



SOUTHERN CALIFORNIA ENVIRONMENTAL SENSITIVITY MAPPING PROJECT

- Index of Shoreline Types**
1. Exposed rocky headlands and exposed seawalls, sediment cover.
  2. Wave-cut platforms with or without thin sediment cover.
  3. Fine grained sand beaches.
  4. Exposed medium to coarse grained sand beaches.
  5. Sheltered sand beaches.
  - 5a. Mixed sand, gravel, cobble and boulder beaches.
  6. Exposed gravel/boulder beaches and exposed sheltered riprap structures.
  8. Sheltered riprap structures.
  9. Sheltered tidal flats.
  10. Marshland.
  - Manmade sheltered inner-harbor structures.

- Biological Features**
- Marine Mammals
  - Fishes
  - Sea otter
  - Andromous salmon
  - Seals, Sea lions
  - Beach spawners
  - Birds
  - Invertebrates
  - Wading birds
  - Clams
  - Diving birds
  - Abalone
  - Shore birds
  - Reptiles
  - Waterfowl
  - Turtles
  - Alcids
  - 2:1 Kelp
  - Gulls and terns
  - Eel Grass

- KEY TO WILDLIFE MARKERS**
- Color Codes: **F** = Fishes, **B** = Birds, **M** = Marine Mammals, **S** = Seals, **L** = Land Mammals, **R** = Reptiles, **A** = Amphibians, **I** = Invertebrates, **C** = Clams, **W** = Waterfowl, **T** = Turtles, **K** = Kelp, **G** = Gulls and Terns, **E** = Eel Grass
- Circle Number = Feature Number  
Circle Size = Feature Size

- Socioeconomic Features**
- Parks and beaches
  - Marinas
  - Mariculture operations
  - Reserves, preserves, refuges and ecological areas.
  - ASBS Areas of Special Biological Significance

- Spill Response Information**
- Boom placements
  - Closures
  - Skimmers
  - Washover locations

Maped, edited, and published by the Geological Survey  
Control by USGS&S

Topography from aerial photographs by multiple methods  
Aerial photos from Survey 1427 Field Index 1949  
Photogrammetric projection 1957 North American datum  
10,000-foot grid based on California coordinate system,  
Zone 5  
1000-meter Universal Transverse Mercator grid ticks,  
Zone 11, shown in blue

Data obtained from various sources: aerial photographs  
Survey 1427, 1949; aerial photos from field check  
Purple text indicates extension of urban areas

UTM GRID AND 1987 MAGNETIC DECLINATION AT CENTER OF SHEET

SCALE 1:24,000

VERTICAL INTERVAL: 20 FEET  
DOTTED LINE SHOWS APPROXIMATE LOCATION OF MEAN HIGH WATER  
SHELLING SHOWS APPROXIMATE LOCATION OF MEAN LOW WATER  
THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 2 FEET

THIS MAP COMPLES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225 OR RESTON, VIRGINIA 22097  
A FUTURE REISSUING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST