, burrowing owl surveys would be conducted separate from and before the desert tortoise surveys. To minimize the potential for impacts on owls, KRGT would relocate burrowing owls from their burrows during preconstruction surveys. Burrowing owls would be relocated to artificial burrows constructed by KRGT or to naturally occurring, abandoned desert tortoise burrows. KRGT would crush all burrows on the right-of-way following relocations, unless owl surveys are separate from tortoise surveys, in which case active desert tortoise burrows would be treated during tortoise surveys.</p>	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT99	The potential impacts of construction on sage grouse include the loss of suitable habitat, possible disruption of breeding activities or brood rearing, and direct mortality. Construction and operation of the Coyote Creek Compressor Station would result in the permanent conversion of about 30.9 acres of suitable habitat to industrial and grassland cover. Additionally, although the proposed project would not result in a permanent loss of habitat	Significant (CEQA Class II)	Surveys were completed following agency-recommended protocols at historic lek locations within 2 miles of the proposed right-of-way in Wyoming, and between MPs 63 and 65, MPs 89 and 96, MPs 203 and 210, and MPs 285 and 348 in Utah. Surveys of some of the historic lek sites in Wyoming were not completed due to heavy snow conditions. KRGT proposes to complete surveys of these sites following snow melt. During the spring 2002 surveys, grouse activity was identified at five historic leks in Wyoming and at one lek in Utah. As recommended by the UDWR and the BLM, KRGT proposes to conduct brood surveys in June or July 2002 that would focus primarily on the areas of historic leks or other areas specified by the agencies. KRGT also proposes to conduct surveys immediately before construction through areas with high potential to contain sage grouse as identified by the UDWR. These areas include MPs 63 to 65, MPs 89 to 96, MPs 203 to 210, MPs 286 to 324, and MPs 332 to 348.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT99 (cont'd)	along the pipeline right-of-way, based on the condition of the existing right-of-way, the regeneration of sagebrush would be slow and could take up to several decades (section 4.7.3).		Potential impacts on sage grouse habitat would be minimized by collocating the proposed right-of-way with the right-of-way disturbed during construction of the existing KRGT pipeline. Additionally, critical breeding and brood rearing stages of sage grouse would be avoided by an August 1 construction start date. KRGT would recontour and reseed disturbed areas immediately following construction in accordance with its site-specific Reclamation Plans (see KRGT50 to 55). KRGT also proposes to make a contribution to either the BLM or the UDWR for assistance with sage grouse protection.			
KRGT100	Construction of the project could affect the desert kangaroo rat and Merriam's kangaroo rat either by disturbing their habitat or by direct mortality of individuals (e.g., the crushing of occupied burrows) (section 4.7.3).	Significant (CEQA Class II)	Because the range of this species generally overlaps with that of the desert tortoise, KRGT's implementation of conservation measures for the desert tortoise (see KRGT90/ARM6) would also reduce potential impacts on these species to less than significant levels.	Less than significant (CEQA Class III)	Utah Nevada California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT101	Nelson's bighorn sheep could be indirectly affected if construction activities temporarily block the migration corridor and expose the bighorn sheep to periods of heavy snowfall at higher elevations, thereby increasing their susceptibility to predation, starvation, and freezing. Construction could also restrict access to a water source or limit travel corridors (section 4.7.3).	Significant (CEQA Class II)	KRGT proposes to install trench plugs at a maximum of 1-mile intervals and at well-defined wildlife and livestock trails along the route. Ets, in conjunction with the agencies' compliance monitors, would reduce trench plug spacing (i.e., add more plugs) if the proposed spacing is determined to be insufficient to facilitate animal escape from the trench. Additionally, construction in the area of the bighorn sheep's migration route would occur only during daylight hours. During construction, KRGT may request authorization to remove or to not install trench plugs in site-specific locations if it is determined that the measures would not provide additional environmental protection.	Less than significant (CEQA Class III)	Nevada California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT102	Suitable habitat for the pygmy rabbit is present along much of the	Significant (CEQA Class II)	KRGT would include pygmy rabbits as a target species during 2002 preconstruction surveys, as approved by the WGFD. Where the proposed right-of-way traverses high	Less than significant (CEQA Class III)	Wyoming	FERC and BLM monitors would verify mitigation is

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT102 (cont'd)	proposed pipeline route in Wyoming (section 4.7.3).		quality rabbit habitat, KRGT would conduct surveys for rabbits within 0.25 mile of the pipeline route. KRGT's primary conservation measure to minimize impacts on pygmy rabbits would be to avoid the rabbit's breeding season, which starts in February and ends in May. With construction currently planned to start after August 1 in areas potentially containing pygmy rabbits, adults and young would be able and expected to vacate the right-of-way ahead of construction. Following construction, KRGT would restore the right-of-way with sagebrush, native grasses, and forbs, as requested by the WGFD.			followed.
KRGT103	Suitable habitat for the Wyoming ground squirrel is present along the Opal, Muddy Creek, and Coyote Creek 1 Loops (section 4.7.3).	Significant (CEQA Class II)	KRGT would include the Wyoming ground squirrel as a target species during 2002 preconstruction surveys. Following construction, KRGT would revegetate the right-of-way using seed mixes containing native and adapted forbs and grasses beneficial to the Wyoming ground squirrel and other species of concern that inhabit similar vegetative community types. Once reestablished following construction, the right-of-way corridor may provide higher quality habitat than is currently present.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
KRGT104	Ringtails could be indirectly affected by disturbance of foraging or denning areas (rocky areas, canyons, and hollowed trees) (section 4.7.3).	Less than significant (CEQA Class III)	No species-specific mitigation proposed (see KRGT83).	Less than significant (CEQA Class III)	Utah	No monitoring required.
IGT105	Impacts on the desert iguana, desert night lizard, and sidewinder could include direct mortality due to crushing by construction equipment, reduction of suitable habitat, and temporary disturbance and displacement (section 4.7.3).	Less than significant (CEQA Class III)	No species-specific mitigation proposed (see KRGT83).	Less than significant (CEQA Class III)	Utah Nevada California	No monitoring required.
RGT106	Construction of the proposed project could result in temporary	Significant (CEQA Class II)	To minimize impacts on Gila monsters, KRGT would: <ul style="list-style-type: none"> relocate individuals identified along the right-of-way 	Less than significant (CEQA Class III)	Nevada California	FERC, CSLC, and BLM monitors would verify

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT106 (cont'd)	displacement or direct mortality of individual Gila monsters, and temporary alteration of habitat (section 4.7.3).		<p>using measures set forth by the Nevada Division of Wildlife (NDOW), which include the use of long-handled instruments to coax an individual into an open bucket or box;</p> <ul style="list-style-type: none"> • submit a report to the FWS, the BLM, and the NDOW following construction detailing the locations where Gila monsters were found and released; • report all sightings of Gila monsters in California to the CDFG; and • incorporate the following specific provisions into its construction environmental awareness program; <ul style="list-style-type: none"> a. procedures to identify Gila monsters and distinguish them from other lizards such as chuckwallas and banded geckos; b. a requirement for reporting observations of Gila monsters to the NDOW and a requirement that observations in California should also be reported to the CDFG; c. consequences of a bite resulting from carelessness or unnecessary harassment of Gila monsters; and d. protective measures for Gila monsters provided under Nevada state law. 			mitigation is followed.
KRGT107	Impacts on Mojave fringe-toed lizards could include direct mortality, increased susceptibility to predation during displacement to adjacent habitats, and temporary loss of habitat (section 4.7.3).	Significant (CEQA Class II)	<p>KRGT proposes to implement the following species-specific conservation measures:</p> <ul style="list-style-type: none"> • resurvey areas of suitable habitat before construction in the summer of 2002 to confirm the extent of the Mojave fringe-toed lizard in the vicinity of the project; • in areas where lizards are observed during preconstruction surveys, in consultation with the CDFG, evaluate the potential to install fencing along the right-of-way to prevent lizards from entering the construction area; and • have a qualified biologist inspect the right-of-way immediately before the onset of trenching or other surface-disturbing activities in areas of suitable Mojave fringe-toed lizard habitat. 	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT108	Construction through the waterbodies potentially occupied by the bluehead sucker, flannelmouth sucker, leatherside chub, mountain sucker, and roundtail chub would increase sedimentation and turbidity. Increased sedimentation and turbidity within the waterbodies could reduce available habitat or stress individuals such that they are more susceptible to predation or disease, or temporarily cause downstream areas to be unsuitable for spawning. Actual construction impacts, however, would be temporary and not likely to result in the direct mortality of fish (section 4.7.3).	Significant (CEQA Class II)	<p>KRGT proposes to cross the Bear River using the HDD method, which would reduce the potential for impact on the bluehead sucker and the leatherside chub to less than significant levels. If the HDD of the Bear River fails and conventional crossing techniques are required, KRGT would implement its WWCM Procedures to minimize impacts on the waterbody (see KRGT32). KRGT would also develop additional conservation measures (e.g., construction methods, timing restrictions) in consultation with the WGFD to reduce the potential for impacts on the bluehead sucker and the leatherside chub to less than significant levels.</p> <p>KRGT would adhere to its WWCM Procedures for other waterbody crossings, which would minimize the potential for long-term or permanent impacts (see KRGT32).</p>	Less than significant (CEQA Class III)	Wyoming	FERC and BLM monitors would verify mitigation is followed.
KRGT109	The Bonneville cutthroat trout is known to occur in the Bear River (MP 47.5) and Yellow Creek (MP 59.6) in Wyoming; and Chalk Creek (66.8), East Fork Chalk Creek (MP 69.6), an unnamed creek (MP 71.1), South Fork Chalk Creek (MP 81.1), and the Weber River (MP 87.6) in Utah (section 4.7.3).	Significant (CEQA Class II)	<p>KRGT proposes to use the HDD construction method to cross the Bear and Weber Rivers. KRGT developed a contingency plan to minimize the impact of an inadvertent release of drilling mud (see KRGT40).</p> <p>KRGT proposes to use dry crossing construction methods to complete the crossings of Chalk Creek and its tributaries (East Fork Chalk Creek, an unnamed creek, and South Fork Chalk Creek) and, based on the time frame necessary to complete the permitting process for the project, could not begin construction until after August 1. KRGT has agreed to offset potential impacts on the Bonneville cutthroat trout through a monetary contribution to the Summit Soil Conservation District to aid in restoration activities in the Chalk Creek watershed.</p> <p>Implementation of KRGT's WWCM Procedures during and</p>	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT109 (cont'd)			following construction would return waterbodies to near preconstruction contours and is expected to allow the waterbodies to function naturally (see KRGT32). Riprap would be limited to areas where flow conditions preclude effective vegetative stabilization techniques such as seed erosion control fabric. KRGT would use geotextile fabric on inner bends of the waterbodies and only use riprap on the outer bends if flow conditions dictate.			
KRGT110	The Virgin spinedace is restricted to the Virgin River drainage basin, which includes three waterbodies that would be crossed by the pipeline: Magotsu Creek (MP 400.3), Moody Wash (MP 403.3), and Beaver Dam Wash (MP 431.0). Of these, the proposed crossing location at Beaver Dam Wash is devoid of riparian vegetation and generally dry, and therefore is not likely to support this species. The proposed crossing locations of Moody Wash and Magotsu Creek flow more regularly and may provide suitable habitat (section 4.7.3).	Significant (CEQA Class II)	KRGT proposes to cross Magotsu Creek and Moody Wash using the flume method, if water is present. If water is not present when the normal construction spread progresses to that location, KRGT proposes to complete the crossings using the open-cut method. Additionally, if water is present in Moody Wash during construction, at the request of the UDWR, KRGT would place nets upstream and downstream of the crossing location to prevent fish from entering the construction area. Based on the current proposed construction state date of August 1, construction through these waterbodies would occur outside the FWS and FS-recommended timing restriction of March 1 through July 1. In accordance with its WWCM Procedures (see KRGT32), KRGT would restore the bed and banks of waterbodies to preconstruction contours or a more stable configuration after construction. Additionally, KRGT has agreed to implement specific mitigation measures recommended by the FS for Moody Wash, including the replacement of boulders and using locally collected willow cuttings during restoration efforts.	Less than significant (CEQA Class III)	Utah	FERC and FS monitors would verify mitigation is followed.
KRGT111	During botanical field surveys, 1 three-cornered milkvetch plant was identified near MP 495.0, 45 populations of yellow two-tone beardtongue were identified between MPs 550.7 and 564.6, and 9 populations of rosy two-	Significant (CEQA Class II)	KRGT proposes to avoid and protect plants located adjacent to the construction right-of-way by installing exclusion fencing. KRGT proposes to conduct new surveys in the spring of 2002 to determine if other three-cornered milkvetch or two-tone beardtongue plants are present in the general area and to assess the extent of potential hybridization along the right-of-way. To facilitate recolonization of disturbed	Less than significant (CEQA Class III)	Nevada California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT111 (cont'd)	tone beardtongue were identified between MPs 502.4 and 506.9. Two-tone beardtongue plants were also identified along six access roads and three-cornered milkvetch plants were identified along two access roads (section 4.7.3).		<p>areas by these plants, KRGT would:</p> <ul style="list-style-type: none"> • collect ripe seed from existing plant populations and, following site preparation, spread collected seeds over the same approximate area that contained the species before disturbance. As recommended by the FWS, KRGT would not collect ripe seed from two-tone beardtongue or reseed with two-tone beardtongue between MPs 554.7 and 557.2; • attempt to redistribute seeds beyond the active access road edges, if known populations are restricted to access roads; and • monitor topsoil segregation in areas containing sensitive species to ensure adequate topsoil is segregated and would replace the topsoil to ensure the seed bank is returned to the affected area. <p>KRGT would monitor revegetation efforts annually for 6 years. If, at the end of the 6-year monitoring period plant abundance is not similar, the CDFG recommended, and KRGT has agreed, that KRGT provide monetary compensation to the CDFG, potentially through the acquisition of additional lands for the CDFG. The amount and type of compensation in California would be determined in consultation with the CDFG and pursuant to the Incidental Take Permit under Section 2081 and/or pursuant to the Streambed Alteration Agreement (SAA) under Section 1600, respectively, of the California Fish and Game Code. Enhancement and management (endowment) fees would be applied to all mitigation lands in California.</p>			
IGT112	Field surveys for the desert cymopterus, Barstow woolly-sunflower, and Mojave monkeyflower were conducted on the Daggett Loop during June 2001 and along access roads and in proposed off right-of-way yards in September and	Significant (CEQA Class II)	To determine the potential for the project to affect these species, KRGT would conduct surveys along the Daggett Loop and associated facilities during the spring of 2002. The CDFG does not expect reseedling of the right-of-way to result in successful recolonization by these species. Therefore, if any of the three species are found, per a recommendation by the CDFG, KRGT would evaluate areas being considered for acquisition as desert tortoise mitigation for suitable habitat for desert cymopterus,	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT112 (cont'd)	October 2001. Although the Daggett Loop access road and off right-of-way yard surveys were conducted too late to observe the actual plants, habitat was identified along the loop and associated facilities for all of these species (section 4.7.3).		Barstow woolly-sunflower, or Mojave monkeyflower. KRGT would then prioritize and incorporate lands containing suitable habitat for both the desert tortoise and the affected plant species into the overall desert tortoise habitat acquisition strategy for the project. The amount and type of compensation in California would be determined in consultation with the CDFG and pursuant to the Incidental Take Permit under Section 2081 and/or pursuant to the SAA under Section 1600, respectively, of the California Fish and Game Code. Enhancement and management (endowment) fees would be applied to all mitigation lands in California.			
KRGT113	Spring 2001 botanical surveys identified a single population of Parish's phacelia, estimated to contain more than 5,000 individual plants, in a dry lakebed adjacent to the right-of-way near MP 665.5 along the Goodsprings Loop (section 4.7.3).	Significant (CEQA Class II)	KRGT would protect this large population from indirect impacts by placing exclusion fencing along the right-of-way near the existing population. If individuals are identified within the right-of-way during preconstruction surveys, KRGT would collect ripe seed from individuals occurring within the proposed construction right-of-way before construction and distribute the collected seeds after construction over the approximate area where the plants were located before disturbance.	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT114	The Rusby's desert mallow can be found in desert scrub in the Clark Mountains near the proposed pipeline route. Spring 2001 botanical surveys identified Rusby's desert mallow growing at two areas along the pipeline right-of-way and along two access roads (section 4.7.3).	Significant (CEQA Class II)	<p>KRGT would avoid and protect plants located adjacent to the construction right-of-way by installing exclusion fencing. Many of the plants, however, are located within the proposed construction right-of-way. These plants would be crushed and, where grading is required, uprooted.</p> <p>KRGT would conduct preconstruction surveys to determine the extent of the population near MP 585.0 and along the access roads with known populations, and would collect ripe seeds from existing populations. To minimize impacts on Rusby's desert mallow, KRGT would:</p> <ul style="list-style-type: none"> • monitor topsoil segregation in areas containing sensitive species to ensure adequate topsoil is segregated and would replace the topsoil to ensure the seed bank is returned to the affected area; • after construction and site preparation, and 	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT114 (cont'd)			<p>following CDFG recommendations, distribute the collected seeds over the approximate area where the plants were located before disturbance; and</p> <ul style="list-style-type: none"> if known populations are restricted to access roads, attempt to redistribute seeds beyond the active access road edges. 			
KRGT115	<p>The swift fox may be found in conjunction with the white-tailed prairie dog colonies located along the Muddy Creek Loop. Impacts on the swift fox from construction would be limited to the conversion of shrub habitats to open areas (section 4.7.4).</p>	<p>Less than significant (CEQA Class III)</p>	<p>No species-specific mitigation proposed (see KRGT83).</p>	<p>Less than significant (CEQA Class III)</p>	<p>Wyoming</p>	<p>No monitoring required.</p>
KRGT116	<p>If occupied Mohave ground squirrel burrows are crushed during construction, mortality of individuals could result. Loss of burrows could also increase ground squirrel susceptibility to predation (section 4.7.4).</p>	<p>Significant (CEQA Class II)</p>	<p>KRGT would:</p> <ul style="list-style-type: none"> implement the recommendation of the CDFG to mitigate for impacts on the Mohave ground squirrel as part of its desert tortoise mitigation by providing additional compensation to the CDFG through a third party for each acre of desert tortoise habitat affected within the area defined as Mohave ground squirrel range (about 667 acres) to cover additional ground squirrel research and study; and notify the CDFG if a dead Mohave ground squirrel is encountered during preconstruction botanical and desert tortoise surveys or during construction. 	<p>Less than significant (CEQA Class III)</p>	<p>California</p>	<p>FERC, CSLC, and BLM monitors would verify mitigation is followed.</p>
3T117	<p>Construction would likely crush Mormon needle grass occurring within the construction right-of-way (section 4.7.4).</p>	<p>Significant (CEQA Class II)</p>	<p>KRGT would conduct surveys during the spring of 2002 in the area where plants were observed during 2001 field surveys and in areas of suitable habitat identified during fall 2001 access road and off right-of-way yard surveys. To minimize potential impacts on Mormon needle grass, in addition to marking the locations of populations or plants, KRGT's 2002 survey teams would:</p> <ul style="list-style-type: none"> collect ripe seeds from individual Mormon needle grass plants to reseed the right-of-way following construction; 	<p>Less than significant (CEQA Class III)</p>	<p>California</p>	<p>FERC, CSLC, and BLM monitors would verify mitigation is followed.</p>

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT117 (cont'd)			<ul style="list-style-type: none"> • Install fencing along the right-of-way to avoid and protect Mormon needle grass individuals located adjacent to, but off of, the construction right-of-way; • monitor topsoil segregation in areas containing sensitive species to ensure adequate topsoil is segregated and replace the topsoil to ensure the seed bank is returned to the affected area; and • place rock mulch on the right-of-way over the areas reseeded with Mormon needle grass. 			
KRGT118	Field surveys were conducted on the Daggett Loop during June 2001 and along access roads and in proposed off right-of-way yards in September and October 2001. Although the Daggett Loop access road and off right-of-way yard surveys were conducted too late to observe the actual plants, habitat was identified along the loop and associated facilities for the small-flowered androstephium (section 4.7.4).	Significant (CEQA Class II)	<p>To determine the potential for the project to affect this species, KRGT proposes to conduct new surveys along the Daggett Loop and associated facilities during the spring of 2002. If small-flowered androstephium are found, KRGT would:</p> <ul style="list-style-type: none"> • install exclusion fencing to protect plants located adjacent to the construction right-of-way; • monitor topsoil segregation in areas containing sensitive species to ensure adequate topsoil is segregated and replace the topsoil to ensure the seed bank is returned to the affected area; and • in accordance with CDFG recommendations, collect ripe seeds from existing populations and, following construction, distribute those seeds over the approximate area where the plants were located before disturbance. 	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT119	Construction would directly impact scaly cloak fern by crushing and, where grading is necessary, uprooting individual plants located within the construction right-of-way. Construction may also result in the permanent loss of habitat. The limestone outcrop that supports the plants would be damaged during construction and it is not	Significant (CEQA Class II)	<p>As approved by the CDFG, KRGT proposes to mitigate for construction impacts on the scaly cloak fern by:</p> <ul style="list-style-type: none"> • conducting surveys in the spring of 2002 to determine if the scaly cloak fern is present along the two access roads where suitable habitat was identified and to adequately characterize the existing population beyond the right-of-way to aid the CDFG in future management of this species; and • providing funding to the CDFG, or to a fund identified by the CDFG, for native plant research based on the work effort required to adequately research and monitor affected species. The 	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT119 (cont'd)	likely that KRGT would be able to recreate the exact preconstruction conditions (section 4.7.4).		amount and type of compensation in California would be determined in consultation with the CDFG and pursuant to the Incidental Take Permit under Section 2081 and/or pursuant to the SAA under Section 1600, respectively, of the California Fish and Game Code. KRGT would provide the CDFG with the agreed upon compensation before construction through scaly cloak fern habitat in the Clark Mountains.			
ARM9	Impact on special status species, compliance with the Endangered Species Act (ESA) and California Endangered Species Act (CESA), and addressing the concerns of the WGFD, the UDWR, and the NDOW regarding special status species (section 4.7.5).	Significant (CEQA Class II)	<p>To ensure that potential impacts on special status species would be avoided or mitigated to less than significant levels, as well as to comply with the ESA and the CESA and address the UDWR concerns regarding special status species, KRGT would not begin construction activities until:</p> <ul style="list-style-type: none"> • KRGT completes any outstanding species-specific surveys and the FERC receives comments from the FWS regarding the preconstruction survey reports; the FERC completes formal consultation with the FWS; • KRGT has completed and filed with the FERC the results of consultations with the UDWR regarding measures to avoid or minimize impacts on special status species in Utah; • KRGT has completed and filed with the FERC the results of consultations with the BLM regarding measures to avoid or minimize impacts on special status species on lands managed by the BLM; and • KRGT has received written notification from the Director of OEP that construction or use of conservation measures may begin. <p>In California, KRGT would not begin construction activities until:</p> <ul style="list-style-type: none"> • KRGT completes any outstanding species-specific surveys in California and the FERC and the CSLC receive comments from the FWS and the CDFG regarding the applicable preconstruction survey reports; 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
ARM9 (cont'd)			<ul style="list-style-type: none"> the FERC completes formal consultation with the FWS; the CDFG makes a consistency determination on the FWS' Biological Opinion pursuant to Section 2080.1 of the California Fish and Game Code or issues an Incidental Take Permit that covers both federally and state-listed species that may be affected; KRGT obtains an Incidental Take Permit under Section 2081 of the California Fish and Game Code for all state-listed species that may be affected, or receives concurrence from the CDFG that an Incidental Take Permit is not required; KRGT has completed and filed with the FERC and the CSLC the results of consultations with the BLM regarding measures to avoid or minimize impacts on special status species on lands managed by the BLM in California; and KRGT has received written notification from the Director of OEP and the CSLC that construction or use of conservation measures may begin in California. 			

LAND USE, TRANSPORTATION, RECREATION AND SPECIAL INTEREST AREAS, AND VISUAL RESOURCES

KRGT120	Land use impacts associated with the project would include disturbance of existing land uses within the construction right-of-way during construction and retention of an expanded or new permanent right-of-way for operation of the pipeline. Of the 10,497.4 acres of land affected by construction of the pipeline facilities, about 2,401.1 acres would be retained as new permanent right-of-way (section 4.8.1.1).	Significant (CEQA Class II)	The land retained as permanent right-of-way would be allowed to revert to former use; however, tree crops such as orchards and aboveground structures would be prohibited on the permanent right-of-way. The remaining 8,096.3 acres used for temporary construction right-of-way and temporary extra workspace would be allowed to revert to prior uses following construction with no restrictions. The right-of-way associated with the proposed pipeline facilities would not result in the conversion of more than 1 percent of agricultural lands to a non-agricultural use or impair the productivity of more than 1 percent of rangeland or agricultural land in a county. The project would also not result in the loss of more than 1 percent of the acreage planted in a county's most valuable crop.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT121	Land used for the aboveground facilities would be permanently converted to a utility use (section 4.8.1.1).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	All	No monitoring required.
KRGT122	Construction of the project could impact grazing allotments by resulting in the loss carrying capacity of an allotment, damaging or removing fences or other natural barriers used for livestock control, and trapping or harming livestock that enter into the construction work area (section 4.8.2).	Significant (CEQA Class II)	<p>KRGT would implement the following mitigation measures:</p> <ul style="list-style-type: none"> • Each fence crossed would be braced and secured before cutting the opening needed for construction to prevent slacking of the wire. The created opening would be closed by temporary gates as necessary to prevent passage of livestock. • On Federal lands, all damaged livestock fences, gates, cattleguards, and brace panels would be repaired or replaced to BLM or FS standards. • Where construction results in damage or removal of a natural barrier used for livestock control, the barrier would be replaced or a fence would be constructed in its place. • Ramps would be constructed to allow for escape of livestock from the trench at all well-defined livestock trails (as determined by the EI, in conjunction with the agencies' compliance monitor) and at 1-mile intervals. • Trench plugs would be constructed at all well-defined livestock trails (as determined by the EI, in conjunction with the agencies' compliance monitor) and at maximum 1-mile intervals to allow for livestock to cross the open trench. The EI, in conjunction with the agencies' compliance monitor, would reduce trench plug spacing (<i>i.e.</i>, add more plugs) if the proposed spacing is determined to be insufficient to facilitate animal movement or escape from the trench. • Temporary fencing would be installed as required to prevent livestock entry into the construction work area. 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
IGT123	Of the 44.2 miles of agricultural land crossed by the pipeline, about 11.5	Significant (CEQA Class II)	To minimize the potential for these impacts, KRGT would maintain the flow of irrigation systems or coordinate the temporary shutoff of systems with affected landowners or	Less than significant (CEQA Class III)	Utah Nevada California	FERC, CSLC, and BLM monitors would verify

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT123 (cont'd)	miles are irrigated crop and hay lands. Several activities could damage or interrupt irrigation during construction, including trenching, grading, stringing, welding, and backfilling. If the flow of irrigation water is disrupted for a prolonged period, crops could be damaged and crop yields reduced (section 4.8.3).		tenants. KRGT would compensate the landowner for damages and lost production and include the agreement as a special right-of-way stipulation in the construction contract. Disturbed drainage furrows, water piping, or heads would be restored, repaired, or replaced as soon as possible and monitored for problems after construction is completed. Where pivot irrigation is active, KRGT would complete construction and restoration within a time frame negotiated with the landowner or tenant. As part of restoration of the right-of-way, survey controls would be implemented to restore the surface to more precise elevations. In addition, KRGT would communicate with the landowners or tenants following construction and restoration to ensure the irrigation systems are functioning properly. Additional repair or remedial work would be performed if requested by the landowner. KRGT would also coordinate with the landowner to assess crop productivity for a period of at least 2 years, and provide compensation where crop yields show decline. Impact and mitigation would be site-specific and based on agreements and/or easement conditions with the affected landowner or tenants. Based on negotiations between the landowner and KRGT, mitigation may include additional compensation for portions of fields that may be taken out of production for all or part of the season.			mitigation is followed.
KRGT124	Temporary construction impact in residential areas could include inconvenience caused by noise and dust generated by construction equipment, personnel, and trenching of roads or driveways; ground disturbance of lawns; removal of trees, landscaped shrubs, or other vegetative screening between residences and/or adjacent rights-of-way; potential damage to existing septic systems or	Significant (CEQA Class II)	KRGT has prepared and would follow site-specific residential construction mitigation plans to minimize disruption and to maintain access to the 26 residences located within 50 feet of the construction work area. The plans show the pipeline centerline; the limits of the construction work area; each residence and other structures; existing pipelines and powerlines; waterbodies, roads, driveways, fences, trees or other landscaping, and private wells; and the location of safety fencing that would be installed during construction.	Less than significant (CEQA Class III)	Utah Nevada	FERC monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT124 (cont'd)	wells; and removal of aboveground structures, such as sheds or trailers, from within the right-of-way (section 4.8.4).					
KRGT125	The proposed pipeline route crosses or is adjacent to several linear transportation and utility rights-of-way including highways, roads, railroad tracks, and powerlines. The majority of the pipeline route would be in remote rural areas where existing traffic volumes are low. Major highways such as state routes or interstates would be crossed at 33 locations. Construction across these features could disrupt the existing transportation system (section 4.8.5).	Significant (CEQA Class II)	KRGT would apply for the permits necessary for road and railroad crossings. Major or improved roads and railroads would be crossed by boring to avoid disrupting traffic. Unsurfaced, lightly traveled, or rural roads would be crossed by the open-cut method if approved by the owner or land management agency. Where open-cut road crossings are conducted, KRGT would detour or control traffic during construction to minimize traffic delays at these locations. If reasonable detours are not feasible, at least one lane of traffic would be left open. No new roadways would be created. Most open-cut road crossings would be completed in 1 day. All roadways would be maintained in such a way to allow access for emergency and private vehicles. KRGT would place and maintain flag persons, signs, barricades, guard rails, safety fence, and signals at road crossings as required by city, county, and state regulations and right-of-way and permit stipulations. In the absence of such regulations, KRGT would place danger signs that would be visible in both directions during darkness at the crossing location and also 500 feet in each direction from the crossing. At a minimum, the danger signs would be legible at 100 feet and flashers would run continuously from 30 minutes before sundown until 30 minutes after sunrise.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT126	The existing transportation system within the project area could be temporarily affected by the influx of construction workers and the delivery of construction equipment and materials to the project area (section 4.8.5).	Significant (CEQA Class II)	See KRGT165 and 166.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT127	Operation of the pipeline could disrupt the existing transportation system (section 4.8.5).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	All	No monitoring required.
KRGT128	The Muddy Creek Loop would cross the Oregon National Historic Trail near the intersection of Highways 412 and 189 on land administered by the BLM. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class II)	The proposed pipeline would be installed immediately adjacent to the existing KRGT pipeline at the crossing of the Oregon National Historic Trail. During construction, KRGT would establish detours around the construction work area to minimize impact on recreational use of the trail. After construction, KRGT would restore the trail to its preconstruction condition.	Less than significant (CEQA Class III)	Wyoming	FERC and BLM monitors would verify mitigation is followed.
KRGT129	The Mormon-California National Historic Trail (also known as the Emigrant Trail) would be crossed by the Muddy Creek Loop on land administered by the BLM. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class II)	At the crossing location, the proposed pipeline would be installed immediately adjacent to the existing KRGT pipeline. During construction, KRGT would establish detours around the construction work area to minimize impact on recreational use of the trail. After construction, KRGT would restore the trail to its preconstruction condition.	Less than significant (CEQA Class III)	Wyoming	FERC and BLM monitors would verify mitigation is followed.
RGT130	The proposed route crosses the boundary of Camp Williams, a National Guard training site, in several locations beginning at about MP 155.5 of the Salt Lake Loop. Military land would be crossed for a total of about 2.4 miles in this area. Construction could impact the purpose for which this special	Significant (CEQA Class II)	KRGT would implement the general mitigation measures identified for the project. Site-specific mitigation measures required by Camp Williams would be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.	Less than significant (CEQA Class III)	Utah	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>g</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT130 (cont'd)	management area was established (section 4.8.6.1).					
KRGT131	The Wildhorse Canyon Obsidian Quarry, listed on the National Register of Historic Places (NRHP), is crossed by the Fillmore Loop. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	Utah	No monitoring required.
KRGT132	Between MPs 382.5 and 382.9 and MPs 384.6 and 404.1, about 19.9 miles of the Dixie National Forest would be crossed by the proposed Fillmore Loop. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class II)	<p>KRGT would implement its site-specific Reclamation Plan for the Dixie National Forest (see KRGT53). KRGT would gain access to the construction right-of-way within the Dixie National Forest using only existing roads. No new roads would be constructed as part of the Kern River 2003 Expansion Project.</p> <p>Following construction, KRGT would restore the area to its preconstruction condition. To facilitate restoration after pipeline construction, the FS would issue a forest order prohibiting the use of OHVs in the corridor. KRGT would implement additional mitigation measures to discourage OHV use in environmentally sensitive areas of the forest, such as in management area 5A and the Mountain Meadows area (see KRGT153). Additional measures would include placing berms at intersections with existing dirt roads to ensure that the area does not appear to be an access road and randomly placing boulders and trees to discourage OHV use. All roads that are currently closed as prescribed in the Dixie National Forest Land and Resource Management Plan would remain closed.</p> <p>Additional site-specific mitigation measures required by the FS would be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.</p>	Less than significant (CEQA Class III)	Utah	FERC and FS monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT133	Within the Dixie National Forest, the proposed pipeline route would intersect the Mountain Meadows Historic Site on the Fillmore Loop. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class II)	See KRGT132. The site is located within the general Mountain Meadows area, which is considered a visually sensitive area (see KRGT158). At the crossing location, the proposed route would be adjacent to the existing KRGT pipeline within the designated Newcastle to Veyo Utility Corridor. KRGT would restore and recontour the construction right-of-way to preconstruction conditions.	Less than significant (CEQA Class III)	Utah	FERC and FS monitors would verify mitigation is followed.
KRGT134	The Beaver Dam Slope Area of Critical Environmental Concern (ACEC) would be crossed between approximately MPs 432.8 and 437.5 and MPs 438.8 and 444.1 of the Veyo Loop. Within the BLM-administered Beaver Dam Slope ACEC, special management attention is given to desert tortoise. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class II)	Mitigation measures for the desert tortoise and its critical habitat are provided in KRGT90/ARM6.	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.
KRGT135	The Mormon Mesa ACEC would be crossed between MPs 444.1 and 444.5 and MPs 446.9 and 455.3 of the Veyo Loop. The Mormon Mesa ACEC is a desert tortoise ACEC managed by the BLM. Construction could impact the purpose for which this special management area was established (section	Significant (CEQA Class II)	Mitigation measures for the desert tortoise and its critical habitat are provided in KRGT90/ARM6.	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT135 (cont'd)	4.8.6.1).					
KRGT136	The Veyo Loop would cross the Moapa River Indian Reservation between MPs 479.2 and 493.8. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class II)	The pipeline route would follow a southwest to northwest path through the reservation adjacent to the existing KRGT pipeline. KRGT would restore all disturbed areas to preconstruction conditions.	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.
KRGT137	The Dry Lake Loop 1 would be adjacent to the eastern boundary of the BLM Fish and Wildlife #3 Wilderness Study Area (WSA) between MPs 504.3 and 509.4. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	Nevada	No monitoring required.
IGT138	The Dry Lake Loop 1 would be parallel to the boundary of the Coyote Springs ACEC as designated by the BLM between about MPs 507.0 and 509.4. The Coyote Springs ACEC is a 75,500-acre area designated for its critical desert tortoise habitat. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Less than significant (CEQA Class III)	Mitigation measures for the desert tortoise and its critical habitat are provided in KRGT90/ARM6.	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT139	The Dry Lake Loop 1 would cross a total of 3.2 miles of the Nellis AFB in two segments between MPs 509.9 and 512.3 and MPs 514.2 and 515.0. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class II)	KRGT would coordinate directly with AFB personnel before construction to address security and other site-specific issues. During construction, the AFB would temporarily close the small arms shooting range located in the area of the proposed project. All disturbed areas would be restored to preconstruction conditions. Additional site-specific mitigation measures required by Nellis AFB would be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.
KRGT140	The Dry Lake Loop 1 would cross a total of 3.1 miles of the Edsall Training Center in two segments between MPs 513.1 and 514.2 and MPs 515.0 and 515.3. Construction could impact the purpose for which this special management area was established. The Nevada National Guard raised concerns about restrictions placed along the pipeline right-of-way and the location of ancillary pipeline facilities in relationship to the training center property (section 4.8.6.1).	Significant (CEQA Class II)	All land used for temporary construction right-of-way and temporary extra workspace would be allowed to revert to prior uses (see KRGT120). Construction of aboveground structures would be prohibited on the permanent right-of-way; however, no restrictions would be placed on the temporary right-of-way or extra workspace. Additional site-specific mitigation measures required by the Edsall Training Center would be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.
RGT141	The Dry Lake Loop 2 would cross the Red Rock HMA between approximately MPs 550.2 and 565.2. Construction could impact the purpose for which this special management area was established (section	Significant (CEQA Class II)	See KRGT72. A large portion of this HMA overlaps with the Red Rock Canyon NCA (see KRGT142).	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT141 (cont'd)	4.8.6.1).					
KRGT142	The Dry Lake Loop 2 would cross the Red Rock Canyon NCA between approximately MPs 552.0 and 557.4. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class II)	The proposed pipeline would be adjacent to the existing KRGT pipeline using a reduced 20-foot offset for the entire crossing of the Red Rock Canyon NCA. The permanent right-of-way for the new pipeline would be placed exactly within the boundary of the permanent right-of-way for the existing KRGT pipeline. KRGT would attempt to minimize disturbance to areas previously disturbed by construction of the existing pipeline. No aboveground facilities associated with the proposed pipeline would be located within the Red Rock Canyon NCA. KRGT would gain access to the construction right-of-way within the Red Rock Canyon NCA using only existing roads. No new roads would be constructed as part of the Kern River 2003 Expansion Project. KRGT would use dust minimization techniques along the construction right-of-way and would remove all litter and debris daily from the construction work site. Following construction, KRGT would return all disturbed areas to their preconstruction condition and implement the mitigation measures identified in the Nevada Reclamation Plan (see KRGT54). KRGT would reseed the proposed right-of-way using native species and would transplant succulents such as cactus, yucca, and Joshua trees to mitigate for visual impacts associated with the project. These measures would be considered successful if 80 percent of the density and diversity of the adjacent undisturbed vegetation is obtained on the right-of-way. Visual qualities of the Red Rock Canyon NCA would be enhanced by the restoration of KRGT's existing right-of-way when the proposed right-of-way is reclaimed. Restoration of KRGT's existing right-of-way would be accomplished to the same standards as the proposed right-of-way. Because the proposed route crosses a non-motorized management emphasis area, KRGT would also implement measures to control unauthorized OHV use (see KRGT153).	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.
RGT143	Approximately 0.9 mile of the Dry Lake Loop 2 beginning at about MP	Significant (CEQA Class II)	The proposed pipeline would be adjacent to the existing KRGT pipeline for the entire 0.9 mile within the Springs Mountains NRA. The permanent right-of-way for the new	Less than significant (CEQA Class III)	Nevada	FERC and FS monitors would verify mitigation is

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT143 (cont'd)	557.4 would cross the Spring Mountains NRA portion of the Humboldt-Toiyabe National Forest. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).		pipeline would be placed exactly within the boundary of the permanent right-of-way for the existing KRGT pipeline. KRGT would reseed the proposed right-of-way using native species and would transplant succulents such as cactus, yucca, and Joshua trees to mitigate for visual impacts associated with the project. These measures would be considered successful if 80 percent of the density and diversity of the adjacent undisturbed vegetation is obtained on the right-of-way. Visual qualities of the Spring Mountains NRA would be enhanced by the restoration of KRGT's existing right-of-way when the proposed right-of-way is reclaimed. Restoration of KRGT's existing right-of-way would be accomplished to the same standards as the proposed right-of-way. To prevent the spread of noxious weeds in the area, KRGT would clean all equipment prior to entering the Spring Mountains NRA (see KRGT60 and ARM5). During construction, KRGT would use only existing roads to access the construction right-of-way. No new roads would be constructed and no modifications to any existing roads would be required in this area. KRGT153 describes measures KRGT would implement to control unauthorized OHV use. Additional site-specific mitigation measures required by the FS would be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.			followed.
KRGT144	The entire 186.0-mile-long portion of the proposed pipeline route in California (part of the Goodsprings Loop and all of the Daggett Loop) is within the California Desert Conservation Area. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	California	No monitoring required.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT145	The Goodsprings Loop would cross the Clark Mountain HMA between MPs 579.4 and 603.7. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	California	No monitoring required.
KRGT146	The Goodsprings Loop would not cross but would be about 1 mile north of the Stateline (between MPs 580.0 and 584.5), Mesquite (between MPs 584.5 and 598.0), and Kingston Range (between MPs 598.0 and 614.0) Wilderness Areas. The Hollow Hills Wilderness Area would be located about 0.25 mile south of the route between MPs 618.0 and 623.6. Due to the close proximity, the areas may be indirectly affected by traffic, noise, and dust during pipeline construction (section 4.8.6.1).	Significant (CEQA Class II)	The delivery of construction equipment and materials would not prevent access to any of these areas (see KRGT166). KRGT would use the existing powerline access road as the primary access to the construction right-of-way in this area. The pipeline would cross several trails/roads during construction adjacent to these wilderness areas. To maintain access to these wilderness areas during construction, KRGT would only allow one trail/road crossing to be closed at any given time. Each trail/road would be open cut and out of service for a maximum of 1 day. KRGT would implement the measures described in KRGT125 to maintain safe passage at each of the trail/road crossings.	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
IGT147	The Goodsprings Loop would not cross but would be located near the Mojave National Preserve. Construction could restrict access to this area (section 4.8.6.1).	Significant (CEQA Class II)	During construction, KRGT would close only one road at a time leaving at least three roads open into the Mojave National Preserve at any given time. The main access to the preserve is provided by Kingston Road and other improved or major public roads. KRGT would maintain safe passage at each of these road crossings as described in KRGT125.	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
BT148	The Goodsprings Loop would be located within the BLM-designated Clark	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	California	No monitoring required.

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Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT148 (cont'd)	Mountain ACEC between about MPs 587.5 and 591.7. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).					
KRGT149	The Goodsprings Loop would be adjacent to two statutory WSAs as defined in the California Desert Protection Act of 1994. These are the Soda Mountains WSA and the South Avawatz WSA. Due to the close proximity, the areas may be indirectly affected by traffic, noise, and dust during pipeline construction (section 4.8.6.1).	Significant (CEQA Class II)	The delivery of construction equipment and materials would not prevent access to any of these public interest areas (see KRGT166). KRGT would use the existing powerline access road as the primary access to the construction right-of-way in this area. The pipeline would cross several trails/roads during construction adjacent to these wilderness areas. To maintain access to these WSAs during construction, KRGT would only allow one trail/road crossing to be closed at any given time. Each trail/road would be open cut and out of service for a maximum of 1 day. KRGT would implement the measures described in KRGT125 to maintain safe passage at each of the trail/road crossings.	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT150	The Goodsprings Loop would be within the current boundary of the Fort Irwin National Training Center between MPs 642.8 and 643.0 and would be close to or adjacent to the boundary until about MP 653.2. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class III)	KRGT would implement the general mitigation measures identified for the project. Site-specific mitigation measures required by Fort Irwin would be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
IGT151	About 3.1 miles of the Marine Corps Firing Range would be crossed by the Daggett Loop between	Significant (CEQA Class II)	As construction approaches the Marine Corps Firing Range, KRGT would coordinate with the Military Police, Ranger Officer, and the Environmental Division concerning security, access, live fire range safety, and special status	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT151 (cont'd)	MPs 3.7 and 6.8. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).		species protections. Additional site-specific mitigation measures required by the Marine Corps would be included as stipulations of the COM Plan, which would be attached to the right-of-way grant issued by the BLM.			followed.
KRGT152	The Daggett Loop would be within the boundaries of Edwards AFB in two locations (between MPs 41.0 and 42.5 and MPs 51.2 and 51.4) and would be north of the AFB boundary between MPs 42.5 and 67.8. Construction could impact the purpose for which this special management area was established (section 4.8.6.1).	Significant (CEQA Class II)	<p>During the scoping process, Edwards AFB identified several items that KRGT would need to implement both before and during construction within the AFB. KRGT would need to:</p> <ul style="list-style-type: none"> • arrange a preconstruction conference at least 30 days prior to the start of construction on Edwards AFB lands; • coordinate with base personnel before beginning any activities within the base; • register all personnel and vehicles operating in conjunction with the project with base security before entering base lands; • coordinate ingress and egress routes to the construction site with base security; and • before excavation, clear all areas where the possibility of encountering ordnance associated with past test and training activities exists using qualified ordnance disposal personnel and in consultation with Edwards AFB personnel. <p>Additional site-specific mitigation measures required by Edwards AFB would be included as stipulations of the COM Plan, which would be attached to the right-of-way grant.</p>	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.
IGT153	The pipeline could increase accessibility for OHV use into previously restricted, inaccessible, or environmentally sensitive areas (section 4.8.6.1).	Significant (CEQA Class II)	<p>The measures KRGT has used in the planning and design of the project or would use to control unauthorized or undesired OHV use include:</p> <ul style="list-style-type: none"> • siting the new pipeline loops typically overlapping the existing KRGT or KRGT/Mojave Common System rights-of-way as opposed to creating entirely new rights-of-way that could introduce more third-party OHV use; 	Less than significant (CEQA Class III)	All	FERC, CSLC, BLM, and FS monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRGT153 (cont'd)			<ul style="list-style-type: none"> • using existing access roads to the right-of-way during construction and operation rather than constructing new roads. KRGT would maintain existing access controls such as replacement of gates and earthen berms where specified; • restoring the construction and permanent right-of-way to or near the original contours, including restoring streams and washes, removing temporary equipment bridges, installing slope breakers for erosion control, and revegetation; and • installing other OHV controls (e.g., signs, fences, berms, breaches, boulders, shrubs trees) where designated by a land management agency to further meet management objectives for OHV use (see KRGT's UECRM Plan). <p>Additionally, KRGT has identified specific measures that would be implemented in the Dixie National Forest to control OHV use. These measures include placing berms at intersections with existing dirt roads to ensure that the area does not appear to be an access road and randomly placing boulders and trees to discourage OHV use. The FS would issue a forest order prohibiting the use of OHVs along the right-of-way to facilitate restoration after construction (see KRGT132).</p>			
KRGT154	Camping occurs in the Dixie National Forest, Spring Mountains NRA, and Red Rock Canyon NCA. In addition, the Coyote Creek Loop 1 would be near a recreational vehicle park at about MP 87.5. A campground is also located within 0.25 mile of the Elberta Loop in Juab County, Utah. Construction-induced effects such as traffic, noise, and dust may affect	Less than significant (CEQA Class III)	No mitigation proposed. The delivery of construction equipment and materials would not prevent access to these areas (see KRGT166).	Less than significant (CEQA Class III)	Utah Nevada	No monitoring required.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT154 (cont'd)	the quality of some users' recreational experiences (section 4.8.6.2).					
KRGT155	Construction of the pipeline would cause construction-related visual impacts. Visual impacts would be caused by vegetation removal, earthwork and grading scars, staging areas, heavy equipment tracks, trenching, blasting, rock formation alteration or removal, and temporary support machinery and tool storage. The degree of impacts from vegetation clearing would depend on the type of vegetation that would be affected (section 4.8.7).	Significant (CEQA Class II)	<p>The visual impact of the pipeline loops would be primarily temporary or short term because most of the proposed route would be constructed adjacent to the existing KRGT pipeline or KRGT/Mojave Common System pipeline rights-of-way. Where the proposed route is adjacent to existing rights-of-way, project construction would temporarily redefine the existing line and result in an incremental increase of visual impact of the previously disturbed area. To further minimize visual impacts, KRGT would implement general mitigation measures as described below.</p> <ul style="list-style-type: none"> The new pipeline loops would typically overlap existing pipeline rights-of-way, thereby minimizing the amount of clearing needed for construction workspace and permanent right-of-way. Parallel placement of the loops with existing rights-of-way would also minimize visual impacts by minimizing vegetation fragmentation. As few landings and turnouts as possible would be created, and these areas of temporary extra workspace would not be located on the noses of ridges or exposed slopes. Felled trees would be left as close as possible to the downhill side of the right-of-way. Grading during restoration would be done in a manner that minimizes erosion and conforms to the natural topography. Soils and rock that are excavated, but not used to backfill the trench or restore contours, would be evenly spread onto the cleared area in non-agricultural areas. In areas where blasting is required, native soils and materials would be used to reclaim the construction right-of-way. Any rock introduced into the surface soil that is visually incompatible with the surrounding areas would be buried on the right-of-way or hauled to an approved disposal site. Site- 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u> /	Impact	Significance Before Mitigation <u>b</u> /	Mitigation	Significance After Mitigation <u>b</u> /	Applicability	Monitoring Responsibility
KRGT155 (cont'd)			<p>specific measures, as specified by a land management agency, would also be implemented. These measures could include the use of native soils, vegetation, and materials to recreate preconstruction conditions, application of a coloration product such as Permeon™ where natural "desert varnish" has been removed, or rebuilding rim-rock disturbed during construction.</p> <ul style="list-style-type: none"> The permanent pipeline right-of-way markers would adhere to the color coding scheme for buried utilities developed by the American Public Works Association. The color coding scheme calls for yellow markers for natural gas, oil, steam, petroleum, or other gaseous material pipelines. KRGT's existing pipeline is identified by yellow markers, and similar markers would be used for the proposed pipeline. In accordance with DOT requirements, KRGT would install pipeline markers wherever necessary to identify the location of the pipeline in order to reduce the possibility of damage. 			
KRGT156	The Bear River Valley, crossed by the Muddy Creek Loop between MPs 46.9 and 50.3, is considered an area with high visual sensitivity (section 4.8.7.2).	Significant (CEQA Class II)	The proposed Muddy Creek Loop in this area would be adjacent to the existing KRGT pipeline. Although not a forested landscape, KRGT proposes to use feathering and tapering and enhanced revegetation. Feathering and tapering would involve varying the width of the cleared right-of-way to reduce visual line contrasts of distorted areas in visually prominent foreground views, such as at the crossing of Highway 150 at MP 49.3. KRGT would also use enhanced revegetation on portions of the west-facing slopes of the Bear River Valley. Enhanced revegetation includes revegetating the cleared areas with native plants (e.g., sagebrush) to match the surrounding vegetation. In addition, KRGT's use of the HDD construction method to cross the Bear River at MP 47.5 would minimize impacts on visual resources by eliminating disturbance of the riparian corridor adjacent to the river.	Less than significant (CEQA Class III)	Wyoming	FERC and BLM monitors would verify mitigation is followed.
KRGT157	Scipio Pass, crossed by the Elberta Loop between MPs 244.0 and 248.0, is	Significant (CEQA Class II)	KRGT would minimize visual impacts in this area by feathering and tapering the cleared right-of-way and enhanced revegetation of the cleared right-of-way using	Less than significant (CEQA Class III)	Utah	FERC and BLM monitors would verify mitigation is

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT157 (cont'd)	considered an area with high visual sensitivity (section 4.8.7.2).		local pinyon juniper and other local vegetation types where possible. KRGT would conduct topsoil salvage and respreading to reduce visual contrast and preserve a viable growing medium for effective revegetation. Seeding would also allow for the rapid reduction in the strong contrast from soil color.			followed.
KRGT158	The Mountain Meadows area within the Dixie National Forest between MPs 392.3 and 394.0 of the Fillmore Loop is considered an area with high visual sensitivity (section 4.8.7.2).	Significant (CEQA Class II)	KRGT would leave trees and vegetation on the downhill side of the right-of-way to provide a natural screen from the trail and parking lot in the Mountain Meadows area. KRGT would limit clearing to preserve mature shrubs and trees. In addition, KRGT's mowing or cutting of vegetation at ground level would encourage resprouting of oak brush. After construction, KRGT would regrade the right-of-way to match preconstruction contours and boulders and trees would be randomly placed to discourage OHV use (see KRGT153).	Less than significant (CEQA Class III)	Utah	FERC and FS monitors would verify mitigation is followed.
KRGT159	The Meadow Valley Wash, crossed by the Veyo Loop between MPs 473.0 and 475.0, is considered an area with high visual sensitivity (section 4.8.7.2).	Significant (CEQA Class II)	KRGT would use enhanced revegetation to mitigate the potential visual impact of the Veyo Loop on the Meadow Valley Wash area. The existing mesquite stands in the area would not be disturbed by the proposed pipeline. KRGT would place natural and artificial obstructions (e.g., boulders, earthen berms, cleared vegetation) from about MP 473 to Meadow Valley Wash and where the right-of-way crosses existing roads or trails to reduce the visibility of the right-of-way for unauthorized OHV use. Additional discussion of the revegetation measures in this area is presented in the Nevada Reclamation Plan (see KRGT54).	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.
GT160	The Red Rock Canyon NCA, crossed by the Dry Lake Loop 2 between MPs 552.0 and 557.4, is considered an area with high visual sensitivity (section 4.8.7.2).	Significant (CEQA Class II)	The proposed loop would be adjacent to the existing KRGT pipeline using a reduced 20-foot offset. KRGT would keep the disturbance in this area to the absolute minimum required for construction of the pipeline. KRGT would use rock mulch or other methods to blend the color of the disturbed area with its surroundings. KRGT would transplant succulent plant species such as cacti, yucca, Joshua trees, and agave specimens in viewsheds with key observation points. Before construction begins, plant specimens required for visual reclamation that are of the appropriate size would be flagged by KRGT for removal and replanting. KRGT would transplant additional salvaged succulents provided by the BLM on the existing	Less than significant (CEQA Class III)	Nevada	FERC and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGT160 (cont'd)			right-of-way. In addition, KRGT would use Permeon™ on the north facing slope at Wilson Tank (around MP 556.6) and on the exposed rock at MPs 557.3 and 558.2, which are visible from a public access road. KRGT would use Permeon™ on both the existing and proposed construction rights-of-way in these areas. In these areas, KRGT would also arrange the boulders and other exposed surface rock along the existing right-of-way in a more non-linear arrangement to reduce the visibility from the public access road.			
KRGT161	Construction and operation of the new aboveground facilities and associated powerlines would have a permanent impact on visual resources (section 4.8.7.3).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	All	No monitoring required.
SOCIOECONOMICS						
KRGT162	Construction of the project could temporarily increase the population along each spread by between 504 and 567 people. About 12 permanent staff would be added to KRGT's existing district offices in Evanston, Wyoming; Fillmore, Utah; and Las Vegas, Nevada (section 4.9.2).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	All	No monitoring required.
KRGT163	Construction of the project could affect the availability of housing in the project area; however, no significant impacts on local housing markets are expected (section 4.9.3).	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	All	No monitoring required.

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