

Chapter 1. Introduction

PROJECT PROPONENT

The demand for communications network capacity in the United States has increased dramatically over the past 15 years and is expected to continue to increase at a rapid pace throughout the next decade. From 1992 to 1997, the total interstate switched access minutes (i.e., minutes transmitted by long-distance carriers that also use the distribution networks of local telephone carriers) increased by 154 percent from 195.4 million minutes to 497.3 million minutes, for an average annual growth rate of 20.5 percent (Federal Communications Commission 1999). To accommodate this traffic, as well as increased traffic associated with video and data transfers and other sources, telecommunications companies have incorporated more effective technologies into their networks, one of the most widely used being fiber optic cable. In 1993, a total of 7.7 million miles of fiber optic cable had been deployed nationwide by incumbent local exchange carriers and competitive access providers. Over the next four years, the total mileage deployed increased to 15.8 million miles, representing a total growth rate for the nationwide fiber network over this period of 105 percent, for an average annual growth rate of 19.7 percent (Federal Communications Commission 1999).

Long-distance revenues in the United States are projected to increase by 30 to 40 percent over the next decade, from \$90 billion in 1999 to \$120 billion in 2010 (Center for Telecommunications Management 1999). This increase in revenue is expected to occur simultaneously with decreasing prices for telecommunications services. The increase in the volume of long-distance voice, video, and data transmissions will offset declining prices, with growth in volume exceeding the 30 to 40 percent growth in revenue. Volume of telecommunications use is growing rapidly not only because of increasing population size but also because of increases in available applications (i.e., type of services). For example, by 2010 the number of telecommuters in the United States is expected to increase by 100 to 150 percent, 10 to 15 percent of all retail shopping is expected to be conducted through home personal computers, and 10 to 20 percent of households are expected to use simultaneous voice-video communications (Center for Telecommunications and Management 1999).

California ranks first in the United States in both population and demand for telecommunications bandwidth, which has already exceeded the capability of existing telecommunications facilities in many areas of the state (Ridley-Thomas 1998). To maintain its robust economy and status as a leader in computer technology, the state will require rapid deployment of state-of-the-art fiber optic facilities. In an effort to satisfy this demand, Williams Communications, Inc. (Williams) plans to construct an integral portion of its nationwide fiber optic network in California. Williams currently operates one of the largest fiber optic networks in the United States, with facilities extending more than 18,000 miles through 37 states. Williams also plans to construct, lease, or purchase more than 14,000 additional miles of fiber optic facilities throughout the country, including California. Although in the terms of mileage the fiber optic facilities planned in California are only a fraction of the overall network (1,000 to 2,000 miles), the portion of Williams' network planned for California is critical to the success of the company's nationwide network plan (**Figure 1-1**). California's geographic position as a leader in computer technology (e.g., Silicon Valley), its role as a center of the entertainment industry (generating video transmission), and the state's vibrant business environment require high-capacity telecommunication facilities. California's position on the West Coast makes it a portal for the transmission of information between the United States, Asia, and the Pacific Rim, and several crucial

routes for Williams' planned facilities in California will directly interconnect to new intercontinental fiber optic cables linking the United States to Asia.

CEQA LEAD AND RESPONSIBLE AGENCIES

Because the proposed project is located in California, it is subject to the requirements of the California Environmental Quality Act (CEQA) (Cal. Pub. Res. Code 21000 et seq.). The California Public Utilities Commission (CPUC) is the designated state lead agency for review of this project under CEQA. This expanded initial study/mitigated negative declaration (IS/MND) prepared for the proposed project may be used, depending on the need for discretionary permits, by other agencies or governmental entities, including, but not limited to, the following:

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

This IS/MND has been prepared pursuant to CEQA, the recently amended State CEQA Guidelines (14 CCR 15000 et seq.), and the CPUC CEQA rules (Rules 17.1, 17.2, and 17.3).

The proposed fiber optic cable network crosses many jurisdictions and will require approvals and permits from various federal, state, and local agencies for the specific routes and associated facilities that comprise the proposed project. Portions of the routes are also subject to compliance with federal environmental regulations, including, but not limited to, the federal Endangered Species Act, National Environmental Policy Act (NEPA), Section 404 of the Clean Water Act, and Section 106 of the National Historic Preservation Act (NHPA).

PROJECT OBJECTIVES

Williams' objectives for construction of the fiber optic cable network in California are to:

- # provide needed fiber optic telecommunications capacity within California through the installation of a new fiber optic network;
- # expand California's national and international telecommunications access and the reliability of that access through diverse links;
- # provide clearance for construction for the projects covered in this IS/MND in California beginning September 1, 1999;
- # avoid or mitigate to less-than-significant levels any significant impacts on California's environment through the careful siting of the project routes and associated facilities (i.e., regenerator/optical amplification stations) and use of special construction methods where applicable (e.g., installation in existing, idle pipelines; directional boring).

The installation of Williams' proposed fiber optic network in California will provide several benefits to the state and consumers of telecommunications services, including:

- # enhancing the capability and reliability of California's telecommunications infrastructure;
- # addressing California's and the nation's existing and future demand for telecommunications services;
- # creating competitive pressures on existing telecommunications carriers, providing them an incentive to maintain low prices and good service;
- # providing high-quality, secure, reliable, competitively priced telecommunications services using state-of-the-art fiber optic technology;
- # providing customers with innovative, customized services designed to meet specific customer needs and expanding the availability of technologically advanced services in California; and
- # promoting opportunities for economic growth in California as businesses shift focus to information services and technology, business needs for telecommunications services expand, and high-quality telecommunications access becomes a factor in business siting decisions.

SCOPE OF THIS EXPANDED INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

The CPUC, as lead agency under CEQA, must comply with the environmental review process described in the State CEQA Guidelines. This IS/MND follows the recently amended CEQA environmental checklist (**Appendix A**) and guidelines and analyzes in detail those resource issues that have been identified as possibly significant from implementation of the proposed project. A brief discussion is also provided for each entry on the environmental checklist form in which the proposed project either will not have an impact or will have a less-than-significant impact on the environment.

The CPUC is responsible for preparing the environmental documentation under CEQA. This IS/MND documents the extensive coordination between Williams and the CPUC and other state and federal agencies and their requirements for compliance with applicable federal, state, and local permits, approvals, laws, and regulations. A list of the permits and approvals required for the proposed project is presented in **Appendix B**. **Appendix C** contains information on areas along specific project routes under the jurisdiction of the California State Lands Commission, a responsible agency under CEQA.

This IS/MND also documents compliance with the appropriate federal and state Endangered Species Acts, Clean Water Act, and NHPA and coordination with responsible, trustee, and cooperating agencies on specific project routes. Endangered species issues are currently being coordinated with the U.S. Fish and Wildlife Service and the California Department of Fish and Game. Compliance with the Clean Water Act is summarized in this IS/MND. Separate wetland delineation reports are currently being prepared for each project route and will be submitted and verified by the U.S. Army Corps of Engineers to support authorization of Nationwide Permit No. 12 prior to construction of applicable routes (**Appendix D** provides an example of a typical wetland delineation report). Compliance with NHPA requires additional activities summarized in this IS/MND, such as preparation of cultural resources inventory reports, evaluation of some cultural resources,

and consultation between federal agencies and the State Historic Preservation Officer. Documentation in compliance with NHPA is provided in separate cultural resources inventory reports.

ORGANIZATION OF THIS IS/MND

This IS/MND analyzes the proposed California network project on a “programmatic” level (i.e., as a whole at a broad level of detail), but also analyzes the proposed project on a site-specific basis where appropriate, according to the most current available information. The IS/MND is organized in two volumes.

Volume I consists of the following:

- # The “Summary” chapter briefly describes the proposed project, impacts and their significance, and programmatic and route-specific mitigation measures.
- # Chapter 1, “Introduction,” describes Williams’ project purpose, need, and objectives.
- # Chapter 2, “Project Description,” describes the construction methods that will be employed and the project features (i.e., mitigation) that have been incorporated into the project to avoid or reduce potentially significant impacts to less-than-significant levels.
- # Chapter 3, “Project Route Descriptions,” describes the project routes and related facilities that comprise the proposed project.
- # Chapter 4, “Environmental Setting,” describes existing conditions (i.e., setting) at a both a programmatic level and site-specific level. The chapter is organized by the order of resource topics in the CEQA initial study checklist.
- # Chapter 5, “Environmental Impacts and Mitigation Measures,” analyzes the environmental impacts of the proposed project and recommended mitigation measures. Resource topics are discussed in the order they appear in Chapter 4 and in the CEQA initial study checklist. For each resource topic, impacts are identified as less than significant or less than significant with mitigation, and mitigation measures are identified. This chapter also contains impact analyses that are appropriate on the programmatic level, rather than a site-specific level. Resource areas that will not be affected by the proposed project are discussed and then eliminated from further analysis. A completed master initial study checklist is provided in **Appendix A**.
- # Chapter 6, “Citations,” is a list of all sources cited in the document.
- # Chapter 7, “Report Preparers,” identifies all individuals involved in preparation of the IS/MND.

Volume II, “Technical Appendices”, contains the CEQA environmental checklist; a list of all the required permits and approvals; scoping information; technical reports; and other general, program, and route-specific background, technical data, and field survey results.