

## 2.0 INTRODUCTION

This Negative Declaration (ND) evaluates the potential environmental consequences of Metromedia Fiber Network Services, Inc.'s (Metromedia or MFNS) proposed modification to its existing Certificate of Public Convenience and Necessity (CPCN), which would authorize Metromedia to install fiber optic cable networks in the San Francisco Bay Area and Los Angeles Basin area. This document has been prepared pursuant to the requirements under CEQA and *CEQA Guidelines* for an initial study and ND, and the California Public Utilities Commission (CPUC) CEQA rules (Rules 17.1, 17.2, and 17.3). The analysis provided in this ND is intended to be sufficiently detailed and comprehensive to be used by the CPUC to issue a modified CPCN for the project. As required for an initial study and Negative Declaration under *CEQA Guidelines* Section 15063 and 15071, this ND describes Metromedia's proposed project and the environmental setting, identifies the environmental effects of the project, discusses ways to mitigate potentially significant effects, and examines the project's consistency with existing zoning, plans, and other applicable land use controls.

### 2.1 BACKGROUND

The demand for telecommunications 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 1988 to 1998, 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 112 percent, from 244.6 billion minutes to 518.8 billion minutes, for an average annual growth rate of 11 percent (Federal Communications Commission [FCC] 1999). One of the most efficient technologies being deployed to accommodate this growth is fiber optic cable (described below). By 1998, 19.2 million miles of fiber had been deployed in the United States, compared to 7.7 million miles in 1993, representing a total growth rate over this 5-year period of 149 percent and an average annual growth rate of 30 percent (FCC 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 at the same time prices for telecommunications services are decreasing due to the growing volume of long-distance voice, video, and data transmissions. The volume of telecommunications use is growing rapidly both because of increasing population and the increasing number of 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, *in CPUC 1999*).

California has not only the largest population in the United States but also the greatest demand for telecommunications bandwidth. It has been estimated that 25 percent or more of the total U.S. market demand is in California (Industry Standard 1999). The central role of computer technology and related high-tech industries in California's current strong economy is also widely recognized. These technology-based industries and the businesses and individuals that utilize their products and services contribute substantially to the growing demand for telecommunications capacity in the state. The FCC's *Trends in Telephone Service* (1999) illustrates California's demand for

1 telecommunications services relative to other states and the country as a whole. A comparison of  
2 telephone revenues by state indicates that, in 1997, telephone revenues in California represented 12  
3 percent of telephone revenues for the entire nation, and were approximately 60 and 70 percent  
4 higher than those of New York and Texas, respectively, the states with the next highest telephone  
5 revenues (FCC 1999).

6 **2.1.1 Fiber Optic Technology**

7 Current fiber optic technology utilizes thin strands of clear glass to transmit pulses of light that  
8 constitute telecommunications signals used for transmitting voice, data, telephony, and other  
9 forms of communication. These laser-generated light pulses can travel great distances without  
10 signal distortion, resulting in higher quality communications. By using different wavelengths of  
11 light, several signals can be fed into the fibers at the same time and remain discrete while travelling  
12 many miles. The fibers are grouped into cables of various sizes depending on the number of  
13 customers to be served. The fiber optic cable is enclosed in conduit, which serves to protect the  
14 cable from damage. Fiber optic cables provide substantially greater capacity and reliability than  
15 traditional copper wires used for telecommunications, while requiring less maintenance.

16 **2.2 PROJECT PROPONENT**

17 To help meet the growing demand for telecommunications capacity in California, Metromedia, a  
18 communications and information services company, plans to construct fiber optic networks in the  
19 San Francisco Bay Area and in the Los Angeles Basin area. Metromedia has extensive experience  
20 constructing fiber optic networks, with more than 3.6 million fiber miles in place throughout North  
21 America and Europe. Metromedia would draw on its experience to provide for the project an  
22 appropriate management structure, adequate training of field personnel, and the ability to respond  
23 to changing circumstances.

24 **2.3 CEQA LEAD AND RESPONSIBLE AGENCIES**

25 As the public agency responsible for issuing CPCNs to telecommunications carriers in the state, the  
26 CPUC is the lead agency responsible for approving the proposed project. The two proposed fiber  
27 optic cable networks would cross numerous jurisdictions and would require permits or approvals  
28 from various federal, state, and local agencies for the specific routes and associated facilities that  
29 constitute the proposed project. Portions of the routes are also subject to compliance with federal  
30 environmental regulations, including the federal Endangered Species Act, National Environmental  
31 Policy Act (NEPA), Section 404 of the Clean Water Act, and Section 106 of the National Historic  
32 Preservation Act (NHPA). This ND may be used by other agencies and governmental entities  
33 responsible for issuing other necessary permits or approvals that may be required, including but  
34 not limited to, the following:

- 35 • U.S. Army Corps of Engineers
- 36 • U.S. Fish and Wildlife Service
- 37 • State Regional Water Quality Control Boards
- 38 • California Department of Fish and Game
- 39 • State Historic Preservation Officer
- 40 • San Francisco Bay Conservation and Development Commission (BCDC)

- 1 • Bay Area Air Quality Management District (BAAQMD)
- 2 • Southern California Air Quality Management District (SCAQMD)
- 3 • California Department of Transportation (Caltrans)
- 4 • California State Lands Commission
- 5 • California State Reclamation Board
- 6 • California Department of Water Resources
- 7 • Local counties, cities, and special districts

8 **2.4 PROJECT OBJECTIVES**

9 Metromedia’s objectives for the proposed project include the following:

- 10 • Provide needed fiber optic telecommunications capacity in the San Francisco Bay Area and  
11 Los Angeles Basin metropolitan areas of California through the installation of two new  
12 fiber optic networks.
- 13 • Expand and enhance California’s national and international telecommunications access and  
14 the reliability thereof using high-quality, state-of-the-art fiber optic technology.
- 15 • Provide clearance for construction of the project covered in this ND to commence as soon  
16 as possible, but not later than August 2000.
- 17 • Avoid or mitigate to less-than-significant levels any significant impacts the project would  
18 otherwise have on California's environment.
- 19 • Help meet California’s and the nation’s existing and future demand for  
20 telecommunications services.
- 21 • Create positive competitive pressures on existing telecommunications carriers.
- 22 • Promote opportunities for economic growth in California as businesses shift their focus to  
23 information services and technology.

24 The project impacts and mitigation measures are summarized in Chapter 3, Project Description,  
25 and analyzed in detail in Chapter 6, Environmental Impacts and Mitigation Measures.

26 **2.5 SCOPE OF THE NEGATIVE DECLARATION**

27 The CPUC, as lead agency under CEQA, must comply with the environmental review process  
28 described in the State *CEQA Guidelines* (Governor’s Office of Planning and Research 1999) and is  
29 responsible for preparing environmental documentation under CEQA. This ND follows the  
30 recently amended CEQA environmental checklist (Appendix B) and guidelines used for  
31 preparation of initial studies, and analyzes in detail those resource issues that have been identified  
32 as possibly significant from implementation of the project. A brief discussion is also provided for  
33 each entry on the environmental checklist form in which the project either will not have an impact  
34 or will have a less-than-significant impact on the environment.

35 This ND documents project compliance with applicable federal, state, and local laws, regulations,  
36 and requirements for permits and approvals, compliance with the federal and state Endangered  
37 Species Acts, the Clean Water Act, and the National Historic Preservation Act (NHPA), and

1 coordination with responsible, trustee, and cooperating agencies on specific project routes.  
2 Endangered species issues are currently being coordinated with the U.S. Fish and Wildlife Service  
3 and the California Department of Fish and Game. Compliance with the Clean Water Act is  
4 summarized in this ND. Separate wetland delineation reports are currently being prepared for  
5 each project route and will be submitted to and verified by the U.S. Army Corps of Engineers to  
6 support authorization of a Nationwide Permit No. 12 prior to construction of applicable routes.  
7 Compliance with NHPA requires additional activities summarized in this ND, such as preparation  
8 of cultural resources inventory reports, evaluation of some cultural resources, and consultation  
9 between federal agencies and the State Historic Preservation Officer. Documentation in  
10 compliance with NHPA is provided in separate cultural resources inventory reports. In addition,  
11 ongoing consultation with the Native American Heritage Commission (NAHC) regarding the  
12 project is taking place, as discussed in this ND.

13 **2.6 ORGANIZATION**

14 This ND analyzes the proposed California network projects at a site-specific, project level of  
15 analysis, but also incorporates the analysis at a programmatic level (i.e., at a broader, more general  
16 level of detail) of some elements that are not specifically part of the current project. The ND  
17 consists of the following chapters and appendices:

18 Chapter 1. Summary, briefly describes the proposed project, impacts and their significance, and  
19 route-specific and programmatic mitigation measures.

20 Chapter 2. Introduction, describes Metromedia’s project purpose, need, and objectives.

21 Chapter 3. Project Description, describes the project, the construction methods that will be  
22 employed and the mitigation measures that have been incorporated into the project to  
23 avoid or reduce potentially significant impacts to less-than-significant levels.

24 Chapter 4. Project Route Description, describes the project routes and related facilities that  
25 constitute the proposed project.

26 Chapter 5. Environmental Setting, describes existing conditions (i.e., setting) at a site-specific  
27 level of detail, as well as at a programmatic level where appropriate. The chapter is  
28 organized by the order of resource topics in the CEQA Guidelines initial study  
29 checklist.

30 Chapter 6. Environmental Impacts and Mitigation Measures, analyzes the environmental  
31 impacts of the proposed project and recommended mitigation measures. Resource  
32 topics are discussed in the order they appear in Chapter 5 and in the CEQA sample  
33 initial study checklist. For each resource topic, impacts are identified as less than  
34 significant or less than significant with mitigation, and mitigation measures are  
35 identified. Chapter 5 also contains some impact analyses that are appropriate on the  
36 programmatic level, rather than a site-specific level. Resource areas that will not be  
37 affected by the proposed project are discussed and eliminated from further analysis.  
38 A completed master initial study checklist is provided in Appendix B.

39 Chapter 7. Cumulative Impacts of the project are discussed in this chapter.

- 1 Chapter 8. CEQA Findings.
- 2 Chapter 9. References.
- 3 Chapter 10. List of Preparers.
- 4 Chapter 11. Glossary and list of acronyms used.
- 5 Appendices include GIS route maps; the CEQA environmental checklist; a Storm Water Pollution
- 6 Prevention Plan (SWPPP); a Mitigation Monitoring and Reporting Plan (MMRP); biological data,
- 7 air quality emissions calculations; and other technical documents.