1 5.5 CULTURAL RESOURCES

2 The project networks are planned within two large areas of California which are separated at their closest points by more than 300 miles. Consequently, the cultural resources setting, in general, for 3 these regions varies somewhat due to differences in climate, vegetation, landform, and 4 prehistoric/historic land use. Within the two project areas are also sub-settings. The San Francisco 5 Bay Area Network contains the coastal environs of San Francisco Bay, and the East Bay, a portion 6 7 of the near-coastal foothills and valleys. The Los Angeles Basin Network consists of a small portion of the coastal Santa Monica Mountains in the north, with most of the project area located to 8 the south in the greater Los Angeles Basin. As is described in the narratives for the various project 9 10 sub-areas and the surrounding environment, the level of archaeological and historical studies that have been completed ranges from extensive studies to no field surveys. Overall, the cultural 11 resource setting includes prehistoric sites that may extend back for several thousand years, with 12 13 some sites showing evidence of contact with early European cultures. The historic sites reflect the broad cultural panorama of this region of California. Historic sites in the region include those 14 associated with early exploration and colonization; the Spanish, Mexican, and American 15 expansions; the Gold Rush; the boom of the 1880s-1890s; post-1900 industrialization; and the 16 growth of the region during World War I, World War II, and post-war eras. 17

Pre-dating human habitation are paleontological resources, in the form of fossilized remains of organisms that lived in the region in the geologic past. Paleontological resources are also present in the regions of interest and preserve an additional aspect of prehistory.

21 5.5.1 Regulatory Setting

22 5.5.1.1 Federal

Federal regulations and policies pertain to those actions that involve federal funding, federal licensing, or federal permitting. Examples may include federal grants or licensing (FERC and ICC) and federal permits associated with vegetation and wetlands (U.S. Army Corps of Engineers [Corps] Section 404 permits). It has been determined that for the San Francisco Network that a Preconstruction Notification to the U.S. Army Corps of Engineers is required in order to seek a National 12 permit.

29 Section 106 Review

30 Section 106 of the National Historic Preservation Act (NHPA), and its amendments effective June 1999, requires that all federal agencies review and evaluate how their actions or undertakings may 31 32 affect historic properties. Review under Section 106 is designed to ensure that historic properties are considered throughout the various stages of federal project planning and execution. Under 33 Section 106, historic properties are resources that are listed or eligible for listing in the National 34 35 Register of Historic Places. Compliance responsibility is placed upon the federal agency initiating an undertaking; the review process is administered by the Advisory Council on Historic 36 Preservation and the State Historic Preservation Officer (SHPO). Recent changes to the Section 106 37 38 process have somewhat increased the role and authority of the SHPO and reduced the role of the

39 Advisory Council.

For actions and projects specific to the project, the Section 106 process may apply if there is a later requirement for a Corps Section 404 permit for river and stream crossings or other waterways under the Corps' jurisdiction.

4 5.5.1.2 State

5 With the CPUC as the lead agency, California policies and regulations are the primary source of 6 regulations and guidelines.

7 California Environmental Quality Act

Historical resources are considered to be part of the environment as defined by CEQA. A 8 9 substantial adverse change to the significance of a historical resource constitutes a significant effect on the environment. A "substantial adverse change" means "demolition, destruction, relocation, 10 or alteration such that the significance of a historical resource would be impaired" (Section 11 12 15064.5). All properties eligible for listing in the California Register of Historical Resources that may be effected by a project must be considered under CEQA. The fact that a resource or property 13 is not listed on the California Register does not preclude it from being significant and does not 14 make it exempt from CEQA evaluation. 15

16 State Historical Building Code

In California, the State Historical Building Code (SHBC) provides some degree of flexibility to 17 owners of historic structures towards meeting building code requirements. The SHBC standards 18 and regulations are performance-oriented rather than prescriptive unlike most housing codes 19 which are more prescriptive. Jurisdictions must use the SHBC when dealing with qualified 20 historical buildings, structures, sites, or resources in permitting repairs, alterations and additions 21 necessary for the preservation, rehabilitation, relocation, related reconstruction, change of use, or 22 continued use of a historic property. The State Historical Building Safety Board has adopted the 23 24 following definition for a qualified historical house or resource:

25 A qualified historical building or structure is any structure, collection of structures, and their associates sites, deemed of importance to the history, architecture or 26 culture of an area by an appropriate local, state, or Federal governmental 27 jurisdiction. This should include designated structures declared eligible or listed on 28 official national, state, or local historic registers or official inventories such as the 29 National Register of Historic Places, State Historic Landmarks, State Points of 30 Historical Interest, and officially adopted city or county registers or inventories of 31 historical or architecturally significant sites, places, or landmarks. 32

Under the provisions of the SHBC, new construction or modifications, such as placing a generating station or other fiber optic facility in a historic building must conform to prevailing codes, although the elements of the existing structure are given the flexibility of reasonable and sensitive alternatives. The alternative building standards and regulations encompassed by the SHBC are intended to facilitate the renovation in a manner that assists in the preservation of original or restored architectural elements and features, encourages energy conservation, provides a costeffective approach to preservation, and ensures the safety of occupants.

1 5.5.1.3 Counties

The policies and regulations of the various counties as they apply to historical resources in the project area are limited. Each affected county has policies (ordinances and General Plans) that echo CEQA and also reflect local policy on the preservation and enhancement of historical resources.

6 5.5.1.4 Cities

The policies and regulations of the various cities as they apply to historical resources in the project
area are limited. Each affected city has policies (ordinances and General Plans) that echo CEQA
and also reflect local policy on the preservation and enhancement of historical resources.

10 5.5.2 Environmental Setting

11 Methods

12 Archaeological Resources

The following archaeological impact assessment is based upon the project's cultural resource reconnaissance survey and inventory report (Mooney & Associates 2000). The paleontological impact assessment is based on a detailed technical memorandum (ESA memorandum dated May 26, 2000). Each study was verified and updated as needed during an independent peer review by SAIC and GANDA.

Archaeological site records and literature searches were performed at the Northwest Information 18 19 Center at Sonoma State University for the San Francisco Bay Area and at the South Central Coastal Information Center at the University of California at Los Angeles for the Los Angeles Basin. These 20 searches included a review of the National Register of Historic Places (NRHP) listings, the State of 21 California Historic Landmarks registers, and county and city registers for historic sites. Results of 22 the listed historic and prehistoric archaeological sites are indicated below for the two project areas. 23 Portions of the project area previously surveyed were selectively spot-checked in the field, and 24 reconnaissance surveys were conducted in areas indicated as not previously surveyed (Mooney & 25 Associates 2000). Because most of the project alignment and ancillary facility sites would be 26 located in built environments such as below paved streets and landscaped developments, ground 27 visibility during field surveys was frequently severely inhibited. 28

29 Native American consultation for this project is an ongoing process. Letters have been sent to the Native American Heritage Commission (NAHC) requesting a search of their Sacred Lands files. 30 31 Protocols for Native American consultation and involvement will comply with the standard 32 procedures requested by the NAHC and with the recommendations discussed at the February 4, 33 2000, meeting of NAHC, i.e., continuous consultation with the affected groups and sincere consideration of Native American concerns regarding prehistoric sites and resources. To date, 34 Metromedia's archaeological consultants have contacted 52 Native Americans representing a wide 35 range of groups and tribal affiliations in the San Francisco and Los Angeles region (Metromedia 36 Fiber Optic Project Native American Contact List, on file at Mooney & Associates). It is assumed 37 that Native Americans will serve as consultants and will be a part of the construction monitoring 38 39 team in those areas containing resources that are important to local Native American people. To date, Andrew Galvan of the Ohlone Indian Tribe has been contacted regarding monitoring of the 40

1 San Francisco Bay Area Network, and Samuel Dunlap of the Gabrielino has been contacted 2 regarding monitoring of the Los Angeles Basin Network.

3 Paleontological Resources

Paleontologists consider all vertebrate fossils to be of significance. Fossils of other types are also considered significant if they represent a new record, new species, an oldest occurring species, the most complete specimen of its kind, a rare species worldwide, or a species helpful in the dating of formations. However, even a previously designated low potential site may yield significant fossils.

8 To obtain full understanding of the paleontological resources in the San Francisco Bay Area, ESA 9 consulted the California Division of Mines and Geology in San Francisco and the U.S. Geological 10 Survey Library in Menlo Park. ESA consulted staff paleontologists, geologic maps, published 11 papers, site-specific field surveys, and various reference books. Communication was also initiated 12 with geologists at the planning offices for the counties crossed by the San Francisco Bay Area 13 Network. ESA consulted Professor Lisa White of San Francisco State University's Geoscience 14 Department.

Paleontological information for the Los Angeles areas was obtained from the California Division of 15 Mines and Geology geologic maps, Dibblee Foundation geologic maps, and a geologic map 16 compiled by J.E. Schoelhamer of the Los Angeles Basin. Literature on fossil-bearing potentials of 17 18 specific geologic formations, and literature on major fossil localities were used to determine potential fossil types within each geologic formation that would be disturbed by the construction 19 in the Los Angeles Basin Network. Other sources of information included fossil locality 20 information from the City of Los Angeles Citywide General Plan Framework EIR, the LA County 21 Natural History Museum, and a professional paper on the Geology of Orange County was 22 obtained from available geologic maps. 23

24 5.5.2.1 San Francisco Bay Area Network

The two Backbone segments of the San Francisco Bay Area Network, designated as the Peninsula 25 and East Bay Backbone alignments, are located within existing Caltrain and Union Pacific Railroad 26 27 corridors. These two railroad corridors each run roughly north-south and extend along the peninsula or western (Caltrain) and eastern (Union Pacific) sides of San Francisco Bay. For these 28 two Backbone alignments, 18 locations for repairs of conduit segments to the existing Pacific Bell 29 30 Structure, and the construction of Points of Presence (POPs) at various locations along the network constitute the three types of construction activities evaluated in this study for the potential to 31 impact significant cultural resources. 32

As noted above, the Backbone segments extend almost entirely along railroad rights-of-way (ROWs). These ROWs consist mostly of unpaved corridors of varying widths ranging from approximately 100 feet to more than 500 feet in some rail yard areas. Within these corridors, existing railroad tracks are present numbering from a single set to more than eight in rail yard areas. The majority of the POPs are also situated in unpaved areas, as they are located within or in an area contiguous to the railroad corridors. The Pacific Bell conduit repair locations however, are nearly all located under existing paved and or landscaped (with lawns, etc.) streets.

At the time of first European contact (circa 1579), the San Francisco portion of the project area was
occupied by two Penutian derived groups, the Coastanoan and the Coast Miwok (Mewuk). The

Coastanoan and the Coast Miwok, although linguistically related, were sufficiently distinct to be 1 2 considered as separate groups. The Coastanoan consisted of eight subgroups that together inhabited most of the San Francisco Bay Area. In spite of having a common language base, they 3 were not bound together in any political sense. Therefore, they did not have a single term or word 4 5 in their language by which they referred to themselves as a whole. Europeans referred to them as Costanos or "people of the coast" from which the name "Coastanoan" was derived. Today, the 6 surviving descendents of these people frequently use a native language term "Ohlone" to 7 designate themselves. The Ohlone inhabited most of the Bay Area except the northwestern side of 8 the Bay. The linguistically distinct Coast Miwok inhabited this latter area at the time of contact. 9 As with all California Native Americans, these groups subsisted by hunting and gathering, with 10 coastal groups relying to a significant degree on marine food resources such as fish, shellfish, and 11 marine mammals as well as terrestrial resources for shelter and sustenance (Kroeber 1925; Levy 12 13 1978:485-495; Kelly 1978;414-425).

14 Archaeological Resources

15 THE SAN FRANCISCO BACKBONE

16 The records and literature search revealed that 651 cultural resource studies/surveys have been previously conducted within a radius of 1,000 feet of the project Backbone alignments, conduit 17 repair locations, and POP facility locations. These previous survey studies include narrow width 18 project corridors for pipelines, utility lines, and roadways, as well as projects that cover a more 19 20 extensive areal plot such as building and facility. The 651 studies/surveys cover portions of or involved resources present within these project areas. The portions of the project area covered 21 ranged from small (less than 0.5 acre) to extensive (several miles of pipeline or transmission line or 22 entire city blocks). Two extensive studies previously conducted in the project area include Hattoff 23 et al. (1995), for the Mojave Northern Expansion pipeline project, and Biosystems Analysis, Inc. 24 (1989) for the WTG-West, Inc. Los Angeles to San Francisco and Sacramento Fiber Optic Cable 25 26 Project. The Hattoff et al. study covered substantial portions of both the Peninsula and East Bay Backbone alignments in the San Francisco Bay Area Network, while the Biosystems study 27 evaluated most of the length along the Peninsula corridor. Another cultural resources study in 28 progress, which also evaluates much of the length of the Peninsula corridor, is being conducted by 29 KEA for the Williams Communications, Inc., Fiber Optic Cable System Installation Project (1999). 30 Overall, it appears that nearly 70 percent (i.e., approximately 2/3) of the total extent of the 31 Backbone network has been previously surveyed. The rest of the network was surveyed as part of 32 the present project (Mooney & Associates 2000). 33

The record search revealed that 68 prehistoric, historic, and multi-component sites containing both prehistoric/historic archaeological sites have been recorded within a 1,000 foot radius of the project Backbone alignments, repair locations, and POP facility locations. One additional site, a historic trash deposit, was discovered along the Peninsula North segment during the current field reconnaissance survey.

- 39 No ethnographic or traditional cultural resources were identified in the project area.
- 40 As indicated above, the majority of prehistoric sites present in the project areas consist of shellfish
- 41 refuse deposits (shell middens). In the San Francisco Bay Area this is especially true along the
- 42 Peninsula Backbone segment. This is not surprising given the segment's proximity to the Bay.

Most of these sites are located in largely developed areas and are likely to have been substantially 1 2 disturbed by previous historic and/or modern activities such as construction and/or agriculture. Nonetheless, intact portions of some sites may lie buried beneath existing streets, sidewalks, 3 railroad ROWs, construction fill, and other modern developments. Prior to disturbance, some of 4 5 these shell middens undoubtedly represented prehistoric habitation sites as indicated by the presence of varying amounts of developed deposit (depth), diverse artifacts, and/or ecofactual 6 remains and, in some instances, by the presence of human burials. Previously recorded historic 7 resources located within the study areas consist of trash deposits and scatters, bridges, trestles, and 8

9 various railroad related structures.

Segment or Facility	Within 1,000 Feet of Project	Within 100 Feet or Less of Project
	BACKBONE	
East Bay North	7(P), 1(H)	1(P)
East Bay South	5(P), 1(H)	1(P), 1(H)
Peninsula North	16(P), 4(H), 1(P/H)	4(P), 3(H)
Peninsula South	14(P), 9(H), 1(P/H), 1 unknown	2(H)
Point of Presence (9 Locations)	2(H)	None
PACIFIC BE	LL STRUCTURE (CONDUIT REPAIR OR REP	PLACEMENT)
Marin County Segment	6(P)	1(P)
Walnut Creek Segment	1(P)	None
Hayward Segment	None	None
Dumbarton Crossing Segment	1(P), 1(H), 1 unknown	1(H)
Oakland Segment	1(P)	1(P)
Peninsula Segment	2(P), 14(H)	7(H)
(P) Prehistoric period	1	
(H) Historic period(P/H) Prehistoric and historic periods		

 Table 5.5-1. Summary of Cultural Resources Locations by Project Component for the San Francisco Bay Area Network

Of the previously or newly recorded cultural resource sites identified within 1,000 feet of the project construction activities, 12 are present within 100 feet of the two project Backbone alignments (see Table 5.5-1). Seven of these resources (four prehistoric, three historic) are in the Peninsula North segment; two historic resources are in the Peninsula South segment; one prehistoric resource is in the East Bay North segment; and two resources (one prehistoric and one historic) are in the East Bay South segment.

16 POINT OF PRESENCE (POP)

17 Two previously recorded resources are located within 1,000 feet of two of the nine proposed POP

18 facility locations. Both are historic resources and neither is located within 100 feet of the project.

1 PACIFIC BELL NEW BUILD LOCATIONS

The field reconnaissance and records search for the Pacific Bell conduit repairs revealed 27 cultural 2 resources within 1,000 feet of repair segments in eight of the 18 repair locations. All the sites are 3 previously recorded; no new sites were noted during the field reconnaissance. These sites consist 4 of 11 prehistoric, 14 historic, and one unidentified resource. Of these 27 resources, 10 are situated 5 within 100 feet of the proposed repair work activities. Of these 10, one prehistoric resource is 6 located along the Oakland Segment, one prehistoric resource is located along the Marin Segment, 7 one historic resource is located along the Dumbarton Segment, and seven historic resources are 8 located along the Peninsula Segment. 9

10 Paleontological Resources

An exhaustive discussion of paleontological resources and rock units crossed by the project route in the San Francisco region is presented in a technical memorandum prepared for this project (ESA, memorandum dated May 26, 2000, on file at the CPUC). Because the route does not cross through or near any known fossil localities, the following provides only a brief summary of the

15 results of the memorandum.

16 Alluvial soil dominates the San Francisco Bay margin. On a geologic scale, the marine sediments are relatively young and may contain fossiliferous material. Invertebrate fossils found in marine 17 18 sediments are usually not considered by paleontologists to be significant resources because they are often widespread, abundant, fairly well preserved, and in predictable locations. Therefore, the 19 same or similar fossils can be located at any number of sites throughout California. Most 20 limestone deposits are prolific with invertebrate skeletal material; organic mudstones are also 21 enriched with invertebrate fossils. It is the abundance of invertebrate fossils in marine rocks that 22 makes them less significant. However, a new marine invertebrate fossil discovery that might 23 extend a marine layer or shed light on a new genus or species would be considered significant. 24

In addition to being alluvial soil, the majority of the project route follows the railroad right-of-way.

The backbone follows the Caltrain right-of-way on the west side of the Bay and the Union Pacific

27 Railroad on the east side. Because the soil has already been disturbed by the railroad, and because

the project would not exceed a construction depth of 5 feet for open trench construction, there is

29 low risk of encountering fossiliferous material along the San Francisco Bay Area Network.

Mollusks (clams, snails, and cephalopods) and echinoids (sand dollars and sea urchins) are the most abundant fossils in the San Francisco Bay Area. The area, overall, has resulted in minimal paleontological discoveries. While the San Francisco Bay Area Network would not cross any known paleontological localities, some possibility of discovering fossiliferous material exists when excavating. However, the chances for paleontological occurrence along this project route are remote.

36 5.5.2.2 Los Angeles Basin Network

37 Archaeological Resources

The Los Angeles Basin Network consists of 18 alignments or loops designated as Local Segments.

The area in which these segments are distributed extends from the southeastern end of the Santa

40 Monica Mountains in northern Los Angeles County to the City of Irvine in south central Orange

1 County. The Los Angeles Basin Network includes 15 Points of Presence (POPs) at various 2 locations along the network. The Local Segments are nearly all located under existing paved 3 and/or landscaped (with lawns, etc.) streets. The POP facilities would be located within existing 4 buildings or areas contiguous to existing paved and or landscaped streets. The locations of these 5 two types of construction activities were evaluated in this study for the potential to impact 6 significant cultural resources.

7 The records and literature search revealed that 261 cultural resource studies/surveys have been 8 previously conducted within a radius of 1,000 feet of the project Local Segments. These previous 9 survey studies include narrow width project corridors for pipelines, utility lines, and roadways, as 10 well as projects of a greater areal extent such as building and facility construction. The 261 11 studies/surveys covered portions of or involved resources present within these project segments.

For the Los Angeles Network, the portions of the project area covered by these previous studies are small with no study covering a substantial amount. Overall, it appears that less than 30 percent of the total extent of the network has been previously surveyed.

A reconnaissance survey was conducted of all of the Local Segments and POP locations (Mooney & Associates, 2000). As noted above, vision was severely inhibited during these surveys by the built environment in which these alignments and locations are planned, i.e., paved and/or

18 landscaped streets. No new cultural resources were discovered during the reconnaissance survey.

The record search revealed that 17 prehistoric, historic, and multi-component sites that are both 19 prehistoric/historic archaeological sites have been previously recorded within a 1,000-foot radius 20 21 of the project alignment and POP locations (Mooney & Associates 2000; Table VII-2). Most of these sites, due to their location in largely developed areas, have been substantially disturbed by 22 previous historic and/or modern activities such as construction and/or agriculture. As indicated 23 24 above, the majority of prehistoric sites present in all of the project areas (north and south) consist of shellfish refuse deposits (shell middens). For the Los Angeles Basin Network this is especially 25 true, where 10 of the 17 sites identified are along the Marina Del Rey, Costa Mesa, and Fashion 26 27 Island Local Segments, all situated adjacent to past or present coastal areas in proximity to marine 28 resources. Prior to disturbance, some of these shell middens represented prehistoric habitation sites as indicated by the presence of varying amounts of developed deposit (depth), diverse 29 artifacts, and/or ecofactual remains, and in some instances, by the presence of human burials. 30 Previously recorded historic resources located within the study areas consist of trash deposits and 31 scatters, and a Mexican Period (early 19th Century) adobe location. 32

33 LOCAL SEGMENTS

A total of 72 cultural resource sites are recorded within 1,000 feet of five of the 18 Los Angeles Basin Network Local Segment alignments. Of these sites, 21 (14 prehistoric and three historic) are recorded within 100 feet of project alignments and locations. Of these 21, nine are recorded along the Irvine Local Segment; four along the Fashion Island Local Segment, one along the Costa Mesa Segment, three along the Marina Del Rey Local Segment; one along the Carson to Costa Mesa Segment, one along the Century City Local Segment, and two along the Burbank Local Segment (see Table 5.5-2).

1 POINT OF PRESENCE FACILITIES RESULTS

During preparation of this analysis, the exact location of the POPs for the Los Angeles Basin
Network was not known. However, as discussed in Chapter 4, the general vicinity of these POP
sites is known. Metromedia proposes to locate all of these 15 POP sites within existing buildings

5 and has proposed, as a mitigation measure in section 6.5, not to adversely affect any historic or

6 potentially historic building.

for the Los Angeles dashi Network		
Segment or Facility	Within 1,000 Feet of Project	Within 100 Feet of Project
Burbank Local Segment	None	2(H)
Pasadena Local Segment	None	None
Santa Monica Local Segment	None	None
Glendale Local Segment	None	None
Century City Local Segment	2(P), 1(H)	1(H)
Santa Monica to Burbank Local Segment	None	None
Hollywood Local Segment	None	None
Marina Del Rey Local Segment	1(P)	3(P)
LAX/Florence Segment	None	None
LAX Segment	None	None
El Segundo Segment	None	None
Long Beach/Downy Segment	None	None
Cypress/Buena Park Segment	None	None
Fashion Island Segment	2(P)	4(P)
Carson/Costa Mesa Segment	3(P), 1(H)	1(P)
Downtown Los Angeles Segment	None	None
Irvine Segment	45(P)	9(P)
Costa Mesa Segment	None	1(P)
Point of Presence (POP) Sites	Unknown ^a	Unknown ^a

Table 5.5-2.	Cultural Resources Locations by Project Element
	for the Los Angeles Basin Network

^a Since the exact location of these sites is not known at this time, no definitive locations can be identified. However, general avoidance mitigation measures are presented in section 6.5, which address this issue. Furthermore, since the proposed location of the POP sites will be in existing facilities that will be selected such that they are not historic buildings it is unlikely that any prehistoric or historic resources will be affected.

(P) Prehistoric

(H) Historic

7 (P/H) Prehistoric and Historic

8 Paleontological Resources

9 The majority of the paleontological resources in Los Angeles are microfossils located deep below 10 the surface. Significant paleontological discoveries have been made at the La Brea Tar Pits on 11 Wilshire Boulevard in Los Angeles, in the Santa Monica Mountains, in Palos Verdes, along the 12 coast of Orange County, and in the Santa Ana Mountains. The La Brea Tar Pits, for example, 1 constitute a rich and well-preserved assemblage of Pleistocene vertebrates, including both bird and

2 mammal species such as the saber-toothed tiger, mastodons, mammoths, and the giant ground

3 sloth. The exact locations of previous finds are proprietary to prevent the removal or destruction

4 of important, non-renewable resources.