



## APPENDIX 1 -- MAPPING METHODOLOGY

#### **Base Maps**

The base maps for the area contained in U24-U27, on maps 1-5, are USGS topographic quad sheets which were supplied by the California Coastal Commission (CCC). Photographically enlarged USGS quad sheets reproduced on mylar sheets from Mendocino County Planning Department were used as base maps for maps 6-31 covering U28-U40. All base maps include streams, the Coastal Zone Boundary, roads, and topographic lines.

#### **Property Line overlays**

Property lines were drawn from Mendocino County Assessor's parcel maps, and updated by Blayney-Dyett using information supplied by the Coastal Commission Staff. Distortion of the County's sepia bases necessitated interpolation of the lines; justification was to the nearest section line. Thus, the property lines should be used only as a general location guide. Legal descriptions and Assessor's maps must be consulted for greater accuracy.

#### **Reproduction Method**

Where necessary, mapped information was enlarged with American Optical Opaque 1000 projector tracing paper overlays. Boundaries were justified by section, aligning township and range lines and then transferred to mylar sheets. The property line overlay, topography/base, and Habitat/Resources sheets, Land Capability/Natural Hazards sheets or Land Use Plan sheet were then printed together as a sepia print in a vacuum print process.

#### MAP SET 1 - HABITATS/RESOURCES

#### **Marine and Fresh Water Habitats**

Reefs: Shown as on USGS quad sheets, 1"=2,000'.

Kelp: Mapped from CCC Marine Resources maps, 1"=2,000', based on U2 flights in January and February 1977. Historic beds are shown as mapped by the California Department of Fish and Game in its unpublished <u>Atlas of Marine Resources</u>.

Rocky Intertidal Areas: Shown as on USGS quad sheets, 1"=2,000'.

Wetlands, Mudflats: Department of Fish and Game Wetlands Survey, Mendocino Coastline, 1979; scales vary.

Vegetation working maps were stereo delineated on 1976 USGS ortho-photo quads from May 1976 NASA U-2 color infrared (CIR) photos; scale 1:33,000. Data for the area north of Westport is derived from the COAP study (33, California Department of Water Resources) with riparian





inserts. Vegetation areas of 40 acres or more were mapped, with the exception of riparian and wetland areas, all of which larger than 10 acres are shown. Categories of vegetation are listed below and described in the Blayney-Dyett Natural Environment paper (B-D, NE).

#### **Wooded Habitats**

Redwood Coastal forest Woodland (coniferous; hardwood) Hardwood Forest Riparian Cutover

#### **Other Upland Habitats**

Coastal Prairie Grassland
Wooded Grasslands
Scrub
Barren
Pygmy Forest
Pygmy-type Forest
Agriculture-AF and Pasture AP
Urban

### **Special Habitats**

Marine Mammal Haulout Areas and Seabird and Marine Rookeries: Humboldt State University Marine Resources Lab, 1"=2,000', 1979, supplemented with CCC Marine Resources maps, 1978.

Spawning Areas, Anadromous Streams and Special Animal Resources: California Department of Fish and Game correspondence, 1979, and California Natural Areas Coordinating Council, 1"=2,000', 1974.

#### **Designated Resource Protection Areas**

Natural Areas and Areas of Special Biological Significance: California Natural Areas Coordinating Council, 1977, 1"=2,000'.

State Parks and Preserves: USGS base maps updated with information from California Parks and Recreation maps; 1979 reduced copies of 1"=2,000' topographic maps.

Special Treatment Areas: California Division of Forestry, 1979; reduced copies of USGS 1"=2,000' topographic maps.





Viewsheds: October 1979, boundaries delineated on USGS 1"=2,000' bases, as seen from Highway 1 and public areas, checked against draft copy of view corridors by North Coast Regional Coastal Commission, 1979.

#### MAP SET 2 – LAND CAPABILITY/NATURAL HAZARDS

#### **Agricultural Land**

Prime: Kneeland loan and Mendocino loam (122, U.S. Department of Agriculture) and sites producing at levels specified in PART II: LAND CAPABILITIES.

Non-prime: Those lands not classified as prime which show as coastal prairie grassland or agriculture on the Vegetation working maps.

#### Timberland

High Productive Capability Class I-III/Moderate Productive Capability Class IV: Classes for both categories were mapped as outlined in 1959 Vegetation Soils Maps by the California Division of Forestry (currently California Department of Forestry); scale 1:31,680.

#### **Hazards**

Sage and Sage maps, prepared for the Coastal Commission, have been supplemented with more recent and detailed information where available. Seismic shaking, landslides, fault lines and tsunami run-up areas were mapped as described below:

- From the Town of Mendocino south, information and scales excellent for seismic shaking, liquefaction and individual landslides, therefore these areas are accurately mapped.
- From the Town of Mendocino north, data very sparse and source maps at scales making transfer very approximate.
- Faults accurately mapped.
- Potentially high groundwater areas are approximate due to scale of original sources.
- From Gualala River to Schooner Gulch, all individual landslides are noted as shaking Zone 3 in CDMGOFR 76-3 S.F.
- Regional data presented (from Mendocino and Fort Bragg SSE) on seismic shaking and landslide hazard where detailed CDMG data unavailable.
- All landslide hazard areas (Zone D) exclude potential liquefaction and high groundwater areas.





• Tsunami run-up areas are approximate due to lack of topographic contours in many areas. All beach areas (sand 25' and less) could be inundated by tsunami run-up although not shown on map.

### SOURCE MAPS FOR GEOLOGIC HAZARDS

MAP	DATE	AREA/INFORMATION	SCALE
Williams & Bedrossian – CDMG OFR 76-3	1976	Schooner Gulch to Gualala River/Geology & Hazards	1:24,000
Williams & Bedrossian – CDHG OFR 76-4	1976	Russian Gulch to Buckhorn Cove/Geology & Hazards	1:24,000
Gardner – Sequence of Podzolic soils along the coast of Northern California	1968	Dehaven Creek to Cuffy Cove (Greenwood Creek)/Terrace Deposits	1:126,720
Calif. DWR Geology, Hydrology and Water Quality of Alluviated Areas	1956	Entire coastal zone/Geology (Bedrock, Terraces, Alluvium)	1:63,360
Jahns & Hamilton PG&E Mendocino Power Plant-PSAR, Geology of Point Arena & Vicinity		Point Arena/Geology	1:24,000
Boyle Master Thesis	1967	Point Arena/Geology	1:24,000
Sage & Sage Seismic Related Hazards in the Coastal Zone	1970	Entire Coast/Geology & Hazards	1:24,000

#### Flooding

USGS, 1"=2,000', 1974 100-year flood delineation for Fort Bragg Area and Gualala River; Special Flood Hazard Area maps, HUD, 1978 for all other areas.

#### **Cliff Erosion**

Assessment and Atlas of Shoreline Erosion Along the California Coast (21, Department of Navigation and Ocean Development), 1977. Reduced USGS topographic base maps.