

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

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

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

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

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

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

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

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

CEQA FINDING NO. KRG93

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

To ensure nesting raptors are not disturbed during construction along the Mojave Desert portion of the project, KRG93 shall conduct pre-construction surveys for raptors in the Mojave Desert in accordance with methods and timing recommendations obtained through consultation with the CDFG, the FWS, and the BLM. If nesting raptors are identified during these surveys, KRG93 shall follow the *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances*, unless other site-specific conservation measures are approved by the CDFG, the FWS, and the BLM.

KRG93's proposed surveys would identify raptor nests that could potentially be affected by pipeline construction. If any nests are found during the surveys, implementation of the *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances* and/or specific treatment approved by the CDFG, the FWS, and the BLM would minimize the potential for nest abandonment, nestling mortality, premature fledging, and ejection of eggs or young from the nest.

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

CEQA FINDING NO. KRGT96/ARM8

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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Exhibit C: CEQA Findings

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

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

CEQA FINDING NO. KRGT98

SPECIAL STATUS SPECIES: Burrowing Owls

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

Exhibit C: CEQA Findings

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

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

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CEQA FINDING NO. KRG798

SPECIAL STATUS SPECIES: Burrowing Owls

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

In accordance with agency recommendations in California, pre-construction burrowing owl surveys shall be conducted concurrently with desert tortoise surveys. In areas where tortoise surveys would not occur until after February 2003, burrowing owl surveys shall be conducted separate from and before the desert tortoise surveys. To minimize the potential for impacts on owls, KRG7 shall relocate burrowing owls from their burrows during pre-construction surveys. Burrowing owls shall be relocated to artificial burrows constructed by KRG7 or to naturally occurring, abandoned desert tortoise burrows. KRG7 shall crush all burrows on the right-of-way following relocations, unless owl surveys are separate from tortoise surveys, in which case active desert tortoise burrows shall be treated during tortoise surveys.

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

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

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CEQA FINDING NO. KRGT100

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

CEQA FINDING NO. **KRGT101**

SPECIAL STATUS SPECIES: Nelson's Bighorn Sheep

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

Exhibit C: CEQA Findings

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

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

CEQA FINDING NO. **KRGT106**

SPECIAL STATUS SPECIES: Gila Monster

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

To minimize impacts on Gila monsters, KRGT shall:

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

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

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

CEQA FINDING NO. KRGT107

SPECIAL STATUS SPECIES: Mojave Fringe-Toed Lizards

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

KRGT shall implement the following species-specific conservation measures:

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

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

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

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CEQA FINDING NO. KRGT113

SPECIAL STATUS SPECIES: Parish's Phacelia

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

FACTS SUPPORTING THE FINDING:

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

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

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

Exhibit C: CEQA Findings

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

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

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CEQA FINDING NO. KRG116

SPECIAL STATUS SPECIES: Mohave Ground Squirrel

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

Class: II

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

FACTS SUPPORTING THE FINDING:

The Mohave ground squirrel is a California-listed threatened species that typically inhabits areas with deep sandy or gravelly friable soils and abundant herbaceous vegetation interspersed with creosote bush and/or Joshua trees. Although suitable habitat for the Mohave ground squirrel is found throughout the Mojave Desert in California, the Daggett Loop is the only proposed KRG1 facility that would be located within the generally accepted range of this species.

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

Given that the Mohave ground squirrel's general area of occurrence overlaps with that of the desert tortoise, KRG1 shall:

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

By mitigating for impacts on the Mohave ground squirrel as part of its desert tortoise mitigation, KRG1 would minimize impacts and ensure comparable resources are set aside to function as undisturbed wildlife habitat for this species.

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

CEQA FINDING NO. KRG119

SPECIAL STATUS SPECIES: Scaly Cloak Fern

Impact: Construction would directly impact the scaly cloak fern by crushing and, where grading is necessary, uprooting individual plants located within the construction right-of-way. Construction may also result in the permanent loss of habitat. The limestone outcrop that supports the plants would be damaged during construction and it is not likely that KRG119 would be able to recreate the exact pre-construction conditions.

Class: II

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

FACTS SUPPORTING THE FINDING:

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

As approved by the CDFG, KRG119 shall mitigate for construction impacts on the scaly cloak fern by:

- providing funding to the CDFG, or to a fund identified by the CDFG, for native plant research based on the work effort required to adequately research and monitor affected species. The amount and type of compensation in California shall be determined in consultation with the CDFG and pursuant to the Incidental Take Permit under Section 2081 and/or pursuant to the SAA under Section 1600, respectively, of the California Fish and Game Code. KRG119 shall provide the CDFG with the agreed upon compensation before construction through scaly cloak fern habitat in the Clark Mountains.

By providing funding to the CDFG, or to a fund identified by the CDFG, KRG119 would minimize impacts associated with the project on the scaly cloak fern.

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

CEQA FINDING NO. ARM9

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

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

Class: II

Finding:

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

CEQA FINDING NO. KRGT120

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

CEQA FINDING NO. KRG122

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

To minimize impacts on grazing allotments, KRG1 shall implement the following mitigation measures:

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

CEQA FINDING NO. KRG123

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

To minimize the potential for impacts on irrigated lands, KRG1 shall maintain the flow of irrigation systems or coordinate the temporary shutoff of systems with affected landowners or tenants. KRG1 shall compensate the landowner for damages and lost production and include the agreement as a special right-of-way stipulation in the construction contract. Disturbed drainage furrows, water piping, or heads shall be restored, repaired, or replaced as soon as possible and monitored for problems after construction is completed. Where pivot irrigation is active, KRG1 shall complete construction and restoration within a time frame negotiated with the landowner or tenant. As part of restoration of the right-of-way, survey controls shall be implemented to restore the surface to more precise elevations. In addition, KRG1 shall communicate with the landowners or tenants following construction and restoration to ensure the irrigation systems are functioning properly. Additional repair or remedial work shall be performed if requested by the landowner. KRG1 shall also coordinate with the landowner to assess crop productivity for a period of at least 2 years, and provide compensation where crop yields show decline. Impact and mitigation would be site-specific and based on agreements and/or easement conditions with the affected landowner or tenants. Based on negotiations between the landowner and KRG1, mitigation may include additional compensation for portions of fields that may be taken out of production for all or part of the season.

These mitigation measures, including KRG1's commitment to compensate landowners for damage and lost production, would minimize impacts on irrigation systems and the associated cropland caused by construction of the project.

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

CEQA FINDING NO. KRGT125

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

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CEQA FINDING NO. KRGT146

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

CEQA FINDING NO. KRGT147

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

- Impact: The Goodsprings Loop would not cross but would be located near the Mojave National Preserve. Construction could restrict access to this area.
- Class: II
- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (Caltrans, BLM, FERC, NPS)

FACTS SUPPORTING THE FINDING:

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

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

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

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

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CEQA FINDING NO. KRGT149

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

Exhibit C: CEQA Findings

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

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

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

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CEQA FINDING NO. KRGT150

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

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

CEQA FINDING NO. KRGT151

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

CEQA FINDING NO. KRGT152

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

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

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

Exhibit C: CEQA Findings

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

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

CEQA FINDING NO. KRGT155

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

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Exhibit C: CEQA Findings

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

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

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

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

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

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

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CEQA FINDING NO. **KRGT165**
KRGT166

SOCIOECONOMICS: Influx of Construction Workers and Delivery of Construction Equipment

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

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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

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CEQA FINDING NO. **ARM10**

CULTURAL RESOURCES: Protection of Cultural Resources

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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Exhibit C: CEQA Findings

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

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

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

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

CEQA FINDING NO. KRGT169

AIR QUALITY AND NOISE: Air Emissions from Temporary Construction Activities

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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Exhibit C: CEQA Findings

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

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

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

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

CEQA FINDING NO. KRGT171

AIR QUALITY AND NOISE: Noise

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

Class: II

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

FACTS SUPPORTING THE FINDING:

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

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

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

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Exhibit C: CEQA Findings

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

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

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

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

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

CEQA FINDING NO. **KRGT173/ARM11**

SAFETY AND RELIABILITY: Public Safety

- Impact: The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas.
- Class: II
- Finding: a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIS/EIR.
- b) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (DOT, FERC)

FACTS SUPPORTING THE FINDING:

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

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

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

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

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

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

Exhibit C: CEQA Findings

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

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

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

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

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

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

Exhibit C: CEQA Findings

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

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

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

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

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

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

EXHIBIT D

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF THE STAFFS' ENVIRONMENTAL ANALYSIS

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

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

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

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

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

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5.3 ENVIRONMENTALLY PREFERABLE PROJECT

The Agency Staffs have determined that KRGT's proposed route is the environmentally preferable project.

5.4 SIGNIFICANT UNAVOIDABLE IMPACTS/STATEMENT OF OVERRIDING CONSIDERATIONS

Effects on all resources were evaluated to determine any significant impact that would remain so after mitigation. As shown in table 5.1-1 (page 5-10), with one exception, all environmental impacts would be reduced to less than significant levels by KRGT's proposed or the Agency Staffs' recommended mitigation. The Agency Staffs have determined that a long-term reduction in special concern vegetation communities (*i.e.*, yucca, cactus, and agave communities) could occur and that potential impacts on these species could be significant. Approval of the project would be subject to a Statement of Overriding Considerations under the CEQA due to this significant unavoidable impact that could remain after mitigation is applied.

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

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

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

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

5.6 FERC AND CSLC STAFFS' RECOMMENDED MITIGATION

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

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

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

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

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

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

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

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

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

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

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

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

(ARM2)

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

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

19. KRGT shall not begin construction activities **until**:
 - a. KRGT completes any outstanding species-specific surveys and the FERC receives comments from the FWS regarding the preconstruction survey reports;
 - b. the FERC completes formal consultation with the FWS;
 - c. KRGT has completed and filed with the FERC the results of consultations with the Utah Division of Wildlife Resources regarding measures to avoid or minimize impacts on special status species in Utah;
 - d. KRGT has completed and filed with the FERC the results of consultations with the BLM regarding measures to avoid or minimize impacts on special status species on lands managed by the BLM; and
 - e. KRGT has received written notification from the Director of OEP that construction or use of conservation measures may begin. (ARM9)

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

21. KRGT shall defer construction and use of its facilities and any staging, storage, or temporary work areas and new or to-be-improved access roads **until**:
 - a. KRGT prepares and files with the FERC and the CSLC (for the California portion of the project), and submits to the consulting parties, as appropriate, any outstanding cultural resources reports and necessary treatment plans;
 - b. KRGT files with the FERC and the CSLC (for the California portion of the project) the comments of the consulting parties on all cultural resources reports and plans submitted for review;
 - c. the CSLC reviews and approves all cultural resources reports and plans prepared for the California portion of the project and notifies KRGT in writing that construction may proceed; and
 - d. the Director of OEP reviews and approves all cultural resources reports and plans and notifies KRGT in writing that construction may proceed.

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

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

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CALENDAR PAGE

5-9

001566
MINUTE PAGE

TABLE 5.1-1

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

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

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG12 ARM1 (cont'd)			<p>reviewed by the company engineer, and the company inspector's approval must be received before each blast.</p> <p>KRG1's Blasting Plan also stipulates the following:</p> <ul style="list-style-type: none"> • KRG1 would not store explosives on Federal land without prior written permission from the land management agency; copies of this permission would be posted on each magazine; • KRG1 would give at least 72 hours advance notice of blasting activities to the land management agency, railroads, highway departments, and local communities; occupants of nearby residences, buildings, and businesses; and local farmers; • KRG1 would erect and maintain warning signs at all approaches to the blast areas and flaggers would be stationed on all roadways passing within 1,000 feet of blasting activities; • KRG1 would not prime or fuse explosives until just before use; • KRG1 would conduct blasting during daylight hours and would monitor blasting activities with three-axis seismographs to ensure that safe vibration levels are not exceeded. Limits of vibration measured as peak particle velocity would not exceed 4 inches per second adjacent to an underground pipeline and 2 inches per second for any aboveground structure (including water wells); and • if an aboveground structure or water well is damaged by blasting, KRG1 would compensate the owner. <p>To ensure that potential impacts associated with blasting are minimized through skillful operations and the use of site-specific plans, before commencement of any blasting, KRG1 would submit to the FERC and the CSLC (for the portion of the project in California) for approval:</p> <ul style="list-style-type: none"> • a copy of the license of the person(s) conducting or supervising the blasting operations and evidence that the person is certified to perform such activity 			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG2 ARM1 (cont'd)			<ul style="list-style-type: none"> in the jurisdiction where blasting occurs; and a copy of the contractor-prepared site-specific blasting plans. The site-specific plans would include a contingency plan that includes safe methods and procedures to identify any misfired detonations and to proceed with further work after misfires. 			
KRG3	The construction and operation of a pipeline near or over mineral resources could affect existing and future production at active or currently inactive mineral resource areas by restricting activities within the pipeline right-of-way. In general, potential significant effects include diminished mineral land value, loss of mineral land access, and loss of revenues generated by future mineral production (section 4.1.3.1).	Significant (CEQA Class II)	Analysis indicates that nearly all of KRG3's pipeline route is adjacent to existing pipelines or other utilities that have already precluded further mineral development. Additionally, impacts on future mineral development would be negligible and would not constitute a significant loss of a mineral resource or mineral availability because of the narrow nature of the right-of-way relative to the expanse of areas with mineral resource potential. In the event any conflicts between the pipeline and other mineral resource operations are identified, KRG3 would compensate the owners of these resources for potential losses.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRG4	The pipeline route crosses various gathering and transmission pipelines (foreign lines) associated with oil and gas production areas located between mileposts (MP) 0.0 and 80.0 of the Muddy Creek Loop and Coyote Creek Loop 1. Construction of the project could cause damage or disruption to these foreign lines (section 4.1.3.1).	Significant (CEQA Class II)	<p>To avoid damage or disruption to any foreign lines crossed by the proposed pipeline, KRG4 would:</p> <ul style="list-style-type: none"> contact and provide the necessary advance notice (no less than 72 hours) to one-call utility location programs before construction; continually probe the depth of cover over foreign line(s) during trench excavation and hand excavate the final 2 feet; and install the pipeline with a normal vertical separation from foreign pipelines of 2 feet. In no case would the pipeline be installed with less than 1 foot of separation from a foreign pipeline. 	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG75	Much of the project route is located within areas of past seismic activity. Potential seismic hazards include active faults, earthquakes/ground shaking, and soil liquefaction (section 4.1.4.1).	Significant (CEQA Class II)	<p>KRG75 would construct and test project facilities to meet Federal standards outlined in the U.S. Department of Transportation's (DOT) regulations in Title 49 Code of Federal Regulations (CFR) Part 192, <i>Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards</i>.</p> <p>KRG75 has also committed to design all project facilities to meet or exceed the latest edition of the Uniform Building Code (UBC), International Building Code (IBC), and recognized industry standards under the direction of certified professional engineers. However, the UBC, IBC, and DOT (Title 49 CFR Part 192) requirements do not necessarily address all seismic design criteria required in California, particularly at fault crossings and liquefaction potential zones.</p> <p>In California, the CSLC requires the incorporation of current seismological engineering standards such as the <i>Guidelines for the Design of Buried Steel Pipe</i> (American Lifeline Alliance), <i>Guidelines for the Seismic Design of Oil and Gas Pipeline Systems</i> (American Society of Civil Engineers), and other recognized industry standards for seismic-resistant design at all fault crossings and liquefaction potential zones in California. The CSLC also requires all engineered structures, including pipeline alignment sheets, buildings and other structures, profile drawings wherever necessary, and other appurtenances and associated facilities in California, to be designed, signed, and sealed by California-registered professionals certified to perform such activities in the jurisdiction where the facilities would be located.</p>	Less than significant (CEQA Class III)	All	<p>KRG75 certified compliance with the DOT Minimum Federal Safety Standards in its application to the FERC.</p> <p>FERC, CSLC, and BLM monitors would verify mitigation is followed.</p>
KRG76 ARM2	The pipeline route would cross seven faults or fault zone areas where the potential for surface fault rupture exists. The potential impact of any fault on the pipeline would depend on the fault activity, the expected	Significant (CEQA Class II)	<p>See KRG75.</p> <p>Mitigation measures KRG76 incorporated into the final design include the following:</p> <ul style="list-style-type: none"> orient the pipe at the fault crossing to produce tension in the pipe material in lieu of compression; provide a substantial unanchored length of pipe across the fault; 	Less than significant (CEQA Class II)	Utah California	<p>FERC, CSLC, and BLM monitors would verify mitigation is followed.</p>

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number &/	Impact	Significance Before Mitigation by/	Mitigation	Significance After Mitigation by/	Applicability	Monitoring Responsibility										
KRG76 ARM2 (cont'd)	magnitude of displacement, the geometry of the fault crossing, and the proximity to population. The potential for large differential ground movements leading to surface rupture would require special design considerations (section 4.1.4.1).		<ul style="list-style-type: none"> create ditch geometries (deeper or wider dependent on fault type and orientation) to minimize forces on the pipe; place medium dense sandy backfill around the pipe at the fault crossing; use heavy-wall pipe at the fault crossing; avoid pipe wall-thickness transitions near fault traces; use a certified engineering geologist to observe the construction excavation in the vicinity of the fault crossings to verify that the design assumptions are valid and the treatments are centered in the correct locations; and equip the mainline valves (MLVs) located upstream and downstream of the faults with actuators. <p>KRG7 would incorporate the following measure into its pipeline operations and maintenance procedures. Following an earthquake within the parameters shown in the table below, KRG7 operations personnel would inspect all parts of the pipeline alignment that fall within the specified distance of the earthquake epicenter for evidence of permanent ground deformation (e.g., cracks or displacements). If surface fault rupture is reported or observed, the pipeline alignment within at least 1,000 feet of the rupture would be inspected. KRG7 would submit reports of its findings to the FERC and the CSLC.</p> <table border="1"> <thead> <tr> <th>Earthquake Magnitude (Richter scale)</th> <th>Epicentral Distance (miles)</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>5</td> </tr> <tr> <td>6.5</td> <td>10</td> </tr> <tr> <td>7</td> <td>15</td> </tr> <tr> <td>7.5</td> <td>20</td> </tr> </tbody> </table>	Earthquake Magnitude (Richter scale)	Epicentral Distance (miles)	6	5	6.5	10	7	15	7.5	20			
Earthquake Magnitude (Richter scale)	Epicentral Distance (miles)															
6	5															
6.5	10															
7	15															
7.5	20															
KRG77	Ground shaking resulting from earthquakes is a potential hazard to the pipeline facilities, especially in the northern parts of Utah and in California, primarily along	Significant (CEQA Class II)	KRG7's commitment to meet or exceed the proper design standards for project facilities in seismically active areas (see KRG75) and its measures to mitigate for surface fault rupture/displacement hazards (see KRG76/ARM2) would reduce the potential effects of ground shaking associated with earthquakes to less than significant levels.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.										

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG77 (cont'd)	the Daggett Loop. Damage to buried pipelines is most often caused by the differential movements of geologic material as opposed to shaking itself. Aboveground structures would more likely be damaged by ground shaking (section 4.1.4.1).					
KRG78	Soil liquefaction can affect a pipeline by causing lateral spreading, loss of bearing strength, flow failures, subsidence, and flotation (section 4.1.4.1).	Significant (CEQA Class II)	Mitigation measures for soil liquefaction hazards are similar to those used at active fault crossings (see KRG75 and KRG76/ARM2).	Less than significant (CEQA Class III)	Utah Nevada California	FERC, CSLC, and BLM monitors mitigation is followed.
KRG79	In areas of slope instability, construction and operation of pipeline facilities could cause landslides. Significant landslides, rockfalls, and debris flows have the potential to damage pipeline facilities (section 4.1.4.2).	Significant (CEQA Class II)	KRG7 has sited the pipeline route to avoid landslide-prone areas wherever possible and has avoided areas of slope instability for the vast majority of the pipeline route. In areas that cannot be avoided, the potential for slope instability would be mitigated by KRG7's implementation of the temporary and permanent erosion control and restoration practices in its Upland Erosion Control, Revegetation, and Maintenance Plan (UECRM Plan), Wetland and Waterbody Construction and Mitigation Procedures (WWCM Procedures), and site-specific recommendations from Sergeant, Hauskins & Beckwith. These include: <ul style="list-style-type: none"> • Installation of slope breakers and sediment barriers across the right-of-way; and • Installation of ditch plugs (trench breakers) at vertical intervals of 100 feet or less for slope gradients of 20 percent or more near MP 45.5 of the Muddy Creek Loop and between MPs 65.0 and 73.0 of the Coyote Creek Loop. <p>In addition to the above measures, to prevent or minimize potential hazards associated with construction-induced slope instability within California, KRG7 would retain a</p>	Less than significant (CEQA Class III)	Wyoming Utah California	FERC, CSLC, and BLM monitors mitigation is followed.

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001570

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number g/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG79 (cont'd)			California-certified Engineering Geologist to oversee construction activities (e.g., excavation) in areas of potentially unstable ground as well as oversee the attempts to locate traces of Quaternary faults during excavation.			
KRG10	Some areas in the vicinity of the project have the potential for subsidence resulting from hydrocompaction (section 4.1.4.3).	Significant (CEQA Class II)	To reduce the potential for hydrocompaction, KRGT would: <ul style="list-style-type: none"> • restore natural drainage patterns that intersect the right-of-way to prevent ponding over the trenchline; and • conduct post-construction surveillance and monitoring of areas susceptible to collapse-induced settlement to identify areas where pipeline maintenance would be necessary to relieve stresses on the pipe. 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRG11 ARM3	Subsidence due to excessive groundwater withdrawal could occur along the route in the Escalante Desert near Milford, Utah, and in the Las Vegas Valley and Dry Valley in Nevada. The potential for subsidence due to groundwater withdrawal also exists in the western Mojave Desert (section 4.1.4.3).	Significant (CEQA Class II)	KRGT would check for evidence of subsidence during routine pipeline operations overflights and other maintenance activities along the entire pipeline route. Repairs would be made as necessary. KRGT would conduct a reassessment of the subsidence hazard in California after every 15 years of operation. Regions of subsidence that approach 5 feet would be identified and the pipeline condition and performance would be evaluated. KRGT would submit a report of its evaluation to the CSLC and appropriate action would be taken based on the CSLC's findings.	Less than significant (CEQA Class III)	Utah Nevada California	No monitoring required in Utah or Nevada. CSLC monitors would verify mitigation is followed in California
KRG12	Flash flooding or debris flows along the pipeline could create a rupture if long, unsupported sections of the pipeline become exposed (section 4.1.4.4).	Significant (CEQA Class II)	KRGT would install the pipeline at least 5 feet below the natural bottoms of susceptible drainages and channels.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
RGT13	Hazards associated with volcanic activity include eruptions, lava flows, glowing avalanches, ash flows, volcanic mudflows	Less than significant (CEQA Class III)	No mitigation proposed.	Less than significant (CEQA Class III)	Utah Nevada	No monitoring required.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

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

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRGTT16 (cont'd)			<p>by the BLM or other Federal land management agencies (on private lands, KRGTT would notify the agency/entity having jurisdiction over paleontological resources (e.g., permitting and archiving in each state) before construction and obtain necessary permits);</p> <ul style="list-style-type: none"> • monitoring sedimentary units where previous and new field surveys identified scientifically significant fossils along the proposed pipeline route and for those route deviations or alternatives in areas of high paleontological sensitivity identified in table 4.1.5-1 (page 4-29). An approved, qualified paleontological monitor would be present during ground-disturbing activities. Disturbed areas would be checked immediately after brushing and trenching, and before the pipe is installed and the trench is backfilled. The paleontologist would also be present to monitor when fossils or fossiliferous sediments are encountered during ground-disturbing activities. The monitor would identify the diagnostic elements of any fossils and be equipped to preserve unearthed fossils. The monitor would have the authority to temporarily divert construction equipment in the event significant paleontological resources are discovered. • educating workers about the potential discovery and importance of paleontological resources and spot-checks by paleontologists in non-monitored areas; • notification of the paleontologist in the event of a find in a non-monitored area; • determination and verification of the paleontological sensitivity of additional workspace areas before ground disturbance; • preparation, identification, preservation, and curation of recovered fossils; and • preparation of reports to document findings. <p>All phases of mitigation would be conducted under the direct supervision of a qualified paleontologist and in accordance with applicable permits. Recovered fossils</p>			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

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

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

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

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG19 (cont'd)			In deep soils, KRG19 would segregate at least 12 inches of topsoil. Where shallow soils (with topsoil less than 12 inches deep), or soils with stony subsoil are encountered, KRG19 would make every effort to segregate the entire topsoil layer. KRG19 would segregate topsoil using one of the following methods: from either the full work area (full right-of-way method), from the trench and subsoil storage area (trench plus spoilsite method), or from the trench and working side (trench plus working site method). The determination of where each topsoil segregation method would be used would be finalized before construction and included in the Construction, Operation, and Maintenance Plan (COM Plan) for the BLM, private landowner agreements, and other applicable permits.			
KRG20	Trenching, ripping, or blasting of stony or shallow bedrock soils can bring stones or rock fragments to the surface, which could interfere with agricultural practices and hinder restoration of the right-of-way (section 4.2.3.1).	Significant (CEQA Class II)	Topsoil would be stockpiled separately from subsoil and the two stockpiles would be replaced in the proper order during backfilling and final grading. Topsoil segregation treatments for rangeland and native habitats are described in more detail in KRG150 to 55; KRG19's UECRM Plan addresses topsoil segregation in residential and agricultural lands. In all actively cultivated or rotated cropland and improved pastures, KRG19 would minimize these impacts by segregating topsoil and removing (picking) excess rock from the top 12 inches of soil so that the size, density, and distribution of rock on the right-of-way is similar to adjacent undisturbed areas. On rangelands, KRG19 anticipates rocks may be disposed of along the right-of-way by scattering them in a natural pattern, as permitted by the landowner or land management agency. If caliche is found in the subsoil, small pieces would be buried on the right-of-way with at least 24 inches of cover while larger pieces of caliche may be disposed of in an appropriate landfill.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG21	Construction can facilitate the establishment of noxious or invasive weeds where none or few existed. The clearing of existing perennial vegetation provides an opportunity for weed species to invade the right-of-way, and the movement of equipment along the right-of-way could transport weed seed and plant parts from one location to another (section 4.2.3.1).	Significant (CEQA Class II)	To minimize and control the spread of noxious weeds, KRG21 would implement its Noxious Weed Plan (see KRG260 and ARM5) and its site-specific Reclamation Plans (see KRG250 to 55).	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRG22	Contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment could have an impact on soils (section 4.2.3.1).	Significant (CEQA Class II)	Implementation of KRG27's Spill Plan (see KRG27) would reduce the impacts of soil contamination from spills or leaks to less than significant levels.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRG23	Impacts on soils associated with the new aboveground facilities would be permanent (section 4.2.3.2).	Less than significant (CEQA Class III)	No specific mitigation proposed. Mitigation measures implemented in these locations would be limited to erosion control measures as described in both KRG27's UECRM Plan and its site-specific Reclamation Plans (see KRG250 to 55).	Less than significant (CEQA Class III)	All	No monitoring required.
WATER RESOURCES						
KRG24	Construction of the pipeline and aboveground facilities could affect groundwater in several ways. Clearing, grading, trenching, and soil stockpiling activities could temporarily alter overland flow and groundwater recharge patterns. Near-surface soil compaction caused by heavy	Significant (CEQA Class II)	Implementation of KRG27's mitigation measures identified for soils (see KRG217 to 23) would reduce these impacts on groundwater to less than significant levels.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

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

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number g/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRGT27 (cont'd)			<ul style="list-style-type: none"> 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>i.e.</i>, reportable quantity). 			
KRGT28	A total of 247 water supply wells or springs have been identified as potentially occurring within 200 feet of the construction right-of-way. As many as 79 of these water supply wells or springs are in locations where blasting for pipeline placement may be necessary. Although adverse impacts on groundwater resources are not anticipated, blasting near water supply wells or springs could cause temporary damage or	Significant (CEQA Class II)	<p>KRGT would conduct final identification and confirmation of groundwater resources through additional field surveys and contacts with local landowners within the project corridor before construction. These surveys would also verify water wells within groundwater source protection areas crossed by the pipeline route.</p> <p>To determine whether pipeline construction activities have affected groundwater quality or yield, KRGT would implement its Groundwater Monitoring Plan. With landowner permission, wells and springs within 150 feet of the construction right-of-way would be sampled before construction to obtain water quality and yield data for each sampling point. Any isolated springs that sustain a riparian community and/or provide a wildlife benefit would be delineated using current U.S. Army Corps of Engineers (COE) methodology. Sampling of water wells or springs</p>	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a</u>	Impact	Significance Before Mitigation <u>b</u>	Mitigation	Significance After Mitigation <u>b</u>	Applicability	Monitoring Responsibility
KRGT28 (cont'd)	changes in water levels and turbidity. Similar impacts may occur for construction activities such as trenching and dewatering (section 4.3.1.2).		outside the 150-foot monitoring area would be done at landowner request. If it is determined that blasting or other construction activities have diminished a water supply, KRGT would arrange for a temporary water supply through a local supplier and make the necessary repairs to the affected water well, or install another comparable well. KRGT would obtain the applicable state and local permits before repairing or replacing any water wells and for any temporary domestic water supplies. Specific mitigation measures would be coordinated with the landowner's management agency in order to meet the landowner's specific needs. KRGT would conduct biological monitoring at isolated springs to determine any adverse impact on the riparian community or diminishment of its value to wildlife. Post-construction well monitoring would be conducted as requested by the well owner or for disputed situations.			
KRGT29	Shallow groundwater could affect the buoyancy of the pipe (i.e., the pipeline would be more likely to float) and increase the potential for corrosion (section 4.3.1.3).	Significant (CEQA Class II)	Within 30 days of placing the facilities in-service, KRGT would file a report with the FERC and the CSLC (in California) describing any complaints received from landowners about water quality or yield, the results of the biological monitoring at any isolated springs, and the remedial action taken to address concerns. In areas where the positive buoyancy of the pipeline may exceed the combined uplift resistance of backfill soil and soil adjacent to the ditch, KRGT would install weights, use concrete-coated pipe, or anchor the pipeline. In addition to the use of externally coated pipe, KRGT would install cathodic protection where necessary to guard against corrosion.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
KRGT30	Seven potential sources of groundwater and/or soil contamination have been identified near the proposed pipeline facilities. The precise location of the historic landfill associated with the Beaver County	Significant (CEQA Class II)	If contaminated groundwater and/or sediments (based on evidence of land-filled debris, subsoil discoloration, or odor) are encountered along the pipeline route or at aboveground facility sites during construction, KRGT would implement the following steps: • halt all construction work in the immediate vicinity of areas where hazardous or unknown wastes are	Less than significant (CEQA Class III)	Utah Nevada California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd).

MITIGATION MONITORING PROGRAM FOR THE KERN RIVER 2003 EXPANSION PROJECT

Mitigation Number <i>a/</i>	Impact	Significance Before Mitigation <i>b/</i>	Mitigation	Significance After Mitigation <i>b/</i>	Applicability	Monitoring Responsibility
KRG130 (cont'd)	Special Service #5 Landfill relative to the pipeline route has not been determined (section 4.3.1.4).		<p>encountered;</p> <ul style="list-style-type: none"> evacuate all construction, oversight, and observing personnel to a road-accessible, up-wind location until the types and levels of potential contamination can be verified; notify KRG1's Chief Inspector, EI, and land management agency Authorized Officer. Following consultation with onsite personnel and the land management agency hazardous materials coordinator, the EI, in conjunction with the agencies' compliance monitor, would be responsible for implementing follow-up actions, including mobilizing emergency response personnel and coordinating with the U.S. Environmental Protection Agency, or state or local agencies; notify and mobilize an emergency response contractor if an immediate or imminent threat to human health or the environment exists; if the land management agency Authorized Officer or his/her designee has determined that an immediate or imminent threat to human health or the environment does not exist, or has been abated, KRG1 or a qualified subcontractor would collect representative samples of the waste and surrounding materials for laboratory analysis; and remove and properly dispose of contaminated materials, if feasible. If the extent of contamination is too widespread for economical removal, or if disposal options are technically infeasible or cost-prohibitive, backfilling of that portion of the trench would be suspended until appropriate mitigation options are approved by the FERC and the CSLC (in California). <p>Before construction, KRG1 would consult with the owner/operator of the Beaver County Services #5 Landfill in Utah to determine the extent of the historic landfill. If land filled materials are encountered during subsurface excavation, KRG1 would dispose of the material in a permitted landfill and replace it with engineered fill.</p>			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG30 (cont'd)			KRG30 would also coordinate with Nellis Air Force Base (AFB) to confirm that the cap associated with Landfill LF-34 is not disturbed during construction activities.			
KRG31	Existing surface water features at the proposed Salt Lake Compressor Station site include a canal (Brighton Canal) that once crossed the site from the southeast to the northwest but has been rerouted along the south and west boundary of the proposed facility location (section 4.3.2.2).	Significant (CEQA Class II)	KRG31 would direct drainage from the site to the west and north. KRG31 would obtain necessary permits for construction of project facilities and comply with Federal, state, and local regulations.	Less than significant (CEQA Class III)	Utah	FERC monitors mitigation is followed.
KRG32	Clearing and grading of streambanks, in-stream blasting (if required), in-stream trenching, trench dewatering, and backfilling could affect waterbodies through modification of aquatic habitat, increased sedimentation, increased turbidity, decreased dissolved oxygen concentrations, stream warming, releases of chemical and nutrient pollutants from sediments, or introduction of chemical contamination such as fuel and lubricants (sections 4.3.2.3 and 4.3.2.4).	Significant (CEQA Class II)	<p>KRG32 would minimize impacts on surface waters by implementing the waterbody construction and restoration measures contained in its WWCM Procedures. The WWCM Procedures are applicable to any stream or river with perceptible flow at the time of crossing and other permanent waterbodies such as ponds and lakes.</p> <p>Some of the relevant mitigation measures pertaining to waterbody crossings specified in KRG32's WWCM Procedures include:</p> <ul style="list-style-type: none"> • locating all extra work areas at least 50 feet away from waterbody boundaries in non-cultivated areas where topographic conditions permit, otherwise extra work areas would be a minimum of 10 feet from the waterbody; • limiting clearing of vegetation between extra work areas and the edge of the waterbody to preserve riparian vegetation; • maintaining adequate flow rates throughout construction to protect aquatic life and prevent the interruption of existing downstream uses; • restricting storage and refueling activities near surface waters; • restricting spoil placement near surface waters; 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number g/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRGT32 (cont'd)			<ul style="list-style-type: none"> limiting use of equipment operating in the waterbody to that needed to construct the crossing; requiring construction across waterbodies to be completed as quickly as possible and during the windows specified in the WWCW Procedures or required by applicable permits; developing and submitting to the FERC site-specific construction procedures for each waterbody greater than 100 feet wide at the crossing location (major waterbody); requiring temporary erosion and sediment control measures to be installed across the entire width of the construction right-of-way after clearing and before ground disturbance; requiring maintenance of temporary erosion and sediment control measures throughout construction until streambanks and adjacent upland areas are stabilized; requiring bank stabilization and reestablishment of bed and bank contours and riparian vegetation after construction; and limiting post-construction maintenance of vegetated buffer strips adjacent to streams. <p>KRGT would also obtain waterbody crossing permits from the COE under Section 404 of the Clean Water Act (CWA) and state water quality certifications under Section 401 of the CWA. These and other permits required by individual states for waterbody crossings could include additional mitigation measures. All construction activities at waterbody crossings would be in accordance with Federal, state, and local permit requirements.</p>			
KRGT33	Refueling of vehicles and storage of fuel, oil, or other hazardous materials near surface waters creates a potential for contamination if a spill were to occur. Immediate downstream users of the water could experience a degradation	Significant (CEQA Class II)		Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

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

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number g/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRGT35 (cont'd)	temporary alteration of beds and banks, temporary loss of wildlife habitat, and increased sediment load during construction (section 4.3.2.4).					
KRGT36	Revegetation of waterbody banks following construction could be slow due to low annual rainfall (section 4.3.2.4).	Significant (CEQA Class II)	During restoration of waterbody banks, KRGT would use natural erosion control techniques (e.g., fiber mats, seeding, plantings) wherever feasible. KRGT would minimize the use of riprap or gabions in accordance with its WWCM Procedures (see KRGT32) and as stipulated in its waterbody crossing permits from the COE and applicable state agencies. KRGT would only use stone riprap or 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.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRGT37	Two of the perennial waterbodies that KRGT proposes to cross using the open-cut method, the Surplus Canal (MP 129.8) and the Sevier River (MP 224.4), are major waterbodies (greater than 100 feet wide at the crossing location) (section 4.3.2.6).	Significant (CEQA Class II)	In accordance with its WWCM Procedures, KRGT has provided site-specific crossing plans for the Surplus Canal and the Sevier River. KRGT proposes to open cut these waterbodies using mechanical excavators operating from each bank. KRGT would minimize impact by limiting the in-stream work at these waterbodies and by completing the crossings in accordance with its WWCM Procedures (see KRGT32). If temporary equipment bridges are determined to be necessary by the construction contractor and the EI, a flexifoat-type bridge would likely be installed across the waterbodies. After installation of the pipe and backfill, KRGT would return the streambanks to the original contours and stabilize them using stone riprap.	Less than significant (CEQA Class III)	Utah	FERC monitors would verify mitigation is followed.
KRGT38	Although neither surface flow nor a defined channel are evident at either of the two crossing locations of the Mojave River (MP 676.7 of the Goodsprings Loop and MP 18.0 of the	Significant (CEQA Class II)	KRGT proposes to construct the crossings of the Mojave River using the open-cut method in accordance with its state waterbody crossing permits. KRGT would restore the areas to preconstruction contours following construction. See KRGT32.	Less than significant (CEQA Class III)	California	FERC, CSLC, and BLM monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number g/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG138 (cont'd)	Daggett Loop), it is classified as an intermittent waterbody. The area consists of a broad, dry wash that includes several smaller, braided washes with no riparian vegetation at either of the crossing locations (section 4.3.2.6).					
KRG139 AR1M4	Both the Bear River (MP 47.5) and the Weber River (MP 87.6) support coldwater fisheries and Federal and/or state sensitive fish species and are considered sensitive waterbodies (section 4.3.2.6).	Significant (CEQA Class II)	KRG1 proposes to cross these rivers using the horizontal directional drill (HDD) method. KRG1 has submitted site-specific HDD crossing plans that show the drill entry and exit workspaces, drill profiles, and workspace requirements for the pipe fabrication and stringout areas. Before construction of the Bear and Weber River crossings may begin, KRG1 would file with the FERC for the review and written approval of the Director of Office of Energy Projects (OEP) revised site-specific HDD crossing plans for these rivers that show all workspace requirements for the drilling operations and the wetlands that would be affected by each workspace. If surveys indicate no wetlands are present, KRG1 would file the survey documentation that supports the finding.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
KRG140	The primary impact that could occur as a result of directional drilling is an inadvertent release of drilling mud (frac-out) directly or indirectly into the waterbody (section 4.3.2.6).	Significant (CEQA Class II)	KRG1 has prepared a Drilling Mud Release Contingency Plan that describes how KRG1 would conduct and monitor the drilling operations to minimize the potential for inadvertent drilling mud releases. The plan also includes procedures for cleanup of drilling mud releases and for sealing the hole if a drill cannot be completed.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
KRG141	In the unlikely event it is required, blasting could injure or kill aquatic organisms, displace organisms during blast-hole drilling operations, and temporarily increase stream turbidity (section 4.3.2.7).	Significant (CEQA Class II)	See KRG181.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont d)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number a/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG42	Based on the results of the scour calculations performed during construction of the existing KRG pipeline, 23 locations, in addition to Yellow Creek, have the potential for scour that may require deeper than normal pipeline burial depth at the crossing (section 4.3.2.8).	Significant (CEQA Class II)	KRG would implement one or a combination of the following measures to protect against scour and bank erosion at these locations: <ul style="list-style-type: none"> • burial below scour depth; • use of concrete-coated pipe or set-on concrete weights; • use of rock shield around the pipe; and/or • installation of erosion control measures (such as gabions and riprap). 	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
KRG43	The Muddy River (MP 477.1) is listed as an impaired waterbody based on total phosphorus and metals. Shallow groundwater underlying the Muddy River floodplain may contain elevated concentrations of inorganic salts, although at levels that do not present a health concern to construction workers (section 4.3.2.9).	Significant (CEQA Class II)	KRG proposes to cross the Muddy River using the flume method. If phosphorus is present in the Muddy River, implementation of KRG's UECRM Plan and WWCM Procedures (see KRG T32) and the additional measures described below would minimize the potential for sediment resuspension, sediment transport, and erosion of banks. Specifically, to minimize resuspension of any potentially contaminated sediments in the Muddy River, KRG proposes to cross the Muddy River using the flume method and would stockpile excavated material in the adjacent upland staging area or temporary extra workspace as needed to minimize handling of sediments. Use of the flume method would minimize the potential for dispersing contaminated sediments in the Muddy River by limiting in-stream activities in flowing water. KRG would complete trenching and backfilling activities in a "dry" area within the waterbody and return the streambottom profile to preconstruction conditions, including replacement of subsurface sediments and streambottom materials before returning the stream to normal flow conditions. In addition, KRG would incorporate any special COE or state conditions regarding handling of potentially contaminated sediments into its crossing plans and would adhere to all National Pollutant Discharge Elimination System (NPDES) permit stipulations when handling potentially contaminated sediments at the Muddy River.	Less than significant (CEQA Class III)	Nevada	FERC monitors would verify mitigation is followed.
KRG44	The COE Utah Regional Office and the Utah Department of	Significant (CEQA Class II)	KRG would cross Bingham Creek using the bore method unless KRG obtains documentation from the UDEQ that the potential for contaminated sediments no longer exists	Less than significant (CEQA Class III)	Utah	FERC monitors would verify mitigation is followed.

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number g/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG T44 (cont'd)	Environmental Quality (UDEQ) have identified Bingham Creek (MP 147.0) as contaminated with elevated levels of copper and zinc due to activities at the Kennecott facility (section 4.3.2.9).		at the crossing location.			followed.
KRG T45	The appropriation of large volumes of hydrostatic test water from surface water sources could temporarily affect the recreational and biological uses of the resource if the diversions constitute a large percentage of the source's total flow or volume. The diversion of large volumes of water from waterbodies could also result in the temporary loss of habitat, changes in water temperature and dissolved oxygen levels, and entrainment or impingement of fish or other aquatic organisms. The withdrawal of large amounts of water from private or public water supply wells could exceed the delivery capacity of the system or well (section 4.3.2.10).	Significant (CEQA Class II)	KRG T would acquire the necessary permits from state agencies before withdrawing hydrostatic test water, including specific approvals from applicable resource agencies. KRG T would minimize the potential for these effects by adhering to the hydrostatic testing measures included in its WWCM Procedures (see KRG T32). These measures include screening intake hoses and regulating the withdrawal of hydrostatic test water at a rate that would not adversely affect aquatic resources or downstream flows. KRG T would limit the rate of water withdrawal from private water wells and county water system wells so as not to exceed the delivery capacity of the system or well. KRG T would be testing only new pipe and would not add any chemicals to the water during hydrostatic testing.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.
RGT 46	The potential impacts resulting from the discharge of hydrostatic test waters onto land would include soil erosion and	Significant (CEQA Class II)	KRG T would acquire the necessary permits from state agencies before discharging hydrostatic test water, including specific approvals from applicable resource agencies.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number g/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG T46 (cont'd)	subsequent degradation of water quality, including increased turbidity and sedimentation from hydrostatic test water runoff. High velocity flows could also cause erosion of the streambanks and streambottom, resulting in a temporary increase of sediment load and destruction of habitat (section 4.3.2.10).		KRG T would use energy-dissipating devices and/or filter bags to prevent erosion, streambed scour, suspension of sediments, and excessive streamflow.			
KRG T47	Two of KRG T's proposed hydrostatic test water sources, the Bear River and Weber River, support coldwater fisheries and offer habitat to Federal and/or state-listed special status species (section 4.3.2.10).	Significant (CEQA Class II)	Hydrostatic test water intakes at these two waterbodies would be equipped with filtering and screening devices to avoid the pumping of organic debris and the entrainment of aquatic species. Test water intakes would be suspended above the stream bottom. Pursuant to permit conditions, KRG T would determine the allowable rates of withdrawal from surface waters to provide for adequate sustained flow based on conditions at the time that these withdrawals are made.	Less than significant (CEQA Class III)	Wyoming Utah	FERC and BLM monitors would verify mitigation is followed.
KRG T48	KRG T would apply water and/or a water-based, non-toxic, organic tackifier to the construction work area, including topsoil piles, to control dust generated by construction activities. The impacts on water resources due to the water withdrawals for dust control are the same as those outlined in KRG T45 for hydrostatic test water withdrawals (see section 4.3.2.11).	Significant (CEQA Class II)	KRG T would store the water in storage tanks located in extra work areas along the construction right-of-way. Trucks would fill up at the storage locations and then travel the right-of-way applying water as necessary to control dust. If the withdrawals are conducted according to KRG T's WWC M Procedures and its proposed mitigation measures for hydrostatic test water withdrawals (see KRG T45), and in compliance with applicable permit requirements, the impacts of dust control measures on water resources would be less than significant.	Less than significant (CEQA Class III)	All	FERC, CSLC, and BLM monitors would verify mitigation is followed.

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CALENDAR PAGE

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MINUTE PAGE

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

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

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

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

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number g/	Impact	Significance Before Mitigation b/	Mitigation	Significance After Mitigation b/	Applicability	Monitoring Responsibility
KRG150 (cont'd)			<p>the right-of-way and stored for use during restoration in areas specified in the site-specific Reclamation Plans.</p> <ul style="list-style-type: none"> Topsoil segregation would be conducted in accordance with KRG1's UECRM Plan or as requested by the land management agency/landowner (see KRG119). The maximum depth of topsoil to be segregated differs between each plan. 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), the vegetation would be mowed, scalped, or crushed, leaving plant root systems intact. Native vegetation removed would be retained for use as mulch during restoration activities. The remaining plant root systems would aid in holding the undisturbed topsoil in place, aid in moisture retention, help to retain organic matter within the soil, and potentially provide a seed source. The width of surface disturbance would be kept to a minimum in order to maximize the benefit of this treatment. This treatment would aid in minimizing soil disturbance, which would improve the restoration potential of disturbed areas. Surface rock, where present and appropriate for restoration activities, would be conserved during construction and spread over the topsoil during restoration to visually blend disturbed and undisturbed areas or for erosion control. In desert areas where a surface varnish is present, large rocks and boulders would be placed to face the varnish side upwards. Rock mulching would aid in stabilizing disturbed soils, reducing erosion, and minimizing visual impacts. Stockpiled surface rock may also be used as mulch where appropriate for the terrain or habitat type. 			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <u>a/</u>	Impact	Significance Before Mitigation <u>b/</u>	Mitigation	Significance After Mitigation <u>b/</u>	Applicability	Monitoring Responsibility
KRG150 (cont'd)			<ul style="list-style-type: none"> Severely compacted soils (except sandy soils) would be scarified to a depth of 6 inches. The need for scarification would be determined by an EI, in conjunction with the agencies' compliance monitor. This treatment would mitigate soil compaction caused by construction. Recontouring would occur in all treatment areas. The contours would be reshaped following backfilling of the trench and replacement of the topsoil to restore preconstruction contours and natural drainage patterns. This treatment would reduce erosion and minimize visual impacts. Imprinting of soils would be conducted in most areas. Following the respreading of topsoil and mulching, the disturbed area would be driven over by an imprinting device such as a sheepfoot (or other equipment). Small depressions would be made in the soil surface in a non-directional pattern. Exceptions to this treatment would be areas where imprinting is not deemed beneficial or in areas inaccessible to equipment. Examples of areas where imprinting would not be conducted include dry washes, wetland/riparian areas, and steeply sloped banks. Imprinting would aid in the collection of water, windblown seeds, and organic matter and would help to firm the soil surface and reduce the potential for wind and water erosion. Seeding would occur throughout the disturbed areas of the project. Within the Mojave Desert, a portion of the seed would be pelletized to add macrobiotic components developed specifically for Mojave Desert habitats. In desert areas, KRGT would salvage and transplant Joshua trees, yucca, cactus, and agave. Before construction, these species would be identified, removed, heeled-in, and irrigated in areas outside of the construction right-of-way, and then transplanted back onto the right-of-way as part of restoration activities. KRGT would locate transplant sites randomly along the right-of-way and/or at locations specified by the BLM. The north 			

TABLE 5.1-1 (cont'd)

Mitigation Monitoring Program for the Kern River 2003 Expansion Project

Mitigation Number <i>a</i> / (cont'd)	Impact	Significance Before Mitigation <i>b</i> / Mitigation <i>b</i> / Mitigation	Significance After Mitigation <i>b</i> / Mitigation <i>b</i> / Mitigation	Applicability	Monitoring Responsibility
KRG150 (cont'd)			<p>orientation of all cactus to be salvaged would be recorded and restored at the time of transplanting. KRG1 would water the transplants at the time of initial planting. A second watering would occur 1 to 2 weeks following transplanting. KRG1 proposes to use time release gels such as Dri-Water™ in the transplanting of succulent species to improve the success rate over its previous efforts. These time-release gels generally consist of starch-based substances that hold water and allow for its slow release over a period of time (typically 90 days).</p> <p>Because of the difficulty in handling larger specimens, Joshua trees over 6 to 8 feet in height and cholla cactus over 3 feet in height would not be transplanted but would be placed on the right-of-way during restoration and used as vertical mulch. Smaller species, such as button cactus and agave less than 6 inches in height, would be considered too small to feasibly transplant and would be used as vegetative mulch. The transplants that do not survive would also be beneficial to the reclamation process as vertical mulch. Vertical mulching would encourage the recruitment of native seeds, provide forage and cover habitat for native species, discourage colonization by invasive or exotic species, and reduce off-highway vehicle (OHV) use along the right-of-way. The processes of identification, removal, storage, and transplanting would be under the direction of a contracted reclamation specialist. KRG1 would 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). KRG1 would provide a summary of this information to the FERC, the BLM, and the California Department of Fish and Game (CDFG) (in California) for review.</p> <ul style="list-style-type: none"> Specific areas designated as visually sensitive would receive additional treatments to mitigate visual impacts. These treatments would include 		