Chapter 5. Environmental Impacts and Mitigation Measures

INTRODUCTION

Like Chapter 4, "Environmental Setting", this discussion of impacts and mitigation measures is organized by resource topic, corresponding to the Environmental Checklist Form of the amended California Environmental Quality Act (CEQA) Guidelines. A completed checklist for the project is provided in **Appendix A**. **Table 5-1** lists sensitive and protected resources by optical amplification (OP-AMP) site along with all applicable mitigation measures.

| During Field Surveys and Site Visits | | | | | |
|--------------------------------------|---|-----------------------|--|--|--|
| OP-AMP Station Site | Associated Resources | Applicable Mitigation | | | |
| Lindenberger | None identified | N/A | | | |
| Mesa Rock | Ephemeral drainage adjacent to potential habitat for Quino checkerspot butterfly and California gnatcatcher | Avoid | | | |

 Table 5-1. Sensitive and Protected Resources Identified at the OP-AMP Station Sites

 During Field Surveys and Site Visits

For each resource discussion, the relevant portion of the state environmental checklist form is provided and the significance criteria used in the impact evaluation (i.e., checklist criteria and local agency or professional standards) are identified. Each entry on the environmental checklist form has a corresponding impact discussion.

Pursuant to the State CEQA Guidelines, a project's physical effects on the environment can be characterized as having either:

- # no impact the project will not result in an impact;
- # a less-than-significant impact the project will result in an impact, but at a level that is not considered significant;
- # a potentially significant impact unless mitigation is incorporated absent mitigation measures or project revisions, the impact of the project will be considered significant; or
- # a potentially significant impact there is substantial evidence that the impact of the project may be significant and cannot be avoided or reduced to a less-than-significant level.

Mechanisms that could cause impacts are discussed for each resource area. Besides installation of the fiber optic cable system, the project will require minor activities related to future operation and maintenance, as described in Chapter 2, "Project Description". Project effects fall into the following three categories: temporary, short-term, and long-term. These categories are defined as follows:

- # A "temporary" effect will occur only during construction and/or subsequent restoration.
- # A "short-term" effect will last from the time construction ceases to within 3 years following construction and/or subsequent restoration.
- # A "long-term" effect will last longer than 3 years following construction and/or subsequent restoration and is typically associated with operation and maintenance of the fiber optic cable system. In some cases, a long-term effect could be considered a "permanent" effect.

Implementation of the mitigation measures specified in this subsequent initial study/mitigated negative declaration (IS/MND) will either avoid the impacts completely or reduce all temporary and short-term construction impacts and any long-term operational impacts to less-than-significant levels. Williams has adopted all of the mitigation measures recommended in this subsequent IS/MND, in addition to those mitigation measures incorporated into the project design and construction approaches in Chapter 2, "Project Description", as part of the construction mitigation strategy for the proposed project.

Pursuant to Public Resources Code Section 21081.6, the California Public Utilities Commission (CPUC) will adopt a mitigation monitoring plan at the time it approves the CPCN and adopts this subsequent mitigated negative declaration. The purpose of the plan is to ensure that the mitigation measures being adopted as part of this project approval will be complied with when the project is implemented. The plan identifies each of the mitigation measures and describes the party responsible for monitoring, the time frame for implementation, and the program for monitoring compliance. A mitigation monitoring plan has been developed and is included in **Appendix F**.

The following terminology is also used to describe impacts:

- # A "cumulative" impact is an impact of the project that is cumulatively considerable when compounded with impacts from other past, present, or reasonably foreseeable future projects. A project's incremental effects are not "cumulatively considerable" solely because other projects will have a significant cumulative impact.
- # "Construction" applies to activities associated with installation of the conduit and cable, construction of the OP-AMP stations, and/or subsequent restoration.
- # "Preproject conditions" refer to conditions before installation of the fiber optic cable system. It does not refer to conditions before construction of the existing facilities in a disturbed right-of-way (i.e., railroad and road right-of-way).
- # "No further mitigation is required" is stated if the impact has been premitigated by Williams' incorporating specific measures into the project design and construction approaches.
- # "None required" is stated if the impact is considered minimal or less than significant and does not require mitigation.

This document examines potential impacts and, where necessary, identifies mitigation measures on a programmatic and/or project-specific basis.

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

- # undertaking all impact avoidance measures described in Chapter 2, "Project Description", and elsewhere in this IS/MND;
- # implementing various plans (i.e., storm water pollution prevention, fire prevention and management, and reclamation 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 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 and implementing all the mitigation measures identified in mitigation monitoring plan (Appendix F).

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----------------|--|--------------------------------------|---|------------------------------------|--------------|
| I. <u>AEST</u> | HETICS - Will the project: | | | | |
| a. | Have a substantial adverse effect on a scenic vista? | | | | _/_ |
| b. | Substantially damage scenic resources along a scenic highway, including, but not limited to, trees, rock outcroppings, and historic buildings? | | | | _/_ |
| c. | Substantially degrade the existing visual character or quality of the site and its surroundings? | | _/ | | _ |
| d. | Create a new source of substantial light or glare that will adversely affect daytime or nighttime views in the area? | | | _ | _/_ |

I. AESTHETICS

Criteria for Determining Significance

The analysis of significance of impacts of the project is based on criteria *a*-*d* described in the environmental checklist. In general, however, projects that result in substantial changes to land forms, remove or add significant structures, result in visual clutter or disorder, or substantially disrupt the visual context with their surroundings will be considered to have a significant visual impact.

Impact Mechanisms

Structures and changes in land forms have some impact on the visual environment. The extent of the impact is based on several factors, such as the existing visual character of the areas, the expectations of individuals viewing the areas, and the location of the impact (foreground, middle ground, and background). Potential visual impacts associated with the project could result from ground disturbance associated with plowing and trenching, installation of cable markers, and construction of OP-AMP stations.

Impact Assessment

Aesthetic values differ between areas. Tolerance for visual clutter, expectations for landscaping, and preferred types of architecture are common criterion of aesthetic values. Context is also important. For example, large office structures that will have little visual impact in a large city might have a significant visual impact in a suburban community.

To assess effects on visual resources, two factors were considered:

- *#* the sensitivity of the project study area to disturbances and
- *#* the type and duration of the disturbance associated with the project.

In general, the project will have a minimal aesthetic impact. Cable either will be buried by trenching or plowing within existing roads, or attaching to existing bridges. Minimal surface disturbance will be needed for a short period during installation. Two OP-AMP stations will be constructed as part of the project. These structures will be designed to be unobtrusive, with exteriors that match their surroundings.

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

As detailed in Chapter 3, "Project Route Description", the project route will traverse a long corridor through two counties and several cities in central Riverside County and San Diego County. Although aesthetics is essentially a qualitative issue, scenic vistas are usually considered those that offer high-quality views of the natural environment. The project route does not travel within or cross any state or local highways classified as "Scenic Highways".

Fiber optic cable and conduit will be buried or attached to existing bridges. Approximately 99% of all work will occur within existing road rights-of-way. As discussed in Chapter 2, "Project Description", installation involves only limited machinery and construction disturbance and will occur for only a short time. Trenches, bore pits, and areas where potholes are dug for installing manholes or handholes will be restored as close to preconstruction conditions as possible or practicable. Installation of conduit and fiber optic cable will have

no long-term aesthetic impacts. The placement of cable markers will be consistent with existing road and other utility markers that typically already exist within road rights-of-way.

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

As described above, the project route will not be installed within or cross a state or local scenic roadway. Instead, the project route will be installed underground within disturbed rights-of-way where it will have minimal visual impact. Because the project route will be installed in previously disturbed rights-of-way, the cable markers located within the shoulder of the road will blend with existing utility marker posts and markers demarcating the roads. No historic or cultural resources will be affected by the proposed construction.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

Impact: Temporary Minor Changes in Landscape from Trenching Operations

Conduit and cable installation will have a temporary visual impact during construction. The conduit and cable will most often be installed by trenching within the paved portion of road rights-of-way. Trenching generally creates a 1-foot-wide by 4-foot-deep trench into which cable and conduit is placed. Although installation will be limited to road rights-of-way, this alone will not ensure that there will be no visual impact in rural areas because installation may use vegetated portions of the right-of-way. In general, installation by trenching may have an aesthetic impact beyond the construction period in rural areas if trenching leaves a landscape scar for a short duration (i.e., for less than 3 years). The effects of trenching could be particularly visible when trenches run up steep slopes. However, Williams plans to avoid trenching steep slopes, where feasible.

Measures to minimize possible temporary changes in landscape from trenching operations are included in the storm water pollution prevention plan (SWPPP) (**Appendix C**) as required by the California Public Utilities Commission (CPUC) and other jurisdictional agencies. In areas where trenching is employed, visual impacts will be mitigated by replacing existing topsoil, using stringent erosion control methods, and reseeding disturbed areas where necessary. With implementation of the recommended construction techniques described in this subsequent IS/MND, the project will result in a less-than-significant impact on scenic resources.

Mitigation Measure. No further mitigation is required.

Impact: Possible Minimal Visual Effect Resulting from Construction of OP-AMP Stations

Approximately a 2-acre portion of each of the OP-AMP stations will be occupied by as many as eight 25- by 30-feet one-story, pre-fabricated buildings that will be surrounded by perimeter fencing measuring approximately 300 by 550 feet. During construction of the OP-AMP stations there will be a temporary disturbance to aesthetic values and an increase in visual clutter because of construction activities and the use of heavy equipment and machinery. Once construction of the OP-AMP stations is complete, approximately 2 to 4 weeks, the stations will return to their preconstruction aesthetic conditions with the inclusion of the station buildings. Station buildings will be designed to minimize aesthetic impacts and, where possible, enhance the visual qualities of the sites on which they are located.

Mitigation Measure A-1: Design OP-AMP Stations to Be Unobtrusive. When constructing 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. The buildings will be colored in the predominant shade of their surroundings. ("Rural areas" are those sites located outside the corporate limits of a city or that are zoned for agricultural use.) However, because of the distance between stations and the innocuous design of the structures (Figure 2-5), this impact is considered less than significant. Compliance with this measure will be monitored by the environmental resource coordinator on each project route and reported to the CPUC. Williams will comply with any local permit design requirements and conditions and report compliance with those measures to the appropriate local agency. Implementation of this mitigation measure will reduce this impact to a less-than-significant level.

d. Create a new source of substantial light or glare that will adversely affect daytime or nighttime views in the area?

The single security light and exterior door lights at OP-AMP stations will introduce a new low-level source of light. However, because this lighting will be similar to a standard residential porch light and will not produce substantial light or glare, it will have no impact.

Cumulative Impacts

On completion of the project, only the fencing and the buildings located on the two OP-AMP stations and the cable markers will be visible. The stations will be sited only in areas that do not support sensitive resources and will be designed to be unobtrusive. Cable markers indicating the existence of underground cable will be installed along the project routes; however, they will be within existing rights-of-way containing either roads, railroads, pipelines, utility lines, or other facilities and will be consistent with the existing road/railroad and utility markers already located within these disturbed rights-of-way. The project will not make a cumulative considerable contribution to any impact on aesthetics.

II. AGRICULTURAL RESOURCES

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|-------------------------------|---|--------------------------------------|--|------------------------------------|--------------|
| wh sig ref and Ca | GRICULTURAL RESOURCES - In determining nether impacts on agricultural resources are gnificant environmental effects, lead agencies may fer to the California Agricultural Land Evaluation d Site Assessment Model (1997) prepared by the difornia Department of Conservation. Will the oject: | | | | |
| a. | Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use? | | | | _/ |

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----|---|--------------------------------------|--|------------------------------------|--------------|
| b. | Conflict with existing zoning for agricultural use or with a Williamson Act contract? | | _ | | _/_ |
| c. | Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | | | | _/ |

Criteria for Determining Significance

The analysis of significance of impacts on agricultural resources is based on criteria a-c in the environmental checklist.

Impact Mechanisms

Projects that have a significant effect on agricultural resources are those that result in a long-term or permanent loss of agricultural land. Conversion of agricultural land may result in a significant impact. Conversion may be direct, through construction over the land or removal of land from Williamson Act contract in anticipation of development, or indirect, through the incremental loss of agricultural land or restriction of agricultural use.

Impact Assessment

In general, the construction, operation and maintenance of the fiber optic cable and OP-AMP stations will have no impact on agricultural resources since construction will occur within existing road rights-of-way or on previously disturbed land zoned for utility or residential uses.

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The project will not result in the permanent conversion of significant amounts of prime or unique farmland or farmland of statewide importance to nonagricultural use. The conduit and cable will be installed by trenching or boring within existing disturbed rights-of-way. Construction may temporarily disrupt agricultural activities only in the immediate area of the disturbed rights-of-way, but will have no permanent impact on operations. Once installed, the fiber optic cable will have no long-term impact on agricultural operations beyond that already inherent in the existing rights-of-way. In addition, because the conduit and cable will be installed within existing disturbed rights-of-way, disruption of agricultural activities is unlikely because these disturbed rights-of-way are not currently in agricultural production.

The OP-AMP stations for the project route, which will be located outside of existing developed areas, will require about 2 acres (300 by 550 feet) in land area (within the fencing). The OP-AMP stations needed

in agricultural areas will not require conversion of significant amounts of land from agricultural use and will be considered an "allowable" use within agricultural preserve areas (described further below).

There is no prime farmland that will be converted for OP-AMP stations because the two sites selected are not currently in agricultural production and have little or no agricultural past use. The total farmland of local importance (which can include prime farmland that lack irrigation water) being converted along the project route is also none. There will be no loss of total pasture land at the two sites. There is no impact on losses of farmland and will not occur as a result of the project.

b. Conflict with existing zoning for agricultural use or with a Williamson Act contract?

Communications facilities such as these stations are considered a "compatible" (i.e., allowable) use in agricultural preserves under Government Code Section 51238 and are therefore allowed on agricultural land that is subject to California Land Conservation Act (Williamson Act) contract (Getz pers. comm.). Construction of OP-AMP stations will be consistent with the above government code and will not have an impact on Williamson Act land by requiring or resulting in its conversion to other nonagricultural uses.

c. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use?

The proposed project will create no demand on agricultural land and exert no pressure for conversion of agricultural land to another use. The fiber optic cable system simply transmits data across agricultural land. The proposed project will not result in an impact on agricultural resources.

Cumulative Impacts

The project could possibly result in, at most, temporary disruption of agricultural activities during construction only in the areas of the disturbed rights-of-way, although this will be highly unlikely. Any agricultural activities allowed within the rights-of-way before the fiber optic cable installation will be allowed to continue after its installation. However, it is unlikely that agricultural activities currently occur within these road rights-of-way. The project will not contribute to the loss of agricultural land in California.

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------|
| II. <u>AIR QUALITY</u> - When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Will the project: | | | | |
| Conflict with or obstruct implementation of the applicable air quality plan? | | | | _/ |

III. AIR QUALITY

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----|--|--------------------------------------|--|------------------------------------|--------------|
| b. | Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | _/_ | | |
| c. | Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard (including | | | | |
| | releasing emissions that exceed quantitative thresholds for ozone precursors)? | | _/ | | |
| d. | Expose sensitive receptors to substantial pollutant concentrations? | | _/_ | | |
| 2. | Create objectionable odors affecting a substantial number of people? | | | _/ | |

Criteria for Determining Significance

A project will normally have a significant effect on the environment if it violates any ambient air quality standard, contributes substantially to an existing or projected air quality violation, or exposes sensitive receptors to substantial pollutant concentrations.

Unlike the San Diego Air Pollution Control District, the South Coast Air Quality Management District (SCAQMD) has established quantitative significance emission thresholds for project construction and operation. For construction, those thresholds equal 2.5 tons ROG or No_x per quarter, 24.75 tons CO per quarter, and 6.75 tons PM10 per quarter. For project operations, the SCAQMD's thresholds equal 55 pounds per day for ROG or No_x, 550 ppd for CO, and 150 ppd for PM10 (SCAQMD 1993). The following impact analysis uses the SCAQMD's thresholds to determine whether project-related emissions will result in a significant air impact in either of the two air basins that will be crossed by the project.

Methodology Used to Estimate Air Emissions

Construction Emissions. A variety of construction equipment, including backhoes, excavators, tractors, and other vehicles, will be used during the construction phase of the project. The heavy equipment will produce air pollutants during the project's construction phase.

Table 5.III-1 summarizes emissions associated with typical construction activities involved with fiber optic cable installation. The emissions include exhaust from construction equipment and fugitive PM10 dust from vehicles operating on pavement and on exposed earth. The emission estimates shown in **Table 5.III-1** are reasonable worst case emissions associated with trenching methods. Installation of fiber optic cable through the use of boring techniques will result in slightly lower emission levels than those shown in **Table 5.III-1**. Worst case quarterly emissions for the project route segments are based on each segment's estimated distance and assume a maximum six month construction period.

Table 5.III-1. Construction Emissions Associated with Fiber Optic Cable Installation

| Location | Emissions | ROG | NO _x | PM10 |
|--------------------------------|------------------|------|-----------------|------|
| South Coast Coast Air Basin | Tons per quarter | 0.27 | 2.49 | 1.02 |
| San Diego County Air Basin | Tons per quarter | 0.27 | 2.49 | 1.02 |

Notes: Construction emissions are based on vehicles typically used for fiber optic cable installation projects and for building pad preparation. Fiber optic cable is assumed to be installed at an average rate of 2,000 feet per day in the South Coast Air Basin (two crews operating simultaneously) and in the San Diego County Air Basin (two crews operating simultaneously). Tons per quarter estimates assume 66 working days per quarter. OP-AMP stations assumed at one acre per site and a one month (22 day) construction period. One OP-AMP station assumed to be installed in the SCAB and one in the San Diego County Air Basin. Emission estimates are based on the California Air Resources Board's URBEMIS7G model.

Operational Emissions. Electrically powered OP-AMP stations will be used to strengthen and/or regenerate the telecommunications signals. Under normal operations, no emissions will be generated as a result of the operation of the fiber optic cable system. However, one 255-horsepower (hp) diesel backup generator will be located at each OP-AMP station to provide emergency electrical power during electrical outages. Air pollutants will be produced by backup generators during power interruptions. **Table 5.III-2** summarizes average daily emissions associated with a typical backup generator assuming it is operated for a maximum of 200 hours per year.

Table 5.III-2. Operational Emissions Associated with OP-AMP Station 255 HP Diesel Generators

| Location | Emissions | ROG | NO _x | PM10 |
|--|------------------------|-----|-----------------|------|
| South Coast Air Basin - Lindenberger site | Average pounds per day | 0.2 | 2.0 | 0.1 |
| San Diego County Air Basin - Mesa Rock site | Average pounds per day | 0.2 | 2.0 | 0.1 |

Notes: Emissions estimated are vendor specific emission factors of 6.534 grams per brake horsepower hour, 0.701grams ROG per brake horsepower hour, and 0.269 grams PM10 per brake horsepower hour. Average daily emissions assume that generators will run approximately one-half hour per day, calculated by dividing 200 hours operation per year by 365 days.

Impact Mechanisms

As described in the methodology section above, the construction and operational air quality significance thresholds established by the SCAQMD are used to evaluate the significance of the project's air quality effects.

Impact Assessment

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

The primary air emissions generated by the project in California will be temporary, resulting from construction activities associated with installation. Emissions will also be produced by the infrequent operation of emergency backup generators at the OP-AMP stations. Neither of these activities will conflict with or obstruct implementation of an applicable air quality plan. Therefore, no impact will occur.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Impact: Increased Levels of Air Pollutants during Construction Exceeding Air District Thresholds

Heavy equipment will produce temporarily increased levels of air pollutants during construction. Daily and annual emissions within each air basin are shown in **Table 5.III-1**. Although emissions will not exceed the 2.5 tons per quarter ROG or No_x threshold, nor the 6.75 tons per quarter PM10 threshold, construction activities will generate enough fugitive dust to warrant the following mitigation measures.

Mitigation Measure AQ-1: Implement Construction Best Management Practices. Williams will employ best management practices (BMPs), as required in the respective air pollution control or air quality management district, for construction activities and shall train work crews in those measures prior to beginning work. The BMPs will, at a minimum, include the practices listed below in combination with any additional practices required by the presiding air district:

- **#** Use low emission construction equipment and/or reformulated fuel.
- **#** Water construction areas to minimize visible dust emissions.
- # Apply approved chemical soil stabilizers according to manufacturers specifications to all inactive construction areas (previously graded which remain inactive for 96 hours).
- **#** Reestablish ground cover on construction site to preconstruction levels through seeding and watering.
- # 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.
- # Maintain a maximum speed of 15 mph on unpaved areas.
- # Suspend all grading operations when wind gusts exceed 25 mph.

Impact: Emissions Exceeding Limits from Backup Generators

Diesel generators will be used as backup electrical power at the two OP-AMP stations. One 255 hp diesel engine will be located at each OP-AMP station. The diesel engines are expected to operate no more than 200 hours per year. **Table 5.III-2** shows that the average daily emissions from these generators, when operating at 200 hours per year, will not exceed the daily significance thresholds in the respective air basins. Consequently, the emissions from these generators is considered to be less than significant.

Mitigation Measure : None required.

c. Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Refer to the discussion below under "Cumulative Impacts".

d. Expose sensitive receptors to substantial pollutant concentrations?

Refer to the response to criterion b above.

e. Create objectionable odors affecting a substantial number of people?

Impact: Temporary Generation of Odors from Diesel Exhaust during Construction and from Diesel Backup Generators at OP-AMP Stations

The project will generate odors temporarily from diesel exhaust during construction activities. Odors will also be produced temporarily from diesel exhaust emitted during the operation of emergency backup generators. These odor impacts are considered less than significant because construction odors will be temporary and operational odors will be infrequent. Neither odor source will be severe or will affect a substantial number of people.

Mitigation Measure. None required.

Cumulative Impacts

With implementation of the identified mitigation measures, the project will comply with all air quality standards. Installation and operation of the fiber optic cable system will neither conflict with nor obstruct implementation of any applicable state or federal air quality plan, nor violate any air quality standard or contribute substantially to an air quality violation. It will not result in a cumulatively considerable net increase of a criteria pollutant in a nonattainment area. Furthermore, it will not expose sensitive receptors to substantial pollutant concentrations.

IV. BIOLOGICAL RESOURCES

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|-----|--|--------------------------------------|--|------------------------------------|--------------|
| BIO | LOGICAL RESOURCES - Will the project: | | | | |
| a. | Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the | | | | |
| | California Department of Fish and Game or U.S. Fish and Wildlife Service? | | _/ | | |
| b. | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the | | | | |
| | California Department of Fish and Game or U.S. Fish and Wildlife Service? | | _/ | | |
| c. | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means? | | _/_ | | |
| d. | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | _/ | | |
| e. | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | _/_ | |
| f | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat | | | , | |

Criteria for Determining Significance

The analysis of significance of impacts of the project is based on the criteria described in the environmental checklist above. In addition, the following general criteria were also considered in determining whether an impact on biological resources will be significant:

- # federal or state legal protection of the resource or species,
- # federal or state agency regulations and policies,
- # local regulations and policies,
- # documented resource scarcity and sensitivity both locally and regionally, and
- *#* local and regional distribution and extent of biological resources.

Based on the State CEQA Guidelines and the general criteria identified above, impacts on biological resources were considered significant if the project will result in any of the following:

- # long-term degradation of a sensitive plant community because of substantial alteration of land form or site conditions (e.g., alteration of wetland hydrology);
- *#* substantial loss of a plant community and associated wildlife habitat;
- *#* fragmentation or isolation of wildlife habitats, especially riparian and wetland communities;
- *#* substantial disturbance of wildlife resulting from human activities;
- # avoidance by fish of biologically important habitat for substantial periods, which may increase mortality or reduce reproductive success;
- *#* disruption of natural wildlife movement corridors;
- # substantial reduction in local population size attributable to direct mortality or habitat loss, lowered reproductive success, or habitat fragmentation of:
 - species qualifying as rare and endangered under CEQA,
 - species that are state-listed or federally listed as threatened or endangered, or
 - portions of local populations that are candidates for state or federal listing and federal and state species of concern;
- *#* substantial reduction or elimination of species diversity or abundance.

Impact Mechanisms

Biological resources could be directly affected by construction activities during conduit and cable installation, construction of associated facilities (i.e., OP-AMP/regeneration stations), and by ongoing operational and maintenance activities along the project route.

Direct and indirect disturbance from construction activities could result in the loss or degradation of biological resources through the following ground-disturbing activities:

- *#* plowing or trenching during conduit and cable installation;
- # temporary stockpiling of soil or construction materials and sidecasting of soil and other construction wastes;
- # excavation for bore pits and assist points;

- # use of designated equipment staging areas (impacts on biological resources are unlikely because locations that are already heavily disturbed, including those that are paved or have compacted dirt and gravel, will be used as staging areas);
- *#* soil compaction, dust, and water runoff;
- # equipment access through nonsensitive stream channels (streams that do not support sensitive species, critical habitat, or riparian woody vegetation);
- *#* vehicle traffic and equipment and materials transport along the right-of-way;
- *#* noise disturbance to wildlife species from construction activities; and
- # temporary parking of vehicles outside the construction zone on sites that support sensitive resources (sites not designated as equipment staging areas).

Impact Assessment

Approach and Methodology

Assumptions. Biological resources could be directly and indirectly affected by construction activities. Construction-related impacts could result in temporary, short-term, or long-term disturbance of biological resources in the project study area. In assessing the magnitude of possible impacts, the following assumptions were made regarding construction-related impacts on biological resources:

- # Plowing and trenching activities along the project route will be limited to a 20-foot-wide right-of-way within the asphalt, gravel, or dirt shoulder of paved county, city and state roads.
- # The actual extent of disturbance within the rights-of-way will likely be substantially less than the maximum widths of the rights-of-way.
- # The rights-of-way will be accessible only from existing access roads. No new access roads will be constructed for the project route.
- # All material stockpiling areas and staging areas will be located either within the 20-foot-wide right-ofway, on non-sensitive areas, or at designated disturbed sites outside the right-of-way.
- # Removing portions of common and widespread habitat types, such as annual grassland, during conduit and cable installation activities will not lead to substantial local decreases in those habitat types.
- # Removing portions of uncommon and biologically unique habitats, such as vernal pools, riparian woodland, and emergent wetland, during conduit and cable installation activities could lead to a localized decrease in those types and could result in the direct loss of special-status species or their habitats. However, direct effects on sensitive habitats (i.e., riparian, emergent marsh, vernal pools, meadows) will be avoided or minimized as part of the project through the following procedures:

- limiting all activities to within the 20-foot-wide right-of-way within the asphalt, gravel or dirt shoulder of county, city, and state roads to avoid impacts on sensitive resources;
- boring conduit and cable as required beneath streams, vernal pools, and other sensitive resource sites; and
- attaching the fiber optic cable to bridges to avoid sensitive perennial streams, where bridges are available.

General Project Commitments

The following general project commitments will be implemented as part of the project to avoid and minimize impacts on biological resources:

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 the 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 post construction 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, and 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).

Conduct a Biological Resource Education Program for Construction Crews. 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 project study area (including their life history and habitat requirements), what portions of the project study area they may be found in, and their legal status and protection under the federal Endangered Species Act (ESA) (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 project plans (e.g. 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.

Confine Construction Equipment and Associated Activities to the Project Route 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 communities and special-status species adjacent to the work area). Along the route, the 20-foot wide work area will be confined to the asphalt or the disturbed ruderal portion of the road shoulder adjacent to potential California gnatcatcher habitat, and Quino checkerspot butterfly habitat. This measure will 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 project route.

The following analysis identifies potential impacts, and the corresponding mitigation measures that will apply.

a. Will the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The project will not have a substantial significant effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species, because Williams will limit all activities to within the 20-foot-wide right-of-way within the asphalt, gravel, or dirt shoulder of county, city and state roads to avoid effects on sensitive resources, or will minimize and reduce impacts to less-than-significant levels through the application of the mitigation measures identified in this subsequent IS/MND. Williams has adopted all of the following recommended mitigation measures to avoid or reduce significant impacts on these species to less-than-significant levels.

Impact: Possible Disturbance of Special-Status Plant Populations

Special-status plants have potential to occur on the project route that support natural habitat (**Appendix H-3**). The project route has a low potential for special-status plant species because it is primarily urban within existing paved county, city or state roads with minimal natural habitat; therefore, the corresponding mitigation measures will be implemented only as necessary. Cable installation activities, including plowing, trenching, and other ground-disturbing activities, could result in the disturbance of special-status plants located within and adjacent to project route, potentially reducing local populations of these species. These plants could be found within both the project route and outside the limits of disturbance. This impact is considered less than significant because Williams has committed to avoid or minimize this impact by adopting the following mitigation measures as part of the construction strategy of the project.

Mitigation Measure B-1: Avoid Impacts on Threatened, Endangered, and Candidate Special-Status Plant Species by Establishing and Observing Exclusion Zones. Before construction, qualified biologists will establish exclusion zones around identified special-status plant populations. Exclusion zones will have a minimum 20-foot radius and will be marked in the field with stakes and flagging. 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. Conduit and cable installation within an exclusion zone will be accomplished by rerouting around the exclusion zone. If rerouting is not feasible, the 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.

Mitigation Measure B-2: Avoid Impacts on Nonlisted Special-Status Plant Populations by Implementing Specific Measures. Through coordination with resource agencies complete avoidance of some nonlisted special-status plant populations may be considered unwarranted (e.g., certain locally common California Native Plant Society List 2 species) or infeasible. For some species, impacts of the project will not be significant based on the distribution of the species, the narrow corridor of the project 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 a significant impact on the local plant population. To avoid significant impacts on nonlisted special-status plants (Appendix H-3), the following measures will be implemented:

- **#** Coordinate with resource agencies to determine which species require mitigation.
- # Identify plant populations in the construction corridor and staging areas using staking and flagging.
- # Excavate the appropriate topsoil depth (approximately 2 to 6 inches depending on the species) from the population site and stockpile with intact roots, rhizomes, and seed bank in areas that will be trenched. The topsoil material will be replaced immediately during post removal revegetation activities with little compaction to encourage water filtration and soil oxygenation. 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.
- # Minimize disturbance in areas that support special-status plants by limiting ground disturbance and other activities to the smallest possible corridor.

Impact: Possible Introduction of New Noxious Weeds or Spread of Existing Noxious Weed Infestations

Construction activities could introduce or spread noxious weeds into currently uninfested areas, possibly resulting in the displacement of special-status plant species and degradation of habitat for special-status wildlife. Plants or seeds may be dispersed on construction equipment if the appropriate measure are not implemented. This impact is considered less than significant because Williams has committed to avoid or minimize this impact by adopting the following mitigation measures as part of the construction strategy for the project.

Mitigation Measure B-3: Avoid the Dispersal of Noxious Weeds in the Fiber Optic Cable Rights-of-Way. To avoid the introduction or spread of noxious weeds into previously uninfested areas, Williams will implement the following measure as part of the project:

- # Locate noxious weed infestation areas before any construction activities.
- # Educate construction supervisors and managers about 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.

Impact: Possible Temporary and Short-Term Disturbance to Habitat for Riverside Pool Fairy Shrimp and San Diego Fairy Shrimp

Riverside fairy shrimp and San Diego fairy shrimp are federally listed invertebrates that could occur in vernal pool and swale habitats along the Kearny Villa Road. Because these species are federally listed, any ground-disturbing activities that directly or indirectly affect potential habitat are considered significant. Potential construction effects include direct mortality from construction activities in vernal pool habitat, direct mortality from habitat degradation (e.g., dust deposition) resulting from construction activities in uplands adjacent to vernal pool habitat, degradation or permanent loss of vernal pool habitat from construction in sites that are hydrologically connected to the vernal pool (e.g., from sediment deposition or runoff of gasoline, oil, or other fluids), and degradation or permanent loss of vernal pool habitat from construction activities conducted in the habitat. This impact is considered less than significant because Williams has committed to avoid or minimize this impact by limiting construction within the paved portion of Kearny Villa Road this will eliminate any direct impacts. Adoption of the following mitigation measure as part of the construction strategy of the project will be used as necessary to ensure avoidance of indirect impacts from construction activities adjacent to potential shrimp habitat.

Mitigation Measure B-4: Establish and Observe Exclusion Zones around Vernal Pools and Hydrologically Connected Areas. Qualified biologists will establish exclusion zones around vernal pools and hydrologically connected areas within or near project work areas. Exclusion zones will be marked in the field with staking and flagging or barrier fencing and extend 20-feet on each side of the pool or swale adjacent to the road.

Construction-related activities will be prohibited or greatly restricted 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 or by boring from outside the 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.

Impact: Possible Disturbance of Habitat of Special-Status Amphibians and Reptiles

The arroyo southwestern toad is a federally listed endangered species that could exist along streams or dry washes and adjacent habitats along the project route. The western pond turtle is found in ponds, streams, and marshes of the Coast Ranges of southern California.

Construction activities in drainages supporting this species could disturb occupied habitat and temporarily displace individual animals. In addition, potential construction effects on the arroyo southwestern toad include damage to or destruction of burrows, direct mortality from construction vehicles or heavy equipment, direct mortality from burrow collapse and subsequent suffocation, temporary disturbance from noise and human presence associated with construction activities, harassment by construction crews, and temporary losses of riparian and associated upland habitat. This impact is considered less than significant because Williams will not plow or trench in streams and has committed to avoid or minimize this impact by adopting the following mitigation measure as part of the construction strategy of the project. The project route has a low potential for special-status amphibians and reptiles because it is are primarily urban within existing paved county, city, or state roads with minimal natural habitat; therefore, the corresponding mitigation measures will be implemented only as necessary.

Mitigation Measure B-5: Establish and Observe Exclusion Zones around Riparian Habitats That Support Special-Status Species. Before construction, qualified biologists will stake and flag exclusion zones around all riparian 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.

Impact: Possible Removal of Southwestern Willow Flycatcher and Least Bell's Vireo Habitat and Temporary and Short-Term Disturbances to Active Nests

The southwestern willow flycatcher and least Bell's vireo, both federally listed as threatened species, potentially occur in riparian habitats associated with the project route. Potential construction effects on the southwestern willow flycatcher and the least Bell's vireo include direct mortality from nest disturbance, temporary disturbance of birds during the nesting season from noise and human presence associated with construction activities resulting in temporary displacement and possibly nest abandonment, and harassment by construction crews. This impact is considered less than significant because Williams will not plow or trench in streams and has committed to avoid or minimize this impact by adopting the following mitigation measures as part of the construction strategy of the project.

Mitigation Measure B-5: Establish and Observe Exclusion Zones around Riparian Habitats That Support Special-Status Species. Refer to the discussion of this mitigation measure earlier in this section. Mitigation Measure B-6: Avoid Occupied Least Bell's Vireo Habitat during the Nesting Season, and Implement Protection Measures, If Necessary. Qualified wildlife biologists will conduct preconstruction surveys for nesting least Bell's vireos in all suitable habitat in the project study area. Three surveys will be conducted during the peak nesting period (generally between May and June). Individual surveys will be conducted at least 1 week apart. 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 (Watkins pers. comm.). If construction activities within suitable habitat for the least Bell's vireo will only occur during the nonbreeding season, preconstruction surveys will not be needed.

Mitigation Measure B-7: Avoid Occupied Willow Flycatcher Habitat during the Nesting Season and Implement Protection Measures, If Necessary. Qualified wildlife biologists will conduct preconstruction surveys for nesting southwestern willow flycatchers in all suitable habitat in the project study area. One survey will be conducted during each of the following three periods: between May 15 and 31, between June 1 and 21, and between June 22 and 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 where they are detected between May 1 and August 15 (Watkins pers. comm.). If construction activities within suitable habitat for the willow flycatcher will only occur during the nonbreeding season, preconstruction surveys will not be needed.

Impact: Possible Removal of California Gnatcatcher Habitat and Temporary and Short-Term Disturbance to Active Nests

The California gnatcatcher is a federally listed threatened species that could exist in the project study area and vicinity throughout the year. Potential construction impacts include temporary disturbance of birds from noise and human presence associated with construction activities and construction crews resulting in temporary displacement and possibly nest abandonment during the nesting season and harassment. These impacts are considered less than significant because Williams has committed to avoid these impacts by constructing within the paved portion, or gravel or dirt shoulder of road rights-of ways , and constructing the Mesa Rock OP-AMP station only during the non-breeding season (July1 thru March 14) and adopting the following mitigation measure as part of the construction strategy of the project.

Mitigation Measure B-8: 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 non-breeding season (July 16 through March 14). However, if construction continues into the 2000 breeding season (March 15 to July 15), 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 [*Polioptila 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 July 1 and March 14) and six 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 15 and July 15.

Mitigation Measure B-9: Establish and Observe Exclusion Zones Around California Gnatcatcher Habitat. Qualified wildlife biologists will establish exclusion zones around potential California gnatcatcher habitat. Exclusion zones will have a 30-foot radius and will be marked occupied 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.

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

Impact: Possible Temporary Loss of Cliff Swallow Colonies

Although swallows are not special-status species, cliff swallows, barn swallows, and rough-winged swallows (and their occupied nests and eggs) are protected by federal and state laws, including the Migratory Bird Treaty Act (50 CFR 10 and 21). USFWS is responsible for overseeing compliance with the Migratory Bird Treaty Act, and the U.S. Department of Animal Control Officer makes recommendations on animal protection issues. Active swallow nesting colonies could be located underneath bridge structures where the fiber optic cable could be attached. Cliff swallows and barn swallows construct mud nests, often concentrated into large breeding colonies, underneath concrete bridges. Rough-winged swallows often construct nests within a bridge structure, gaining access to the interior through existing drainage holes in the structure.

Installation of the fiber optic cable on these bridges during the breeding season (between March 1 and September 1) could result in destruction or abandonment of swallow nests and potentially of entire breeding colonies. This impact is considered less than significant because Williams has committed to avoid or minimize this impact by adopting the following mitigation measure as part of the construction strategy of the project.

Mitigation Measure B-10: Avoid Disturbance to Nesting Cliff Swallows. If activities to attach fiber optic cable to bridges occur outside the cliff 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 cliff 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 cliff swallows' breeding season, the nests will be removed before March 1.

- # If swallows begin building nests on the bridge after net installation, the mud placed by the swallows will be removed as frequently as necessary to prevent establishment of new nests.
- # A qualified biologist will monitor the initial removal of existing abandoned swallow nests, swallow nesting activity, and mud removal procedures to ensure that the contractor does not affect nests with eggs or young swallows.

- # Swallow nest removal and monitoring will be confined to the construction area. Nesting attempts outside the work area on a bridge structure will not be removed if construction activities will not damage active nests or prevent adult swallows from flying to and from an active nest site
- # If a swallow constructs a nest, lays eggs, or hatches young on the bridge within the construction area prior to completion of construction activities, Williams will contact the USFWS to obtain the appropriate permit before removal of the active nest.
- # If nest removal does not occur by March 1 and cliff swallows subsequently colonize the bridge and would be affected by construction, attachments to the bridge will not begin before September 1, unless Williams obtains permits from the USFWS.

Impact: Potential Temporary Disturbance of Bat Roosting Sites

Several bat species could potentially occur in the vicinity on the project route. Potential roosting habitat for bats within or near the project study area includes large abandoned buildings; bridges; trees; and cliffs, caves, and mines.

If present, these species could be affected by construction activities associated with fiber optic cable installation. Potential effects include temporary disturbance from noise and human presence associated with construction activities. However, the potential effects of the project are minimized by the following factors:

- # cliff, mine, cave, and building habitats that could potentially support large colonies of bats do not occur in the project rights-of-way;
- # trees large enough to potentially support roosting bats will not be removed as part of the project;
- # the rights-of-way are linear and narrow (3-foot excavation corridor and 40-foot maximum disturbance corridor);
- # activities related to the project are temporary, and restoration efforts will begin immediately following construction; and
- # the project route is already disturbed, relative to the surrounding landscape, from the original road construction activity in the rights-of-way and from ongoing maintenance of the road shoulder rightsof-way.

Remaining potential impacts are not considered significant because Williams has committed to avoid or minimize this impact by adopting the following mitigation measures as part of the construction strategy of the proposed project.

Mitigation Measure B-5: Establish and Observe Exclusion Zones around Riparian Habitats That Support Special-Status Species. Refer to the discussion of this mitigation measure earlier in this section.

Mitigation Measure B-11: Postpone Bridge Attachments on Bridges That Support Maternity Roosting Bats. In conjunction with mitigation for nesting swallows (Mitigation Measure B-10: "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, determine the most appropriate construction time and method.

Impact: Possible Disturbance to Active Stephens' Kangaroo Rat Burrows and Loss of Habitat

The Stephens' kangaroo rat is a state-listed threatened and federally listed endangered species that could potentially exist on the project route in Riverside County.

The Stephens' kangaroo rat could be affected by construction activities associated with fiber optic cable installation if ground-disturbing activities occur in areas that provide suitable habitat for this species. Potential construction effects include damage to or destruction of burrows, direct mortality from construction vehicles or heavy equipment, direct mortality from burrow collapse and subsequent suffocation, temporary disturbance from noise and human presence associated with construction activities, harassment by construction crews, and temporary and permanent losses of habitat. This impact is considered less than significant because the project route is primarily urban and within existing paved county, city, or state roads with minimal natural habitat; therefore, the corresponding mitigation measures will be implemented only as necessary.

Mitigation Measure B-12: Conduct Preconstruction Searches for Stephens' Kangaroo Rat Burrows and Implement Protection Measures, If Necessary. Within 7 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 more common 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 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 USGS 7.5-minute quadrangles, 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. In Riverside County, the entire project route is within the Riverside County Habitat Conservation Agency, Habitat Conservation Plan (HCP) for the Stephens' Kangaroo Rat in Western Riverside County California. Specifications or guidelines within the HCP will be applied to the project route, including a fee for habitat compensation at a 1 to 1 ratio.

Mitigation Measure B-13: Establish and Observe Exclusion Zones around Stephens' Kangaroo Rat Burrows. 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 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.

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

Impact: Possible Temporary and Short-Term Disturbance to Quino Checkerspot Butterfly Habitat

The Quino checkerspot butterfly is a federally listed endangered species that could potentially exist in the project study area.

The Quino checkerspot butterfly could be affected by construction activities associated with fiber optic cable installation if ground-disturbing activities occur in areas that provide suitable habitat for this species. Potential construction effects include damage to host plants, direct mortality from construction vehicles or heavy equipment, temporary disturbance from noise and human presence associated with construction activities, harassment by construction crews, and temporary and permanent losses of habitat. Ground-disturbing activities outside of the paved portion of roads along the project route will be limited to the within the gravel or dirt shoulder of the road right-of-way. Based on the December 21, 1999 field visit with the USFWS, Quino checkerspot butterfly specialist, Ms. Hayworth, and Williams biologists, the USFWS concurred that Williams will avoid impacts to this species if they remain within the road right-of-way, constuct outside of potential habitat, and construct outside the flight season for the Quino checkerspot butterfly. The only potential habitat identified was adjacent to the Mesa Rock Road OP/AMP site, and construction of the OP/AMP site will be limited to the non-flight season for the Quino checkerspot butterfly. This impact is considered less than significant because the project route has a low potential for Quino checkerspot butterfly because the project route is primarily urban and within existing paved county, city, or state roads with minimal natural habitat.

Mitigation Measure: None required.

Impact: Possible Temporary and Short-Term Disturbance of Other Special-Status Wildlife Species

Several other special-status species potentially exist in the project study area (**Appendix H-4**). Effects on these species from project activities are expected to be less than significant and no additional mitigation measures are required for one or more of the following reasons:

the species, although potentially occurring in the project study area, occupies habitat that will not be affected by project activities;

- # the species occupies and is dispersed throughout a habitat type, such as annual grassland, that is abundant throughout the project study area and the potential for a narrow, linear project to affect local or regional populations is minimal;
- *#* habitat disturbance is temporary;
- # actual acreage disturbed will be less than that occurring within the right-of-way because of other resource constraints that require localized rerouting or boring;
- # the rights-of-way are linear and narrow (3-foot excavation corridor and 40-foot maximum disturbance area); therefore, the disturbed area is spread across many miles of the project study area, further minimizing the potential effects of temporary habitat disturbance and the potential for injury or mortality in any given area of the project;
- # the project route is already disturbed, relative to the surrounding landscape, from the original road and from ongoing maintenance of the road shoulder the potential for nest sites within the right-of-way is therefore extremely limited;
- # preconstruction surveys and mitigation for other special-status burrowing animals will be conducted in all suitable habitat for other ground dwelling special-status species potentially occupying the same habitat type, which will reduce the likelihood of inadvertent mortality during construction;
- # maintenance of the existing roads prevented the establishment of significant shrub cover that will potentially be used for nesting by some special-status birds; therefore, the likelihood of inadvertent destruction of nests is reduced;
- # Williams has committed to not working in streams, thereby avoiding or minimizing potential project effects on aquatic species;
- # the species is widely dispersed and the potential for activities in a narrow, linear area to affect an individual is minimal;
- # although the species has a special-status designation, it is relatively common locally and a narrow, linear project will be unlikely to have an effect on the local population;
- # the species occupies a forest or woodland habitat type that will not be directly affected by the project because the habitat has previously been removed and a cleared corridor is maintained;
- # the species is associated with a habitat type that will be protected through implementation of existing mitigation measures (e.g., riparian habitat).

Mitigation Measure : None required.

Impact: Possible Temporary and Short-Term Disturbance of Threatened, Endangered, and Special-Status Fish Species

Special-status fish species (arroyo chub) have potential to occur on the project route. The project is not expected to adversely affect threatened, endangered, or special-status fish species. The project is designed to avoid effects on aquatic species through the use of noninvasive construction methods (no work in streams) that avoid direct effects on in-channel habitat, the use of best management practices to minimize the potential for transport of sediment to streams and the use of measures to return the crossing sites to preconstruction conditions.

One special-status fish, the arroyo chub, could potentially occupy numerous drainages crossed by the project route (**Appendix H-5**). Potential impacts include potential temporary increases in sedimentation and turbidity, short-term loss of habitat, accidental seeps of bentonite from boring activities, and accidental spills of hazardous materials.

Project construction will not require any in-stream work in or removal of riparian vegetation because of directional bores, which minimizes the potential for sediment generation in streams and avoids direct in-channel habitat effects on threatened and endangered fish species. The potential for short- and long-term sediment transport from upland sources to streams will be reduced to a less-than-significant level through implementation of the SWPPP and the reclamation plan prepared for the project route, which include measures to minimize sediment transport and measures to promote the recovery of construction areas to preconstruction conditions (**Appendices C** and **F**). The potential for accidental bentonite seeps and spills of hazardous materials will be minimized through implementation of the SWPPP.

This impact is considered less than significant because Williams has committed to avoiding or minimizing this impact by adopting the following mitigation measures as part of the construction strategy of the project. The project route has a low potential for special-status fish because it is primarily urban within existing paved county, city, or state roads with minimal natural habitat; therefore, the corresponding mitigation measures will be implemented only as necessary.

Mitigation Measure B-5: Establish and Observe Exclusion Zones around Riparian Habitats That Support Special-Status Species. Refer to the discussion of this mitigation measure earlier in this section.

Mitigation Measure B-14: 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 specialists 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 week 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 will be allowed beginning March 15 and ending September 15, as required under the Migratory Bird Treaty Act.

Mitigation Measure B-15: Conduct Postconstruction Monitoring in Woody Riparian Communities That Are Substantially Disturbed during Construction Activities. The proposed project has been designed to avoid and minimize disturbance of woody riparian 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 will include a design specifications, an implementation plan, maintenance requirements, and a monitoring program. Revegetation will be implemented immediately in substantially disturbed areas. 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 communities. Resource specialists will document baseline conditions prior to construction in riparian areas. Data that may be gathered on each site to document baseline conditions and during the subsequent monitoring visits will include:

- # relative cover and types of plant species establishing in the installation corridor,
- # percent absolute vegetation cover,
- # general assessment of the 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 plans for riparian habitats will be considered successful when the following criteria are met:

- # The riparian habitats established are composed of a mix of species similar to that removed during cable installation.
- # At least 75% absolute cover of native riparian vegetation is developed on each site.
- **#** 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.
- # Less than 5% of absolute cover on each site will be composed of weedy annual or perennial species.
- # Plantings at each site (if needed) are self-sustaining without human support (e.g., weed control, rodent control, or irrigation).

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

The project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community because Williams will not plow or trench in streams to avoid substantial adverse effects on riparian habitats and has committed to avoid or minimize this impact by adopting the following mitigation measures as part of the construction strategy of the project.

Impact: Possible Long-Term Damage to Sensitive Biological Resources from Unanticipated Construction of Emergency Access Roads or Use of Construction Staging Areas outside the Delineated Project Study Area and Not within Previously Paved or Graveled Areas

The construction of access roads or the construction or use of staging areas that are outside the project study area and are not already paved or graveled could result in long-term damage to sensitive biological resources. This impact is considered less than significant because Williams has committed to avoid or minimize this impact by adopting the following mitigation measure into the proposed construction strategy for the proposed project.

Mitigation Measure B-16: Conduct Biological Clearance Survey of New Access Roads and Staging Areas before Construction of Such Roads and Areas and Implement Avoidance Measures if Required. If new access roads are proposed to be constructed or if the selection of staging areas is changed to include locations that are not in previously disturbed areas that have not been subjected to biological surveys, these locations will be surveyed by a qualified botanist and wildlife biologist. The field inspection of the staging areas and new access roads will be conducted before their construction as they are selected. If sensitive biological resources are identified at selected staging areas or within the right-of-way of any new access roads, through consultation with DFG or the appropriate agency, the area will be avoided and another location selected. Implementation of this mitigation measure will result in a less-than-significant impact.

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact: Possible Temporary and Short-Term Direct Disturbance of Waters of the United States

Fiber optic cable installation activities could result in direct disturbance of waters of the United States in California.

Impacts on jurisdictional wetlands are not expected because wetlands were not identified along the project route, except associated with riparian perennial rivers and streams, and with vernal pools along Kearny Villa Road. The vernal pools are greater than 100 feet from the proposed project route, and will not be impacted because installation of the fiber optics cable will be limited to the asphalt portion of Kearny Villa Road.

This impact is considered less than significant because Williams will not plow or trench in streams. They will use directional bores or bridge attachments where available. Similar streams flowing through culverts will not be directly affected because trenching will be done above the culvert and limited to a 20-foot right-of-way within the paved portion or gravel or dirt shoulder of roads. In addition, construction of the San Diego County Mesa Road OP-AMP station will be limited to the disturbed area north of an existing disturbed swale, and no direct impacts will occur. Williams has committed to avoid or minimize this impact by adopting the following mitigation measures as part of the construction strategy of the project if bores or bridge attachments are not feasible, or if there is not enough cover available for the fiber optic cable above existing culverts. These measures focus on protecting stream communities, reestablishing pre project site conditions to encourage a return of self-sustaining stream communities, and ensuring no net loss of wetland acreage and habitat value.

Mitigation Measure B-15: Conduct Postconstruction Monitoring in Woody Riparian Communities That Are Substantially Disturbedduring Construction Activities. Refer to the discussion of this mitigation measure earlier in this section.

d. Will the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites because Williams has committed to avoid or minimize this impact by adopting the recommended mitigation measures as part of the construction strategy of the project to avoid substantial adverse effects on these resources. The project route has a low potential for native resident or migratory fish or wildlife because it is primarily urban within existing paved county, city, or state roads with minimal natural habitat; therefore, the corresponding mitigation measures will be implemented only as necessary.

Impact: Possible Wildlife Entrapment in Open Trenches

Open trenches during construction could pose a threat to individual animals, particularly at night by entrapping or inadvertently resulting in injury to wildlife species. Several species could become entrapped in trenches. This impact is considered less than significant because Williams has committed to avoiding this impact by adopting the following mitigation measure as part of the construction mitigation strategy of the project.

Mitigation Measure B-17: 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.

Impact: Possible Short-Term Degradation of Fish Habitat from Accidental Seepage of Bentonite into Streams

Directional boring can result in bentonite seeps to surface waters. This could occur if the bore intersected a fracture that opened to the surface, and bentonite pressures were high enough to push the material to the surface. Bentonite is a nontoxic clay-based water mixture used to lubricate the boring mechanism. Although nontoxic, seeps of bentonite into streams can result in temporary increases in turbidity and sedimentation that could affect fish and their habitat. This possible impact is considered less than significant because Williams will strictly implement the spill prevention measures described in the SWPPP to avoid the potential for bentonite seeps to streams as part of its mitigation strategy, as described in Chapter 2, "Project Description".

Several measures will be included in the SWPPP to avoid the potential for bentonite seeps, including requiring boring crews to strictly monitor drilling fluid pressures, requirements for no nighttime boring unless absolutely necessary (e.g., some large river crossings), retaining containment equipment on site, monitoring waters downstream of the crossing sites to identify any seeps quickly, immediately stopping work if a seep into a stream or other surface water is detected, immediate implementing containment measures, adhering to agency reporting requirements, and identifying responsible parties.

The DFG streambed alteration agreement and RWQCB water quality certification will most likely contain monitoring and reporting requirements. These requirements will be adhered to during construction.

Mitigation Measure : None required.

Impact: Possible Effects on Fish from Accidental Spills of Toxic Substances during Construction

Hazardous materials associated with the project will be limited to those substances typically associated with construction equipment, such as gasoline, diesel fuels, engine oil, and hydraulic fluids. An accidental spill of these substances could contaminate drainages and adversely affect fish or their habitat. This possible impact is considered less than significant because Williams will strictly adhere to the spill prevention measures described in the SWPPP (see Chapter 2, "Project Description"). The SWPPP will be included in the documents for construction specifications. The contractor will follow the measures in the SWPPP to ensure that petroleum products are not discharged into drainages or bodies of water.

As described in the SWPPP and in Chapter 2, "Project Description", hazardous substances will be stored in staging areas located at least 150 feet from streams and other surface waters. Refueling and vehicle maintenance will be performed at least 150 feet from these receiving waters. Sedimentation fences, certified weed-free hay bales, sand bags, water bars, and baffles will be used as additional sources of protection for waters, ditches, and wetlands.

Mitigation Measure : None required.

e. Will the proposed project be in substantial conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?

The project will not conflict with any local policies or ordinances protecting biological resources such as the preservation policies or ordinances. Because the project route will be constructed within a 20-foot right-of-way within the paved portion of county, city, or state roads, or on the gravel or dirt shoulder of these roads, no significant impacts on biological resources that cannot be integrated will result from project construction . Construction activities will result in less than significant impacts for one or more of the following reasons:

- # the project route is already disturbed, relative to the surrounding landscape, from the original road and from ongoing maintenance of the road shoulder;
- # maintenance of the existing roads prevent the establishment of significant native shrub cover, trees, and habitat for wildlife; and
- **#** Williams will comply and adhere to any local ordinances along the project route.
- f. Will the proposed project be in conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan(NCCP), or other approved local, regional, or state habitat conservation plan?

The project route will cross areas covered under the following adopted HCPs:

- # Riverside County Habitat Conservation Agency, Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County California.
- # Multiple Species Conservation Program, City of San Diego MSCP Subarea Plan
- # Multiple Species Conservation Program, MSCP Plan San Diego County.

The project will not conflict with provisions of any approved HCP or NCCP and any affects to these plans are less than significant. Williams is committed to avoiding or reducing impacts on biological resources by the implementation of mitigation measures established in this document and will comply with provisions and guidelines within approved HCPs or NCCPs or other local plans along the project route through consultation. Although the project may not necessarily participate in any of these plans, the project route is currently under going coordination with the USFWS to ensure that the project does not conflict with the provisions of these adopted plans. Therefore, no impacts are anticipated and no mitigation is required.

Cumulative Impacts

Cumulative impacts of the project on biological resources are considered less than significant for the following reasons:

- **#** Most of the major habitat types the project will affect are abundant in the project study area.
- # The project route is linear and narrow and construction will disturb a small amount of habitat relative to the amount of these habitats available locally and projectwide.
- # Activities related to the project are temporary and the disturbance corridor will be immediately restored.
- # Project rights-of-way are already disturbed from original construction and ongoing maintenance activities of roads.
- # Mitigation measures have been designed to avoid or minimize effects on biological resources to lessthan-significant levels.
- # Much of the project study area is relatively remote and is not subject to other major projects that will contribute to a substantial cumulative effect.

Impacts on listed species will be avoided through implementation of the mitigation measures into the project design specifications. Therefore, no cumulative impacts on listed species or their habitats are anticipated.

The cumulative impacts of the project on fish populations or habitats are expected to be minimal. No direct habitat loss or impairment of passage or migration will occur because Williams will use noninvasive drainage crossing methods for flowing sensitive streams (i.e., crossings will not require in-water work or structures). Williams will implement measures to minimize the potential for long-term chronic erosion and stabilize site conditions and to minimize the potential for accidental spills of materials to surface waters to less-than-significant levels. Therefore, no cumulative impacts on fish populations or habitats are anticipated.

V. CULTURAL RESOURCES

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|--------------|---|--------------------------------------|--|------------------------------------|--------------|
| v. <u>cu</u> | JLTURAL RESOURCES - Will the project: | | | | |
| a. | Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | | _/ | | |
| b. | Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | | _/ | | |

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----|--|--------------------------------------|--|------------------------------------|--------------|
| с. | Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | _/ | | |
| d. | Disturb any human remains, including those interred outside of formal cemeteries? | | _/ | | |

Criteria for Determining Significance

According to CEQA, an impact is considered significant if it will disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group. In addition to significance criteria *a*-*d* in the environmental checklist, the State CEQA Guidelines define a significant historical resource as a resource listed or eligible for listing on the California Register of Historical Resources (CRHR) or any resource included in a local register of historical resources as defined in Pubic Resources Code Section 5024.1(K), or that has been as identified as significant in a historical resources survey meeting the requirements of Public Resources Code 5024.1(g). A historical resource may be eligible for inclusion in the CRHR if it:

- # is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- *#* is associated with the lives of persons important in our past;
- # embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values;
- *#* has yielded, or may be likely to yield, information important in prehistory or history.

Any resource that has been determined eligible for inclusion in the National Register of Historic Places (NRHP) will be considered eligible for the CRHR. Finally, an archaeological site is considered significant if it meets the definition of a unique archaeological resource as defined in Public Resources Code Section 21083.2 and Section 151264.5(c)(3) of the State CEQA Guidelines.

Impact Mechanisms

Disturbance of cultural resources from implementation of the project could result in impacts on known cultural resources and on buried, unidentified archaeological sites. Cultural resources could potentially be affected during construction of the cable system through the following ground-disturbing activities:

grading or other site preparation,

- # blading or grading of existing access roads,
- # plowing or trenching,
- # temporary stockpiling of soil,
- *#* digging bore pits or assist points, and
- *#* use of equipment staging areas.

In addition, OP-AMP stations will be constructed at the Lindenberger and Mesa Rock locations in Riverside and San Diego Counties, respectively. Cultural resources have not been found to occur at these locations.

Impact Assessment

- a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? or
- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

The following analysis for cultural resources identifies potential impacts on cultural resources that could occur as a result of implementation of the proposed project and describes mitigation measures that will avoid or reduce impacts to less-than-significant levels. A cultural resources monitoring plan will be presented in the technical report submitted for review and approval by CPUC before construction begins.

Implementation of the mitigation measures listed below will result in the avoidance of significant impacts on potentially significant cultural resources in compliance with State CEQA Guidelines. No archaeological excavations, artifact analysis, or other specialized studies of cultural artifacts or deposits are proposed as this time based on the understanding that all cultural resource sites will be avoided through rerouting of the conduit and cable, monitoring, and/or boring under archeological/cultural resources.

Impact: Possible Disturbance to Prehistoric Resources

Ground-disturbing activities associated with the installation of the fiber optic cable, such as surface clearing, plowing, trenching, and excavation of bore pits, could result in significant impacts on known prehistoric cultural resource sites. These activities could affect both surface and underground portions of these sites. Seven prehistoric archaeological sites [CA-Riv-816 (C-Steele Peak-C-1), CA-Riv-817 (C-Steele Peak-C-2), C-Steele Peak-D-1, CA-Riv-1845 (C-Romoland-A-1), CA-SDi-5072, CA-SDi-8747 (C-Escondido-C-1), and CA-SDi-2723 (C-Del Mar-C-1)] have been identified within the project area. All these sites have archaeological remains evident on the surface, and may have buried archaeological deposits within 30 feet of the roadside. Damage to these cultural resource sites will be considered a significant impact. However, this impact is considered less than significant because Williams has committed to avoid or minimize this impact by adopting mitigation measure C-1: Avoid impacts to 7 known prehistoric cultural resource sites.

Mitigation Measure C-1: Avoid Impacts on Seven Known Prehistoric Cultural Resources. Impacts on sites CA-Riv-816 (C-Steele Peak-C-1), CA-Riv-817 (C-Steele Peak-C-2), C-Steele Peak-D-1, CA-Riv-1845 (C-Romoland-A-1), CA-SDi-5072, CA-SDi-8747 (C-Escondido-C-1), and CA-SDi-2723 (C-Del Mar-C-1) will be avoided by installing the fiber optic cable within the road or shoulder, and avoiding damage or disturbance to the boulders and soil along side the road. A qualified cultural resource monitor will be present during construction in these areas. Methods and procedures for monitoring will be described in a monitoring plan that will be included in the cultural resources inventory report currently being prepared.

Impact: Possible Disturbance to Potentially Buried Resources in Sensitive Area

Three sites, CA-Riv-4513, CA-Riv-4609, and CA-Riv-5443, are located on both sides of the road alignment in the vicinity of, but not within 30 feet, of the project route. The area between these sites is listed as a "midden area" on the site records and in the records search, but no midden was observed during the field investigation. However, the possibility of buried deposits could not be rules out on the basis of surface examination. Damage to buried cultural resources in this area will be considered a significant impact. However, this impact is considered less than significant because Williams has committed to avoid or minimize this impact by adopting mitigation measure C-2.

Mitigation Measure C-2: Avoid Potential Impacts on Buried Resources in Archaeologically Sensitive Areas. Impacts on buried cultural resources within the area between CA-RIV-4513, CA-RIV-4609, and CA-RIV-5443 will be avoided by monitoring. Monitoring will be implemented to avoid or minimize significant impacts and damage buried deposits. It does not guarantee that no impacts will occur. A qualified archaeological monitor will be present during all ground disturbing activities in this area, which is defined as the area between Highways 5 and 805 along Sorrento Valley Road. Methods and procedures for monitoring will be described in a monitoring plan that will be included in the cultural resources inventory report currently being prepared.

Impact: Possible Disturbance to Historic Resources

Construction of the project may result in significant impacts on historic resources, such as canals, bridges, railroads, and buildings. The resources consist of railroad crossings (historic Southern Pacific Railroad, C-Riverside East-C-1 and historic Atchison, Topeka and Santa Fe, C-Perris-C-1), the historic Gage Canal in Riverside (CA-Riv-4768-H or C-Riverside East-A-2), one historic railroad station (33-7601), a block of historic bungalows (4th Street historic district, 33-7587), and the Pala Road bridge over Pechanga Creek (C-Temecula-C-1). Damage to these cultural resource sites will be considered a significant impact. However, this impact is considered less than significant because Williams has committed to avoid or minimize this impact by adopting mitigation measures C-3 and C-5.

Mitigation Measure C-3: Avoid Impacts on Historic Buildings. The Perris Railroad station and the 4th Street historic district in Perris will be avoided by installing the cable within the roadway. The historic bungalow district is potentially eligible for listing in the CRHR as it exemplifies distinctive 1920's architecture in Southern California. The railroad station is eligible for its unique architectural style and for its association with the railroad.

construction will not affect buildings or associated features or landscaping. The cable will be installed by trenching in the roadway. All equipment and staging will take place in the roadway, leaving the sidewalks and landscaping intact. The appearance of the roadway will be restored after construction. Therefore, there will

be no threat of damage to the individual settings and contexts of the resources, or to the architectural fabric of the structures. Vibrations from trenching are expected to be minimal, and pose less of a threat to wood frame structures, such as the historic bungalows along 4^{h} Street. The railroad station is of masonry construction. However, the vibratory effects of trenching are not expected to exceed those of passing trains.

Mitigation Measure C-4: Avoid Impacts on Historic Canals and Railroads. Impacts on the historic Gage canal and the historic Southern Pacific Railroad in Riverside, and the historic Atchison, Topeka, and Santa Fe Railroad (two segments) in the city of Perris will be avoided by boring under the canal and the railroads. Boring beneath the resources will also avoid interference with the function of the canal and railroads.

Mitigation Measure C-5: Avoid Impacts on Historic Bridges. This bridge has been determined not eligible for listing in the NRHP, but may still be eligible for local registers. Impacts on the structural and aesthetic integrity of the Pechanga Creek Bridge at Pala Road will be avoided by attaching the cable in such a manner that, if removed in the future, the essential form and integrity of the bridge and its environment will be unimpaired. The fiber optic cable will be installed in the same area as already existing attached conduit on the south side of the bridge. Existing conduit includes an 18-inch steel pipe and a 2-inch PVC duct; in which the proposed cable will be installed. Construction details will be determined at a later date with input from a preservation specialist. Should a bridge attachment not be feasible, the cable will be installed by boring under the creek.

Impact: Possible Long-Term Damage to Unidentified Buried Cultural Resource Sites from Ground-Disturbing Activities

Buried cultural resources that were not identified during field surveys could be inadvertently unearthed during ground-disturbing activities, which could result in the demolition or substantial damage to significant cultural resources. This impact is considered less than significant because Williams has committed to avoid or minimize this impact by adopting mitigation measure C-6 (Stop work if cultural resources are discovered during ground-disturbing activities) as part of the construction strategy for the proposed project.

Mitigation Measure C-6: 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.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact: Possible Disturbance to Paleontological Resources during Construction

The project will include ground-disturbing activities, such as trench excavation, to install the fiber optic cable system. These ground-disturbing activities could inadvertently affect paleontological resources. This impact is considered less than significant because Williams has committed to avoid this impact by adopting the following mitigation measure as part of the construction mitigation strategy for the project.

Mitigation Measure C-7: 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% 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% of the time during ground-disturbing activities in areas with low paleontological sensitivity). The paleontologist will monitor ground-disturbing activities and salvage and catalogue fossils where necessary.

A qualified paleontologist will be present at the preconstruction conference; establish procedures for paleontological resource surveillance; and 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 will be 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 longterm 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 the project 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, will signify completion of the program to mitigate impacts on paleontologic resources.

d. Disturb any human remains, including those interred outside of formal cemeteries?

Impact: Possible Long-Term Damage to Previously Unidentified Human Remains on Nonfederal Land from Ground-Disturbing Activities

It is not anticipated that the proposed project will affect known cemeteries or burials; however, buried human remains that were not identified during field surveys could be inadvertently unearthed during excavation activities, which could result in damage to these human remains. This impact is considered less than significant because Williams has committed to avoid or minimize this impact by adopting mitigation measure C-8: Comply with state laws pertaining to the discovery of human remains.

Mitigation Measure C-8: Comply with State 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.

Cumulative Impacts

With implementation of the identified measures, the project will avoid impacts on cultural resources, will not cause a substantial adverse change in the significance of a historical or archaeological resource, directly or indirectly destroy a unique paleontological resource or unique geologic feature, or cause unauthorized disturbance of any human remains. No impacts on cultural resources (including historical resources, paleontological resources, and human remains) will result from implementation of the project that will make a cumulative considerable contribution to a cumulative impact on cultural resources.

VI. GEOLOGY AND SOILS

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------|
| VI. <u>GEOLOGY AND SOILS</u> - Will the proposed project: | | | | |

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----|---|--------------------------------------|--|------------------------------------|--------------|
| a. | Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| | Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | , | |
| | Strong seismic groundshaking? | | | _/ | |
| | 3. Seismic-related ground failure, including liquefaction? | | | _/ | |
| | 4. Landslides? | | | _/ | |
| | Result in substantial soil erosion or the loss of topsoil? | | _/ | | |
| 2. | Be located on a geologic unit or soil that is unstable or that will become unstable as a result of the proposed project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse? | | | _/_ | |
| 1. | Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | | | _/_ | |
| • | Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of waste water? | | | | _/_ |

Criteria for Determining Significance

The analysis of significance of impacts on geology, seismicity, and soils is based on professional judgment and on criteria a-e in the environmental checklist. A project will also result in a significant impact if it will cause substantial accelerated soil erosion and sedimentation.

Impact Mechanisms

Geology, seismicity, and soil impact mechanisms include initiation of shallow landslides by improper alignment of the project route or improper installation of the fiber optic cable and accelerated erosion and sedimentation caused by soil disturbance. However, Williams' engineering practices include designing a system that minimizes landslide or seismic risk to avoid damage to the fiber optic cable.

Impact Assessment

This section describes impacts and mitigation measures pertaining to geologic, seismic, and soil conditions along the project route. Potential water quality impacts caused by erosion and resulting sedimentation are described in the "Hydrology and Water Quality" section of this chapter, and impacts on agricultural lands are described in the "Agricultural Resources" section of this chapter.

The environmental effects identified in this section were evaluated using information provided in the references cited above, and on professional judgement.

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. Strong seismic groundshaking? Seismic-related ground failure, including liquefaction? Landslides?

Impact: Possible Temporary Damage to the Fiber Optic Cable System from Earthquake-Induced Strong Ground Shaking

The project route will pass through areas that are subject to strong earthquake-induced ground shaking. Strong ground shaking from one of these faults will not expose people to potential significant impacts, but could damage the OP-AMP stations. This impact is considered less than significant because the prefabricated structures will not be inhabited, are certified by the manufacturer to meet necessary seismic design standards, and any damage will not affect humans or the environment.

Mitigation Measure. None required.

Impact: Possible Temporary Damage to the Fiber Optic Cable System from Earthquake Fault Displacement

Ground surface displacement of earthquake fault traces could damage the fiber optic cable system where the project route will pass through faults. Although the fault movement could disrupt the operation of the cable system, there will be no physical impact on humans or the environment. This impact is considered less than significant because the fiber optic cable system will be designed to accommodate earthquake fault offsets at the soil surface and because damage to the system will not have a significant impact on humans or the environment.

Mitigation Measure. None required.

b. Result in substantial soil erosion or the loss of topsoil?

Impact: Possible Temporary Accelerated Erosion and Sedimentation from Soil Disturbance and Vegetation Removal

Erosion is a natural process; however, accelerated erosion, which is the rate of erosion beyond that of natural erosion, generally occurs as a result of human activities. Soils that will underlie the project route, many of which are already disturbed, vary widely with respect to their erosion hazard. Ground-disturbing activities,

including removal of vegetation, can cause increased water runoff rates and concentrated flows and may cause accelerated erosion. The eroded material (i.e., sediment) could degrade the quality of receiving waters.

Williams is required to prepare and implement a SWPPP for the project route, which will include mitigation measures to control accelerated erosion and sedimentation. Williams has already committed to these mitigation measures as part of the project. A SWPPP is required to be prepared for any project that entail soil disturbance of 5 acres or more and are submitted to the applicable RWQCB for approval before project commencement. Because the area of soil disturbance will be small within a given area, there will not be an opportunity for significant erosion to occur, except for those portions of the project route that will be on steep slopes. The erosion and sediment control measures, if properly prescribed, implemented, and maintained, are expected to reduce erosion rates during and after construction to near preconstruction rates. By implementing these SWPPP mitigation measures, this impact is considered less than significant.

Mitigation Measure. No further mitigation is required.

c. Be located on a geologic unit or soil that is unstable or that will become unstable as a result of the proposed project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Impact: Possible Temporary Damage to the Fiber Optic Cable System from Earthquake-Induced Liquefaction

The project route may pass through a few areas that are subject to earthquake-induced liquefaction. Liquefaction and resulting differential ground settlement and lateral spreading could damage the fiber optic cable system. The impact is considered less than significant because damage to the fiber optic cable system will not have a significant physical impact on humans or the environment.

Mitigation Measure. None required.

Impact: Possible Long-Term Slope Mass Failure

The fiber optic cable will be installed primarily on level to gently slopes. However, in a few areas, the installation will require excavation into steep slopes, some of which are subject to shallow mass movement (i.e., slumping or landsliding). In such areas, runoff water from areas upslope of the trench could percolate into the trench, saturate the soil, and increase soil pore water pressures in a localized area. Such a condition could increase the potential for a shallow mass movement.

The areas of existing and potential instability will be avoided to the extent practicable. A geotechnical analysis is being conducted by Williams in areas where the project route wold pass through potentially unstable soil. The geotechnical analysis may recommend that the fiber optic cable be rerouted or be bored or trenched beneath the failure plane of the unstable area and that handholes and manholes not be constructed. It is unlikely that people or structures will be located downslope of the increased mass movement hazard area. For these reasons, this impact is considered less than significant.

Mitigation Measure. None required.

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

Impact: Potential Damage to the Fiber Optic Cable System from Seasonal Soil Expansion and Contraction

The project route will pass through areas with soils that are considered "expansive" by the Uniform Building Code and by the USDA Natural Resources Conservation Service. If not properly engineered, seasonal soil expansion and contraction could damage the fiber optic cable system. This impact is considered less than significant because proper engineering and construction techniques will eliminate this hazard and any damage that does occur will not have a significant physical impact on humans or the environment.

Mitigation Measure. None required.

e. Leave soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of waste water?

No septic tanks or alternative wastewater disposal systems will be installed as part of the project. No impacts will occur.

Cumulative Impacts

Development in California has the cumulative impact of bringing additional people into potential contact with geologic hazards. In some instances, such as where mass grading occurs, a project may directly contribute to increased landslide hazard or soil erosion.

As described above, the project will not expose people to substantial risk of loss, injury, or death relative to geologic hazards; result in substantial soil erosion; potentially result in landslides or other mass movements; create substantial risks because of expansive soils; or produce wastewater from septic tanks, sewers, or other disposal facilities. The contribution of the project to the cumulative impacts will be less than significant.

| | | | Less than Significant | | | |
|-----|---|-------------|--------------------------|-------------|-------|--|
| | | Potentially | with | Less than | | |
| | | Significant | Mitigation | Significant | No | |
| | | Impact | Incorporated | Impact | Impac | |
| HA | ZARDS AND HAZARDOUS MATERIALS - | Å | * | × | 1 | |
| - | ZARDS AND HAZARDOUS MATERIALS - Il the proposed project: | | | | Ĩ | |
| | | | | | | |
| Wil | Il the proposed project: | | <u> </u> | | | |

VII. HAZARDS AND HAZARDOUS MATERIALS

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impac |
|-----------------------------|--|--------------------------------------|--|------------------------------------|-------------|
| env ups like | ate a significant hazard to the public or the ironment through reasonably foreseeable et and accident conditions involving the ly release of hazardous materials into the ironment? | | / | | |
| c. Em haz sub | it hazardous emissions or involve handling ardous or acutely hazardous materials, stances, or waste within one-quarter mile of existing or proposed school? | _ | | _/ | |
| haz Gov resu | located on a site that is included on a list of ardous materials sites compiled pursuant to vernment Code Section 65962.5 and, as a llt, will it create a significant hazard to the lic or the environment? | | | _/_ | |
| or, v with use peo | ocated within an airport land use plan area where such a plan has not been adopted, be nin two miles of a public airport or public airport, and result in a safety hazard for ple residing or working in the proposed ect area? | | | | _/ |
| airs | located within the vicinity of a private trip and result in a safety hazard for people ding or working in the proposed project ? | _ | | _ | _/ |
| inte | air implementation of or physically rfere with an adopted emergency response a or emergency evacuation plan? | | | _/_ | |
| inju incl urb | ose people or structures to the risk of loss, ry, or death involving wildland fires, uding where wildlands are adjacent to anized areas or where residences are rmixed with wildlands? | | _/_ | | |

Criteria for Determining Significance

The analysis of significance of impacts related to hazards and hazardous materials is based on criteria a-h in the environmental checklist and on the following factors:

- # potential hazards and/or hazardous materials encountered during trenching or any subsurface excavation; and
- # proper disposal of hazardous materials encountered during trenching or any subsurface excavation.

Impact Mechanisms

Potential impacts associated with the proposed project could include:

- # potential exposure to existing contaminated soils, contaminated groundwater, abandoned underground storage tanks and piping, and contaminated material from existing undocumented dumping and landfilling;
- # potential exposure to, and releases of, hazardous materials, such as oils, grease, lubricants, and solvents, used during normal construction operations; and
- # potential risk of upset to the public or the environment.

Impact Assessment

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? or
- b. Will the proposed project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials?

Impact: Possible Temporary Exposure to or Release of Hazardous Materials during Construction

The project will not require long-term storage, treatment, disposal, or transport of hazardous materials; however, small quantities of hazardous materials will be stored, used, and handled during construction. The hazardous materials anticipated to be used are small volumes of petroleum hydrocarbons and their derivatives (e.g., gasoline, oils, lubricants, solvents) required to operate the construction equipment. These materials could be released in accidental spills.

This impact is considered less than significant because a SWPPP, which includes methods to protect water quality in response to emergency spills, has been prepared for the project. Additionally, Williams has adopted the following mitigation measure as part of the construction mitigation strategy for the project.

Subsurface hazardous materials may be encountered during construction. A regulatory database search is being conducted for the project route to identify and avoid known contaminated sites. The results of the database search are being used by Williams to avoid known contaminated sites. However, during construction, the construction team may encounter unexpected materials that may be considered to be of a hazardous nature. Procedures for proper handling and disposal are established by federal, state, and local regulations. Williams' contractors will be trained in the handling of such materials prior to construction.

A transaction screen environmental site assessment is being conducted by Williams for each OP-AMP station. The results of the site assessment will be used by Williams to avoid locating an OP-AMP station on a known contaminated site.

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 BMPs and the Occupational Safety and Health Administration's (OSHA's)

Hazardous Waste Operations and Emergency Response (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 the OSHA's HAZWOPER requirements. In addition, the construction team will have a written plan outlining response procedures 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 that 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.

c. Will the proposed project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No hazardous emissions will be generated by the project. No hazardous emissions or acutely hazardous materials, substances, or waste will be handled within 0.25 mile of an existing or proposed school. The construction contractor will not locate a staging area near an existing or proposed school. Therefore, this is a less-than-significant impact.

All institutional controls governing the storage, transportation, use, handling, and disposal of hazardous materials will be followed by project personnel during construction of the project.

d. Will the proposed project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, will create a significant hazard to the public or the environment?

Impact: Possible Exposure of the Public or Environment to Hazardous Materials Sites

Contaminated sites (i.e., gasoline stations and automotive repair facilities) may be encountered along some of the urbanized portions of the project route. State and federal laws regulate the manner in which contamination and hazardous materials are investigated and remediated. The U.S. Environmental Protection Agency and California Environmental Protection Agency maintain databases listing known contaminated sites. These databases include information about leaking underground storage tanks; hazardous waste generators; treatment, storage, and disposal facilities; sites known to have contaminated groundwater; and sites currently undergoing remediation or corrective action. A search of these locations is currently being performed for the project route and the OP-AMP stations. Coordination with waste disposal activities with local regulatory agencies will be needed along the project route. This impact is considered less than significant because all listed hazardous materials sites will be identified prior to construction and avoided through modifying the location of the project route or OP-AMP stations.

Mitigation Measure : None required.

e. For a proposed project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the proposed project result in a safety hazard for people residing or working in the proposed project area?

As discussed in Chapter 2, "Project Description", the project will involve the installation of conduit and cable entirely within road rights-of-way. There will be no resultant structures that will impair airport operations or endanger other land uses. As a result, the project will have no impact.

f. For a proposed project in the vicinity of a private airstrip, will the proposed project result in a safety hazard for people residing or working in the proposed project area?

As discussed above, the project will not result in a safety hazard for people working or residing in the surrounding area. No trenches or holes will be left open overnight, and no equipment or construction materials will remain accessible to the public once construction activities cease for the day. Therefore, there is no impact.

g. Will the proposed project impair implementation of or physically interfere with an adopted emergency response or evacuation plan?

Impact: Possible Temporary Limited Emergency Access

The project will involve the operation of heavy machinery. Emergency response times may be affected within road rights-of-way. Emergency access will be regulated as a condition of road encroachment permits by the applicable regulatory agency. Williams will implement traffic control measures as required by the local jurisdiction. This is part of the standard construction strategy of the project to further reduce impacts on traffic and emergency response vehicles. This is a less-than-significant impact.

Mitigation Measure. None required.

h. Will the proposed project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Impact: Possible Temporary Exposure of People or Structures to Wildland Fires

The project will not expose people or structures to a significant risk of loss, injury, or death attributable to wildland fires. This impact is considered less than significant because Williams has prepared and will implement a fire prevention and management plan for the project route (**Appendix G**).

Mitigation Measure. No further mitigation is required.

Cumulative Impacts

The proposed project will not be expected to make a considerable contribution toward hazard or hazardous materials impacts. Contaminated soils or other materials may be unexpectedly encountered along the project route and will require appropriate handling and disposal by a licensed contractor. Because the characteristics and the volume of hazardous materials that could be unexpectedly encountered during construction cannot be

determined, the possible cumulative impact is only speculative. Some materials encountered along the project route may be recyclable, which will reduce any possible impact on hazardous waste disposal/landfill capacity to a less-than-significant level. The cumulative impact of disposal of contaminated materials unexpectedly encountered along the project route is considered a less-than-significant impact because of regulatory safeguards that limit exposure and require controlled handling and disposal.

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----|--|--------------------------------------|--|------------------------------------|--------------|
| | DROLOGY AND WATER QUALITY - Will proposed project: | | | | |
| | | | | | |
| a. | Violate any water quality standards or waste discharge requirements? | | _/_ | | |
| b. | Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater | | | | |
| | table level (i.e., the production rate of pre- existing nearby wells will drop to a level that will not support existing land uses or planned uses for which permits have been granted)? | | _/ | | |
| c. | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that will result in substantial erosion or siltation onsite or offsite? | | _/ | | |
| d. | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner that will result in flooding onsite or offsite? | | _/_ | | |
| e. | Create or contribute runoff water that will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | | | | _/_ |
| f. | Otherwise substantially degrade water quality? | | | | _/ |
| g. | Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard deligation map? | | | | / |
| h. | other flood hazard delineation map? Place within a 100-year flood hazard area | | | | _/ |
| | structures that will impede or redirect flood flows? | | | | _/ |

VIII. HYDROLOGY AND WATER QUALITY

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----|---|--------------------------------------|--|------------------------------------|--------------|
| i. | Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | _/_ |
| j. | Contribute to inundation by seiche, tsunami, or mudflow? | | | | _/ |

Criteria for Determining Significance

The analysis of the significance of impacts from the project is based on criteria *a-j* in the environmental checklist. In addition, the potential for significant impacts on hydrologic conditions and water quality from construction activities was evaluated based on the intensity, duration, and timing of the various disturbances of aquatic and riparian resources. State and federal agencies implement policies aimed at managing these three factors and keeping the risk of water quality degradation within safe levels to protect human and aquatic life. With the evolution of ecosystem management, both the magnitude of each factor and the processes that it affects are important.

The intensity of an impact relates not only to its location and areal extent but also to "typical mean and extreme values observed in the ecosystem". State water quality standards (WQSs) set criteria for parameters with these ranges of values in mind to represent threshold values over or under which the exceedance may become significant. In addition to WQSs, aquatic and riparian habitat parameters, such as spawning area and recruitment of woody debris, have baseline conditions that need to be maintained. In all cases, the location and magnitude of an impact influence whether a parameter will be significantly affected. Agencies may issue a variance, recognizing that certain accedences of standards are permissible for periods of limited duration.

The timing of water quality impacts is important because it can affect whether reproductive and migratory cycles of aquatic biota or other seasonal beneficial uses are affected. State resource agencies have established preferred construction windows (if in-water work is needed) to minimize the potential impacts of in-water construction on the reproductive and migratory cycles of aquatic organisms, particularly anadromous salmonids.

Impact Mechanisms

Potential construction-related impact mechanisms for water quality include the following:

Conduit and cable installation and associated soil disturbance could cause road embankment or channel bed and bank erosion (the latter on dry stream crossings only). Construction equipment can compact soils, leading to accelerated runoff and concentration in localized areas prone to sheet erosion and gullying. Disturbing ditch lines, which function as extensions of the stream network, also could result in fine sediment deposition into natural stream courses.

- # Removal of riparian vegetation can weaken streambank structure and increase its susceptibility to erosion. Disturbance to the geomorphic characteristics and stability of the channel bed and banks may initiate long-term readjustments (chronic erosion) in self-formed alluvial channels.
- # Hazardous materials associated with the proposed project will be limited to those substances associated with construction equipment, such as gasoline, diesel fuels, engine oil, and hydraulic fluids. An accidental spill of these substances could contaminate drainages, soils, wetlands, and other environmentally sensitive areas.
- # Use of guided boring equipment could result in an accidental bentonite spill into, or adjacent to, stream channels. Bentonite is an non-toxic drill lubricant made from a mixture of clay and water.

There will be no operation- or maintenance-related impact mechanisms.

Impact Assessment

Operation and maintenance activities of the project will be expected to be minor, because access points will already exist and substantial land or vegetation disturbance activities will not be required. Operation and maintenance activities will follow the same guidelines and restrictions as construction activities; therefore, no effects on hydrology and water quality will be anticipated.

a. Violate any water quality standards or waste discharge requirements?

Impact: Possible Temporary Transport of Sediment to Waterbodies

Project construction will not require in-water work in drainages supporting sensitive resources (i.e., streams that support sensitive fish, amphibians, or other riparian and water-dependent species or waters that are water quality impaired by sediments). At stream crossings that are flowing at the time of construction, Williams will either attach the conduit to an existing bridge, install the conduit over or under existing culverts, or bore under the stream. Williams may install fiber optic cable across seasonal dry drainages. These drainages typically flow underneath the existing road through culverts at a sufficient depth that trenching within the paved portion of roads or along gravel or dirt shoulders will not directly affect these drainages.

There is potential for surface runoff to transport upland sidecast trench spoils into streams, which could result in temporary increases in turbidity and sedimentation in watercourses downstream of the project route. Temporary increases in turbidity or sedimentation could be adverse if the rate of sediment generation exceeds the rate of sediment transport in a stream, a frequent occurrence during wet weather. Excessive sediment in the water column (increased turbidity) can interfere with fish feeding behavior and with photosynthesis in aquatic flora. Sediment deposition on the channel bed can displace aquatic fauna and prevent adequate water circulation through fish eggs in spawning beds. Because of the nature of construction on existing roads trench spoils generated during construction will be backfilled at the end of each work day. To minimize the exposure of sediments to runoff, Williams will make best efforts to ensure that all trenches are backfilled at the end of each work day. Where backfilling the trench is not feasible, proper erosion control features will be established to eliminate or minimize exposure of sediments to runoff.

This impact is considered less than significant because Williams will not perform in-water work in sensitive drainages, will isolate flow from construction areas in nonsensitive streams, will use aggressive construction

BMPs to minimize sediment transport to streams from upland, will compact and regrade affected areas to match adjacent natural areas, and will seed and mulch or allow natural revegetation at constructed sites, as described in Chapter 2, "Project Description"; Williams will apply for authorization under the National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activity to the North Coast RWQCB and Central Valley RWQCB. Williams has prepared a SWPPP and will implement appropriate erosion control BMPs for all construction activities that could discharge contaminated runoff into offsite stormwater runoff and occur within the rainy season of October 1 to May 1. Williams has also adopted additional mitigation measure B-6, "Avoid Riparian and Wetland Habitats That Support Special-Status Species by Establishing and Observing Exclusion Zones" and measures described under "General Project Commitments" in the "Biological Resources" section above as part of the construction mitigation strategy for the project.

The SWPPP includes measures to minimize erosion and sediment transport to streams and also identifies BMPs (e.g., water diversion and sediment containment devices, protection of trench spoils, installation of water bars), site restoration, postconstruction monitoring of the effectiveness of BMPs, contingency measures, contractor responsibilities, responsible parties, and agency contacts. Erosion control measures include storing trench spoils outside the stream or ditch corridor (above the ordinary high-water mark) and protecting receiving waters from these erosion source areas with sedimentation fences or other effective sediment control devices. Possible subsurface soil erosion of the trench backfill material will be controlled by using trench plugs. Additionally, stream channels may be protected from surface runoff along the project route with sedimentation fences or other sediment control devices placed in roadside drainage ditches downstream of construction. Trench spoils will be backfilled into the trenches at the end of each work day to minimize sediment exposure to runoff. The surface of the project route will be restored (to a condition appropriate for the location) within 7 days of fiber optic cable installation.

Mitigation Measure. No further mitigation is required.

Impact: Possible Temporary Disruption of Bed and Bank Sediments in Channels during Fiber Optic Conduit and Cable Installation

Williams will avoid trenching and installation of fiber optic cable across seasonal dry drainages. These drainages typically flow underneath the existing road through culverts at a sufficient depth that trenching within the paved portion of roads or along gravel or dirt shoulders will not directly affect these drainages.

If culvert depths are not at a sufficient depth to allow for suitable cover for the fiber optic cable, trenching maybe required within these drainages.

Trenching across dry drainages or small nonsensitive flowing drainages to install conduit and cable could cause disruption of the bed and bank sediments. This sediment disruption could result in some suspension of sediment in the water column and a corresponding increase in turbidity and sedimentation downstream during subsequent precipitation events that contribute flow to the channel.

As described in Chapter 2, "Project Description", Williams will use noninvasive construction methods that mitigate significant impacts on water quality at flowing sensitive stream crossings. Conduit and cable installation at these crossings will be limited to boring under sensitive streams, installation of conduit and cable over or under existing culverts, or attaching the conduit to an existing bridge. Possible impacts of installation

of conduit at sensitive stream crossings are considered less than significant because Williams will use noninvasive construction methods as part of the project that do not disturb the beds or banks of streams.

Also as noted in Chapter 2, "Project Description", Williams could install conduit and cable in streams that are dry at the time of construction or in small, nonsensitive flowing streams by plowing or trenching. Although these methods do disturb the bed and banks of streams, the possible impacts of these crossings to water quality are not considered significant because flows, if present, will be small, the drainages will not support resources that are considered sensitive, and if temporary, localized elevations in turbidity should occur or are anticipated, construction BMPs will be implemented. On completion of construction, the site will be restored. Any alterations to the beds and banks will be covered in the DFG streambed alteration agreements.

The possible impacts of installing conduit and cable through dry drainages are considered less than significant because Williams will use construction BMPs and has prepared and will implement a SWPPP, which will include regrading and compacting backfilled drainages and trenches to match natural, adjacent site conditions as part of the construction mitigation strategy of the project.

Mitigation Measure. No further mitigation is required.

Impact: Possible Long-Term In-Channel Erosion and Deposition from Decreased Channel Stability

Removing riparian vegetation along drainages could weaken streambank structure and increase susceptibility to erosion. Disturbing the geomorphic characteristics and stability of the channel bed and banks may initiate long-term readjustments (chronic erosion) in self-formed, alluvial channels.

A significant impact could occur if large amounts of riparian vegetation are removed, the channel bed and banks on several crossings of one channel or within one watershed are disturbed, or sensitive crossing sites that have been disturbed mechanically are further disturbed by high-flow events before they are stabilized. However, this impact is considered less than significant because the project route will be within existing disturbed rights-of-way that generally do not contain riparian vegetation (except where some vegetation has encroached on the rights-of-way) and Williams will use, noninvasive construction methods at flowing sensitive streams as part of the project design. Williams will avoid trenching and installation of fiber optic cable across seasonal dry drainages. These drainages typically flow underneath the existing road through culverts at a sufficient depth that trenching within the paved portion of roads or along gravel or dirt shoulders will not directly affect these drainages. In addition, Williams has adopted mitigation measure B-6, "Avoid Riparian and Wetland Habitats That Support Special-Status Species by Establishing and Observing Exclusion Zones" (described in the "Biological Resources" section) as part of the construction mitigation strategy for the project.

Mitigation Measure. No further mitigation is required.

Impact: Possible Temporary Degraded Water Quality from Accidental Spills of Hazardous Materials during Construction

Hazardous materials associated with the project will be limited to those substances associated with construction equipment, such as gasoline, diesel fuels, engine oil, and hydraulic fluids. Accidental spills of these substances could contaminate drainages, soils, wetlands, and other environmentally sensitive areas.

This impact is considered less than significant because Williams has prepared and will implement a SWPPP, including spill prevention measures, that will be strictly implemented as part of the construction mitigation strategy for the project. The contractor will follow the SWPPP and perform measures to ensure that petroleum products are not discharged into drainages or bodies of water. The plan will address measures to minimize the potential for bentonite seeps. Elements of the plan include a description of potentially hazardous and nonhazardous materials that could be spilled accidentally during construction (fuels, equipment lubricant, human waste and chemical toilets, and bentonite); potential spill sources, potential spill causes, proper storage and transport methods, spill containment, spill recovery, agency notification, and responsible parties.

As described in the SWPPP, hazardous substances will be stored in staging areas located at least 150 feet from streams and other surface waters. Refueling and vehicle maintenance will be performed at least 150 feet from these receiving waters. Sedimentation fences, certified weed-free straw bales, sand bags, berms, and baffles will be used as additional sources of protection for waters, ditches, and wetlands.

Mitigation Measure. No further mitigation is required.

Impact: Possible Temporary Water Quality Degradation and Siltation from Accidental Seepage of Bentonite into Streams

As mitigation built into the construction approach, Williams will install conduit and cable under sensitive flowing streams by boring under the streams, installing the conduit under or over existing culverts, or attaching the conduit to existing bridges (see Chapter 2, "Project Description"). During the boring operation, bentonite is used to lubricate the bore and help remove cuttings from the borehole. Although unlikely, the bentonite mixture can seep to the surface within a stream channel. Seepage could happen if bores encounter fractures in the underlying rock, and bentonite pressures are great enough to allow the material to surface.

This impact is considered less than significant because Williams will strictly implement the SWPPP to minimize the potential for bentonite seeps to streams.

Several measures are included in the SWPPP to minimize the potential for bentonite seeps, including requiring boring crews to strictly monitor drilling fluid pressures, retaining containment equipment onsite, monitoring waters downstream of the crossing sites to identify any seeps quickly, immediately stopping work if a seep into a stream is detected, immediately implementing containment measures, adhering to agency reporting requirements, and identifying responsible parties.

To ensure that the impacts from any accidental seepage of bentonite into streams will be further reduced to a less-than-significant level, Williams has adopted the mitigation measures under "General Project Commitments" described in the "Biological Resources" section above as part of the construction mitigation strategy for the project.

Mitigation Measure. No further mitigation is required.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells will drop to a level that will not support existing land uses or planned uses for which permits have been granted)?

The project will consist of the installation of fiber optic cable and conduit through a variety of means. Depth of the fiber optic cable typically will not exceed 48 inches, except under special circumstances such as boring under rivers. It will have no impact on ground water supplies or interfere with groundwater recharge because the project has been designed to avoid this impact.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that will result in substantial erosion or siltation onsite or offsite?

The project has been designed so that no in-water work in sensitive water bodies (i.e., waterbodies supporting critical habitat or listed or proposed species) will occur during the construction of the project. The project will not alter existing drainage patterns through the alteration of a stream or river course or of upland areas, as the rights-of-way will be regarded to preconstruction contours. In all cases, the conduit will either be installed on a bridge or other existing river or stream crossing or will be bored under flowing water courses. No impact will occur because the project has been designed to avoid this impact.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner that will result in flooding onsite or offsite?

The project has been designed so no in-water work in sensitive water bodies (i.e., waterbodies supporting critical habitat or listed or proposed species) will occur during the construction of the project. The project will not alter existing drainage patterns through the alteration of a stream or river course. In all cases, the conduit will either be installed on a bridge or other existing river or stream crossing or bored under flowing water courses. No impact will occur because the project has been designed to avoid this impact.

e. Create or contribute runoff water that will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project will not create or contribute runoff water to drainage systems.

f. Otherwise substantially degrade water quality?

The project will not create or contribute to water quality impairment other than the temporary disturbances described for checklist question "*a*".

g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The project will not include the construction or placement of housing within floodplains.

h. Place within a 100-year flood hazard area structures that will impede or redirect flood flows?

The project will not have structures within 100-year floodplains.

i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

The project will not affect any surface water flows nor increase the risk of flooding.

j. Contribute to inundation by seiche, tsunami, or mudflow?

The project will not affect the potential for inundation by seiche, tsunami, or mudflow.

Cumulative Impacts

The cumulative effect of a temporary, small increase in sediment load will be minimal. Because the direct and residual effects of trench spoils erosion will be minor, no cumulative impacts will be expected. Successful spill prevention will result in no cumulative impacts.

Regarding flood hazards, if construction is necessary within a 100-year floodplain, the project will be required to obtain applicable local permits. This will result in no contribution to a cumulative impact because the local permit system, in accordance with flood insurance rates set by the Federal Emergency Management Agency, is designed to avoid development that will cumulatively result in flood hazard.

| | | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|-----|----|--|--------------------------------------|---|------------------------------------|--------------|
| IX. | LA | ND USE AND PLANNING - Will the proposed | | | | |
| | | ject: | | | | |
| | a. | Physically divide an established community? | | | | _/ |
| | b. | Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning | | | | |
| | | ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | _/_ | | |
| | c. | Conflict with any applicable habitat conservation plan or natural community conservation plan? | | | | _/ |

IX. LAND USE AND PLANNING

Criteria for Determining Significance

The analysis of significance of impacts of the project is based on criteria a-c in the environmental checklist and on the following factors:

- *#* substantial changes to land uses along the cable right-of-way,
- *#* incompatibility with long-term uses on adjacent properties, or
- # conflict with applicable land use plans.

Impact Mechanisms

All cities and counties within California are required to adopt a general plan establishing goals and policies for their future development. In order to implement their plans, local jurisdictions adopt zoning, subdivision, grading, and other ordinances. A project may have an impact on the local general plan by proposing actions that will conflict with planning goals, policies, or regulations adopted to avoid or minimize environmental impacts. A proposed project may disrupt land use patterns by physically dividing a community (e.g., freeway construction).

Impact Assessment

a. Physically divide an established community?

The project consists of the installation of fiber optic cable within existing road rights-of-way and the construction of two OP-AMP stations adjacent to the cable alignment. Conduit, cable, and handholes/manholes will primarily be installed underground and will cause minimal disruption during construction. The conduit and cable will be attached to several bridges, as shown on **Table 3-1**. Marker posts will be installed above ground approximately every 700 to 1,000 feet on the shoulder of the roads along the right-of-way. The cable installation will be constructed in accordance with local zoning ordinances and will result in only short-term construction related impacts to traffic. Therefore, the installation, operation, and maintenance of the cable will not physically divide any community.

The two OP-AMP sites, Lindenberger and Mesa Rock, are classified rural residential. As utility infrastructure, the proposed OP-AMP stations are considered an allowable use subject to the provision of a conditional use permit. The approval of conditional use permits are usually subject to the review and approval of the respective planning agencies responsible for development and land use in each county. Typically, planning agencies review the projects constancy with surrounding uses, traffic impacts, aesthetic impacts, and effects on local natural resources.

At each OP-AMP station Williams estimates that three to eight precast concrete buildings will be installed. Site security will be achieved by placing the stations within fenced areas approximately 300 by 550 feet in size. As in the design mitigation discussed in Chapter 2, the stations will be located on sites not supporting sensitive biological or cultural resources. The fiber optic cable system will not create any structures or other features large enough or intrusive enough to divide an established community. Therefore, the construction, operation, and maintenance of the OP-AMP stations will not physically divide any community.

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Impact: Conflict with Local Land Use Plans

CEQA evaluates physical changes in the environment that may result from the implementation of a project and whether those changes are significant (State CEQA Guidelines Section 15378). The project may conflict with local land use plans and regulations adopted for the purpose of avoiding and mitigating an environmental effect. Pursuant to Section 15064(h) of the State CEQA Guidelines, this impact will be less than significant as long as the project complies with these standards. Williams has adopted the following mitigation measure as part of the construction mitigation strategy for the project. Mitigation Measure LU-1: Obtain and Comply with Local Zoning Permits. Williams will obtain necessary local zoning permits prior to construction of facilities and will comply with the applicable conditions of approval.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

The project will be constructed within areas of Riverside and San Diego Counties with existing resource conservation plans including:

- # Multiple Species Conservation Program (MSCP), San Diego County;
- # Multiple Species Conservation Program, City of San Diego MSCP Subarea Plan; and
- # Riverside County Habitat Agency, Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County.

The construction within existing rights-of-way will not conflict with local habitat and natural community conservation plans, as described in Chapter 5, "Biological Resources", of this document.

Neither OP-AMP site is within the designation of a habitat conservation plan or natural community conservation plan area. Therefore, the project will have no impacts related to existing habitat conservation plans.

Cumulative Impacts

The project will not result in the physical division of a community nor will it leave evidence of its existence other than the two OP-AMP stations. Further, any necessary discretionary permits will be obtained from state and federal agencies relative to habitat conservation plans, thereby ensuring compliance with such plans, and from local agencies relative to zoning regulations. The project will make little contribution to any cumulative effect.

X. MINERAL RESOURCES

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----|---|--------------------------------------|---|------------------------------------|--------------|
| X. | MINERAL RESOURCES - Will the proposed project: | | | | |
| | a. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state? | | | | _/_ |

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----|--|--------------------------------------|---|------------------------------------|--------------|
| b. | Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | | | | / |

Criteria for Determining Significance

The analysis of significance of impacts of the project is based on criteria a and b in the environmental checklist and the fact that the project is entirely within road rights-of-way and construction of the project will only require excavation to a shallow depth.

Impact Mechanisms

Projects with the potential for limiting the availability of mineral resources are those that will build over the resources; place sensitive uses such as housing or schools adjacent to surface mines or other resource recovery activities, thereby restricting their operations; or shut off access to the resource.

Impact Assessment

- a. Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state? and
- b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The project route is located within existing road rights-of-way, which limits their availability for surface mining. All of the OP-AMP station sites are located on private property outside of rights-of-way. Therefore, the OP-AMP sites will have a greater potential for mineral resource recovery. None of the OP-AMP stations along the project route will be installed in areas classified as Mineral Resource Zone-3.

Locating OP-AMP stations within areas of possible mineral deposits could limit future access to those sites. However, because none of the OP-AMP sites are classified as Mineral Resources Zone-3, the impact on mineral resources is less than significant.

Cumulative Impacts

The installation of conduit and cable in existing rights-of-way will not affect the prior ability to access mineral resources within these rights-of-way. The limited number of OP-AMP stations that will be installed and Williams' preference to build them at existing substations and keep them out of 100-year floodplains greatly limits the potential that any such station will interfere with an existing or future mineral resource recovery operation. Therefore, the project will not cause any cumulative impact on mineral resources.

XI. NOISE

| | | Less than | | | | |
|-----|---|--------------------------------------|--|------------------------------------|-------------|--|
| | | Potentially Significant Impact | Significant with Mitigation Incorporated | Less than Significant Impact | No Impac | |
| NOI | <u>SE</u> - Will the proposed project: | | | | | |
| a. | Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies? | | _/_ | | | |
| b. | Expose persons to or generate excessive groundborne vibration or groundborne noise levels? | | | _/_ | | |
| c. | Result in a substantial permanent increase in ambient noise levels in the proposed project vicinity above levels existing without the proposed project? | | _/_ | | | |
| d. | Result in a substantial temporary or periodic increase in ambient noise levels in the proposed project vicinity above levels existing without the proposed project? | | _/_ | | | |
| e. | Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the proposed project area to excessive noise | | | | | |
| | levels? | | | | _/_ | |
| f | Be located in the vicinity of a private airstrip and expose people residing or working in the proposed project area to excessive noise levels? | | | | , | |

Criteria for Determining Significance

The analysis of significance of impacts of the project is based on criteria *a-f* in the environmental checklist. In addition, city and county governments typically use noise elements, which are part of the general plan, to evaluate long-term noise-related land use compatibility for development of an area, and noise ordinances to regulate noise from specific noise sources such as unmuffled automobiles, music and parties, industrial activities, and construction. Because the project falls in the second category typically regulated by noise ordinances, noise element criteria will typically not apply.

Each city and county typically enacts its own noise ordinance standards; however, most noise ordinances are fairly similar. Noise ordinances generally set limits on acceptable noise levels at the property line of the affected land use based on the background noise level, the noise level from the source in question, the duration of the noise event, and the time of day. Noise ordinances often contain exemptions for construction activities, provided that the construction activity occurs during hours specified by affected local jurisdictions. There are no established noise thresholds for wildlife species; accordingly, noise impacts on wildlife are generally

addressed qualitatively. For purposes of this analysis, noise environments considered to be acceptable for human use are considered acceptable for wildlife species.

Project-related noise will occur from use of construction equipment and construction activity associated with the proposed cable installation and from operation of support equipment at OP-AMP stations. Noise levels along the rights-of-way will increase and noise-sensitive receptors, such as residences, schools, hospitals, places of worship, recreation areas, and wildlife species, located near the construction areas could be affected. The effect of increased noise levels will be somewhat diminished because most construction activity is expected to take place during daylight hours when background noise levels are generally the highest and people's tolerance is the highest. Because construction crews are expected to move quickly, construction noise will be audible for only one day or less.

For purposes of this analysis, a noise impact is considered significant if project-related noise at a noisesensitive land use or receptor has the potential to exceed typical noise ordinance standards. To keep this analysis reasonably conservative, the analysis does not presume that construction activity is exempt from regulations.

Noise generated from the project is expected to be less than noise currently generated by trains or automobiles using various rights-of-way.

Impact Mechanisms

The impact mechanism is the generation of noise by construction equipment, diesel-powered emergency backup generators, or other support equipment at OP-AMP stations that will affect nearby noise-sensitive receptors.

Impact Assessment

a. Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?

Noise-generating activities associated with the proposed project are related primarily to construction activities. Typical construction equipment to be used includes rubber-tired backhoes, tracked vehicles, tractors, and directional boring equipment. All construction activity will occur during daylight hours, except for possible limited nighttime boring activities in isolated areas.

Construction of the OP-AMP stations and potential access road improvements will also involve the use of noise-generating equipment. Grading is expected to be the noisiest activity associated with the construction of these facilities and improvements.

Table 5.XI-1 summarizes typical noise levels produced by construction equipment expected to be used for grading and in-ground fiber optic cable installation.

| Table 5.XI-1. Summary of Construction Noise Sources | | | | | |
|---|----------------------------------|--|--|--|--|
| Equipment | Sound Level at 50 Feet (dBA-Leq) | | | | |
| Backhoe | 80 | | | | |
| | | | | | |

| Grader | 85 | |
|--|----|--|
| Bulldozer | 85 | |
| Source: Federal Transit Administration 1995. | | |

Noise associated with the proposed project is expected to come primarily from cable installation and construction of OP-AMP stations. Noise may also be associated with operation of emergency backup generators and other support equipment, such as heating, ventilation, and air conditioning (HVAC) equipment, at the OP-AMP stations. In California, noise from these types of operations is regulated only at the local level.

Impact: Temporary Exposure of Residences and Other Sensitive Receptors to Construction Noise in Excess of Local Standards

A bulldozer is expected to be the noisiest piece of equipment used at any construction site, and other highly noisy equipment will likely not be used concurrently with a grader. Therefore, the assessment of potential noise impacts associated with in-ground conduit and cable installation or other construction activity is based on a worst-case source level of 85 dBA at 50 feet. Noise levels that could potentially occur in the vicinity of cable installation or other construction sites based on this source level are summarized in **Table 5.XI-2**. This table includes attenuation factors from distance, molecular absorption, and anomalous excess attenuation (Hoover 1996). Locations within about 2,000 feet of an active construction site have the potential to be exposed to noise in excess of 50 dBA. Many local noise ordinances use sound levels in the range of 50 to 55 dBA as thresholds for violation as residential uses during daylight hours. Lake County uses 55 dBA. Residences or other sensitive receptors will be located within 2,000 feet of many portions of the cable routes and may be exposed to noise in excess of local standards. Construction noise may substantially increase noise above background sound levels. However, construction within existing railroad or road rights-of-way will typically not be expected to generate noise that will be significantly greater than noise generated by trains or automobiles.

| Distance to Receptor (feet) | Sound Level at Receptor (dBA) |
|-----------------------------|-------------------------------|
| 50 | 85 |
| 100 | 79 |
| 200 | 73 |
| 500 | 64 |
| 600 | 62 |
| 800 | 60 |
| 1,000 | 57 |
| 1,500 | 53 |
| 2,000 | 50 |
| 2,500 | 47 |
| 3,000 | 44 |
| 4,000 | 40 |
| | |

Table 5.XI-2. Estimated Noise in the Vicinity of an Active Construction Site

| Distance to Receptor (feet) | Sound Level at Receptor (dBA) | | |
|---|--|--|--|
| 5,280 | 36 | | |
| 7,500 | 29 | | |
| Notes: The following assumptions were used: | | | |
| | | | |
| Basic sound level drop-off rate: | 6.0 dB per doubling of distance | | |
| Basic sound level drop-off rate: Molecular absorption coefficient: | 6.0 dB per doubling of distance 0.7 dB per 1,000 feet | | |
| 1 | | | |
| Molecular absorption coefficient: | 0.7 dB per 1,000 feet | | |

Table 5.XI-2. Estimated Noise in the Vicinity of an Active Construction Site

This impact is considered less than significant because Williams has adopted the following mitigation measure as part of the construction mitigation strategy for the proposed project.

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 occur 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 powered by electrical generators.
- b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?

Impact: Temporary Exposure of Residences or Other Sensitive Uses to Localized Groundborne Vibration and Noise

Directional boring and drilling and operation of heavy equipment may generate localized groundborne vibration and noise that could be perceptible at residences or other sensitive uses close to the activity. Groundborne noise is noise radiated by vibrating ground and structures supported on vibrating ground.

Construction within active railroad rights-of-way will not create significantly more ground vibration than passing trains. Because potential groundborne vibration and noise will be temporary and will occur only during daylight hours, groundborne vibration and noise impacts are considered less than significant.

Mitigation Measure. None required.

c. Result in a substantial permanent increase in ambient noise levels in the proposed project vicinity above levels existing without the proposed project?

Impact: Exposure of Nearby Sensitive Receptors to Excessive Noise Levels from Use of Emergency Backup Generators and Other Support Equipment at OP-AMP Stations

A permanent source of noise associated with ongoing operation of the proposed project is an emergency backup generator to power each OP-AMP station in case of a power outage. Other support equipment, such as HVAC equipment, may also generate noise. The generator will be located outside the concrete precast structure that houses the regeneration equipment and will be operated temporarily only during a power outage or when the generator is being tested or serviced. Generators used at these facilities are typically powered by a 255-horse power diesel-driven reciprocating engine. An engine of this type and size will produce a sound level of about 84 dBA at 50 feet (Hoover 1996). HVAC equipment will be used to control the equipment in the facility to protect electronics. The size, type, and degree of use of this equipment will vary, depending on the climate in which the facility is located..

The backup generators will be installed with a standard sound attenuating enclosure. A standard enclosure is expected to provide approximately 15 dB of sound reduction. With an enclosure in place the 84 dB source level will be reduced to approximately 69 dBA. The noise level produced by HVAC equipment will vary depending on climate. Noise produced by this equipment could potentially be equal to the noise produced by the backup generator. Based on this source level, noise-sensitive uses within about 500 feet of an OP-AMP facility could be exposed to noise in excess of 50 dBA. Noise-sensitive uses within 1,400 feet of a facility could be exposed to noise in excess of 40 dBA. An emergency power outage could require extended use of the generator and result in exposure of nearby sensitive receptors to noise in excess of local day and night noise ordinance standards or to excessive noise increases. Noise from HVAC equipment could have similar results. This impact is considered less than significant because Williams has adopted the following mitigation measure as part of the construction mitigation strategy of the proposed project.

Mitigation Measure N-2. 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 OP-AMP stations such that the noise produced does not exceed local noise ordinance criteria. Potential methods for achieving this level 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.

d. Result in a substantial temporary or periodic increase in ambient noise levels in the proposed project vicinity above levels existing without the proposed project?

Construction activity will result in a temporary increase in noise. Refer to the response to question a above.

e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the proposed project area to excessive noise levels?

This question is not applicable to the project.

f. Be located in the vicinity of a private airstrip and expose people residing or working in the proposed project area to excessive noise levels?

This question is not applicable to the project.

Cumulative Impacts

There are no cumulative noise impacts associated with the project because noise impacts are anticipated to be temporary and highly localized.

| | Si | tentially gnificant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|--|-------------------|----------------------------------|---|------------------------------------|--------------|
| I. <u>POPULATION AND HOUSING</u> - V proposed project: | ill the | | | | |
| a. Induce substantial population gro either directly (e.g., by proposing r and business) or indirectly (e.g., tl extension of roads or other infrastr | ew homes rough | | | _ | _/ |
| b. Displace a substantial number of e housing units, necessitating the or replacement housing elsewhere? | • | | _ | | _/_ |
| c. Displace a substantial number of p necessitating the construction of re housing elsewhere? | • | | | | _/ |

XII. POPULATION AND HOUSING

Criteria for Determining Significance

The analysis of significance of impacts of the proposed project is based on criteria a-c in the environmental checklist.

Impact Mechanisms

Projects that will introduce substantial population growth or make it possible for such growth to occur (i.e., new sewer line or road) will significantly impact population and housing. In addition, projects that will displace substantial housing or necessitate the construction of replacement housing might also have a significant impact.

Impact Assessment

a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and business) or indirectly (e.g., through extension of roads or other infrastructure)?

The project will provide point-to-point service through a network of fiber optic cables. There is no direct access to the fiber optic cable. The project is not a form of infrastructure like roads, water, or sewer lines that can induce population growth within specific areas. The availability of high-speed, high-volume communications is one factor among many (e.g., cost of living, economic opportunities, market availability, quality of schools, salary levels, tax levels) in the decision by people and businesses to locate in California. Therefore, the proportional contribution of the project to California's future growth is too remote and speculative for analysis. Also, the volume of communications traffic originating or terminating in California cannot be differentiated from the amount of traffic passing through California. The indirect impact of this project and others of its type on such growth is only speculative. No direct impact will occur.

- b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere? or
- c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?

The project will serve existing and future telecommunications demand through a fiber optic cable system and will neither induce substantial population growth in any particular area, nor make a cumulatively considerable contribution to population growth. Construction will not displace any housing or numbers of people. The installation process is quick and will not require the construction of new housing. There will be no impact on population or housing as a result of the project.

Cumulative Impacts

The project will neither produce nor displace housing. It will have no impact on population or housing and will not contribute to cumulative impacts.

XIII. PUBLIC SERVICES

| | Less than | | |
|-------------|------------------|-------------|--------|
| Potentially | Significant with | Less than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

XIII. <u>PUBLIC SERVICES</u> - Will the proposed project:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|--------------------------|--------------------------------------|---|------------------------------------|--------------|
| Fire protection? | | | _/ | |
| Police protection? | | | | _/_ |
| Schools? | | | | _/ |
| Parks? | | | | _/ |
| Other public facilities? | | | | _/ |

Criteria for Determining Significance

The assessment of significance of impacts of the project is based on criterion a in the environmental checklist.

Impact Mechanisms

Projects that create a demand for public services may result in the construction of public facilities. This construction may result in a significant impact when associated with significant adverse physical changes.

Impact Assessment

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: Fire protection? Police protection? Schools? Parks? Other public facilities?

Impact: The Construction of Two OP-AMP Stations May Temporarily Increase Demand for Fire Protection Services

This project is the installation of fiber optic cable and construction of related small facilities along existing rights-of-way. Construction will be temporary, quick, and self-sustaining. The unstaffed OP-AMP stations will require minimal public services. The project will not create a new demand for governmental services or facilities and will not require construction, alteration, or expansion of any such facilities to provide acceptable service levels. As discussed in Chapter 2, the project will incorporate a fire prevention and management plan during construction, where necessary, thereby mitigating the need for new permanent or temporary fire protection facilities (**Appendix G**). The impact is considered less than significant.

Mitigation Measure. No further mitigation is required.

Cumulative Impacts

The project will need no public services. It will therefore not contribute to any cumulative impacts.

XIV. RECREATION

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|-------------|---|--------------------------------------|---|------------------------------------|--------------|
| . <u>RF</u> | ECREATION - Will the proposed project: | | | | |
| a. | Increase the use of existing neighborhood and regional parks or other recreational facilities | | | | |
| | such that substantial physical deterioration of the facility will occur or be accelerated? | | | | _/ |
| b. | Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical | | | | |
| | effect on the environment? | | | | / |

Criteria for Determining Significance

The analysis of significance of impacts of the project is based on criteria a and b in the environmental checklist. Additionally, an impact on recreation will be considered significant if it will:

- # increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated or
- # include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Impact Mechanisms

A project that creates a demand for recreation may result in the construction or expansion of recreational facilities. This construction may result in a significant effect when associated with significant adverse physical changes.

Impact Assessment

- a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated? and
- b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

This project is the installation of fiber optic cable and construction of ancillary facilities along existing road rights-of-way. The project will not generate new population, nor will there be an increased demand for recreation facilities during construction. Accordingly, the project will not result in any increase in the use of parks or recreation facilities, nor will the project construct or lead to the expansion of any recreational facilities. The project will have no impact on recreational opportunities or facilities.

Mitigation Measure. None required.

Cumulative Impacts

The project will need no recreational services and will, therefore, not contribute to cumulative effects.

| | | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|-----|------|--|--------------------------------------|---|------------------------------------|--------------|
| xv. | TRA | ANSPORTATION/TRAFFIC - Will the proposed | | | | |
| | proj | _ * * | | | | |
| | | | | | | |
| | a. | Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or | | , | | |
| | | congestion at intersections)? | | _/ | | |
| | b. | Cause, either individually or cumulatively, a level-of-service standard established by the county congestion management agency for designated roads or highways to be exceeded? | | | _/ | |
| | c. | Result in a change in air traffic patterns, | | | | |
| | с. | including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | | _/_ |
| | d. | Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm | | | | |
| | | equipment)? | | _/ | | |
| | e. | Result in inadequate emergency access? | | _// | | |
| | f | Result in inadequate parking capacity? | | _/ | | |
| | g. | Conflict with adopted policies, plans, or | | | | |
| | | programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | | | | _/ |

XV. TRANSPORTATION/TRAFFIC

Criteria for Determining Significance

The analysis to determine the significance of transportation and traffic impacts associated with the project is based on criteria a-g in the environmental checklist. In addition, the project will have a significant impact on the environment if it causes a substantial deterioration of the roadway surface because of construction-related activities or causes a substantial increase in traffic delay.

Impact Mechanisms

Projects that create a significant increase in traffic, exceed adopted traffic service standards, increase traffic hazards, result in inadequate emergency access, or exceed parking capacity may result in a significant impact. Typically these are projects that will generate or introduce traffic to a particular location or obstruct the flow of traffic for a given period of time.

Impact Assessment

The project will not use roadways as a means of transportation, but rather as a corridor for the placement of underground fiber optic cable. Urban installations will require trenching and replacement of existing pavement. Fiber optic cable installation along rural and low-density suburban road rights-of-way will be plowed or trenched outside the pavement. Highway and larger road crossings, as well as certain urban installations, will be accomplished by boring beneath that roadway surface. Transportation and traffic impacts will result from construction-related activities and are considered short-term and temporary in nature. Operation and/or maintenance of project facilities (e.g., OP-AMP stations) will require only occasional inspection visits; therefore, operations-related traffic is considered minimal.

a. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?

The fiber optic cable will either be installed within existing road or hung from existing bridges. Access to the project route will be by existing access roads.

Impact: Temporary Traffic Disruption within Road Rights-of-Way

Nearly all of the project's traffic impacts will result from temporary construction-related work that will occur within road rights-of-way during conduit and cable installation. The only permanent facilities resulting from the project will be unstaffed OP-AMP stations that will require only occasional inspection visits. Sufficient vehicle parking area will be available at each station during such visits. Most conduit and cable installations in road rights-of-way will occur on the paved surface. As discussed in Chapter 2, "Project Description", road pavement will be cut and replaced (under permit from the appropriate public agency) only where environmental constraints preclude using the road shoulder or other portion of the right-of-way. Major road crossings will be bored, minimizing the need for major road closures during construction.

As discussed in Chapter 2, "Project Description", the construction crews will be comprised of a preparation crew, a fiber optic cable installation crew, and a cleanup crew. Installations along road rights-of-way, particularly in urban areas, will have less need for the preparation and cleanup crews than installations in non-urban rights-of-way. Most of the traffic and traffic disruption that may occur during fiber optic cable installation crews.

Plowing or trenching methods might be used adjacent to roadways, depending on the physical characteristics of the site. Trenching will be the method of installation within roadways. Typically, the equipment used by a trenching crew will include an asphalt cutter, a backhoe/excavator, a roller/compactor, a spool truck, and pickup trucks. For comparison, given the narrowness of the required trenching and the types

of equipment used, pavement work will generally be less invasive than domestic water main replacement, which typically requires a 24-inch-wide trench. Additionally, Williams will be required to obtain road encroachment permits from various local and state agencies that dictate required traffic control. This impact is considered less than significant because Williams has adopted the following mitigation measure as part of the construction mitigation strategy for the project.

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 prior to construction and will comply with the applicable conditions of approval. Traffic control measures, such as the placement of warning signs, the use of traffic control personnel when appropriate, and coordination with local emergency response providers, will be implemented.

b. Cause, either individually or cumulatively, a level-of-service standard established by the county congestion management agency for designated roads or highways to be exceeded?

Impact: Temporary Disruption of Traffic

For the initial screening of impacts resulting from project-related traffic increases, the Institute of Transportation Engineers (ITE) recommends that an impact be examined more closely if it will involve an increase of 50 or more trucks, 100 passenger vehicles, or an equivalent combination of vehicles per hour in the peak direction during the peak hour at any roadway intersection (Institute of Transportation Engineers 1989). For this analysis, impacts associated with increased project-related traffic may be considered substantial if the number of project-generated vehicle trips will exceed any of those thresholds. Although more than one crew may be working the project route at a given time, because of the length of the project route, trucks and other vehicles will typically gain access to construction sites from different sets of roadways and intersections.

Employee trips by construction workers traveling to and from the sites are not anticipated to exceed 20 per day per crew. Truck trips will be considerably less because the construction equipment will remain at the site during work hours, arriving and leaving once daily from designated staging areas. Spool trucks will make two or three trips per day, depending on the speed of installation and need for conduit. Traffic generated by the project is expected to be minimal.

The project, with its associated vehicles, will temporarily increase traffic and disrupt traffic flow as installation crews move along road rights-of-way. These effects will be less than the study threshold established by the ITE. The increases in traffic will not be substantial and the project's impacts will be less than significant.

The project may temporarily disrupt traffic during installations adjacent to or within traffic lanes. As discussed in Chapter 2, "Project Description", a traffic control plan will be implemented to minimize the impacts of lane closures, if necessary, and any traffic flow disruptions. As a result of the plan, the disruption of traffic will be less than significant.

The project will have only temporary effects on traffic. Level-of-service standards for roads established by the appropriate county congestion management agency (CMA) are intended to regulate longer term traffic increases that result from the construction of traffic generators such as offices, stores, and residential developments or projects that result in permanent changes to existing traffic patterns. As such, the project will not exceed level-of-service standards established by the applicable county CMA for designated roads.

Mitigation Measure. None required.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The project will most commonly involve the belowground installation of conduit and cable and will not result in the construction of any towers or other impediments to air traffic. There will be no impact as a result of the project.

d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact: Temporary Increase in Accident Risk

As discussed in Chapter 2, "Project Description", encroachment and any other necessary permits will be acquired from the appropriate governing agency prior to any construction in a public road right-of-way. As provided in the traffic control plan, described in Chapter 2, "Project Description", installation crews will comply with roadside safety protocols and with signing and flagging requirements to reduce the risk of accident. Work crews will be trained in their roles and responsibilities before construction begins. Project impacts related to the risk of accidents are considered less than significant because Williams has adopted a traffic control plan, will provide safety training, and has adopted the following mitigation measure as part of the construction mitigation strategy for the project.

Mitigation Measure T-1: Obtain and Comply with Local and State Road Encroachment **Permits.** Refer to the discussion of this mitigation measure earlier in this section.

e. Result in inadequate emergency access?

Impact: Temporary Effects on Traffic Flow

The project will have temporary effects on traffic flow, particularly where the project route is located within road rights-of-way. In those limited instances when the installation will encroach on traffic lanes, traffic will be managed in accordance with the traffic control plan described in Chapter 2, "Project Description", which will allow priority passage by emergency vehicles. Project impacts on emergency access are considered less than significant because Williams has adopted a traffic control plan and the following mitigation measure as part of the construction mitigation strategy for the project.

Mitigation Measure T-1: Obtain and Comply with Local and State Road Encroachment **Permits.** Refer to the discussion of this mitigation measure earlier in this section.

f. Result in inadequate parking capacity?

Impact: Creation of Limited New, Temporary Vehicle Parking

The project will create limited new temporary parking demand as crews move along the project route. Any vehicle parking during construction will be limited to the right-of-way, as provided in the encroachment permit issued by the appropriate governing agency. Construction equipment will be kept in designated staging areas when not in use and will not create new parking demand. OP-AMP stations will be unstaffed and will not create long-term, permanent parking demand. Project impacts on parking are considered less than significant because Williams has adopted the following mitigation measure as part of the construction mitigation strategy for the proposed project.

Mitigation Measure T-1: Obtain and Comply with Local and State Road Encroachment **Permits.** Refer to the discussion of this mitigation measure earlier in this section.

g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The project consists of the installation of conduit and cable and related facilities within or adjacent to existing rights-of-way; and after construction, all affected areas will be returned to their preconstruction state. Using alternative transportation modes for installation crews, such as bicycles or buses, will not be consistent with the project objective of rapid construction or with construction methods. The project will have no lasting impact on demand for alternative transportation or on alternative transportation facilities (e.g., bus stop, park and ride lot).

Cumulative Impacts

The project will not result in any increase in vehicular traffic beyond the temporary increase caused by installation crews. The project may result in temporary obstructions of traffic, but the traffic plan being instituted as part of the project will minimize the impacts of such obstructions on traffic flow and emergency access. As a result, the project will not contribute to a cumulatively considerable transportation or traffic impact.

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|------|--|--------------------------------------|---|------------------------------------|--------------|
| | TILITIES AND SERVICE SYSTEMS - Will the project: | | | | |
| Jseu | project. | | | | |
| a. | Exceed wastewater treatment requirements of | | | | |
| | the applicable Regional Water Quality Control | | | | |
| | Board? | | | | _/ |
| b. | Require, or result in the construction of, new | | | | |
| | water or wastewater treatment facilities or | | | | |
| | expansion of existing facilities, the construction | | | | |
| | of which could cause significant environmental | | | | |
| | | | | | |

XVI. UTILITIES AND SERVICE SYSTEMS

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|----|---|--------------------------------------|---|------------------------------------|--------------|
| c. | Require, or result in the construction of, new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | _/_ |
| d. | Have sufficient water supplies available to serve the proposed project from existing entitlements and resources, or will new or expanded entitlements be needed? | | | | _/ |
| e. | Result in a determination by the wastewater treatment provider that serves or may serve the proposed project that it has adequate capacity to serve the proposed project's proposed projected demand in addition to the provider's existing commitments? | | | | _/_ |
| f | Be served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs? | | | | _/ |
| g. | Comply with federal, state, and local statutes and regulations related to solid waste? | | | | _/ |

Criteria for Determining Significance

The analysis of significance of impacts of the project is based on criteria a-g in the environmental checklist.

Impact Mechanisms

A project that creates a demand for public utilities and service systems can result in the construction or expansion of public facilities such as wastewater treatment facilities, storm drainage facilities, water supplies, and/or landfills. This construction can result in a significant effect when associated with significant adverse physical changes.

Impact Assessment

Construction of the project will occur promptly with no demands on outside utilities. Because of elements of the project design, this project will have no impact on demand for utilities and service systems during construction. Electrical power for the OP-AMP stations will be a permanent demand on utilities. However, this demand will be minimal and will have no impact on overall demand for utilities and service systems.

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The project will incorporate the requirements of the NPDES in the SWPPP (including erosion control and spill prevention and countermeasures) prepared for the project route. The plan will specify measures to minimize erosion and production of drainage water and will be prepared to meet the requirements of approval by the applicable RWQCB. Therefore, no impact will occur.

b. Require, or result in the construction of, new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Pursuant to Section 15064(h) of the State CEQA Guidelines, a change in the environment is not significant if it complies with an applicable, publicly adopted, regulatory standard that has been adopted for environmental protection and governs the same environmental resource being affected. Compliance with the NPDES meets the requirement for stormwater quality established by the RWQCB. No wastewater requirements will apply to the project.

c. Require, or result in the construction of, new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The project will not create new, impermeable surfaces that will substantially increase drainage runoff beyond that existing without the project. Accordingly, the project will not require or result in the construction of stormwater drainage facilities.

d. Have sufficient water supplies available to serve the proposed project from existing entitlements and resources, or will new or expanded entitlements be needed?

The project will not require external water supply, so sufficient water supplies exist without requiring new or expanded entitlements.

e. Result in a determination by the wastewater treatment provider that serves or may serve the proposed project that it has adequate capacity to serve the proposed project's proposed projected demand in addition to the provider's existing commitments?

The project will not affect wastewater treatment services, as no wastewater will be generated by the project.

f. Be served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs?

Soil removed during trenching will be replaced following installation of the conduit and cable. It is not anticipated that excess soil material will be generated. Therefore, the project will not require use of a landfill for the disposal of soil or other solid waste generated during construction or operation activities.

g. Comply with federal, state, and local statutes and regulations related to solid waste?

Solid wastes associated with the project may include soil displaced by installation of the conduit, cable, and OP-AMP stations, spools, and other packaging material associated with the conduit and cable. The project will not produce substantial amounts of solid waste. Soil removed during trenching operations will be replaced and the surface returned as close to preconstruction conditions as possible or practicable. Areas around boring operations and around OP-AMP stations will similarly be cleaned up during the final stage of the operation.

Spools and other packaging for conduit and cable will be taken away for reuse or recycling. Once installation is complete, the project will produce no solid wastes.

There are no federal, state, or local statutes or regulations applicable to the proposed project that pertain to solid waste. The project will have no impact on solid waste.

Cumulative Impacts

The project will not require utilities or service systems, other than electricity. Therefore, it will not contribute to cumulative impacts.

| | | Less than | | | | |
|-------|--|--------------------------------------|--|------------------------------------|--------------|--|
| | | Potentially Significant Impact | Significant with Mitigation Incorporated | Less than Significant Impact | No Impact | |
| XVII. | <u>MANDATORY FINDINGS OF</u> <u>SIGNIFICANCE</u> | | | | | |
| a. | Does the proposed project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | | _/ | | | |
| ь. | Does the proposed project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a proposed project are considerable when viewed in connection with the effects of past proposed projects, the effects of other current proposed projects, and the effects of probable future proposed projects.) | | / | | | |
| с. | Does the proposed project have environmental | | _/ | | | |
| | effects that will cause substantial adverse effects on human beings, either directly or indirectly? | | _/_ | | | |

MANDATORY FINDINGS OF SIGNIFICANCE

a. Does the proposed project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant of animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of major periods of California history or prehistory?

The project will have effects on biological and cultural resources, air quality, water quality, land use planning, and ambient noise levels that are potentially significant; however, these will be mitigated through project design, as contained in Chapter 2, "Project Description", and by the mitigation measures described in this initial study, which Williams has adopted as part of the construction mitigation strategy for the project. The specific impacts, as well as the project design elements and mitigation measures that will reduce all potentially significant impacts to less-than-significant levels, are described in their respective sections. All impacts have been either avoided or reduced to a less-than-significant level.

b. Does the proposed project have impacts that are individually limited, but cumulatively considerable?

CEQA Guidelines Section 15064 specifies that when assessing whether a cumulative effect requires preparation of an environmental impact report, the lead agency must consider both whether the cumulative impact is significant and whether the incremental effects of the project are cumulatively considerable. No environmental impact report is required if the project's effects are not cumulatively considerable. The lead agency may determine that a proposed project's contribution is less than cumulatively considerable when either:

- *#* the contribution will be rendered less than considerable through mitigation measures,
- # the proposed project will comply with the requirements of a previously approved mitigation program or plan that provides specific requirements that will avoid or substantially lessen the proposed project's effects, or
- # the proposed project's incremental impacts are so small that the environmental conditions will be essentially the same whether or not the proposed project was implemented (e.g., *de minimus*).

Cumulative impacts in the categories of air quality, biological resources, cultural resources, noise, water resources, traffic, population and housing, and agriculture may be considered significant at either the statewide, regional, or local level. As discussed in the air quality section, both the South Coast and San Diego County air basins are classified nonattainment for one or more criteria air pollutants. Activities that emit criteria pollutants within those air basins have a significant cumulative impact on air quality. The air quality management districts and air pollution control districts established under state and federal law to preserve air quality have adopted plans intended to reduce pollutant levels over time. These districts have established rules and programs under their air quality plans that limit proposed project-specific contributions to the overall problems. The contributions of the proposed project are not cumulatively considerable because, as mitigated, the proposed project will comply with applicable air district rules and plans for construction activities and any required permits to operate the regenerators' back up generators will be obtained before the OP-AMP stations operate.

Biological resources, particularly threatened, endangered, candidate, and other listed species, are cumulatively affected by development that reduces the extent or productivity of habitat. The state and federal governments, through DFG, the Corps, USFWS, and NMFS, have promulgated a regulatory process that limits impacts on these species. The incremental and cumulative effects of the proposed project are rendered less than significant due to mitigation requiring compliance with all applicable regulations that protect plant, fish, and animal species. The mitigation measures imposed, the provisions included in the project description (e.g., preconstruction surveys and resource staking, presence of an environmental resource coordinator, contractor training), and Williams' commitment to reroute the cable around or bore under sensitive resources render the proposed project's contribution less than cumulatively considerable.

Placement of structures within 100-year floodplains has cumulative impacts on the potential for flood hazard (refer to "Hydrology and Water Quality"). As more development occurs within a floodplain, the capacity to retain flood flows is reduced and the potential for flooding and flood-related damage is increased. The Federal Emergency Management Agency, through the federal flood insurance program, establishes standards that minimize the impacts of and limit development within flood plains. Cities and counties that regulate land uses in conformity with these standards through floodplain zoning ordinances are eligible for participation in the flood insurance program. The proposed project is not cumulatively considerable because neither of the OP-AMP stations will be located within floodplains and because required mitigation will include compliance with local floodplain ordinances prior to the installation of any structures in a 100-year floodplain.

At the local level, noise impacts could occur as a result of the operation of the two emergency backup generators and other support equipment at OP-AMP stations. Williams will design and locate the such that the noise produced does not exceed local noise ordinance criteria. There are no cumulative noise impacts associated with the project because noise impacts are anticipated to be temporary and highly localized., in the case of the cable installation or within local noise thresholds in the case of the OP-AMP stations.

Temporary traffic-related impacts may occur at the local level for the project routes. The temporary traffic disruption resulting from cable installation is not cumulatively considerable because of the traffic control plans that will be implemented as part of the proposed project and the standard traffic control requirements of the state and local encroachment permits that must be obtained prior to installing cable conduit in or adjacent to roads. In the long-term, the impacts of the proposed project will be minimized because, on completion of proposed project, environmental conditions on the overlying roads will be essentially the same as if the proposed project had not been implemented.

The project does not contribute to the statewide cumulative effect of the loss of agricultural land to other uses, including urbanization. The impacts of the proposed project and similar telecommunications proposed projects on agricultural land will be limited to the two OP-AMP stations, generally considered a compatible use within agricultural operations, and will have no discernable effect on the rate of agricultural conversion.

California's continuing and rapid population growth has statewide cumulative impacts on population and housing. The effect of the proposed project and similar telecommunications proposed projects on population growth is indistinguishable from the general mix of factors that lead people to move to California and is not a critical component in most such decisions. It has no impact on the rate of growth due to births. Public services (i.e., fire protection, police protection) are at or near their limit in some localities. This project creates no new demand for those services. Utilities and service systems (i.e., sewer capacity, water supply) are also at or near their capacity in some localities. This proposed project creates no new demand for those services.

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

The project will not cause substantial adverse effects on human beings. The project will have no effect on housing or recreation. Effects on air quality, noise, and land use have all been determined to be less than significant with implementation of mitigation measures. Potential adverse effects, such as slope destabilization and hazardous materials release, have been determined to be less than significant due to specified elements of the proposed project's design and the mitigation measures identified in this IS/MND.