

MINUTE ITEM

This Calendar Item No. C52 was approved as Minute Item No. 52 by the California State Lands Commission by a vote of 3 to 0 at its 12-3-99 meeting.

**CALENDAR ITEM
C52**

A 8,9,11
S 4,5,6,7

12/03/99
PRC 8134.9 W 25544
N. Smith

PERMIT FOR TELEPHONE LINE RIGHT OF WAY

PERMITTEE:

Williams Communications, Inc.
Attn: Mr. Stephen Lee
PO Box 22064
Tulsa, Oklahoma 74121

AREA, LAND TYPE, AND LOCATION:

Sovereign lands located in: (1) San Joaquin River and Mayberry Slough attached to the Antioch Bridge, near the city of Antioch, Contra Costa and Sacramento Counties; (2) Sacramento River at Sherman Island near the overhead transmission crossing, Sacramento and Solano Counties; and (3) Sacramento River just south the of I Street Bridge, near the city of Sacramento, Sacramento and Yolo Counties.

AUTHORIZED USE:

Installation, operation and maintenance of: (1) an attached six-inch diameter steel conduit containing eight innerducts; (2) directional boring and placement of a five-inch steel conduit containing three innerducts; and (3) existing conduit, this route contains one fiber optic cable with 96 to 288 hair-thin glass fibers.

LEASE TERM:

Continuous use plus one year, commencing December 4, 1999.

CONSIDERATION:

No monetary consideration shall be charged for the placement, use and maintenance of fiber optic cables or other similar transmission devices placed by those qualifying under the scope of Section 7901 of the Public Utilities Code.

OTHER PERTINENT INFORMATION:

1. Applicant has the right to use the uplands adjoining the lease premises. The fiber optic cable which is attached to the Antioch Bridge and the other which crosses the Sacramento River in the city of Sacramento and West

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Sacramento are currently within the lease premises of the California Department of Transportation and Pacific Bell, respectively. Both cable crossings are considered compatible uses with the existing leases.

2. Williams Communications, Inc. is proposing to construct an integral portion of its nationwide fiber optic network in California. This network includes eleven routes within the state and the route for consideration, at this time, is from Pittsburg to Sacramento.
3. A Mitigated Negative Declaration was prepared and adopted for that portion of the network within California by the California Public Utilities Commission. The California State Lands Commission's staff has reviewed the document. A Mitigation Monitoring Program was adopted by the California Public Utilities Commission.
4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

U.S. Fish and Wildlife Service, California Public Utilities Commission, California Department of Fish and Game and U.S. Army Corps of Engineers.

FURTHER APPROVALS REQUIRED:

State Reclamation Board.

EXHIBITS:

- A-1. Location Map - San Joaquin And Mayberry Slough, Antioch Bridge
- A-2. Location Map - Sacramento River, Sherman Island
- A-3. Location Map - Sacramento River, City Of Sacramento
- B. Mitigation Monitoring Program

PERMIT STREAMLINING ACT DEADLINE:

April 18, 2000

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

CALENDAR ITEM NO. C52 (CONT'D)

CEQA FINDING:

FIND THAT A MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING PROGRAM WERE PREPARED AND ADOPTED FOR THIS PROJECT BY THE CALIFORNIA PUBLIC UTILITIES COMMISSION AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN. ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT B, ATTACHED HERETO.

SIGNIFICANT LANDS INVENTORY FINDING:

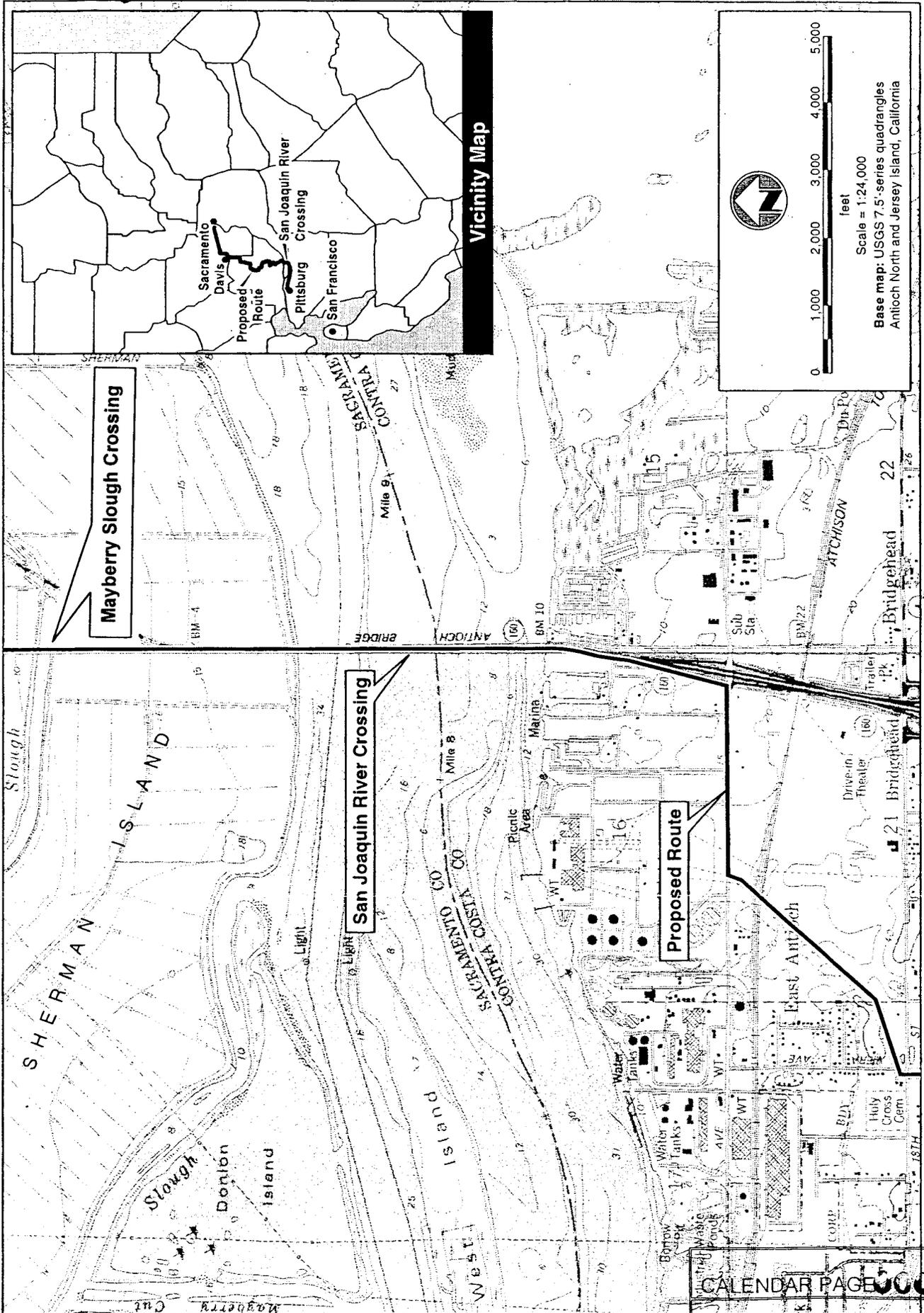
FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODE SECTIONS 6370, ET SEQ.

FINDING OF NON-INTERFERENCE WITH PUBLIC USE PURSUANT TO PUBLIC UTILITIES CODE SECTION 7901:

FIND THAT THE AUTHORIZED IMPROVEMENTS WILL NOT UNREASONABLY INTERFERE WITH THE PUBLIC USE OF THE PREMISES OR INTERRUPT THE NAVIGATION OF THE OVERLYING WATERS IF CARRIED OUT IN ACCORDANCE WITH THE TERMS, CONDITIONS AND COVENANTS OF THE PERMIT.

AUTHORIZATION:

AUTHORIZE ISSUANCE TO WILLIAMS COMMUNICATIONS, INC. OF A PERMIT FOR TELEPHONE LINE RIGHT OF WAY, FOR A TERM OF CONTINUOUS USE PLUS ONE YEAR, BEGINNING DECEMBER 4, 1999, FOR INSTALLATION, OPERATION AND MAINTENANCE OF: (1) A SIX-INCH DIAMETER STEEL CONDUIT CONTAINING EIGHT INNERDUCTS; (2) DIRECTIONAL BORING AND PLACEMENT OF A FIVE-INCH STEEL CONDUIT CONTAINING THREE INNERDUCTS; AND (3) AN INTERDUCT WITHIN AN EXISTING CONDUIT. ALL CONDUITS WILL CONTAIN ONLY ONE FIBER OPTIC CABLE WITH 96 TO 288 HAIR-THIN GLASS FIBERS ON THE LAND SHOWN ON EXHIBIT A-1, A-2, AND A-3, ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF; CONSIDERATION: EXEMPT PURSUANT TO SECTION 7901 OF THE PUBLIC UTILITIES CODE WITH THE STATE RESERVING THE RIGHT, IN THE EVENT OF CHANGED CIRCUMSTANCES, TO FIX A RENT AND MODIFY IT PERIODICALLY DURING THE PERMIT TERM, AS PROVIDED IN THE PERMIT.

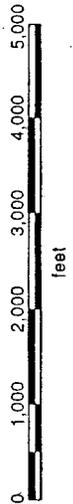


Mayberry Slough Crossing

San Joaquin River Crossing

Proposed Route

Vicinity Map

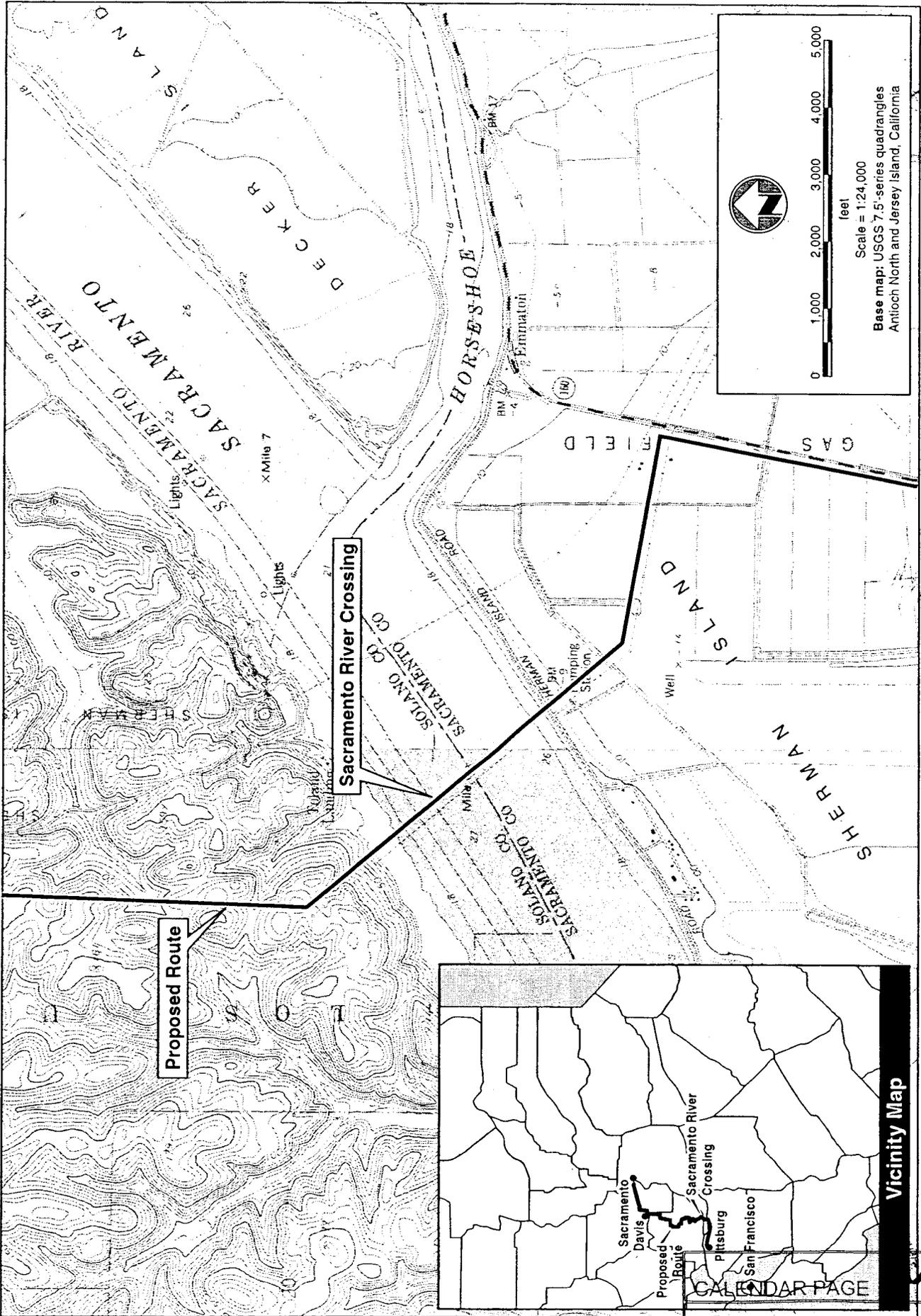


Scale = 1:24,000
 Base map: USGS 7.5'-series quadrangles
 Antioch North and Jersey Island, California

**Location of San Joaquin River and Mayberry Slough Crossings
 near Antioch**

Jones & Stokes Associates, Inc.

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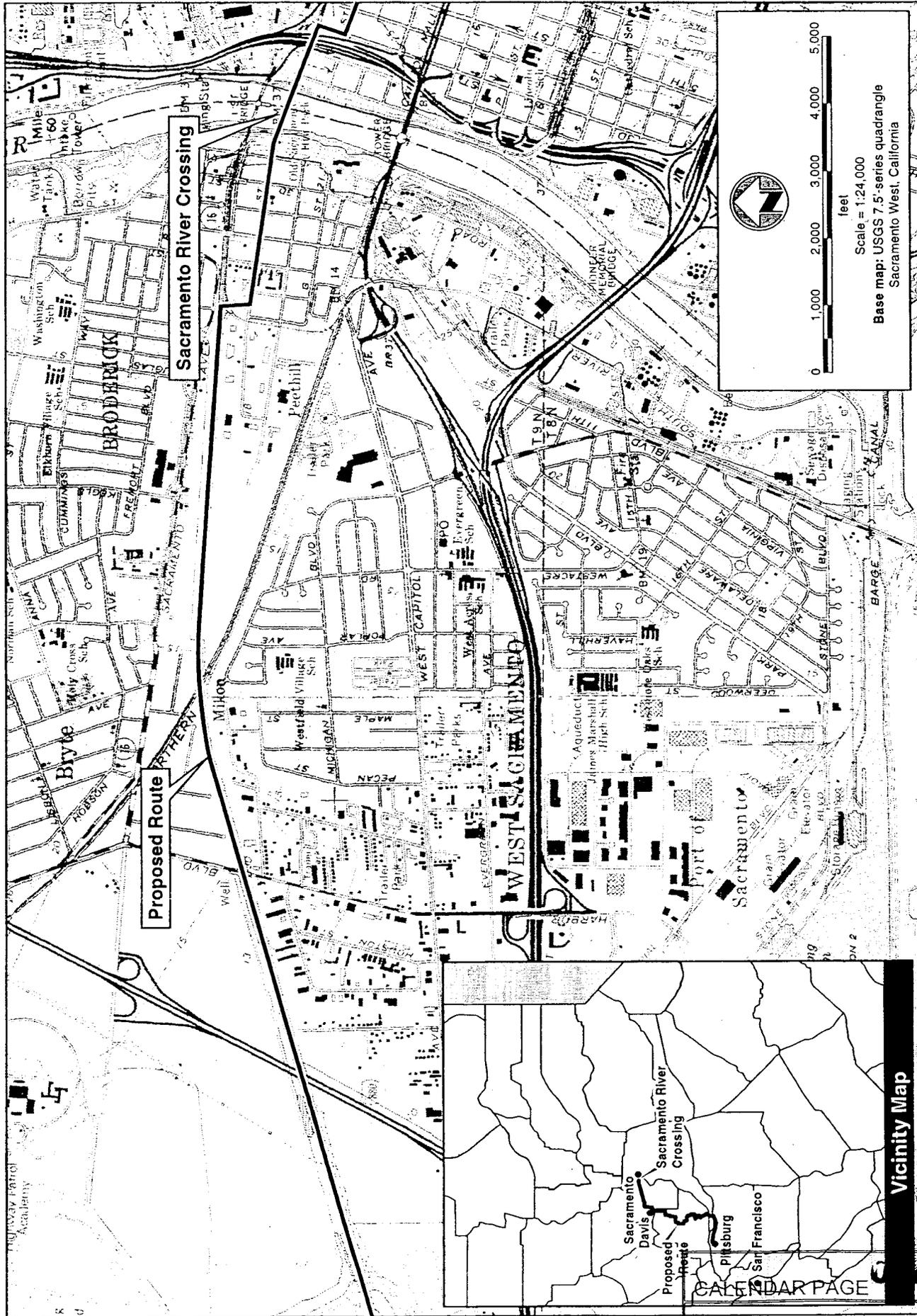
**Location of Sacramento River Crossing
at Sherman Island**

Jones & Stokes Associates, Inc.

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0006949



Location of Sacramento River Crossing at Sacramento

Jones & Stokes Associates, Inc.

EXHIBIT B

**Mitigation Monitoring Program Adopted by the
California Public Utilities Commission**

[Mitigation measures applicable to the Pittsburg to Sacramento
project route are marked with a check (✓).]

Introduction

PROJECT BACKGROUND

Williams Communications (Williams) is proposing to install a fiber optic telecommunications system along a series of routes in California. This applicant's mitigation monitoring plan is appended to the initial study/mitigated negative declaration (IS/MND) prepared for the proposed project and submitted to the California Public Utilities Commission (CPUC). The CPUC is adopting this mitigation monitoring plan with its approval of the Williams application for a Certificate of Public Convenience and Necessity (CPCN).

LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

Because the proposed project is located in California, it is subject to the requirements of the California Environmental Quality Act (CEQA). The CPUC is the designated state lead agency for review of this project under CEQA. Other agencies or governmental entities that may have jurisdiction over portions of the proposed project include:

- air pollution control and air quality management districts;
- California Coastal Commission;
- California Department of Fish and Game (DFG);
- California Department of Transportation;
- state regional water quality control boards;
- California State Lands Commission;
- California State Reclamation Board;
- California State Water Resources Control Board; and
- local counties, cities, and special districts.

The proposed fiber optic cable network crosses many jurisdictions and will require approvals and permits from various federal, state, and local agencies for the specific routes and associated facilities that comprise the proposed project. Portions of the routes are also subject to compliance with federal environmental regulations, including the following:

- Section 401 of the Clean Water Act requires a water quality certification (or waiver) to be obtained from the applicable regional water quality control board (RWQCB) for discharge activities that may affect water quality. The permit establishes measures to ensure water quality protection and is a required prerequisite for issuance of a Nationwide Permit No. 12 (see below).
- Section 402 of the Clean Water Act requires a National Pollution Discharge Elimination System (NPDES) certification to be obtained from the applicable RWQCB before construction that may disturb 5 acres or more of land. A storm water pollution prevention plan (SWPPP) containing erosion control measures is required.
- Section 404 of the Clean Water Act requires issuance of an individual or nationwide permit (in this instance, Nationwide Permit No. 12 for discharges associated with excavation, backfilling,

or bedding of utility lines) by the U.S. Army Corps of Engineers (Corps) before discharge into the waters of the United States, including wetlands.

- Section 10 of the Rivers and Harbors Act requires permit authorization for activities occurring within designated navigable waterways to maintain navigability in the interest of interstate commerce.
- Section 7 of the federal Endangered Species Act requires consultation with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service regarding necessary measures to avoid harm to plant, fish, and wildlife species that are federally listed as threatened or endangered where there is a federal lead agency (e.g., Corps, U.S. Forest Service, U.S. Bureau of Land Management) action. Section 7 requires and establishes protocols for preconstruction wildlife surveys and mitigation measures.
- Section 10 of the Endangered Species Act requires the issuance of an incidental take permit before any public or private action may be taken that would potentially harm, harass, injure, capture, collect, or otherwise hurt (i.e., take) any individual of an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan that would offset the take of individuals, which may occur as an incidental effect of the project, providing for the overall preservation of their species through specific mitigation measures.
- Section 106 of the National Historic Preservation Act requires examination of cultural resources before various federal agencies can provide permits under their jurisdiction. Section 106 establishes requirements and protocols for preconstruction cultural resource surveys and mitigation of impacts on cultural resources.
- Section 1603 of the California Fish and Game Code requires a streambed alteration agreement from DFG before any action that would divert or obstruct flow or alter the channel of designated drainages, rivers, streams, and lakes. Potential impacts must be mitigated.
- The California State Lands Commission requires an easement (Pub. Res. Code 6301) for lands crossed by the route below the ordinary high-water mark of tidal waters and below the low-water mark of nontidal waterways (e.g., the Sacramento River crossing).

SUPPORTING TECHNICAL DOCUMENTATION

The following technical studies and documents have been or are being prepared in support of the mitigated negative declaration. Copies of the pertinent reports will be provided to the CPUC, applicable jurisdictional agencies, and the project's environmental resources coordinators and resource monitors before the initiation of construction activities:

- Storm water pollution prevention plans - SWPPPs are being developed for all project routes and will be submitted to the appropriate RWQCBs in support of NPDES regulations, where applicable. The plans identify activities that may cause pollutant discharge (including sediment) during storms and the best management practices that will be employed to control pollutant discharge. Construction techniques are identified to reduce the potential for runoff, including minimizing site disturbance, controlling water flow over construction sites, stabilizing bare soil, and ensuring proper site cleanup. Additionally, the plans specify the erosion and sedimentation control measures to be implemented, such as silt fences, trench plugs, terraces, water bars, best management practices, and seeding and mulching. The SWPPPs also specify spill prevention countermeasures.

identify the types of materials used for equipment operation (mainly vehicle fluids such as fuel and hydraulic fluids), and identify measures to prevent or cleanup hazardous material and waste spills. Emergency procedures for responding to spills is also identified. The SWPPP will be included in the contract specifications for each specific route.

- Fire prevention and response plans - Fire prevention and response plans are being developed for some project routes with input from the fire response managers of affected agencies. The plans identify the fire precaution and suppression measures that will be implemented and the parties responsible for fire prevention and response. Prevention and response measures, such as requirements to have firefighting water tanks on site and extinguishers and shovels in vehicles, are being identified. The fire prevention and response plan, as applicable, will be included in the contract specifications for each applicable route. The following project routes require a fire prevention and response plan: Point Arena to Sacramento, Sacramento to the California/Nevada border, San Luis Obispo to Bakersfield, San Luis Obispo to Los Osos Loop, Riverside to California/Arizona border, and Los Angeles to Riverside.
- Reclamation plans - Reclamation plans are being developed for all project routes to identify areas that will be restored and the methods that will be used. Seed mixes, schedules, success criteria, and success monitoring for restoration of wetlands and drainages are being identified. The reclamation plan, as applicable, will be included in the contract specifications for each applicable route.
- Wetland delineation reports are being prepared for each project route and will be submitted and verified by the Corps to support authorization of Nationwide Permit No. 12 before construction of applicable routes.
- Cultural resource inventory reports are being prepared for each project route in compliance with the National Historic Preservation Act, which also requires evaluation of some cultural resources and consultation between applicable federal agencies and the State Historic Preservation Officer.

PURPOSE OF THIS MITIGATION MONITORING PLAN

When approving a mitigated negative declaration, the CPUC must adopt a mitigation monitoring or reporting program for those mitigation measures included in the mitigated negative declaration or made a condition of project approval to avoid significant effects (Pub Res. Code Sec. 21081.6, State CEQA Guidelines Sec. 15097). The purpose of the plan document is to ensure that the mitigation measures required by the CPUC will be implemented.

The objectives of monitoring are to:

- ensure that mitigation measures are properly implemented;
- provide feedback to agency staff and decision makers about the effectiveness of their actions;
- provide learning opportunities for improving mitigation measures on future projects; and
- identify the need for enforcement action before irreversible environmental damage occurs.

A detailed implementation strategy will be prepared outlining the process for carrying out the mitigation requirements of the proposed project. The implementation strategy will be submitted to the CPUC for review and opinion before construction.

Reporting and Field Organization

MITIGATION MONITORING RESPONSIBILITY

The CPUC is responsible for ensuring full compliance with the mitigation measures adopted with the mitigated negative declaration for the proposed project. The CPUC will monitor and report on all mitigation and construction activities and will require Williams to implement this mitigation monitoring plan. Williams is responsible for complying with the mitigation measures and reporting the progress of that compliance through the mitigation monitoring plan.

Williams will ensure that any deviation from the procedures identified under the mitigation monitoring plan is first approved by the CPUC and other appropriate agencies. Any proposed deviation will be reported immediately to the CPUC and appropriate agencies by Williams for consideration by the CPUC.

Williams will inform the CPUC of any mitigation measures that are not or cannot be successfully implemented. The CPUC will assess whether alternative mitigation is appropriate and specify to Williams the subsequent actions required.

CONSTRUCTION MANAGEMENT STRUCTURE

Williams has extensive experience constructing fiber optic facilities. Since 1997, the company has installed over 6,000 miles of fiber optic cable in the United States. Before 1997, a former affiliate of Williams pioneered fiber optic installation within idle pipelines and pipeline corridors while constructing and operating a 13,000-mile fiber optic network spanning 37 states.

To provide the best potential for success of the proposed project, a proper management structure, adequate training of field personnel, an environmental training program, and the ability to respond to changing circumstances are critical. For each project route, a field management structure has been established to oversee the construction process (refer to Figure 2-7 in the IS/MND). Additionally, training classes for the contractor and construction crews will be held covering issues such as environmental protection safety, spill prevention and response, fire prevention and management, and proper management of stormwater runoff.

The field management structure established for each project route will include engineering, construction, and environmental personnel such as spread superintendents, spread supervisors, contract compliance inspectors, environmental resource coordinators, and biological and archeological support. The roles and responsibilities of each onsite representative will be clearly understood and communicated during the training program and are summarized below.

Spread Superintendent

The Williams contractor and spread superintendent will be on site to address engineering questions, make field decisions, and coordinate with permitting agencies. The spread superintendent has the overall responsibility for onsite decisions and the direct reporting responsibilities to the Williams' project manager for contract compliance as well as the ability to shut down the construction operations in case of

environmental noncompliance, emergencies, safety-related issues, and disputes with the construction contractor.

Spread Supervisor

Williams' spread supervisor will be on site for each contractor to oversee the individual contract compliance inspectors and work with the contractor to resolve field conflicts. The spread supervisor will report directly to the spread superintendent and also perform most of the administrative duties. The spread supervisor will communicate daily all construction activities related to compliance, safety, and administration.

Contract Compliance Inspectors

Contract compliance inspectors will be assigned to each construction crew to observe their work. Where crews work in the same area, one inspector could monitor more than one crew. The inspector will monitor the environmental resource concerns and check implementation of the erosion protection measures. The contract compliance inspector will be trained on environmental issues that may be encountered during the construction project and will have immediate access to qualified biologists, archeologists, and paleontologists when needed.

Environmental Resource Coordinator

An environmental resource coordinator will be assigned to each project route. The environmental resource coordinator will work with the contract compliance inspector and biologists and archeologists and agencies and the engineering and construction representatives to resolve conflicts and coordinate resource avoidance and protection. The environmental resource coordinator will patrol the construction site periodically (while maintaining contact with spread superintendents, spread supervisors, and contract compliance inspector) to help monitor implementation of the resource protection measures.

Biological and Archeological Resource Monitors

Qualified biologists and archeologists will locate and stake in the field and locate on the construction drawings previously identified sensitive resources and identify for the contractor the necessary protection methods. Biologists and archaeologists will also be onsite during construction where their presence is needed and as required in this document or as a condition of required permits. Additionally, they will coordinate, as necessary, with monitors from the CPUC and any other appropriate agencies. Other resource monitors will be available, as necessary and appropriate (i.e., Native American and paleontological monitors).

ENVIRONMENTAL TRAINING AND AWARENESS

An important part of implementing the proposed project is education through training and awareness programs. All levels of field management and construction personnel will be informed about environmental protection and the seriousness of non-compliance. Training will take place at the Williams engineering level and at the contractor level. Appropriate personnel from the CPUC and other regulatory agencies will be invited.

Williams and its Consultant Team

Williams and its consultant team includes contract compliance inspectors, environmental resource coordinators, biologists and archeologists, resource personnel, and spread superintendents and supervisors. Training seminars led by project managers and qualified biologists and archeologists will be held before construction to explain and educate construction supervisors and managers about the following:

- the need for and importance of resource avoidance and protection,
- resource mapping format and interpretation of construction drawings,
- resource protection staking methods,
- construction process as it relates to required mitigation measures,
- roles and responsibilities, and
- project management structure and contacts.

All contract compliance inspectors will be required to complete an inspector training class. These classes will cover issues such as the environmental issues mentioned above, resource mapping and construction drawing interpretation, roles and responsibilities, and site safety.

Contractor Team

The contractors team will include the job superintendent, crew foremen, and crew members. The training and education will take place through several processes beginning with the preconstruction meetings and ending with training classes just before construction activities.

Preconstruction Meetings

Meetings with the contractor will be held before construction begins for each project route. These meetings will be used as an opportunity to reinforce the need for and importance of compliance with environmental resource avoidance and protection measures.

The following issues related to environmental protection will be explained at these meetings:

- the need for and importance of resource avoidance and protection,
- resource mapping format and interpretation of construction drawings,
- resource protection staking methods,
- construction process as it relates to required mitigation measures,
- roles and responsibilities, and
- project management structure and contacts.

Field Meetings - Contractor Job Superintendents and Foremen

The spread superintendents and supervisors, contract compliance inspectors, and environmental coordinators will regularly conduct meetings with the contractors' superintendents and foremen to coordinate the construction and mitigation processes.

Contractor Crew Members

The contractors' foremen will be responsible for transmitting the information discussed in the preconstruction meetings for the superintendents and foremen to the individual crew members through tailgate meetings in the field. These tailgate meetings will be attended by the contract compliance inspectors

and environmental resource coordinator and will usually be held weekly to discuss safety issues. Environmental issues will be included and discussed in these meetings.

CONSTRUCTION SCHEDULE AND WORKFORCE

Construction Schedule

Clearance for construction of the fiber optic cable system is scheduled to commence on September 1, 1999, or on receipt of all necessary authorizations from the CPUC and other applicable governing agencies, and to be completed by April 1, 2000. All permits and approvals will be in place before construction commences and will be provided to the CPUC. Construction on some segments of the project routes will be subject to various schedule windows so that potential disturbance of sensitive species can be avoided.

Construction segments and schedules may vary according to environmental constraints (biological, archeological, seasonal work windows) and the completion of permitting processes.

Timing of Work

Monitoring activities associated with construction will proceed as follows:

- locate all sensitive resources, construction methods, and avoidance measures or mitigation measures on the construction drawings;
- acquire permits and approvals from governing agencies;
- conduct preconstruction wildlife surveys in predetermined suitable habitat areas;
- prepare traffic plans, as necessary;
- stake and flag resources as stipulated in the environmental documentation and from results of field surveys conducted for each project route;
- prepare the rights-of-way and install sedimentation control measures where needed;
- install conduit and fiber optic cable and construct associated facilities;
- restore the rights-of-way and install erosion control measures;
- apply seed and mulch as specified in the SWPPPs and reclamation plans;
- monitor erosion control; and
- monitor success of mitigation.

Construction Workforce

The labor and equipment associated with each type of operation were discussed previously. Discussed below is the number and types of crews associated with each spread and the flow of construction activities along the project routes. The actual number and composition of the workforces may vary with conditions

at the time of construction. The contractor is responsible for determining the most efficient methods for completing the work within the parameters given.

Williams is anticipating hiring multiple contractors for most routes, depending on the length of the route and the amount of time available to install the conduit and cable and construct associated facilities after the completion of the CEQA and permitting processes and the onset of the wet season.

On past similar fiber optic installation projects with multiple contractors, each contractor has been expected to operate one spread per route. The number of spreads may vary depending on the contractor's ability to meet the schedule for cable system installation. Each spread will consist of the following crews:

- **Preparation Crew** – The preparation crews will prepare the rights-of-way for construction by placing temporary gates in fences, clearing vegetation where necessary, and repairing erosion problems on existing roads to provide access.
- **Conduit and Cable Installation Crew** – The conduit and cable installation crews will install the conduit and cable using the construction methods discussed in the IS/MND.
- **Cleanup Crew** – The cleanup crews will perform final cleanup of the rights-of-way, restoring preinstallation ground contours, installing erosion protection measures (e.g., erosion control blankets), and restoring affected stream channels.
- **Seeding Crew** – The seeding crews will apply seed and mulch where necessary.

REPORTING PROCEDURES

The monitoring reporting procedures for implementation of mitigation for each project route are described below and show in Table 1.

Table 1. Mitigation Monitoring Reporting Procedure Summary

Reports	Prepared By	Prepared When	Submitted When	Submitted To	Copies to
Field Report					
Daily log	Resource monitor	Daily	End of week	Environmental resource coordinator	File
	Contract compliance inspector	Daily	End of week	Environmental resource coordinator	File
Site Monitoring Report					
First	Resource monitor	Preconstruction staking	End of week	Environmental resource coordinator	File
Second	Resource monitor	Construction monitoring	End of week	Environmental resource coordinator	File
Third	Resource monitor	Postconstruction site evaluation	End of week	Environmental resource coordinator	File

Table 1. Mitigation Monitoring Reporting Procedure Summary

Reports	Prepared By	Prepared When	Submitted When	Submitted To	Copies to
Database entry	Environmental resource coordinator	Weekly	Faxed or e-mailed weekly	CPUC	None needed
Violation Report					
Notification requirement	Any contract compliance inspector or resource monitor observing violation	Notify environmental resource coordinator immediately	Immediately	Environmental resource coordinator notifies spread supervisor, CPUC, and other appropriate agencies immediately	N/A
Report	Any contract compliance inspector or resource monitor observing violation	Immediately (include photos if possible)	Next working day	Environmental resource coordinator	Environmental resource coordinator sends report to CPUC and other appropriate agencies
Progress Reports					
Monthly letter	Environmental resource coordinator	Throughout month	End of month	CPUC	Interested parties on request
Installation completion report	Environmental resource coordinator	Project completion following all reclamation activities	Project completion following all reclamation activities	CPUC	Interested resource agencies on request

Field Reports

Each of the resource monitors and each of the contract compliance inspectors will complete a daily progress log and forward it to the environmental resource coordinator for that project route at the end of each week. Daily logs will be kept on file by the environmental resource coordinators for future reference.

For identified resources, the resource monitors will complete an environmental site monitoring report. This form is in triplicate so that it can be submitted upon completion of preconstruction resource staking, construction monitoring, and post-construction site evaluation. Once a week, completed forms for identified resources will be submitted to the environmental resource coordinator. Resource monitors will submit the second and third copy of the form as each phase of construction monitoring is completed for the specific resource. Other field reports will be completed as specified in permits and plans.

The environmental resource coordinator for each project route will enter pertinent information from the progress logs and monitoring reports into a database. Once a week, these reports will be faxed or e-mailed to the CPUC Energy Division Analysis Branch Environmental Program staff at 415/703-2200 for review.

Contract compliance inspectors and resource monitors will immediately alert the environmental resource coordinator of any violation of the mitigation measures. The environmental resource coordinator will immediately notify the spread supervisor, the CPUC, and other appropriate agencies. A violation report will be completed by any project construction management or environmental representative who observes a violation of the mitigation measures. Photo documentation will accompany the report when possible. By the next working day, the contract compliance inspector or resource monitor will submit a completed violation form to the environmental resource coordinator. The environmental resource coordinator will immediately fax the violation report to the CPUC staff and other appropriate agencies.

Progress Reports

The environmental resource coordinator for each project route will submit a written progress report to the CPUC each month. This report will discuss the progress of construction, resulting impacts, mitigation implemented, violations and remediation measures, if any, and any other noteworthy elements of the project and the monitoring program. The CPUC will provide copies of these reports to interested resource agencies on request. The report shall be sent to:

California Public Utilities Commission
Energy Division, Analysis Branch
505 Van Ness Avenue, Fourth Floor
San Francisco, CA 94102
Attn: John Boccio

Installation Completion Report

Following completion of all construction activities, the environmental resource coordinator will inspect and certify completion of the mitigation measures and conduct post-project evaluations. An installation report will be prepared for each project route by the respective environmental resource coordinator and submitted to the CPUC and made available to other regulatory agencies (e.g., DFG, USFWS, SLC) on request following completion of construction. The report will summarize compliance with the mitigation measures made a part of approval by the CPUC. The report shall describe any problems encountered in implementing the mitigation measures.

Long-Term Monitoring

Nearly all of the monitoring procedures discussed in this plan will be conducted during the construction phase of the project (including preconstruction, construction, and reclamation or restoration activities, as applicable). However, Measure B-40 establishes monitoring commitments that could continue for some time after installation is completed. These involve site-specific reporting requirements to ensure that long-term restoration and revegetation actions are successfully implemented. The CPUC and Williams will be responsible for monitoring long-term mitigation measures.

VARIANCE PROCESS

The basic protocol for submitting a variance will vary depending on the proposed change. Three types of variances have been identified: minor variances, zone variances, and project-wide variances.

A minor variance is site-specific in nature and would modify implementation of a mitigation measure so that the same or elevated level of resource protection is provided and would result in no new impacts. Agency monitors have the authority to conduct the technical and field review, coordinate with the lead and

trustee agencies, and approve or deny the variance within an approximate turnaround time of two working days.

Williams will obtain a variance for any deviation from the project description (i.e., change in location of regenerator/OP-AMP stations) as approved in the IS/MND or for any construction, operation, or maintenance activity or practice that is not carried out in accordance with approved plans, mitigation measures, or other conditions of approval.

Williams will apply for a zone variance when the proposed modification would apply throughout a specific area of the project and the modification would result in the same or elevated level of resource protection and would not result in any new impacts. Agency monitors do not have the authority to approve zone variance requests in the field. Williams must prepare a variance request and submit it to the lead agencies (and any trustee agencies as applicable) for review and approval. Turnaround time would be flexible for zone variances, but is anticipated to be less than five working days. Williams would not initiate the requested activity until the variance is approved.

A request for a project-wide variance would be applicable for a modification of the implementation of a mitigation measure for the entire project that results in the same or elevated level of resource protection; a change in project description; or a waiver of adopted mitigation measures, mitigation plans and conditions, or permit conditions. Agency monitors do not have the authority to approve project-wide variances. Williams must prepare a variance request and submit it to the lead agencies (and any trustee agencies as applicable) for review and approval. Turnaround time would be variable and will depend on the level of review required and the availability of staff to process the request. Williams would not initiate the requested activity until the variance is approved.

All variance requests will include the following minimum information:

- a description of the requested action,
- the reason for the variance,
- relevant mitigation requirements,
- the impact of the variance,
- additional relevant mitigation resulting from variance, and
- the impact of not obtaining the variance.

Mitigation Monitoring

The following discussion of mitigation is organized by environmental issue, following the initial study checklist in Appendix G of the State CEQA Guidelines. Potential impacts of the proposed project and mitigation measures and the particular routes to which the measures apply are listed in the "Summary" section of the IS/MND.

The discussion does not include issues for which no mitigation is necessary. For each mitigation measure, the party responsible for undertaking the measure, the timing of the measure (i.e., before, during, or after installation), and the program for monitoring the mitigation are described. (All references to the CPUC pertain to the California Public Utilities Commission, Energy Division, Analysis Branch, unless otherwise specified.)

GENERAL MEASURES

In addition to the mitigation measures discussed later in this section, general measures have been incorporated into project design and construction. To ensure that the measures are implemented appropriately, Williams will be assisted by the contract compliance inspectors, resource monitors, and environmental resource coordinators for each project route. These individuals are identified in this plan under "responsible party."

Williams general measures include the following:

- implement route-specific plans (including SWPPPs, reclamation plans, fire prevention and response plans, and traffic control plans);
- site equipment staging areas in disturbed areas and in locations that avoid impacts on sensitive resources;
- implement all state and federal permit conditions (e.g., Section 404 wetlands permit, Section 401 water quality certification, Endangered Species Act restrictions, Section 1603 streambed alteration agreement);
- mark the location of sensitive resource areas in the field and on construction drawings to be used by Williams and its contractors; and
- provide environmental training programs for monitoring, construction, and engineering personnel.

SPECIFIC MEASURES

Specific measures to avoid or minimize the potential for significant impacts on environmental resources to less-than-significant levels have been incorporated into the project design and construction. The essential responsibility for complying with these commitments, as well as the mitigation measures imposed, rests with

Williams. Williams is responsible for ensuring that its construction contractors will implement the mitigation measures.

The following measures have been developed and designed as part of the proposed project to avoid or reduce all potential significant impacts to less-than-significant levels:

- **Staging Areas** - No new equipment staging areas will be established in undisturbed areas or on public lands; all staging areas will be located on private lands. To the fullest extent possible, access to the proposed project routes will be by existing access roads to the utility, pipeline, road, or railroad rights-of-way used for the proposed project. If any new access roads to regenerator/OP-AMP stations are required, surveys will be conducted to identify sensitive biological and archeological resources. These resources will be fully avoided and cleared for use by the CPUC before construction.
- **Sensitive Resources** - All sensitive resources (i.e., biological and archeological resources, sensitive stream crossings, wetlands) will be identified during field studies and staked and flagged in the field and marked on construction drawings before construction. Most sensitive resources (approximately 90 percent) already have been identified, along each of the project routes and are specifically addressed and documented in the IS/MND. All sensitive resources will be identified and documented for the CPUC and other regulatory agencies at the permitting stage and before construction. The remaining field studies are currently in progress. Sensitive resources will be avoided by minor rerouting of the cable route within the disturbed right-of-way; boring under the resource; or attaching the conduit to an existing bridge, where applicable. The conduit and cable will be bored under sensitive streams (streams supporting threatened or endangered species or other resources of special value) or attached to bridges, and no construction activities will be conducted within the limits of the stream. No construction equipment will be operated in sensitive streams.
- **Work Scheduling** - Construction activities will be scheduled so as not to interfere with the reproductive cycles of sensitive plant and animal species. Construction work windows will be included, where applicable, into the construction specifications.
- **Work in Wet Weather** - In consultation with the contract compliance inspector and environmental professionals, as needed, no construction or routine maintenance activities will be performed during periods when the soil is too wet to support the construction equipment.

This plan is considered a working document and, in accordance with the mitigation measures, will incorporate conditions of permits as they are issued by regulatory agencies with jurisdiction over the proposed project. Williams will be responsible for distributing permit conditions to construction contractors as permits are issued and ensuring that these conditions are carried out.

Williams has committed as its preference to avoid all significant impacts. Where all avoidance is not possible, Williams has committed to reducing all potentially significant impacts to less-than-significant levels by:

- incorporating all mitigation measures described in Chapters 2 and 5 of the IS/MND into the proposed project;
- implementing various plans (i.e., storm water pollution prevention, fire prevention and management, reclamation, and traffic control plans), where necessary;

- committing to either rerouting the conduit and cable around sensitive resources, boring the conduit under sensitive resources, or attaching it to existing bridges, where available;
- siting the cable system (conduit and cable and regenerator/OP-AMP sites) in the field in areas that do not support sensitive resources with support from qualified biologists, archeologists, and other resource personnel;
- staking and flagging resources in the field and locating sensitive resources on construction drawings before construction;
- conducting an environmental training and awareness program;
- establishing a construction management structure in the field to ensure avoidance; and
- adopting all the mitigation measures identified in the IS/MND.

MITIGATION MEASURES

Aesthetics

Mitigation Measure A-1: Design Regenerator/OP-AMP Stations to Be Unobtrusive

When constructing regenerator/OP-AMP stations in rural areas, Williams will implement various measures to reduce the visual impact of the facility, such as siting the facility where it will be screened by existing vegetation or topography, and will design the exterior to blend with the surroundings. ("Rural areas" are those sites located outside the corporate limits of a city or that are zoned for agricultural use.) The buildings will be colored in the predominant shade of their surroundings. Williams will comply with any local permit design requirements and conditions and report compliance with those measures to the appropriate local agency.

Responsible Party: Williams -- environmental resource coordinator.

Timing: Before construction of stations; after local permitting, if any.

Monitoring Program: The environmental resource coordinators for each of the routes will notify the CPUC at such time as Williams applies to a city or county for a use permit for a regenerator/OP-AMP station. At such time as a permit is granted, each environmental resource coordinator shall notify the CPUC and provide a copy of the approved permit, including the conditions of approval. Where no local use permit is required, the environmental resource coordinator shall provide to the CPUC the proposed exterior elevations of the station for review and concurrence. The environmental resource coordinator will notify the CPUC of installations and provide a photo of the completed regenerator/OP-AMP station.

Air Quality

Mitigation Measure AQ-1: Implement Construction Best Management Practices

Williams will use best management practices, as required in the respective air pollution control district or air quality management district, for construction activities and will train work crews in those measures before beginning work. The available best management practices will, at a minimum, include the practices listed below in combination with any additional practices required by the presiding air district.

- Water construction areas to minimize visible dust emissions.
- Apply approved nontoxic chemical soil stabilizers according to manufacturer specifications to all inactive construction areas (previously graded areas that remain inactive for 96 hours).
- Reestablish ground cover on the construction site through seeding, as required for erosion control.
- Maintain truck and equipment engines in good running condition.
- Clean equipment daily or as needed to reduce tracking of soil onto adjacent roads.
- Clean adjacent roads daily or as needed to remove accumulated soil.
- Limit maximum speed to 15 miles per hour (mph) on unpaved roads.
- Suspend all grading operations when wind gusts exceed 25 mph.

Responsible Party: Williams -- environmental resource coordinator.

Timing: During installation. Before operation of fiber-optic cable.

Monitoring Program: The environmental resource coordinator for each of the routes will notify the CPUC at such time as Williams applies to the air district for a permit to operate. At such time as a permit is granted, each environmental resource coordinator shall notify the CPUC and provide a copy of the permit conditions, if any. The environmental resource coordinator shall report on compliance in the weekly progress report to the CPUC.

Mitigation Measure AQ-2: Obtain Authority to Construct and Permit to Operate Emergency Backup Generators, Where Required ✓

Before construction and operation of any emergency backup generators in districts requiring permits for such facilities, Williams will obtain an authority to construct permit and a permit to operate from the appropriate air pollution control or air quality management district.

Responsible Party: Williams -- environmental resource coordinator.

Timing: Before operation of the emergency backup generators in districts requiring permits.

Monitoring Program: The environmental resource coordinators for each of the routes will notify the CPUC at such time as Williams applies to the air district for a permit to operate. At such time as a permit is granted, each environmental resource coordinator shall notify the CPUC and provide a copy of the permit conditions.

Biological Resources

NOTE: *The following impacts and corresponding mitigation measures are taken from the mitigated negative declaration adopted by the CPUC. Nonetheless, changes may yet occur as federal and state resource agencies (e.g., the Corps, USFWS, DFG) consider and approve regulatory permits for the project (e.g., Section 404, biological opinion, Section 1603). The final measures will be evaluated and incorporated into the mitigation monitoring plan before construction.*

Mitigation Measure B-1: Retain Qualified Biologists and Resource Specialists to Monitor Construction Activities near Specified Sensitive Biological Areas

Williams will retain qualified biologists and other qualified resource specialists, as necessary, to monitor fiber optic cable installation activities on each project route where sensitive resources have been identified. Monitors will be hired and trained prior to construction and will be responsible for preconstruction surveys, staking resources, onsite monitoring, documentation of violations and compliance, coordination with contract compliance inspectors, and postconstruction documentation.

Biological monitors will locate and stake previously identified sensitive resources before construction activities begin in specified segments. Resource monitors/contract construction inspectors will patrol areas and work with contract compliance inspectors to ensure that barrier fencing, stakes, and required setback buffers are maintained. They will also be responsible for monitoring construction activities in areas that support special-status species, woody riparian vegetation, wetlands, and perennial (i.e., flowing at the time of construction) drainage crossings.

The field monitors will also be responsible for completing variance forms and obtaining clearance from the resource agencies for deviations from the mitigation measures (e.g., decreases in exclusion zones).

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The environmental resource coordinator will be responsible for ensuring that the resource monitors are staking resources and monitoring activities in sensitive areas. The environmental resource coordinator will report on compliance in the weekly report to the CPUC.

Mitigation Measure B-2: Conduct a Biological Resource Education Program for Construction Crews and Enforce Construction Restrictions before Construction

Williams will conduct a biological resource education program for construction crews (primarily crew and construction foremen) before construction activities begin. The education program will include a brief review of the special-status species and other sensitive resources that could exist in the proposed project study area (including their life history and habitat requirements) and what portions of the proposed project study area they may be found in and their legal status and protection under the U.S. Endangered Species Act of 1973 (16 USC 1536). The education program will include materials describing sensitive resources, resource avoidance, permit conditions, and possible fines for violations of state or federal environmental laws. The program will also cover the mitigation measures, environmental permits, and proposed project plans, such as a SWPPP, reclamation plan, and any other required plans. The program will also cover interpretation of the construction drawings because sensitive resources will be marked on the drawings. The education program will inform construction personnel of possible fines for violations. The construction

monitors will hand out written materials describing sensitive resources, resource avoidance, permit conditions, and fines. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Multiple education programs will be conducted as needed to inform appropriate new personnel brought on the job during the construction period.

Responsible Party: Williams -- environmental resource coordinator, engineering project manager, and construction manager.

Timing: Before and during construction.

Monitoring Program: The environmental resource coordinator shall notify the CPUC that the education program has been completed before beginning construction on each spread. The contract compliance inspector shall monitor adherence to the guidelines and restrictions presented during the education program on an ongoing basis and shall notify the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the CPUC of any noncompliance.

Mitigation Measure B-3: Avoid Impacts on State-Listed and Federally Listed and CNPS 1B Special-status Plant Populations by Establishing and Observing Exclusion Zones ✓

This mitigation measure focuses on avoiding all direct and indirect effects on threatened, endangered, and candidate and other special-status plants (California Native Plant Society [CNPS] List 1B) located during floristic surveys. Before construction, qualified biologists will establish exclusion zones around these special-status plant populations or areas identified as suitable habitat for special-status plants that were not identifiable at the time of the field surveys (e.g., along the San Luis Obispo to Bakersfield project route). Exclusion zones will have a minimum 20-foot radius and will be marked in the field with stakes and flagging and marked on the construction drawings. Construction-related activities will be prohibited within these zones. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zones. Fiber optic cable installation near these resources will be accomplished by rerouting around the exclusion zone. If rerouting is not feasible, the fiber optic conduit will be bored beneath the exclusion zone. Williams will remove all stakes and flagging demarcating exclusion zones within 60 days after construction and site restoration have been completed in the area.

Responsible Party: Williams -- Resource monitor and environmental resource coordinator.

Timing: Before and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The environmental resource coordinator shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-4: Avoid Impacts on CNPS Lists 2 and 4 Special-status Plant Populations by Implementing Specific Measures ✓

Complete avoidance of some nonlisted special-status plant populations may be considered unwarranted (e.g., certain locally common CNPS List 2 species). For some species, impacts of the proposed project would not be significant based on the distribution of the species, the narrow corridor of the cable route, and other factors (e.g., timing of installation may avoid the plants' critical reproductive period). For other species, the

impact of construction activities could result in an impact on the local plant population. To avoid significant impacts on CNPS Lists 2 and 4 special-status plants, the following measures will be implemented:

- Identify plant populations and areas identified as suitable habitat in the construction corridor and staging areas using staking and flagging.
- Conduct construction activities during the period when the plant is not flowering or fruiting.
- Minimize disturbance in areas that support special-status plants by limiting ground disturbance and other activities to the smallest possible corridor.
- Identify CNPS List 2 plant populations that may be affected at least 2 weeks prior to disturbance to allow time for coordination with the appropriate land management and resource agencies (e.g., DFG, USFWS, U.S. Bureau of Land Management [BLM], and CPUC). The appropriate agencies will be contacted to discuss the most appropriate measures to use for minimizing impacts on CNPS List 2 species. In general, the measures will include excavating the appropriate topsoil depth (approximately 2 to 16 inches depending on the species) from the population site and stockpiling with intact roots, rhizomes, and seed bank in areas that will be trenched. The topsoil material will be replaced immediately during postremoval revegetation activities with little compaction to encourage water filtration and soil oxygenation. The contractor will also be directed to avoid replacing topsoil infested with exotic or noxious weed species. This revegetation activity will be monitored by a qualified botanist familiar with the local flora.
- Contact the appropriate land management and/or resource agencies after restoration activities are complete and report findings.

Responsible Party: Williams – Resource monitor, qualified botanists, environmental resource coordinator, and contract compliance inspector.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of staking and flagging exclusion zones relative to sensitive plants. The resource monitor and qualified botanist will monitor excavation, stockpiling, and replacement of topsoil, as required by this mitigation measure. The environmental resource coordinator shall document compliance in the weekly report to the CPUC.

Mitigation Measure B-5: Confine Construction Equipment and Associated Activities to the Project Routes in Areas That Support Sensitive Resources

Construction equipment will be confined to a 20-foot wide work area in areas that support sensitive resources (e.g., in areas that support riparian and wetland communities and special-status species adjacent to the work area). This measure does not apply to resources that are being completely avoided by directional boring and drilling.

During the environmental training program, construction personnel will be informed about the importance of avoiding ground-disturbing activities outside of the designated work area. The contract compliance inspectors and environmental resource coordinator, with support from qualified biologists, if

necessary, will ensure that construction equipment and associated activities avoid any disturbance of sensitive resources outside the cable rights-of-way.

Responsible Party: Williams – resource monitors, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The environmental resource coordinator will educate the contractor on the importance of keeping equipment confined to the right-of-way. The resource monitor and contract compliance inspector shall ensure that equipment is confined to work areas. The resource monitors will report compliance and noncompliance with this measure.

Mitigation Measure B-6: Avoid the Dispersal of Noxious Weeds in the Fiber Optic Cable and Associated Facility Rights-of-Way ✓

Several noxious weed species have been documented along the project routes. Jones & Stokes Associates is currently mapping noxious weed infestations and potential wash stations along the project routes. Noxious weed and wash station locations should be finalized by early August. To avoid the introduction or spread of noxious weeds into previously uninfested areas, Williams will implement the following measures as part of the proposed project:

- Continue to identify noxious weed infestation areas before construction activities and indicate locations on construction drawings.
- Use certified weed-free imported materials (or rice straw in upland areas).
- Continue to coordinate with land management agencies to ensure that the appropriate best management practices are implemented. County agricultural commissions and land management agencies were contacted to develop lists of target noxious weed species for each project route and discuss measures to avoid the dispersal of noxious weeds.
- Educate construction supervisors and managers on weed identification and the importance of controlling and preventing the spread of noxious weed infestations.
- Clean equipment at designated wash stations after leaving noxious weed infestation areas (these wash stations will be identified by the resource specialists before construction activities in a particular segment).

The contract compliance inspectors, with support from resource personnel, will routinely inspect installation activities to verify that construction equipment is being cleaned of soil and plant matter at designated wash stations.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: Noxious weed infestations will be located by the resource monitors before construction. The monitors will then coordinate with the contractor to identify wash stations. These

wash stations will be staked and flagged. The contractor will be directed to clean equipment in these demarcated areas. The contract compliance inspector and resource monitors shall notify the environmental resource coordinator of any failures to follow the prescribed mitigation program and the environmental resource coordinator shall immediately notify the CPUC.

Mitigation Measure B-7: Avoid Impacts on Vernal Pool Habitats by Establishing and Observing Exclusion Zones around Vernal Pools and Hydrologically Connected Areas

To avoid impacts on vernal pools and associated habitat for special-status species, before construction, qualified biologists will establish exclusion zones around vernal pools and hydrologically connected areas within or near proposed project work areas. Exclusion zones will be marked in the field with staking and flagging or barrier fencing. Exclusion zones around vernal pools will normally have a 20-foot radius. During the wet season (November–May), however, exclusion zones around vernal pools will have a 250-foot radius. The larger radius will be applied during the wet season to avoid indirect effects on vernal pools from construction activities in areas that are hydrologically connected to the pools.

Construction-related activities will be prohibited within the exclusion zones. Essential vehicle operation on existing roads and foot travel will be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the zones. Construction activities within an exclusion zone will be accomplished by rerouting around the exclusion zone.

Williams will remove all stakes, flagging, and barrier fencing demarcating exclusion zones within 60 days after construction and site restoration have been completed in the area.

Responsible Party: Williams -- Resource monitor and environmental resource coordinator.

Timing: Before and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones and advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall note compliance with these requirements in the weekly report to the CPUC.

Mitigation Measure B-8: Avoid Riparian and Wetland Habitats That Support Special-status Species by Establishing and Observing Exclusion Zones

Before construction, qualified biologists will stake and flag exclusion zones around all riparian and wetland areas. Exclusion zones will have a minimum 20-foot radius beyond the limits of riparian or wetland vegetation that support habitat for special-status species. Construction-related activities will be prohibited within these zones. Essential vehicle operation on existing roads and foot travel will be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zone. Construction activities within an exclusion zone will be accomplished by boring under the zone. In seasonal streams that potentially support special-status amphibians and where boring is infeasible, Mitigation Measure B-13: "Avoid Disturbance to Special-Status Reptiles and Amphibians", will be implemented. In streams that support special-status birds and where boring is infeasible, Mitigation Measure B-26: "Avoid Occupied Least Bell's Vireo Habitat during the Nesting Season, and Implement Protection Measures, If Necessary" will be implemented.

Responsible Party: Williams -- Resource monitor and environmental resource coordinator.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-9: Avoid Disturbance to Elderberry Shrubs by Establishing and Observing Exclusion Zones ✓

To avoid impacts on VELB habitat, field resource specialists will identify and mark with flagging all elderberry shrubs within 50 feet of the affected proposed project right-of-way. Orange barrier fencing will be installed around all shrubs to further avoid inadvertent effects. No ground-disturbing activities will be permitted within 25 feet of the elderberry shrub. All shrubs within 25 feet of potential ground-disturbing activities will be avoided by boring under the affected elderberry shrub from a site outside the 25-foot exclusion zone at a depth of not less than 5 feet to avoid damage to the elderberry capillary root system.

Responsible Party: Williams -- Resource monitor and environmental resource coordinator.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-10: Avoid Disturbance to Delhi Sands Flower-loving Fly Habitat

The conduit will be installed into an existing, idle gas pipeline in areas of suitable Delhi Sands flower-loving fly habitat. Therefore, potential effects are limited to ground disturbances for handhole access points. Williams will avoid impacts on this species by siting handhole access points outside of the identified suitable Delhi Sands flower-loving fly habitat. To ensure handhole sites are not sited in suitable habitat, preconstruction surveys will be conducted by a qualified biologist holding a valid survey permit from the USFWS. All suitable habitat along the project route will be delineated and described during this survey. The biologist will assist Williams with site selection of handhole sites to ensure avoidance of all suitable habitat.

Responsible Party: Williams -- Resource monitor and environmental resource coordinator.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones and advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-11: Avoid Disturbance to Quino Checkerspot Butterfly Habitat

Within the range of the Quino checkerspot butterfly, the fiber optic cable will be installed within an existing pipeline. Potential disturbance of suitable habitat in these areas include installation of handhole sites and regenerator/OP-AMP facilities. Williams will avoid impacts on this species by siting all handhole sites and regenerator/OP-AMP facilities in areas that do not provide suitable habitat conditions for Quino checkerspot butterfly. A qualified biologist holding a valid survey permit from the USFWS will assist Williams with siting these facilities by identifying appropriate sites that do not support suitable habitat.

Responsible Party: Williams – resource monitors and environmental resource coordinator.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. Exclusion zones will extend 25 feet from the edge of suitable habitat. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones and advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-12: Avoid Morro Shoulderband Snail Habitat by Rerouting or Boring Under Suitable Habitat Areas

Surveys were conducted to identify all potentially suitable habitat for the Morro shoulderband snail. Along the project route, suitable habitat includes ruderal habitats that are adjacent to typical suitable Morro shoulderband snail habitat along the edges of Los Osos Valley Road. Impacts on the Morro shoulderband snail will be avoided by either rerouting around or boring under all areas identified as suitable habitat for this species.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. Exclusion zones will extend 25 feet from the edge of suitable habitat. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones and advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-13: Avoid Disturbance to Special-status Reptiles and Amphibians by Boring under Streams or Constructing Barrier Fencing and Relocating Animals during Construction

Potential impacts on special-status reptiles and amphibians will be avoided by implementing Mitigation Measure B-8. However, at seasonally flowing streams that support suitable habitat for non-federally listed special-status amphibians and reptiles where boring is infeasible, impacts will be avoided by constructing barrier fencing and relocating individual animals during construction, as follows:

- If the stream does not have flowing water during the time of construction and before construction activities begin, qualified and permitted biologists will survey the route to determine the potential for animals to exist in residual pools or vegetation within the affected project route. If special-status amphibians and reptiles continue to occupy habitats within the route, they will be captured by qualified, permitted wildlife biologists and relocated to the nearest suitable habitat upstream or downstream of the project route. Barrier fencing will be constructed along each side of the work area to prohibit animals from re-entering the work area during conduit and cable installation activities. Once the conduit is installed, the site will be immediately restored to its original scope and conditions, and the barrier fencing will be removed. Qualified biological monitors and wildlife biologists will be onsite to identify and relocate any animals that move into the work area during construction activities.
- Where other access is unavailable, vehicles may need to cross drainages. Williams will restrict vehicle crossings to existing crossing sites where feasible. If necessary, vehicle crossings will be constructed as described in Chapter 2 of the IS/MND. Qualified wildlife biologists will assist Williams in identifying suitable crossing locations to avoid impacts on vegetation and other habitat features. If impacts on vegetation or other habitat features is unavoidable, Williams will attempt to access the opposite side of the drainage by traveling around the site on existing roads or rights-of-way, or consult with DFG for a site-specific variance. If a drainage with flowing water requires a vehicle crossing, barrier fencing will be installed and animals relocated. Barrier fencing will be constructed of wire mesh material so that flows are not impeded but access into the disturbance area by amphibians and reptiles is restricted. If barrier fencing is required, it will be installed 4 days prior to use of the crossing site. Relocation surveys will be conducted for 3 consecutive days to verify that all animals are removed from the disturbance area. Temporary barriers will be removed immediately after the installation activities are completed, the crossing is no longer needed, and the site is restored.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, contract compliance inspector, and spread superintendent.

Timing: Before, during, and at completion of construction.

Monitoring Program: The resource monitors shall report to the environmental resource coordinator and the contract compliance inspector the presence of these species. The contract compliance inspector and spread superintendent, if necessary, are responsible for ensuring that sufficient time is provided for installing barrier fencing, relocating animals, and verifying their removal as provided in this mitigation measure. The environmental resource coordinator shall note compliance with these requirements and the presence of any special-status reptiles and amphibians in the weekly report to the CPUC.

Mitigation Measure B-14: Avoid Blunt-Nosed Leopard Lizard Habitat by Conducting Preconstruction Searches for Burrows and Implementing Protection Measures, If Necessary

According to USFWS protocol, within 30 days before the beginning of construction activities, qualified wildlife biologists will conduct systematic searches for active blunt-nosed leopard lizard burrows in all suitable habitat subject to ground disturbance and a 30-foot-wide buffer around this area. Biologists will conduct burrow searches by systematically walking 30- to 100-foot-wide transects throughout the survey area. Transect width will be adjusted based on vegetation height and topography (California Department of Fish and Game 1990). Biologists will conduct blunt-nosed leopard lizard burrow searches in conjunction with the preconstruction San Joaquin kit fox and special-status kangaroo rat burrow searches (see Mitigation Measure B-29: "Conduct Preconstruction San Joaquin Kit Fox Den Searches" and Mitigation Measure B-31: "Conduct Preconstruction Searches for Giant, Tipton, and Morro Bay Kangaroo Rat Burrows", described below).

When a potential burrow is found, biologists will examine the burrow entrance for blunt-nosed leopard lizards and their tail drags and scat. A burrow will be considered active if a blunt-nosed leopard lizard or its sign is observed at the burrow.

All active burrows will be assigned a number and mapped on topographic maps. Active burrows will be flagged in the field with pin flags marked with the burrow number. Information on the size of the burrow, signs of activity, surrounding terrain and habitat type, presence of special habitat features (e.g., washes and playas), and distance to other burrows will be recorded.

Williams will provide USFWS and DFG with verbal notification of the results of preconstruction burrow searches within 5 days after these activities are completed and before the start of construction in the area. Williams will provide USFWS and DFG with written notification of the results within 30 days after these activities are completed.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, contract compliance inspector, and spread superintendent.

Timing: Before, during, and at completion of construction.

Monitoring Program: The resource monitors shall report to the environmental resource coordinator and the contract compliance inspector the presence of these species. The contract compliance inspector and spread superintendent, if necessary, are responsible for ensuring that sufficient time is provided for conducting the preconstruction searches and notifying the USFWS and DFG of the results. The environmental resource coordinator shall note compliance with this mitigation measure and the results of preconstruction searches in the weekly report to the CPUC.

Mitigation Measure B-15: Avoid Blunt-Nosed Leopard Lizard Burrows by Establishing and Observing Exclusion Zones Around Burrows

Following preconstruction searches for blunt-nosed leopard lizard burrows and before construction, qualified biologists will establish exclusion zones around active blunt-nosed leopard lizard burrows. Exclusion zones will have a 30-foot-wide radius and will be marked in the field with stakes and flagging.

Construction-related activities will be prohibited within these zones. Essential vehicle operation on existing roads and foot travel will be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zones.

Impacts on the blunt-nosed leopard lizard will be avoided by routing around the exclusion zone or by boring under the exclusion zone.

Williams will remove all stakes and flagging demarcating exclusion zones within 60 days after construction and site restoration have been completed in the area.

Responsible Party: Williams – Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-16: Construct in Blunt-Nosed Leopard Lizard Habitat during the Lizard's Active Season

To the extent possible, Williams will confine construction activities within suitable habitat areas for the blunt-nosed leopard lizard to the lizard's active season between May 1 and September 30. This will maximize the potential for lizards to escape from construction areas or to be captured and relocated from construction areas (Kuritsubo and Saslaw pers. comms.).

Responsible Party: Williams – environmental resource coordinator, contract compliance inspector, spread superintendent.

Timing: During construction.

Monitoring Program: The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of suitable blunt-nosed leopard lizard habitat.

Mitigation Measure B-17: Avoid Potentially Occupied Coachella Valley Fringe-Toed Lizard Habitat by Establishing and Observing Exclusion Zones

Because habitat for Coachella Valley fringe-toed lizard can shift over time as wind-blown sands shift, qualified biologists will conduct preconstruction surveys to identify all potential habitat for the Coachella Valley fringe-toed lizard along the proposed project right-of-way. Surveys will be conducted within 30 days before the beginning of construction activities. Qualified wildlife biologists will conduct systematic searches in all suitable habitat subject to ground disturbance and a 30-foot-wide buffer around this area.

All potential habitat will be mapped on topographic maps and flagged in the field with pin flags marked with the resource site number.

Williams will provide USFWS and DFG with verbal notification of the results of preconstruction surveys within 5 days after these activities are completed and before the start of construction in the area. Williams

will provide USFWS and DFG with written notification of the results within 30 days after these activities are completed.

Following preconstruction searches for Coachella Valley fringe-toed lizard and before construction, qualified biologists will establish exclusion zones around suitable habitat areas. Exclusion zones extend 100 feet from the edge of suitable habitat and will be marked in the field with stakes and flagging.

Construction-related activities will be prohibited within these zones. Essential vehicle operation on existing roads and foot travel will be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zones. Impacts on the Coachella Valley fringe-toed lizard will be avoided by routing around the exclusion zone or by boring under the exclusion zone.

Williams will remove all stakes and flagging demarcating exclusion zones within 60 days after construction and site restoration have been completed in the area.

Responsible Party: Williams – wildlife biologists, resource monitors, environmental resource coordinator and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: Wildlife biologists will identify suitable habitat before construction. Resource monitors will stake and flag exclusion zones around suitable habitat. The contract compliance inspector is responsible for ensuring that rerouting and boring occurs as necessary. The environmental resource coordinator shall note compliance with this requirement and the extent of any boring operations in the weekly report to the CPUC.

Mitigation Measure B-18: Implement the Flat-Tailed Horned Lizard Rangeland Management Strategy

To avoid, minimize, and offset potential impacts on the flat-tailed horned lizard, Williams will implement the standard mitigation measures described in the Flat-Tailed Horned Lizard Management Strategy prepared by the Working Group of Flat-Tailed Horned Lizard Interagency Coordinating Committee (1997). In addition to conducting a worker training program and having a qualified biologist onsite, if necessary, additional possible mitigation measures include relocation of lizards found in the construction work area by qualified, permitted wildlife biologists, post-construction restoration, and habitat compensation.

Responsible Party: Williams -- Resource monitor and environmental resource coordinator.

Timing: Before, during, and after construction.

Monitoring Program: The environmental resource coordinator shall notify the CPUC of completion of the worker training program before beginning construction on each spread within flat-tailed horned lizard habitat. The resource monitor shall monitor compliance with the mitigation measures and shall notify the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the CPUC, USFWS, and DFG of any noncompliance. The environmental resource coordinator shall note completion of post-construction restoration in the weekly report to the CPUC. Should habitat compensation be required, the environmental resource coordinator shall notify the CPUC.

Mitigation Measure B-19: Avoid Desert Tortoise Burrows by Conducting Preconstruction Searches and Implementing Protection Measures, If Necessary

All facilities, including handhole access points and regenerator facilities will be sited in areas that do not support suitable habitat for desert tortoise or that do not support active or potential burrows. However, to ensure clearance of all potential habitat areas within the construction right-of-way, within 30 days before the beginning of construction activities, qualified wildlife biologists, as described by USFWS (U.S. Fish and Wildlife Service 1992), will conduct initial systematic searches for desert tortoise burrows in all suitable habitat in the proposed project area and a 30-foot-wide buffer around this area. Biologists will conduct burrow searches by systematically walking 30-foot-wide transects throughout the survey area. Transect width will be reduced as needed, based on vegetation height and topography.

When a burrow is found, biologists will measure the size; evaluate the shape of the burrow entrance; and note tracks, scat, shells, bones, scutes, egg shell fragments, or any other potential tortoise sign at the site. All burrows will be assigned a number and mapped on topographic maps. Burrows will be flagged in the field with pin flags marked with the burrow number. Information on burrow dimensions and conditions, signs of activity, and surrounding terrain and habitat type will be recorded.

Within 24 hours before the beginning of construction activities, qualified wildlife biologists will conduct a follow-up systematic search for any desert tortoise burrows that may have become established within the survey area since the initial survey.

Disturbance and destruction of tortoise burrows will be avoided (e.g., by moving assist points for cable installation and siting regeneration facilities in non-tortoise habitat).

Williams will provide USFWS and DFG with verbal notification of the results of initial preconstruction burrow searches within 5 days after this activity is completed and before the start of construction in the area. Williams will provide USFWS and DFG with verbal notification of the results of follow-up preconstruction burrow searches within 3 days after this activity is completed. Williams will provide USFWS and DFG with written notification of the results of both the initial and follow-up surveys within 30 days after the follow-up surveys are completed.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, contract compliance inspector, and spread superintendent..

Timing: Before, during, and at completion of construction.

Monitoring Program: The resource monitors shall report to the environmental resource coordinator and the contract compliance inspector the presence of these species. The contract compliance inspector, and spread superintendent if necessary, are responsible for ensuring that time is provided for conducting the preconstruction searches, undertaking any necessary tortoise and egg relocations, and notifying the USFWS and DFG of the results. The environmental resource coordinator shall note compliance with this mitigation measure and the results of preconstruction searches in the weekly report to the CPUC.

Mitigation Measure B-20: Avoid Desert Tortoise Burrows by Establishing and Observing Exclusion Zones

Following preconstruction searches for desert tortoise burrows and before construction, qualified biologists will establish exclusion zones around active desert tortoise burrows. Exclusion zones will have a 30-foot-wide radius and will be marked in the field with stakes and flagging.

Construction-related activities will be prohibited or greatly restricted within these zones. Essential vehicle operation on existing roads and foot travel will be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zones. Fiber optic cable installation within an exclusion zone will be accomplished by boring from outside the zone or routing around the exclusion zone.

Williams will remove all stakes and flagging demarcating exclusion zones within 60 days after construction and site restoration have been completed in the area.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-21: Avoid Disturbing Active Special-Status Raptor Nests

To avoid potential adverse effects on nesting special-status raptors, Williams will establish no-disturbance buffers around active nests during the breeding season. If construction activities are scheduled to occur during the breeding season, preconstruction surveys of all potentially active nest sites within 0.5 mile of the affected project routes will be conducted. If construction activities are scheduled to occur during the non-nesting season, then no surveys would be required. If surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation would be required. If active nests are found, Williams will establish a no-disturbance buffer around the active nest, as follows:

- for the golden eagle and prairie falcon, the buffer would include a 0.5-mile radius around the nest; and
- for the white-tailed kite, Cooper's hawk, sharp-shinned hawk, and osprey, the buffer would include a 500-foot radius around the nest.

The size of individual buffers can be adjusted based on an evaluation of the site by a qualified raptor biologist. The evaluation will be based on the presence of topographical features that obstruct the line of sight from the construction activities to the nest or observations of the nesting pair during construction based on the level of ongoing disturbance (e.g., farming activities or road traffic) and the observed sensitivity of the birds. Evaluations and buffer adjustments will be done in consultation with the local DFG and BLM or USFS (on those project routes that cross BLM or USFS lands) representative. The portion of the project route that is within the designated buffer would be identified in the field by staking and flagging. If construction activities occur only during the nonbreeding season between August 1 and February 1, no surveys would be conducted and no buffers would be required.

The preconstruction surveys will be conducted during spring and summer of the construction year. To avoid effects on active nest sites, no installation activities will occur within the specified buffer zone during

the breeding season, between February 1 and August 1, or until it is determined that young have fledged. Surveys will not be conducted in areas where proposed project activities would occur only during the nonbreeding season between August 1 and February 1.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction surveys. The environmental resource coordinator will notify the DFG and affected federal agencies of the results. The resource monitors shall report daily to the environmental resource coordinator on completion of staking and flagging exclusion zones. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall note compliance with this mitigation measure, as well as the results of preconstruction searches in the weekly report to the CPUC. The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of potentially active special-status raptor nests.

Mitigation Measure B-22: Avoid Disturbing Active Swainson's Hawk Nests by Establishing and Observing Buffer Zones ✓

To avoid disturbing active Swainson's hawk nests, Williams will establish 0.5-mile radius no-disturbance buffer zone around each active nest during the breeding season. All buffer zones will be based on line-of-sight. If topographical features obstruct the line-of-site of an active nest within the buffer zone, or if other factors reduce the likelihood of disturbance, then the buffer may be reduced based on consultation with DFG. The portion of the right-of-way that is within the designated buffer zone will be identified on the construction drawings and in the field by staking and flagging. If construction activities occur only during the nonbreeding season (from August 1 to February 28), no buffers or further mitigation is required.

If construction activities continue into the 2000 breeding season, surveys will be conducted again to determine activity at all potential nest sites. Qualified raptor biologists will conduct construction year surveys of all potentially active nest sites within 0.5 mile of the affected project route. Surveys will be conducted by searching all suitable nest trees with binoculars to find active nests. If surveys indicate that nests are inactive or potential habitat is unoccupied during the construction year, no further mitigation measures will be required. If active nests are found, a 0.5-mile-wide no-disturbance buffer will be established around the active nest as described above.

To avoid effects on active nest sites, no construction activities will occur within the specified buffer zone during the breeding season, between March 1 and August 1, or until it is determined that young have fledged. Surveys will not be conducted in areas where proposed project activities will occur only during the nonbreeding season.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction surveys. The environmental resource coordinator will notify the DFG and affected federal agencies of the results. The resource monitors shall report daily to the environmental resource coordinator on completion of staking and flagging exclusion zones. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall note compliance with this mitigation measure, as well as the results of preconstruction searches in the weekly report to the CPUC. The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of potentially active special-status raptor nests.

Mitigation Measure B-23: Avoid Disturbing Northern Spotted Owl Nests by Constructing during the Non-Breeding Season or by Establishing and Observing Buffer Zones Around Active Nests

Protocol surveys for northern spotted owl were not conducted because installation of the conduit is scheduled for the fall and winter of 1999, during the northern spotted owl nonbreeding season. If construction activities occur during the nonbreeding season, between September 1 and March 15, then no mitigation is required. However, if construction continues into the 2000 breeding season, potentially occupied sites will be avoided until after the breeding season or until after protocol surveys are conducted and indicate that no spotted owl nests occur within 0.25 mile of the project route (as described below).

Construction during the Breeding Season. If construction activities are scheduled to occur during the breeding season, to avoid impacts on the northern spotted owl, protocol surveys will be conducted by qualified raptor biologists to determine if active breeding sites are present.

Project-related disturbances to active northern spotted owl nests will be avoided by conducting protocol-level surveys in all potential habitat areas to determine the location of nests and establishing no-disturbance buffers around active sites. Protocol surveys are conducted using the USFWS's standard guidelines (U.S. Fish and Wildlife Service 1992). The guidelines require either six independent surveys of the potentially affected area in one year or three surveys in two consecutive years. No construction activities will occur within 0.25 mile of potential habitat until after protocol surveys are complete. If no spotted owls are detected during surveys, no additional mitigation will be required. If spotted owls are detected during surveys and are found to be nesting within 0.25 mile of the right-of-way, field resource specialists will establish a 0.25-mile-radius buffer zone around the nest site. To avoid disturbing nesting spotted owls, proposed project activities will be postponed within the buffer zone during the breeding season.

Surveys for spotted owls will be conducted between March and August of the construction year. To avoid disturbing nesting spotted owls, no construction activities will be permitted within the buffer zone during the nesting season, between March 15 and August 30, or until it is determined that young have fledged.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction surveys. The environmental resource coordinator will notify the DFG and affected federal agencies of the results. The resource monitors shall report

to the environmental resource coordinator on completion of staking and flagging exclusion zones. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall note compliance with this mitigation measure, as well as the results of preconstruction searches in the weekly report to the CPUC. The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of active Swainson's hawk nests.

Mitigation Measure B-24: Avoid Disturbing California Spotted Owl and Northern Goshawk Nests by Establishing and Observing Buffer Zones and Avoid Construction Activities during the Breeding Season

Protocol surveys for California spotted owl and northern goshawk were not conducted because installation of the conduit is scheduled for the fall and winter of 1999, during the nonbreeding season. If construction activities occur during the nonbreeding season, between September 1 and March 15, then no mitigation is required. However, if construction continues into the 2000 breeding season, potentially occupied sites will be avoided until after the breeding season or until after protocol surveys are conducted and indicate that no spotted owl or goshawk nests occur within 0.25 mile of the project route (as described below).

- **Construction during the Breeding Season.** If construction activities are scheduled to occur during the breeding season, to avoid impacts on the California spotted owl and northern goshawk, protocol surveys will be conducted by qualified raptor biologists to determine if active breeding sites are present.

Project-related disturbances to active California spotted owl and northern goshawk nests will be avoided by conducting protocol-level surveys in all potential habitat areas to determine the location of nests and by establishing no-disturbance buffers around active sites. If no spotted owls or northern goshawks are detected during surveys, no additional mitigation will be required. If spotted owl or northern goshawk are detected during surveys and are found to be nesting within 0.25 mile of the affected right-of-way, field resource specialists will establish a 0.25-mile-radius buffer zone around the nest site. To avoid disturbing nesting spotted owls and northern goshawks, proposed project activities will be postponed within the buffer zone during the breeding season (from March to August).

Surveys for spotted owls and northern goshawks will be conducted between March and August of the construction year according to standard USFS survey protocol. To avoid disturbing nesting spotted owls and northern goshawks, no construction activity will be permitted within the buffer zone during the nesting season, between March 15 and August 30, or until it is determined that young have fledged.

Responsible Party: Williams – resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction surveys. The environmental resource coordinator will notify the DFG and affected federal agencies of the results. The resource monitors shall report daily to the environmental resource coordinator on completion of staking and flagging exclusion zones, if any.

The contract compliance inspector will ensure that construction-related activities are prohibited in buffer zones during the exclusion period. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall note compliance with this mitigation measure, as well as the results of preconstruction searches in the weekly report to the CPUC. The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of active northern goshawk or California spotted owl nests.

Mitigation Measure B-25: Avoid Disturbing Active Burrowing Owl Nests and Implement Standard DFG Guidelines during the Nonbreeding Season

Surveys were conducted during spring and summer 1999 to locate active burrowing owl nesting burrows. Because construction is scheduled to occur during fall and winter of 1999, additional preconstruction surveys will be conducted to locate active nonbreeding burrows. If construction activities continue into the 2000 breeding season, preconstruction surveys will be conducted to locate active nesting burrows. Surveys consist of visually checking all potential sites within 500 feet of the proposed fiber optic cable rights-of-way within 30 days of construction. To avoid impacts on burrowing owls, no-disturbance buffers will be established around all active nesting burrows during the breeding season, and the DFG burrowing owl guidelines will be implemented during the nonbreeding season. If no burrowing owls are found, no further mitigation measures will be required.

- **Breeding Season.** If active burrowing owl nests are found, biologists will establish a 250-foot buffer zone around the active burrow. No installation activities will be permitted within the specified buffer zone until after the breeding season, between February 1 and August 31, or until it is determined that young have fledged.
- **Wintering Season.** Because adult burrowing owls can occupy burrows year round, before installation activities in active areas (and following the breeding season), DFG mitigation guidelines for burrowing owls (California Department of Fish and Game 1995) will be implemented. The guidelines require that one-way doors be installed at least 48 hours before construction at all active burrows that exist within the excavation area so that the burrows are not occupied during installation of the conduit. The guidelines also require the installation of two artificial burrows for each occupied burrow that is removed. Qualified wildlife biologists will conduct preconstruction surveys for burrowing owls within one to two weeks of installation activities. The one-way doors will be installed at that time to ensure that the owls can get out of the burrows but cannot get back in. Artificial burrows will be constructed within the project route prior to installation of one-way doors.

Habitat disturbance from construction activities will be minor, linear, and temporary. No permanent habitat loss will occur. Therefore, no habitat compensation is included as part of this mitigation measure.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction surveys. The environmental resource coordinator will notify the DFG and affected federal agencies of the results. The resource monitors shall report daily to the environmental resource coordinator on completion of owl exclusion measures, if any. The

compliance inspector will ensure that construction-related activities are prohibited in buffer zones during the exclusion period. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall note compliance with this mitigation measure, as well as the results of preconstruction searches in the weekly report to the CPUC. The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of burrowing owl nests.

Mitigation Measure B-26: Avoid Occupied Least Bell's Vireo Habitat during the Nesting Season, and Implement Protection Measures, If Necessary

Protocol surveys for least Bell's vireo were not conducted because construction is planned for the nonbreeding season (fall and winter 1999). However, if construction continues into the 2000 breeding season (April 10 through July 31) (Watkins pers. comm.), qualified wildlife biologists will conduct preconstruction surveys for nesting least Bell's vireos in all suitable habitat in the affected proposed project study area, and no-disturbance buffer zones will be established around all active sites. According to USFWS protocol, eight surveys will be conducted. Individual surveys will be conducted at least 10 days apart, with three conducted during the peak survey season (generally between May and June). Survey methodology will be consistent with that described in the USFWS's survey protocol for the species (U.S. Fish and Wildlife Service 1998). If least Bell's vireos are detected, construction activities will be prohibited within 1,000 feet of the area between April 1 and July 15. No construction activity will occur within this buffer area during the breeding season until surveys are complete. If construction activities near suitable habitat for the least Bell's vireo will only occur during the nonbreeding season, preconstruction surveys will not be needed.

Responsible Party: Williams – resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction surveys. The environmental resource coordinator will notify the USFWS and affected agencies of the results. The contract compliance inspector will ensure that construction-related activities are prohibited in buffer zones during the exclusion period and advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall note compliance with this mitigation measure, as well as the results of preconstruction searches in the weekly report to the CPUC. The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of least Bell's vireo nests.

Mitigation Measure B-27: Avoid Occupied Willow Flycatcher Habitat during the Nesting Season and Implement Protection Measures, If Necessary

Protocol surveys for southwestern willow flycatcher were not conducted because construction is planned for the nonbreeding season (fall and winter 1999). However, if construction continues into the 2000 breeding season (May 1 and August 15) (Sogge et al. 1997), qualified wildlife biologists will conduct preconstruction surveys for nesting willow flycatchers in all suitable habitat in the affected proposed project study area and no-disturbance buffer zones will be established around all active sites. According to USFWS protocol, one survey will be conducted during each of the following three periods: May 15-31, June 1-21, and June 22-July 10. Surveys will be conducted by qualified and permitted biologists in accordance with the USFWS protocol (Sogge et al. 1997). If willow flycatchers are detected, construction activities will be prohibited within 1,000 feet of the area between May 1 and August 15. No construction activity will occur within this buffer area

during the breeding season until surveys are complete. If construction activities near suitable habitat for the willow flycatcher will only occur during the nonbreeding season, preconstruction surveys will not be needed.

Responsible Party: Williams – resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction surveys. The environmental resource coordinator will notify the USFWS and affected agencies of the results. The contract compliance inspector will ensure that construction-related activities are prohibited in buffer zones during the exclusion period and advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall note compliance with this mitigation measure, as well as the results of preconstruction searches in the weekly report to the CPUC. The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of willow flycatcher nests.

Mitigation Measure B-28: Avoid Occupied California Gnatcatcher Habitat during the Nesting Season, and Implement Protection Measures, If Necessary

Protocol surveys for California gnatcatcher were not conducted because construction is planned for the nonbreeding season (July 1 through March 14). However, if construction continues into the 2000 breeding season (August 31 to February 14), qualified wildlife biologists will conduct preconstruction surveys for California gnatcatchers in all suitable coastal sage scrub habitat and adjacent riparian, grassland, and chaparral stands in the affected proposed project study area before construction begins to determine occupancy, and no-disturbance buffer zones will be established around each active site. Surveys will be conducted in accordance with the Coastal California Gnatcatcher [*Poliopitila californica californica*] Presence/Absence Survey Guidelines, February 28, 1997 (U.S. Fish and Wildlife Service 1997a). Nine surveys will be conducted during the nonbreeding season (between August 31 and February 14) and six surveys will be conducted during the breeding season (between March 15 and June 30). Individual surveys will be conducted at least 2 weeks apart during the nonbreeding season and at least 1 week apart during the breeding season. If California gnatcatchers are detected, construction activities will be prohibited within 1,000 feet of the area between March 1 and July 15. If construction activities within suitable habitat for the California gnatcatcher will only occur during the nonbreeding season, preconstruction surveys will not be needed and no buffer zones are required.

Responsible Party: Williams – resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction surveys. The environmental resource coordinator will notify the USFWS and affected agencies of the results. The contract compliance inspector will ensure that construction-related activities are prohibited in buffer zones during the exclusion period and advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall note compliance with this mitigation measure, as well as the results of preconstruction searches in the weekly report to the CPUC. The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of willow flycatcher nests.

Mitigation Measure B-29: Avoid San Joaquin Kit Fox Dens by Conducting Preconstruction Searches and Implementing Protection Measures, If Necessary

Within 30 days before the beginning of construction activities, qualified wildlife biologists (as defined by USFWS [U.S. Fish and Wildlife Service 1997b]) will conduct systematic kit fox den searches in all suitable habitat subject to ground-disturbing activities in the proposed project study area and a 200-foot-wide buffer around this area. Biologists will conduct den searches by systematically walking 30- to 100-foot-wide transects throughout the survey area. Transect width will be adjusted based on vegetation height and topography (California Department of Fish and Game 1990). If a den is found, biologists will measure the size; evaluate the shape of the den entrances; and note tracks, scat, prey remains, or recent excavations at the site.

Dens will be classified in one of three den status categories, consistent with those defined by USFWS (U.S. Fish and Wildlife Service 1997b):

- Potential den - any burrow or artificial structure (e.g., a pipe or culvert) that has an entrance of at least 4 inches in diameter for its entire visible length; a collapsed den will not be considered a potential den site.
- Known den - any natural den or artificial structure that is being used or has been used at any time in the past by a San Joaquin kit fox for any activity other than whelping or rearing pups. Fresh excavation alone will not be considered adequate sign to classify a den as "known."
- Natal or pupping den - any den or artificial structure that is being used or has been used at any time in the past by a kit fox to whelp or rear pups.

All dens will be assigned a number and mapped on topographic maps. Den sites will be flagged in the field with pin flags marked with the den number. Potential, known, and natal or pupping dens will be distinguished from each other in the field by the pin flag color. Information on the size and number of openings, signs of activity, surrounding terrain and habitat type, and distance to concentrations of small mammal prey and other den sites will be recorded.

Disturbance and destruction of dens will be avoided where possible (e.g., rerouting fiber optic cable around a den site or boring to install fiber optic cable under a den site). However, if dens are located within the proposed work area and cannot be avoided during construction, qualified wildlife biologists will remove these dens by carefully hand excavating them (U.S. Fish and Wildlife Service 1997b).

Williams will notify USFWS and DFG immediately if a natal or pupping den is found in the survey area. Williams will provide USFWS and DFG with verbal notification of the results of preconstruction den searches and den excavations within 5 days after these activities are completed and before the start of construction in the area. Williams will provide USFWS and DFG with written notification of the results within 30 days after these activities are completed.

Responsible Party: Williams—environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction searches and undertaking any necessary fox relocations. Wildlife biologists will undertake the examinations and, if necessary, excavations, and will

notify the USFWS and DFG of the results. The environmental resource coordinator shall note compliance with this mitigation measure and the results of preconstruction searches in the weekly report to the CPUC.

Mitigation Measure B-30: Avoid San Joaquin Kit Fox Dens by Establishing and Observing Exclusion Zones

Following preconstruction kit fox den searches and den excavations and before construction, qualified wildlife biologists will establish exclusion zones around the remaining dens following the procedures described by USFWS (U.S. Fish and Wildlife Service 1997b). Exclusion zones will be marked in the field with stakes and flagging. The radius of these zones will be as follows:

- potential den = 50 feet,
- known den = 100 feet, and
- natal or pupping den = to be determined in coordination with USFWS.

Construction-related activities will be prohibited or greatly restricted within these zones. Essential vehicle operation on existing roads and foot travel will be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zones. To avoid affecting the exclusion zone, the fiber optic cable will be rerouted around the exclusion zone or will be bored under the zone.

Williams will remove all stakes and flagging demarcating exclusion zones within 60 days after construction and site restoration have been completed in the area.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-31: Avoid Giant, Tipton, and Morro Bay Kangaroo Rat Burrows by Conducting Preconstruction Surveys and Implement Protection Measures, If Necessary

Within 30 days before the beginning of construction activities, qualified wildlife biologists will conduct systematic searches for giant kangaroo rat, Tipton kangaroo rat, and Morro Bay kangaroo rat burrows in all suitable habitat in the proposed project study area subject to ground-disturbing activities and a 30-foot-wide buffer around this area. Biologists will conduct giant and Tipton kangaroo rat burrow searches by systematically walking 30- to 100-foot-wide transects throughout the survey area. Transect width will be adjusted based on vegetation height and topography (California Department of Fish and Game 1990). Biologists will conduct kangaroo rat burrow searches in conjunction with the preconstruction San Joaquin kit fox den searches (see Mitigation Measure B-29: "Avoid San Joaquin Kit Fox Den by Conducting Preconstruction Searches and Implementing Protection Measures, If Necessary", described above).

When a burrow or precinct is found, biologists will measure the diameter of the burrow(s); evaluate the shape of the burrow entrance(s); and note tracks, scat, tail drags, or presence of haystacks at the site. Scat may be collected for later confirmation of species by known experts. The presence of haystacks alone will not be considered adequate sign to confirm giant kangaroo rat presence.

All active and potential burrows or precincts will be assigned a number, mapped on topographic maps, and photographed. Burrows or precincts will be flagged in the field with pin flags marked with the burrow or precinct number and the species of kangaroo rat the structure is associated with. Active and potential burrows or precincts will be distinguished from each other in the field by the pin flag color. Information on the size and number of burrows, signs of activity, surrounding terrain and habitat type, and distance to other burrows or precincts will be recorded.

Williams will provide USFWS and DFG with verbal notification of the results of preconstruction burrow searches within 5 days after these activities are completed and before the start of construction in the area. Williams will provide USFWS and DFG with written notification of the results within 30 days after these activities are completed.

Responsible Party: Williams -- environmental resource coordinator, contract compliance inspector, and spread superintendent.

Timing: Before construction.

Monitoring Program: The contract compliance inspector, and spread superintendent if necessary, are responsible for ensuring that sufficient time is provided for conducting the preconstruction searches. Resource monitors will undertake the necessary examinations and notify the USFWS and DFG of the results. The environmental resource coordinator shall note compliance with this mitigation measure and the results of preconstruction searches in the weekly report to the CPUC.

Mitigation Measure B-32: Avoid Giant, Tipton, and Morro Kangaroo Rat Burrows by Establishing and Observing Exclusion Zones

Following preconstruction searches for special-status kangaroo rat burrows or precincts and before construction, qualified wildlife biologists will establish exclusion zones around inactive and active giant, Tipton, and Morro Bay kangaroo rat burrows or precincts. Exclusion zones will have a 30-foot radius and will be marked in the field with stakes and flagging.

Construction-related activities will be prohibited or greatly restricted within these zones. Essential vehicle operation on existing roads and foot travel will be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zones. Fiber optic cable installation within an exclusion zone will be accomplished by rerouting around the exclusion zone or by boring under the exclusion zone. Regenerator/OP-AMP facilities will not be sited in suitable habitat for these species.

Williams will remove all stakes and flagging demarcating exclusion zones within 60 days after construction and site restoration have been completed in the area.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-33: Avoid Stephens' and Pacific Kangaroo Rat Burrows by Conducting Preconstruction Searches and Implementing Protection Measures, If Necessary

Within 30 days before the beginning of construction activities, qualified wildlife biologists will conduct systematic searches for kangaroo rat burrows (because the Stephens' kangaroo rat and the Pacific kangaroo rat both occur in the same habitats and their burrows are identical, biologists will identify all kangaroo rat burrows as either occupied or potential Stephens' kangaroo rat) in all suitable habitat in the proposed project study area subject to ground-disturbing activities and a 30-foot-wide buffer around this area. Biologists will conduct burrow searches by systematically walking 30- to 100-foot-wide transects throughout the survey area. Transect width will be adjusted based on vegetation height and topography to ensure 100% coverage.

When a burrow or precinct is found, biologists will measure the diameter of the burrow(s) and indicate whether it shows any signs of activity (e.g., tracks, scat, dust baths, or tail drags) or is considered a potential burrow (no signs of activity).

All active and potential burrows or precincts will be assigned a number, mapped on topographic maps, and photographed. Burrows or precincts will be flagged in the field with pin flags marked with the burrow or precinct number. Information on the size and number of burrows, signs of activity, surrounding terrain and habitat type, and distance to other burrows or precincts will be recorded.

Williams will provide USFWS and DFG with verbal notification of the results of preconstruction burrow searches within 5 days after these activities are completed and before the start of construction in the area. Williams will provide USFWS and DFG with written notification of the results within 30 days after these activities are completed.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before construction.

Monitoring Program: The contract compliance inspector, and spread superintendent if necessary, are responsible for ensuring that sufficient time is provided for conducting the preconstruction searches. Resource monitors will undertake the necessary examinations and notify the USFWS and DFG of the results. The environmental resource coordinator shall note compliance with this mitigation measure and the results of preconstruction searches in the weekly report to the CPUC.

Mitigation Measure B-34: Avoid Stephens' Kangaroo Rat Burrows by Establishing and Observing Exclusion Zones

Following preconstruction searches for kangaroo rat burrows or precincts and before construction, qualified wildlife biologists will establish exclusion zones around potential and active kangaroo rat burrows

or precincts. Exclusion zones will have a 30-foot radius and will be marked in the field with stakes and flagging.

Construction-related activities will be prohibited within these zones. Essential vehicle operation on existing roads and foot travel will be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zones. Regenerator/OP-AMP facilities and handhole sites will not be sited in occupied habitat for these species.

Williams will remove all stakes and flagging demarcating exclusion zones within 60 days after construction and site restoration have been completed in the area.

Responsible Party: Williams – Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the USFWS and DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-35: Avoid San Joaquin Antelope Ground Squirrel Burrows by Conducting Preconstruction Searches and Implementing Protection Measures, If Necessary

Within 30 days before the beginning of construction activities, qualified wildlife biologists will conduct systematic searches for active San Joaquin antelope ground squirrel burrows in all suitable habitat in the proposed project study area subject to ground-disturbing and a 30-foot-wide buffer around this area. Biologists will conduct burrow searches by systematically walking 30- to 100-foot-wide transects throughout the survey area. Transect width will be adjusted based on vegetation height and topography. While walking the transects, biologists will scan the area for antelope ground squirrels and listen for their vocalizations. Biologists will conduct San Joaquin antelope ground squirrel burrow searches in conjunction with the preconstruction San Joaquin kit fox, special-status kangaroo rat, and blunt-nosed leopard lizard burrow searches (see Mitigation Measures B-12: "Conduct Preconstruction Searches for Blunt-Nosed Leopard Lizard Burrows and Implement Protection Measures, If Necessary," B-28: "Conduct Preconstruction Searches for San Joaquin Kit Fox Dens and Implement Protection Measures, If Necessary," and B-30: "Conduct Preconstruction Searches for Special-Status Kangaroo Rat Burrows and Implement Protection Measures, If Necessary," described above).

When a potential burrow is found, biologists will examine the burrow entrance for San Joaquin antelope ground squirrels and their scat. A burrow will be considered active if a San Joaquin antelope ground squirrel or its sign is observed at the burrow.

All active burrows will be assigned a number and mapped on topographic maps. Active burrows will be flagged in the field with pin flags marked with the burrow number. Information on the size of the burrow, signs of activity, surrounding terrain and habitat type, presence of special habitat features (e.g., washes and playas), and distance to other burrows will be recorded.

Williams will provide DFG with verbal notification of the results of preconstruction burrow searches within 5 days after these activities are completed and prior to the start of construction in the area. Williams will provide DFG with written notification of the results within 30 days after these activities are completed.

Responsible Party: Williams -- environmental resource coordinator, contract compliance inspector, and spread superintendent.

Timing: Before construction.

Monitoring Program: The contract compliance inspector, and spread superintendent if necessary, are responsible for ensuring that sufficient time is provided for conducting the preconstruction searches. Resource monitors will undertake the necessary examinations and notify the USFWS and DFG of the results. The environmental resource coordinator shall note compliance with this mitigation measure and the results of preconstruction searches in the weekly report to the CPUC.

Mitigation Measure B-36: Avoid San Joaquin Antelope Ground Squirrel Burrows by Establishing and Observing Exclusion Zones

Following preconstruction searches for San Joaquin antelope ground squirrel burrows and before construction, qualified wildlife biologists will establish exclusion zones around active San Joaquin antelope ground squirrel burrows. Exclusion zones will have a 30-foot-wide radius and will be marked in the field with stakes and flagging.

Construction-related activities will be prohibited or greatly restricted within these zones. Essential vehicle operation on existing roads and foot travel will be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zones. Fiber optic cable installation within an exclusion zone will be accomplished by rerouting around the exclusion zone or by boring under the exclusion zone.

Williams will remove all stakes and flagging demarcating exclusion zones within 60 days after construction and site restoration have been completed in the area.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before, during, and after construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector will ensure that construction-related activities are prohibited in those zones. The resource monitors and contract compliance inspector will advise the environmental resource coordinator of any noncompliance. The environmental resource coordinator shall immediately notify the DFG of any noncompliance and shall note compliance with this requirement in the weekly report to the CPUC.

Mitigation Measure B-37: Avoid Disturbance to Northern Harrier, Snowshoe Hare, White-Tailed Jackrabbit, Sierra Nevada Mountain Beaver, and American Badger by Conducting Preconstruction Surveys and Establishing No-Disturbance Buffers

To avoid impacts on these species, qualified wildlife biologists will conduct preconstruction surveys during the breeding season in all suitable habitat along the affected right-of-way and establish no-disturbance buffers until after the breeding season. If fiber optic cable installation activities occur during the nonbreeding season, no surveys or other mitigation is required. Breeding season surveys for these species will include a visual search of the right-of-way by qualified wildlife biologists in all suitable habitats to detect active nests or dens. If none are detected, no other mitigation is required. Where one or more active nest or den of these species is detected, a no-disturbance buffer will be established around the nest or den. The buffer will be 200 feet on both sides of the active nest or den. The buffer will remain in effect until after the breeding season. Once the breeding season is over, the conduit can be installed. Nesting or denning seasons for these species are as follows:

- northern harrier - March 1 through August 15,
- snowshoe hare and white-tailed jackrabbit - February 1 through August 1, and
- Sierra Nevada mountain beaver and American badger - March 1 through August 1.

If cable installation activities are proposed during any of the above periods, surveys will be conducted and buffers established at active sites. If cable installation activities occur outside of these time periods, surveys are not required and cable installation can proceed with no further mitigation.

Responsible Party: Williams – resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The contract compliance inspector is responsible for ensuring that sufficient time is provided for conducting the preconstruction surveys and that that no construction will take place in buffer zones during the nesting or denning season. The resource monitors shall report daily to the environmental resource coordinator on completion of staking and flagging buffer zones, if any. The environmental resource coordinator shall note compliance with this mitigation measure, as well as the results of preconstruction searches in the weekly report to the CPUC. The environmental resource coordinator shall notify the CPUC before initiation of construction in any area of active nests or dens.

Mitigation Measure B-38: Avoid Disturbance to Nesting Swallows by Implementing Timing Restrictions, Removing Nests, and Installing Mesh Netting

If activities to attach fiber optic cable to bridges occur outside the swallow nesting season, between March 1 and August 31, activities can proceed with no further mitigation.

If construction activities are planned to occur during the breeding season, a qualified wildlife biologist will inspect known nest sites during the swallows' nonbreeding season between September 1 and February 28. If all swallow nests are abandoned, the nests may be removed.

If the proposed bridge attachments are to occur during the swallows' breeding season, the nests will be removed before March 1. After nest removals, the underside of the bridge will be covered with 1/2- to 3/4-inch mesh net or poultry wire. All net installation will be completed before March 1. The netting must be

anchored so that swallows cannot attach their nests to the bridge through gaps in the net. All net installations will be done to the satisfaction of USFWS.

- If swallows begin building nests on the bridge after net installation, the mud placed by the swallows will be removed. The means of entering the net will be identified, and the net will be repaired.
- If a swallow successfully completes a nest during bridge attachments, Williams will contact USFWS to obtain the appropriate removal permits.
- The netting will remain under the bridge from March 1 until September 1 or until the bridge attachments are completed, whichever comes first.
- If netting of the bridge does not occur by March 1 and swallows subsequently colonize the bridge, attachments to the bridge will not begin before September 1, unless Williams obtains permits from the USFWS.

Responsible Party: Williams – Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: If construction will occur during the cliff swallow breeding season, the resource monitors shall inform the environmental resource coordinator of any known nest sites on bridges to which cable is to be attached and of implementation of the mitigation measure. The contract compliance inspector, and the spread superintendent if necessary, are responsible for ensuring that construction will be postponed if necessary to comply with this mitigation measure. The environmental resource coordinator shall note compliance with this measure, and the necessity for obtaining any permits from the USFWS, in the weekly report to the CPUC.

Mitigation Measure B-39: Avoid Bat Maternity Roost by Postponing Bridge Attachments

In conjunction with mitigation for nesting swallows (Mitigation Measure B-37: "Avoid Disturbance to Nesting Cliff Swallows," described above) and before construction, a qualified wildlife biologist will conduct a survey of all bridge attachment sites to determine occupancy by maternity roosting special-status bats. If it is determined that special-status bats are roosting beneath bridge attachment sites, to avoid construction-related disturbance, construction will be postponed until the qualified wildlife biologist determines that the site is unoccupied; or, through consultation with local DFG staff, determines the most appropriate construction time and method.

Responsible Party: Williams – Resource monitor, environmental resource coordinator, contract compliance inspector, and spread superintendent.

Timing: Before construction.

Monitoring Program: The resource monitors shall inform the environmental resource coordinator of any special-status bats roosting on bridges to which cable is to be attached. The contract compliance inspector, and the spread superintendent if necessary, are responsible for ensuring that construction will be postponed in accordance with this mitigation measure. The environmental resource coordinator shall

note compliance with these requirements and the presence of any special-status bats in the weekly report to the CPUC.

Mitigation Measure B-40: Avoid and Minimize Disturbance of Woody Riparian Vegetation along Drainages

Impacts on woody riparian vegetation will be avoided by boring underneath drainages that support this habitat type. A minimum 20-foot-wide setback will be established and staked by a resource specialist before construction activities. This buffer will extend between the edge of the woody riparian vegetation and construction equipment.

Woody riparian vegetation close to the project routes that could be indirectly or inadvertently affected by installation activities will be protected by installation of temporary fencing or staking and flagging of a minimum 20-foot-wide setback. Depending on site-specific conditions, this buffer may be narrower or wider than 20 feet, as determined by the field resource specialist. Identification and protection of woody riparian vegetation close to the work zone will include either flagging or fencing, depending on site-specific conditions.

Before construction activities are initiated on a route, the limits of the work zone will be identified by a qualified biologist. The environmental coordinator or contractor compliance inspector will routinely inspect construction activities to ensure that protective measures are working and that they remain in place during installation. The contract compliance inspector also will confirm that protective measures are in place before construction activities begin on the route. Protective fencing will remain in place until all construction activities in the area are complete.

In areas where boring is determined to be infeasible, the project environmental coordinator will coordinate the appropriate resource agencies to obtain clearance for cutting of woody riparian vegetation. These areas will be identified at least one month in advance of vegetation removal. The appropriate land management and resource agencies will be submitted a letter describing existing conditions on the site and photographs of the site. Verbal approval will be obtained prior to removal of any woody riparian vegetation.

Shrub vegetation will be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration of the species. Cutting will be limited to a minimum area necessary within the 20-foot-wide cable right-of-way. This type of removal will be allowed only for shrub species (all trees will be avoided) and in areas that do not provide habitat for sensitive species (i.e., willow flycatcher). To protect migratory birds, no woody riparian vegetation removal will be allowed beginning March 15 and ending September 15, as required under the Migratory Bird Treaty Act.

Responsible Party: Williams – Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before and during construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking the limit of work zones and, as appropriate after construction, removal of markings. The contract compliance inspector shall ensure that this mitigation measure is followed and that equipment, including boring equipment, is confined to identified work areas. The contract compliance inspector and resource monitors shall notify the environmental resource coordinator of any failures to follow the prescribed mitigation measure and the environmental resource coordinator shall immediately notify the CPUC.

Mitigation Measure B-41: Conduct Postconstruction Monitoring in Woody Riparian and Wetland Communities That Are Substantially Disturbed during Construction Activities

The proposed project has been designed to avoid and minimize disturbance of woody riparian and perennial wetland communities because most projects occur within existing disturbed rights-of-way. However, if woody riparian vegetation and wetlands are substantially disturbed during construction, site conditions will be restored and some areas revegetated to ensure a no-net-loss of habitat functions and values.

Areas that will require revegetation will be determined by a qualified restoration ecologist in conjunction with the appropriate land management and resource agency specialists. A general revegetation plan for wetland and woody riparian communities will be developed and approved by the resource agencies prior to construction. The revegetation plan will include design specifications, an implementation plan, maintenance requirements, and a monitoring program. Revegetation will be implemented immediately following disturbance as is appropriate in substantially disturbed areas, or as is appropriate for the local site conditions. Monitoring for a specified time period will be conducted to document the degree of success in achieving the success criteria and to identify remedial actions that may be needed. Annual monitoring reports will be submitted to the appropriate resource agencies. The report will summarize the data collected during monitoring periods, describe how the habitats are progressing in terms of the success criteria (described below), and discuss any remedial actions performed.

Monitoring will be required in all substantially disturbed riparian and wetland communities. Resource specialists will document baseline conditions prior to construction in wetland and riparian areas. Data that may be gathered on each site to document baseline conditions and during the subsequent monitoring visits would include:

- wetland delineation using DFG guidelines and the U.S. Army Corps of Engineers' (Corps') 1987 manual,
- relative cover and types of plant species establishing in the installation corridor,
- percent absolute vegetation cover,
- general assessment of the wetland or riparian habitat in relation to the surrounding undisturbed area, and
- noxious weed or erosion problems.

Success criteria will be determined through coordination with plant ecologists from land management and other resource agencies. A brief letter report summarizing the results of monitoring and recommending additional needed actions will be submitted to the appropriate land management and resource agencies.

This revegetation plan for riparian and wetland habitats will be considered successful when the following criteria are met:

- The riparian and wetland habitats established are composed of a mix of species similar to that removed during cable installation.
- At least 75 percent of the absolute cover of riparian and wetland vegetation immediately adjacent to the construction corridor.

- Growth is achieved of riparian species that rate good or excellent vigor and growth based on a qualitative comparison of leaf turgor, stem caliber, leaf color, and foliage density in the planted sites with individuals of the same species in the adjacent riparian areas.
- Annual or perennial nonwetland species that comprise less than 5 percent of preinstallation species composition or the composition of surrounding undisturbed wetland or riparian vegetation.
- Plantings at each site (if needed) are self-sustaining without human support (e.g., weed control, rodent control, or irrigation).

Responsible Party: Williams -- environmental resource coordinator and restoration ecologist.

Timing: Before and after construction.

Monitoring Program: A restoration ecologist will document existing conditions before vegetation is removed. The environmental resource coordinator shall notify the CPUC that woody riparian and wetland communities will be affected. The restoration ecologist shall provide the CPUC with a brief letter report summarizing the results of the monitoring and recommending additional needed action one year after completion of construction. If a revegetation plan is necessary, the restoration ecologist shall provide the CPUC with monitoring reports on an annual basis as provided in the mitigation measure.

Mitigation Measure F-1: Avoid in-Water Construction in All Flowing Streams that Support Sensitive Fish Species at or Below the Crossing Location

To avoid impacts on listed fish species, Williams will not use in-water construction methods (plowing or trenching) to cross streams flowing at the time of construction and that support sensitive fish species at or downstream of the crossing location. At flowing sensitive stream crossings, Williams will install the cable by boring under the stream, attach the cable to an existing bridge, or install the cable under or over an existing culvert to avoid impacts to listed fish species.

Responsible Party: Williams -- resource monitors, contract compliance inspector, and environmental resource monitor.

Timing: During construction.

Monitoring Program: The resource monitors and contract compliance inspector shall monitor compliance with this measure and inform the environmental resource coordinator. The environmental resource coordinator shall note compliance with this mitigation measures in the weekly reports to the CPUC.

Mitigation Measure B-42: Survey Proposed Staging Areas before Construction and Implement Avoidance Measures, if Required

All staging areas will be evaluated to determine the presence or potential presence of sensitive biological resources, including waters of the United States, sensitive natural communities, and special-status species. If the surveys are conducted past the appropriate identification period for special-status species, a site evaluation will be conducted to determine if suitable habitat is present. If suitable habitat is located on the site, recommendations will be made for choosing a new location or avoiding the habitat onsite (if feasible).

The appropriate mitigation measures discussed for other biological resources in this document will also be implemented. Implementation of this mitigation measure will result in a less-than-significant impact.

Responsible Party: Williams –Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: Before construction.

Monitoring Program: The resource monitors shall notify the contract compliance inspector and environmental resource coordinator of any sensitive biological resources identified at the access roads or staging areas being proposed. The contract compliance inspector will monitor to ensure that new roads and staging areas avoid sensitive areas. The environmental resource coordinator shall note compliance with this mitigation measure in the weekly report to the CPUC.

✓ Mitigation Measure B-43: Minimize Disturbance and Restore Other Waters of the United States to Preproject Conditions

Consistent with the Corps' Nationwide Permit No. 12 for utility line discharges, the area of waters of the United States that will be disturbed will be limited to the minimum area necessary to successfully install the fiber optic conduit and cable. The following measures will be implemented to minimize effects on and restore other waters of the United States and associated plant communities:

- Stabilize exposed slopes and streambanks immediately on completion of installation activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its preproject condition and reduces the effects of erosion on the drainage system.
- In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the proposed project engineers determine that more aggressive erosion control treatments are needed, geotextile mats, excelsior blankets, or other soil stabilization products will be used.
- Remove trees, shrubs, debris, or soils during construction that are inadvertently deposited below the ordinary high-water mark of drainages in a manner that minimizes disturbance of the drainage bed and bank.
- Implement additional measures that may be required as part of the DFG, Corps, and RWQCB permits that will be obtained for each project route.

These measures will be incorporated into contract specifications and implemented by the construction contractor. Additionally, Williams will incorporate all permit conditions into construction specifications. The contract compliance inspectors and biologists will routinely inspect construction activities to verify that the above protective measures and permit conditions have been implemented.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: During construction.

Monitoring Program: The resource monitors and contract compliance inspector shall monitor compliance with this measure and inform the environmental resource coordinator. The environmental

resource coordinator shall note compliance with this mitigation measure in the weekly report to the CPUC.

Mitigation Measure B-44: Minimize Disturbance and Restore Jurisdictional Wetlands to Preproject Conditions

Williams will implement the following guidelines for reestablishing conditions conducive to natural site regeneration:

- Avoid installation activities in saturated or ponded wetlands during the wet season (spring and winter) to the maximum extent possible. Where such activities are unavoidable, protective practices, such as use of padding or vehicles with balloon tires, will be used.
- Where determined necessary by the resource specialists, geotextile cushions and other materials (e.g., timber pads, prefabricated equipment pads, or geotextile fabric) will be used in saturated conditions to minimize damage to the substrate and vegetation.
- In wetlands that are trenched, the top 12 inches of topsoil from the excavated site with intact roots, rhizomes, and seed bank will be stockpiled (Corps' Nationwide Permit No. 12 requires that topsoil be stockpiled and replaced). The topsoil and subsoil will be replaced immediately after construction activities are complete.
- Recontour the ground surface to maintain preproject wetland hydrology.

Responsible Party: Williams – Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: During construction.

Monitoring Program: The resource monitors and contract compliance inspector shall monitor compliance with this measure and inform the environmental resource coordinator. The environmental resource coordinator shall note compliance with this mitigation measure in the weekly report to the CPUC.

Mitigation Measure B-45: Avoid and Protect Specified Jurisdictional Wetlands Adjacent to Construction Areas

In wetland areas, fiber optic cable installation activities will be limited to the rights-of-way. Protective barrier fencing or staking and flagging will be used in specified wetland areas to protect wetlands near the work zone. Wetlands will also be identified on the construction drawings. Resource personnel will assist in placing protective barriers around wetlands prior to any ground-disturbing activities.

Resource personnel will identify the specific location of protective barriers before cable and regenerator/OP-AMP station construction activities are initiated near specified jurisdictional wetlands. The contract inspectors and resource specialists will routinely inspect protected areas to ensure that barriers remain in place and are effective. Protective barriers will remain in place until all construction activities are complete in areas near sensitive resources.

Responsible Party: Williams – Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: During construction.

Monitoring Program: The resource monitors shall report daily to the environmental resource coordinator on completion of marking exclusion zones and, as appropriate after construction, removal of markings. The contract compliance inspector shall ensure that equipment, including boring equipment, is confined to identified work areas. The contract compliance inspector and resource monitors shall notify the environmental resource coordinator of any failures to follow the prescribed mitigation measure and the environmental resource coordinator shall immediately notify the CPUC.

Mitigation Measure B-46: Fill or Cover Open Trenches Daily

Any open trenches will be filled with earth material imported from an existing borrow site or covered with plywood or other material to prevent entrapment at the end of each work day. Both ends of any open trench will be sloped to form escape ramps before covering. If wildlife are found in the trench, they will be removed by a qualified permitted biological monitor before resumption of work in that trench segment. Williams will specify this requirement in the agreements with all construction contractors.

Responsible Party: Williams – Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: During construction.

Monitoring Program: The contract compliance inspector shall ensure that all trenches will be closed at the end of the day. The contract compliance inspector and resource monitors shall notify the environmental resource coordinator of any failures to follow the prescribed mitigation measure and the environmental resource coordinator shall immediately notify the CPUC.

Cultural and Paleontological Resources

Mitigation Measure C-1: Develop and Implement Avoidance Procedures

Once the inventories are complete and all sites that could be affected by the project routes have been identified, the following process will be implemented to ensure that resources are avoided. The first step will be for the assigned project archaeologist and the project engineer to review the possible avoidance measures for each potentially significant cultural resource site to determine which avoidance method is appropriate. Depending on the characteristics of individual sites, effects will be avoided by rerouting the conduit around identified cultural resource sites or by boring beneath sites. When an avoidance measure is agreed on, these measure will be coordinated with the appropriate agency staff. When applicable, methods of avoiding impacts may also be determined in consultation with a lead federal agency and the California State Historic Preservation Officer in compliance with Section 106 of the National Historic Preservation Act. Avoidance measures for each potentially significant site will be outlined in the cultural resources inventory report for each project route. The cultural resources inventory reports will be reviewed and approved by the CPUC. The agreed on avoidance measure will be conveyed to the contractor by marking on the appropriate construction specifications. Where appropriate, field marking of sites or areas of exclusion zones may be undertaken.

Responsible Party: Williams will develop methods of avoidance. The resource monitor will restake sites as needed. The environmental resource coordinator and the contract compliance inspector are responsible for ensuring that the avoidance measures are implemented.

Timing: Avoidance measures are developed during implementation of the cultural resource inventory and during agency consultation. Implementation of the avoidance measures occurs during construction.

Monitoring Program: The environmental resource coordinator shall submit all cultural resource inventory reports to the CPUC as they are available (however, these reports are not for general public release). These inventory reports specify the avoidance procedures for each cultural resource site. The resource monitor (archaeological monitor) shall specify and the contract compliance inspector shall enforce the requirements of the reports in accordance with this mitigation measure. Any noncompliance shall be reported to the environmental resource coordinator, who shall notify the CPUC immediately.

Mitigation Measure C-2: Develop and Implement Cultural Resources Monitoring Plan

Where cultural resource monitoring is called for, Mitigation Measure C-1 should be implemented. For each project route, a separate mitigation monitoring plan will be developed. The monitoring plan will outline where and how qualified archaeologists will conduct archaeological monitoring. The plan will include a description of the locations of areas that would be monitored as well as the methods and procedures for archaeological monitoring areas selected for monitoring. The areas selected for monitoring will include these areas considered to be particularly sensitive for the presence of buried cultural resources. The monitoring plans will be included as appendices for the cultural resources inventory reports for each route being reviewed and approved by the CPUC. The agreed on monitoring protocols will be conveyed to the contractor by marking on the areas to be monitored on the appropriate construction specifications. Where appropriate, field marking of sites or areas of exclusion zones may be undertaken.

Responsible Party: Williams will develop a mitigation monitoring plan for each project route. The resource monitor will restake sites as needed. The environmental resource coordinator and the contract compliance inspector are responsible for ensuring that the monitoring measures specified in the monitoring plan are implemented.

Timing: The mitigation monitoring plan is developed for each project route in conjunction with preparation of the cultural resources inventory report for each project route.

Monitoring Program: The environmental resource coordinator shall submit all cultural resource monitoring plans to the CPUC as they are available (however, these reports are not for general public release). These monitoring plans specify the cultural resource monitoring procedures for individual project routes. The resource monitor (archaeological monitor) shall specify and the contract compliance inspector shall enforce the requirements of the monitoring plans in accordance with this mitigation measure. Any noncompliance shall be reported to the environmental resource coordinator, who shall notify the CPUC immediately.

Mitigation Measure C-3: Conduct Test Excavation to Determine Resources Significance, and if Significant, Conduct Data Recovery Excavation

If avoidance of potentially significant resources proves to be infeasible, then the following mitigation measure will be implemented. A test excavation will be conducted to determine the significance of each resource that cannot be avoided. If the resource is found to be significant, then a data recovery excavation will be conducted. The data recovery will be directed by a data recovery plan, prepared for review and approval by the CPUC.

Responsible Party: Williams will retain a qualified professional archaeologist to prepare a test excavation plan and a data recovery plan, if needed, and to conduct any archaeological test excavation

that may become necessary. Williams is responsible for ensuring that this measure is implemented, as appropriate, when it is infeasible to avoid potentially significant cultural resources.

Timing: Test excavation is conducted prior to construction if it is determined that it is infeasible to avoid a potentially significant cultural resource site. A data recovery plan is developed after completion of test excavation if it is determined that the resource is significant.

Monitoring Program: The environmental resource coordinator shall submit all cultural resource test excavation reports and data recovery plans to the CPUC as they are available (however, these reports are not for general public release). Williams shall enforce the requirements for any test excavations, data recovery plans, and data recovery that may become necessary in accordance with this mitigation measure. Any noncompliance shall be reported to the environmental resource coordinator, who shall notify the CPUC immediately.

✓ **Mitigation Measure C-4: Site Regenerator/OP-AMP Facilities to Avoid Setting Impacts on Significant and Potentially Significant Resources**

Regenerator/OP-AMP facilities will not be sited in proximity to potentially and significant historic resources where those resources are determined to have a historic setting that could be compromised.

Responsible Party: Williams -- The environmental resource coordinator and the contract compliance inspector are responsible for ensuring that this avoidance measure is implemented.

Timing: During design of regenerator/OP-AMP facilities.

Monitoring Program: The environmental resource coordinator shall submit cultural resource inventory reports for each project route to the CPUC. These inventory reports will include the locations of regenerator/OP-AMP facilities and will indicate if any significant or potentially significant historic resources are in proximity to these locations. If any significant or potentially significant historic resources are in proximity to these locations, the report will recommend that the regenerator/OP-AMP facilities be located in a different area. The contract compliance inspector shall enforce the requirements of the reports in accordance with this mitigation measure. Any noncompliance shall be reported to the environmental resource coordinator, who shall notify the CPUC immediately.

✓ **Mitigation Measure C-5: Stop Work If Cultural Resources Are Discovered during Ground-Disturbing Activities**

If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or human bone, are inadvertently discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the CPUC, State Historic Preservation Officer, and other appropriate agencies. Implementation of this mitigation measure will result in avoidance of a substantial adverse change in the significance of historical or archaeological resources that could be inadvertently discovered during construction.

Responsible Party: Williams -- Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: During construction.

Monitoring Program: The resource monitor (archaeological monitor) shall notify the contract compliance inspector and environmental resource coordinator of any sensitive biological resources identified at the access roads or staging areas being proposed. The contract compliance inspector will stop work in that area and provide sufficient time to assess and consult. The contract compliance inspector shall enforce the treatment measures developed to avoid substantial adverse changes. The environmental resource coordinator shall note compliance with this mitigation measure in the weekly report to the CPUC.

Mitigation Measure C-6: Retain a Qualified Paleontologist to Oversee Construction Activities and Prepare a Report ✓

In known areas of high sensitivity for paleontological resources, full-time monitoring by a qualified paleontologist may be required, based on the construction method used (i.e., a paleontological monitor will be present 80 to 100 percent of the time during ground-disturbing activities in areas with high paleontological sensitivity). In areas of low sensitivity, spot checking may be required (i.e., a paleontological monitor will be present 0 to 20 percent of the time during ground-disturbing activities in areas with low paleontological sensitivity). In areas of no sensitivity, no monitoring will be required. The paleontologist will monitor ground-disturbing activities and salvage and catalogue fossils where necessary.

On routes where areas having high or medium sensitivity have been identified, the qualified paleontologist will be present at the preconstruction conference; will establish procedures for paleontological resource surveillance; and will establish, in cooperation with the contract compliance inspectors and environmental resource coordinator, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of the fossils.

The role of the paleontological monitor is to recover, analyze, process, catalog, curate, and document significant fossil remains. Paleontological monitors will be available and equipped to salvage fossils as they are unearthed to avoid construction delays and remove samples of sediments that are likely to contain the remains of small fossil vertebrates. Paleontological monitors will be able to temporarily halt or divert construction equipment to allow removal of large specimens. The qualified paleontologist, in cooperation with the contract compliance inspector and environmental resource coordinator, will determine appropriate actions to ensure proper exploration and salvage of encountered paleontologic resources (fossils).

If major paleontological resources or significant concentrations of fossils are encountered that require long-term halting or redirecting of construction or that cannot be collected during normal monitoring time, salvage operations must be initiated and completed as quickly as feasible at the direction of the qualified paleontologist and coordinated with the construction contractor. The environmental resource coordinator will be notified as soon as possible regarding any paleontologic salvage operation.

Implementation of this mitigation measure will result in the salvage of unique paleontological resources or sites and unique geologic features. A final paleontological report will be submitted to the CPUC on completion of construction on each project route where areas of high or low sensitivity have been identified. The report will include monitoring dates, methodologies, an itemized inventory of specimens and analysis of the significance of encountered fossils, curation of collected fossils to the point of identification, and accession of the fossils to a museum repository with a retrievable storage system. The final report and inventory, when submitted to the CPUC, signifies completion of the program to mitigate impacts on paleontologic resources.

Responsible Party: Williams -- Resource monitor (paleontologist), environmental resource coordinator, and contract compliance inspector.

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Timing: Before and during construction.

Monitoring Program: The resource monitor (paleontologist) shall specify and the contract compliance inspector shall enforce the requirements of this mitigation measure. The environmental resource coordinator shall note compliance with this measure in the weekly report to the CPUC. Any necessary salvage operation, as well as any noncompliance, shall be reported to the environmental resource coordinator, who shall notify the CPUC immediately. The environmental resource coordinator shall provide a copy of the final paleontological report and inventory to the CPUC as soon as it is available.

✓ **Mitigation Measure C-7: Comply with State and Federal Laws Pertaining to the Discovery of Human Remains**

If human remains of Native American origin are discovered during ground-disturbing activities on nonfederal lands, state laws relating to the disposition of Native American burials will apply. The Native American Heritage Commission (NAHC) will have jurisdiction (Pub. Res. Code Sec. 5097). If human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- the coroner of the county has been informed and has determined that no investigation of the cause of death is required,
- if the coroner determines that the remains are of Native American origin, the coroner shall contact the NAHC within 24 hours, and
- the NAHC shall identify the person or persons it believes are the most likely descendent of the deceased Native American.

The most likely descendent may make recommendations to the land owner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Pub. Res. Code Sec. 5097.98.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (section 8100), and unauthorized disturbance of Native American cemeteries is a felony (section 7052). Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission.

If human remains of Native American origin are discovered on federal land during ground-disturbing activities, compliance with the Native American Graves Protection and Repatriation Act (NAGPRA) regulations relating to discovery of human remains of Native American origin on federal land would be required.

NAGPRA specifies the procedures that agencies must follow when burials of Native American origin are found on federal land (43 CFR Part 10). The regulations implementing the requirements of NAGPRA relating to the inadvertent discovery of human remains of Native American origin are described in 43 CFR Part 10, Subpart B Section 10.4. These regulations include the following provisions, which would be implemented by Williams and by the federal agency with direct jurisdiction over the land if human remains are discovered during construction activities:

- notify the county coroner or the sheriff;
- notify, in writing, the responsible federal agency; and
- cease activity in the area of discovery and protect the human remains.

On notification that human remains have been discovered on federal land, the responsible federal agency should:

- certify receipt of the notification;
- take steps to secure and protect the human remains;
- notify the Indian tribe or tribes likely to be culturally affiliated with the discovered human remains within one working day; and
- initiate consultation with the Indian tribe or tribes in accordance with regulations described in 43 CFR Part 10, Subpart B Section 10.5.

Implementation of this mitigation measure would result in avoidance of unauthorized disturbance of human remains.

Responsible Party: Williams – Resource monitor, environmental resource coordinator, and contract compliance inspector.

Timing: During construction.

Monitoring Program: The resource monitor (archaeologist) shall notify the proper authorities, the contract compliance inspector, and the environmental resource coordinator immediately if human remains are discovered and shall implement the mitigation measure. The contract compliance inspector shall act as necessary to ensure that no further excavation or disturbance occurs. The environmental resource coordinator shall notify the CPUC of the find. The environmental resource coordinator shall note compliance with this mitigation measure in the weekly report to the CPUC.

Hazardous Materials

Mitigation Measure H-1: Ensure Proper Labeling, Storage, Handling, and Use of Hazardous Materials

The construction contractor will ensure proper labeling, storage, handling, and use of hazardous materials in accordance with best management practices and the Occupational Safety and Health Administration's (OSHA's) HAZWOPER requirements. The construction contractor will ensure that employees are properly trained in the use and handling of these materials and that each material is accompanied by a material safety data sheet. Additionally, any small quantities of hazardous materials stored temporarily in staging areas will be stored on pallets within fenced and secured areas and protected from exposure to weather. Incompatible materials will be stored separately, as appropriate.

To avoid unexpected releases of hazardous materials, the construction contractor team will include individuals trained in accordance with OSHA's HAZWOPER requirements. Additionally, the construction team will have a written plan outlining how to respond if hazardous materials are unexpectedly encountered. The plan will specify identification, handling, reporting, and disposal of hazardous materials. All hazardous waste materials removed during construction, to the extent necessary to ensure the area can be safely traversed, will be handled and disposed of by a licensed waste disposal contractor and transported by a

licensed hauler to an appropriately licensed and permitted disposal or recycling facility. Williams will require in its contracts that contractors meet federal, state, and local requirements.

Responsible Party: Williams -- environmental resource coordinator and contract compliance inspector.

Timing: During installation.

Monitoring Program: The contract compliance inspector shall ensure that qualified individuals are available on the construction team, as required by this mitigation measure. The environmental resource coordinator shall immediately notify the CPUC if any hazardous materials or wastes are encountered and provide information about how the wastes are being handled.

Land Use

Mitigation Measure LU-1: Obtain and Comply with Local Zoning Permits

Williams will obtain necessary local zoning permits before construction of facilities and will comply with the applicable conditions of approval.

Responsible Party: Williams -- environmental resource coordinator.

Timing: During installation.

Monitoring Program: The environmental resource coordinator shall notify the CPUC of any local zoning permits being applied for by Williams and provide the CPUC with a copy of any approved permits and conditions of approval.

Noise

Mitigation Measure N-1: Employ Noise-Reducing Construction Practices

When installing and constructing fiber optic cable system, Williams will employ the following noise-reducing measures:

- Restrict construction activity along routes and at staging areas within 1,000 feet of residences to daytime hours (7:00 a.m. to 7:00 p.m.). No construction will be performed within 3,000 feet of an occupied dwelling unit on Sundays, legal holidays, or between the hours of 7:00 p.m. and 7:00 a.m. on other days.
- All equipment will have sound-control devices no less effective than those provided on the original equipment. No equipment will have an unmuffled exhaust.
- As directed by the local jurisdiction, Williams will implement appropriate additional noise mitigation measures to comply with the applicable local noise ordinance including, but not limited to, changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.
- If traffic control devices requiring electrical power are employed within 500 feet of sensitive receptors, the devices will be battery/solar powered instead of electrical power generators.

Responsible Party: Williams -- environmental resource coordinator and contract compliance inspector.

Timing: During construction.

Monitoring Program: The contract compliance inspector shall enforce these requirements on the construction team. The environmental resource coordinator shall notify the CPUC of any noncompliance with this measure.

Mitigation Measure N-2: Limit Use of Helicopters near Residences and Other Sensitive Land Uses

Williams will locate helicopter staging/landing areas away from residences and other sensitive land uses. Except when operating from an existing airport, helicopter staging/landing areas will be located at least 1 mile from sensitive land uses.

Responsible Party: Williams -- environmental resource coordinator.

Timing: During construction.

Monitoring Program: The contract compliance inspector shall enforce these requirements on the construction team. The environmental resource coordinator shall notify the CPUC of any noncompliance with this measure.

Mitigation Measures N-3. Design and Locate Emergency Backup Generators and Other Support Equipment to Limit Noise from the Engine Generator

Williams will design and locate the emergency backup generators and other support equipment at regenerator/OP-AMP stations such that the noise produced does not exceed local noise ordinance criteria. Potential methods for achieving this include locating the facility away from noise-sensitive uses and using local shielding from the building structure, topography, or sound walls to reduce noise transmission to sensitive receptors.

Responsible Party: Williams -- environmental resource coordinator.

Timing: During construction.

Monitoring Program: The contract compliance inspector shall enforce these requirements on the construction team. The environmental resource coordinator shall notify the CPUC of any noncompliance with this measure.

Transportation/Traffic

Mitigation Measure T-1: Obtain and Comply with Local and State Road Encroachment Permits

Williams will obtain all necessary local and state road encroachment permits before construction and will comply with the applicable conditions of approval. Traffic control measures, such as the placement of warning signs and the use of traffic control personnel when appropriate, will be implemented.

Responsible Party: Williams -- environmental resource coordinator.

Timing: Before construction.

Monitoring Program: The environmental resource coordinator shall notify the CPUC of any road encroachment permits being applied for by Williams and provide the CPUC a copy of any approved permits and conditions of approval.