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.

CALENDAR ITEM
01

A 34

S 17

08/14/02
W30121, W25855, W25856
PRC 7509.2 and PRC 7512.2
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.

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 (KRGT), for the construction, use and maintenance of a 36-inch natural gas pipeline that crosses two parcels of State school land in San

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

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.

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

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 KRGT 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.

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

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

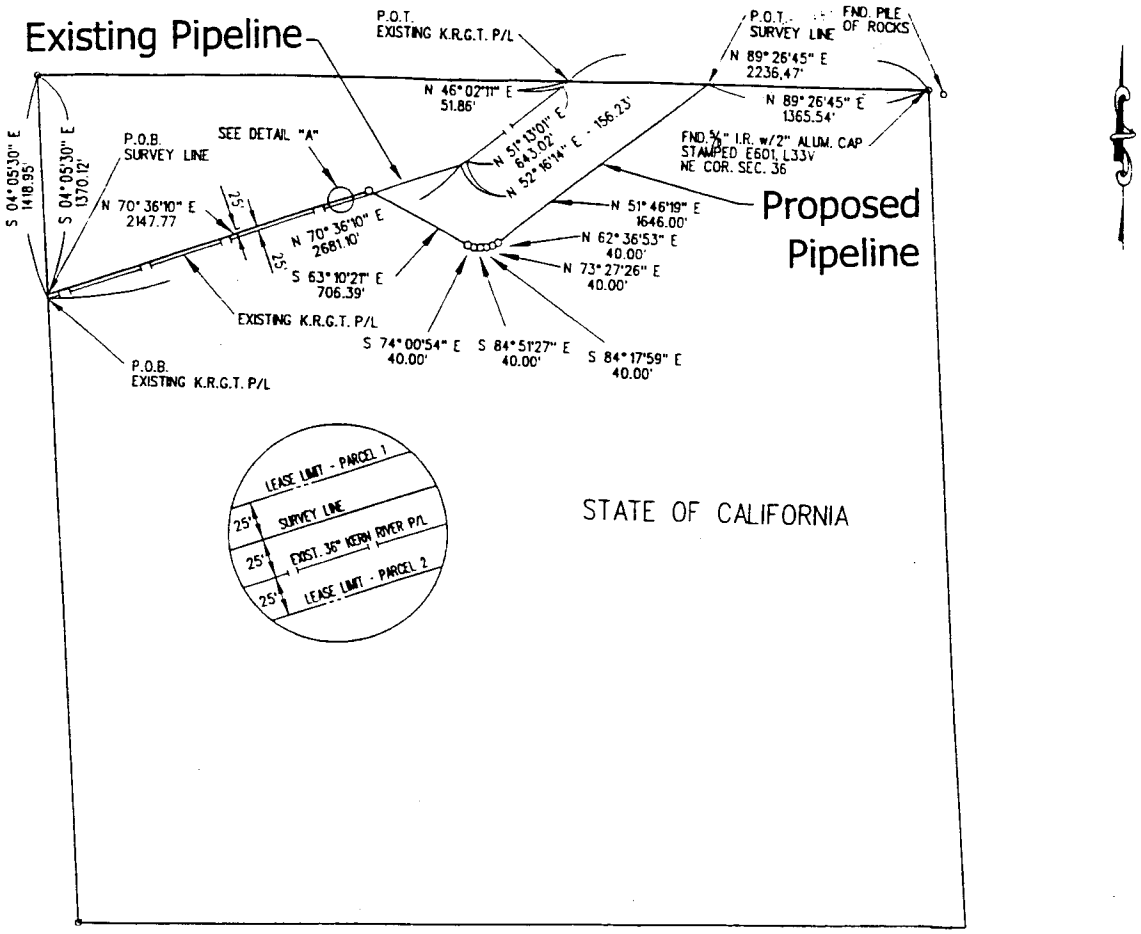
AGGREGATE OF NO LESS THAN $10,000,000; SURETY BOND IN THE AMOUNT OF $50,000; AND CONSTRUCTION PERFORMANCE BOND IN THE AMOUNT OF $450,000. (W25855)

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 ACQUISTION COMPANY 1, LLC, A GENERAL PARTNER AND KERN RIVER ACQUISTION 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

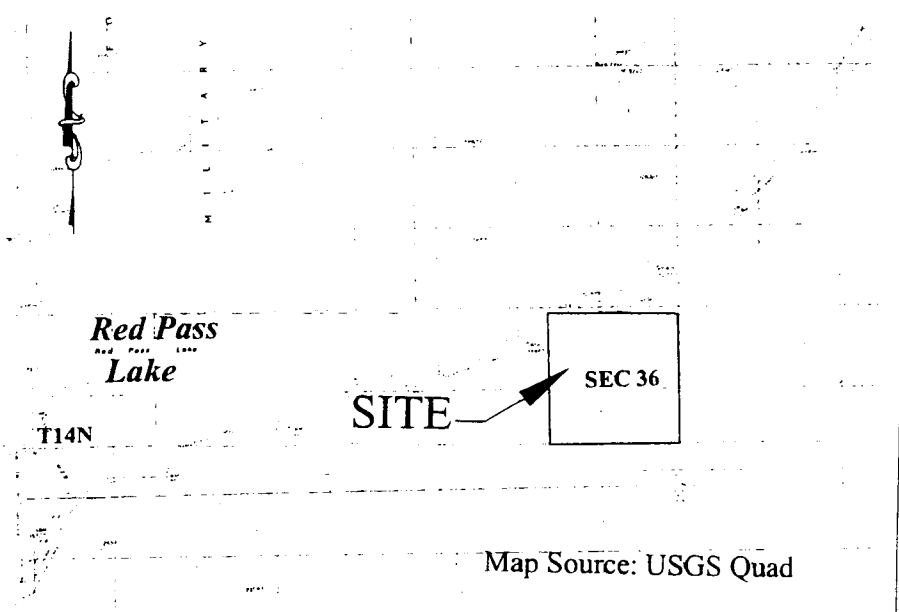
SITE



Sec.36, T14N, R6E, SBM

NO SCALE

LOCATION



Map Source: USGS Quad

Exhibit A

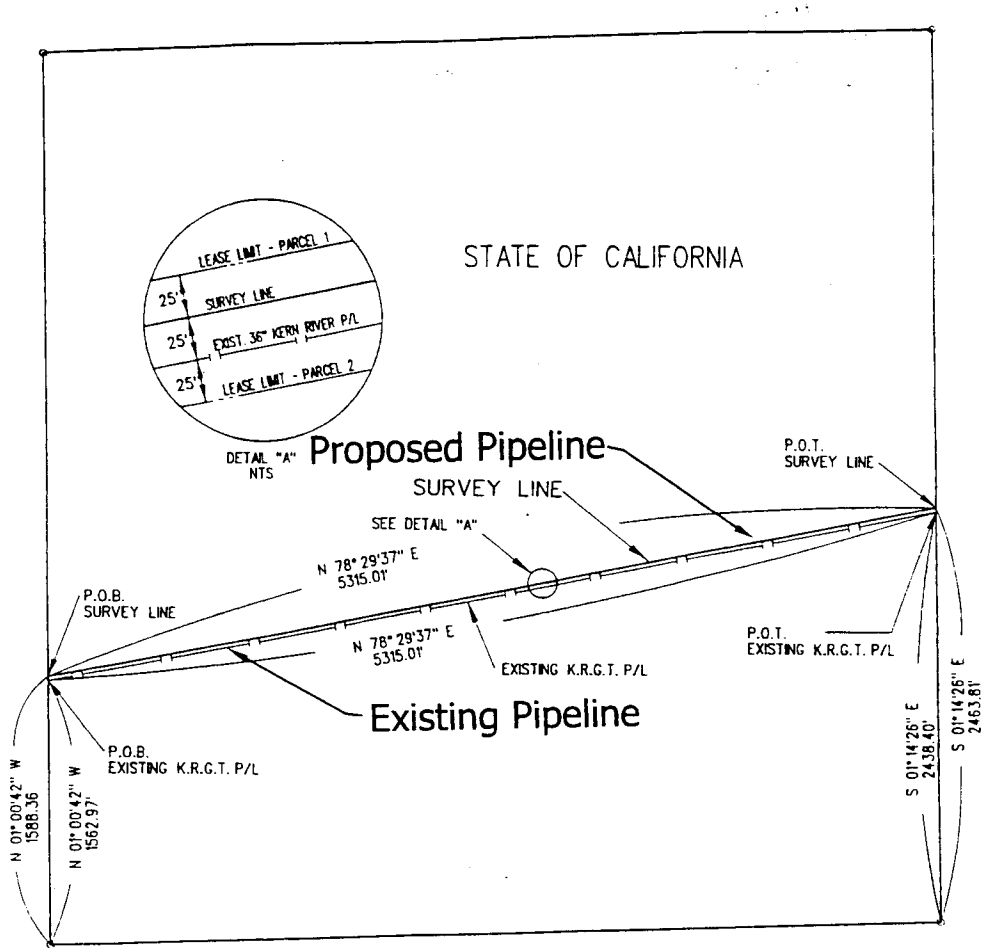
W25855/PRC7509.2
School Lands
San Bernardino County

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 int nor shall it be construed as, a waiver or limitation of any state interest in the subject or any other property.

CALENDAR PAGE
MINUTE PAGE

NO SCALE

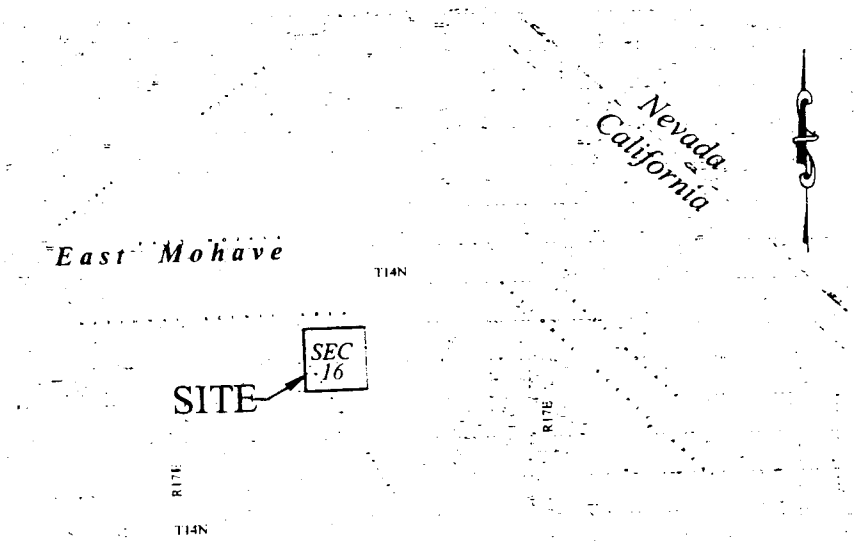
SITE



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 or any other property.

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. KRGT57).

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;

- 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).

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.

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

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).

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.

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;

- 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, KRGT 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.

KRGT'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, KRGT'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 KRGT, 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;

- 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;

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- 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).

CEQA FINDING NO. **KRGT33**
KRGT76

WATER REOURCES: Surface Water Contamination

Impacts: 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 in water quality. Acute and chronic toxic effects on aquatic organisms could result from such a spill.

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.

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, Kern County Office of Emergency Services, San Bernardino County Office of Emergency Services, BLM, COE, FERC)

FACTS SUPPORTING THE FINDING:

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

As mitigation, KRGT shall implement the measures in its Spill Plan (see CEQA Finding No. KRGT27). Adherence to the Spill Plan would prevent a large spill from occurring near surface waters. KRGT shall 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 shall not be allowed within 100 feet of a waterbody bank. KRGT shall 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, shall be installed around the pumps. Personnel shall perform frequent maintenance and inspection of these structures. Should a spill occur, the measures in the Spill Plan would decrease the response time for control and clean up of the spill.

The most effective protection of surface water and fishery 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 condit[illegible] 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: 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:

- 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. **KRGT46**
KRGT78

WATER RESOURCES: Hydrostatic Test Water Discharge

Impacts: The potential impacts resulting from the discharge of hydrostatic test waters onto land include soil erosion and 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 stream bottom, resulting in a temporary increase of sediment load and destruction of habitat.

Downstream sedimentation associated with hydrostatic test water discharges could impact fisheries.

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 hydrostatic test water background discussion in CEQA Finding Nos. KRGT45/ KRGT48/KRGT79.

Upon completion of each hydrostatic test section, KRGT would either discharge the water on land within the construction right-of-way in accordance with its Lahontan RWQCB discharge permits, pump the water directly into the next pipeline segment to be hydrostatically tested, or store the water in holding tanks until the next pipeline segment is ready to be tested. KRGT has identified eight hydrostatic test water discharge locations in California (MPs 598.0, 620.8, 638.1, 653.7, and 668.4 of the Goodsprings Loop and MPs 0.0, 17.5, and 70.0 of the Daggett Loop).

KRGT shall not discharge test water directly into surface waters unless authorized by the Lahontan RWQCB. KRGT shall test only new pipe and shall not use any chemical additives during testing. Test water shall be discharged to stable, upland areas along the construction right-of-way; discharge locations would depend on the length of the test section and applicable federal, state, and local guidelines. KRGT shall use energy-dissipating devices and/or filter bags to prevent erosion, streambed scour, suspension of sediments, and excessive streamflow.

By using energy-dissipating devices and/or filter bags, KRGT would minimize erosion, streambed scour, suspension of sediments, excessive streamflow, and impacts on fisheries associated with hydrostatic test water discharge activities.

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 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), 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 brevifoila* (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 engelmanii* (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.

- 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 redside 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.

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. **KRGT90/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 KRGT 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.

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