

**Appendix I: Spatial Data Layers Available for MPA Planning on the
North Central Coast – revised 10/1/07**

Appendix I: Spatial Data Layers Currently Available for the North Central Coast Study Region (Revised 10/01/07)

Data Type	Layer Name	Layer Description	Source	Metadata	Spatial Extent			Data Resolution
					State	CCSR	NCCSR	
Base	Buoys	Common buoys state wide. Not comprehensive. Lacking metadata	unknown	No	X	X	X	high
Base	California state boundary	State of California boundaries including islands	California Department of Fish and Game (CDFG)	Yes	X	X	X	medium
Base	California Coastline	Detailed coastline of California (1:24,000)	CDFG	Yes	X	X	X	high
Base	1 minute graticule	1' vector grid	CDFG	Yes	X	X	X	high
Base	5 minute graticule	5' vector grid	CDFG	Yes	X	X	X	high
Base	10 minute graticule	10' vector grid	CDFG	Yes	X	X	X	high
Base	Roads	California roads by county		Yes	X	X	X	medium
Base	State Waters	Boundaries of State Waters for California	CDFG	Yes	x			high
Base	Federal Central Coast Study Area	Boundaries of Federal Central Coast Study Region	CDFG	Yes		X		high
Base	Central Coast Study Region	Boundaries of State MLPA Central Coast Study Region	CDFG	Yes		X		high
Base	Central Coast Study Subregions	Boundaries of State MLPA Central Coast Study SubRegions	CDFG	Yes		X		high
Base	North Central Coast Study Region	Boundaries of State MLPA North Central Coast Study Region	CDFG	Yes			X	high
Base	North Central Coast Subregions	Boundaries of State MLPA North Central Coast Study SubRegions	CDFG	Yes			X	high
Bathymetry	Bathymetric Complexity	Complexity is defined as the standard deviation (square of the variance) of bathymetry for all grid cells located within a one kilometer radius of each cell.	The Nature Conservancy	No	X	X	X	low
Bathymetry	Depth Contours in Fathoms	10, 20, 30, 40, 50, 100, & 200 fathom contours	CDFG	Yes	X	X	X	low
Bathymetry	Depth Contours 10m intervals	10 meter interval contours (10 - 600)	CDFG	Yes	X	X	X	low
Bathymetry	Depth Contours 100m intervals	100 meter interval contours (100 - 4800)	CDFG	Yes	X	X	X	low
Bathymetry	Depth Contours 30-100-200m	30, 100, & 200 meter contours	CDFG	Yes	X	X	X	low
Bathymetry	Depth Soundings	Depth soundings at 200m horizontal resolution	CDFG	No	X	X	X	medium

CCSR = MLPA Central Coast Study Region
NCCSR = MLPA North Central Coast Study Region

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Bathymetry	MLPA Depth Zones in meters	MLPA depth zones (0-30m, 30-100m, 100-200m, 200-3000m)	CDFG	Yes	X	X	X	low
Biology	Bird Species Densities	Combined densities of north central /central California marine bird species	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird Diversity	Combined species diversity for north central /central California marine bird species	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird Biomass Densities	Total biomass densities of north central /central California marine bird species	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird Densities (Warm Water Periods)	Combined densities of north central /central California marine bird species during warm water periods	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird Diversity (Warm Water Periods)	Combined species diversity for north central /central California marine bird species during warm water periods	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird Biomass Densities (Warm Water Periods)	Total biomass densities of north central /central California marine bird species during warm water periods	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird Diversity (Neutral Water Periods)	Species diversity of north central /central California marine bird species during neutral water periods	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird Biomass Densities (Neutral Water Periods)	Total biomass densities of north central /central California marine bird species during neutral water periods	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird Densities (Cold Water Periods)	Combined densities of north central /central California marine bird species during cold water periods	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Birds Diversity (Cold Water Periods)	Species diversity of north central /central California marine bird species during cold water periods	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird Biomass Densities (Cold Water Periods)	Total biomass densities of north central /central California marine bird species during cold water periods	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Biology	Bird Breeding Colonies	Major bird breeding colonies on northern / central California coast	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	California Seabird Colonies	Statewide bird colonies	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Combined Bird Densities (Davidson Current Season)	Combined densities of north central /central California marine bird species during Davidson Current season	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Birds Diversity (Shannon-Weiner Diversity Index)	Species diversity of north central /central California marine bird species during Davidson Current season	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Bird Biomass Densities (Davidson Current Season)	Total biomass densities of north central /central California marine bird species during the Davidson Current season	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Bird Densities (Neutral Water Periods)	Densities of north central /central California marine bird species during neutral water periods	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Birds Density & Diversity	Density and diversity of north central /central California marine bird species	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Bird Densities (Oceanic Season)	Density of north central /central California marine bird species during oceanic season	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Bird Diversity (Oceanic Season)	Diversity of north central /central California marine bird species during oceanic season	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Bird Biomass Densities (Oceanic Season)	Biomass densities of north central /central California marine bird species during the oceanic season	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Bird Densities (Upwelling Season)	Densities of north central /central California marine bird species during upwelling season	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Biology	Bird Diversity (Upwelling Season)	Diversity of north central /central California marine bird species during upwelling season	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Biology	Bird Biomass Densities (Upwelling Season)	Biomass densities of north central /central California marine bird species during upwelling season	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Fish Density & Diversity	Density and diverstiy of fish in northern / central California waters	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Demersal Fish Trawls (1977-2001)	Diversity, richness and total number of fish caught in northern / central California demersal fish trawls; 1977 - 2001 - Points	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Fish Diversity & Richness from Trawls (1977-2001)	Diversity, richness and total number of fish caught in northern / central California demersal fish trawls; 1977 - 2001 - Grid	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Mean Richness Determined from Hook-Line Samples	Mean groundfish richness from hook and line samples - northern Monterey Bay	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Mean Richness Determined from Long-Line Samples	Mean groundfish richness from longline samples - northern Monterey Bay	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Mean Richness Determined from Trawl Samples	Mean groundfish richness from trawl samples - northern Monterey Bay	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Salmonid Stream Outlets	Stream outlets used by salmonids (from various sources)	The Nature Conservancy	Yes		X	X	medium
Biology	Bird & Fish Density	Density of north central /central California marine birds and fish	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Bird & Fish Diversity	Diversity of north central /central California marine birds and fish	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Birds & Fish Density & Diversity	Density and diverstiy of marine birds and fish in northern / central California waters	NOAA 2004 Biogeographic Assesment	Yes		X	X	medium
Biology	Brachipoda	Locations of ROV-sampled Brachiopoda in Monterey Bay	Monterey Bay Aquarium Research Institute (MBARI)	Yes		X		high
Biology	Chemosynthetic Biological Communities	Locations of observed chemosynthetic commdunities - ROV - Monterey Bay area	MBARI	Yes		X		high

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Biology	Crinoids	Locations of observed crinoids - ROV - Monterey Bay	MBARI	Yes		X		high
Biology	Gorgonacea	Locations of observed Gorgonacea communities- ROV - Monterey Bay area	MBARI	Yes		X		high
Biology	Porifera	Locations of Porifera observations - ROV - Monterey Bay area	MBARI	Yes		X		high
Biology	Sessile Cucumbers	Locations of sessile Holothurians - ROV - Monterey Bay area	MBARI	Yes		X		high
Biology	Soft Corals	Locations of soft coral observations - ROV - Monterey Bay area	MBARI	Yes		X		high
Biology	Corals, Sponges, and Anemones	Locations of structure forming invertebrates - west coast	NOAA, Essential Fish Habitat process	Yes	X	X	X	low
Biology	Kelp Canopy Coverage in 1989	Kelp canopy cover fall 1989	CDFG	Yes	X	X	X	high
Biology	Kelp Canopy Coverage in 1999	Kelp canopy cover fall 1999	CDFG	Yes	X	X	X	high
Biology	Kelp Canopy Coverage in 2002	Kelp canopy cover fall 2002	CDFG	Yes	X	X	X	high
Biology	Kelp Canopy Coverage in 2003	Kelp canopy cover fall 2003	CDFG	Yes	X	X	X	high
Biology	Kelp Canopy Coverage in 2004	Kelp canopy cover fall 2004	CDFG	Yes	X	X	X	high
Biology	Kelp Canopy Coverage in 2005	Kelp canopy cover fall 2005	CDFG	Yes	X	X	X	high
Biology	Persistent Kelp	Kelp persistent in 3 or more out of 4 years (1989, 1999, 2002 & 2003)	The Nature Conservancy	Yes	X	X	X	high
Biology	Kelp Canopy Coverage for 1989, 1999, 2002, 2003	Union of kelp canopy coverage for years 1989, 1999, 2002, 2003	UCSB, Brian Kinlan	Yes	X	X	X	high
Biology	Marine Mammal Haulouts	Pinniped haulouts of California	National Marine Fisheries Service	Yes	X	X	X	high
Biology	Marine Mammal Rookeries	Pinniped rookeries of California	National Marine Fisheries Service	Yes	X	X	X	high
Biology	Marine Mammal Density / Diversity Grid	Density and diversity of marine mammals calculated for a regular grid	CDFG	Yes			x	medium
Biology	Sea Otter Counts (Fall)	Northern / central California sea otter counts during fall 2001	NOAA/UCSC	Yes		X	X	high

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Biology	Sea Otter Counts (Spring)	Northern / central California sea otter counts during spring 2002	NOAA/UCSC	Yes		X	X	high
Biology	Sea Otter Counts (Southern California)	Southern California sea otter counts	unknown	No		X	X	low
Biology	Sea Otter Densities	Sea otter densities for central California	NOAA 2004 Biogeographic Assessment	Yes		X	X	medium
Charts	Anacapa Passage	NOAA Nautical Chart	NOAA					varies by chart
Charts	Bodega and Tomales Bays	NOAA Nautical Chart	NOAA				X	varies by chart
Charts	Gulf of Santa Catalina	NOAA Nautical Chart	NOAA					varies by chart
Charts	Point Conception to Point Sur	NOAA Nautical Chart	NOAA			X		varies by chart
Charts	Pfeiffer Point to Cypress Point	NOAA Nautical Chart	NOAA			X		varies by chart
Charts	Point Dume to Purisima Point	NOAA Nautical Chart	NOAA			X		varies by chart
Charts	Estero Bay	NOAA Nautical Chart	NOAA			X		varies by chart
Charts	Estero Bay Mooring Area	NOAA Nautical Chart	NOAA			X		varies by chart
Charts	Gulf of the Farallones	NOAA Nautical Chart	NOAA				X	varies by chart
Charts	Half Moon Bay	NOAA Nautical Chart	NOAA				X	varies by chart
Charts	Port Hueneme to Santa Barbara	NOAA Nautical Chart	NOAA					varies by chart
Charts	Monterey Bay	NOAA Nautical Chart	NOAA			X		varies by chart
Charts	Monterey Harbor	NOAA Nautical Chart	NOAA			X		varies by chart
Charts	Moro Bay	NOAA Nautical Chart	NOAA			X		varies by chart
Charts	Santa Cruz Island to Purisima Point	NOAA Nautical Chart	NOAA			X		varies by chart

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Charts	Santa Cruz Channel	NOAA Nautical Chart	NOAA					varies by chart
Charts	Approches to San Diego Bay	NOAA Nautical Chart	NOAA					varies by chart
Charts	San Francisco to Point Arena	NOAA Nautical Chart	NOAA					varies by chart
Charts	San Miguel Passage	NOAA Nautical Chart	NOAA				X	varies by chart
Charts	Santa Monica Bay	NOAA Nautical Chart	NOAA					varies by chart
Charts	San Nicolas Island	NOAA Nautical Chart	NOAA					varies by chart
Charts	San Pedro Island	NOAA Nautical Chart	NOAA					varies by chart
Charts	Santa Barbara	NOAA Nautical Chart	NOAA					varies by chart
Charts	Santa Barbara Island	NOAA Nautical Chart	NOAA					varies by chart
Charts	San Diego to Cape Mendocino	NOAA Nautical Chart	NOAA			X	X	varies by chart
Charts	Southeast Farallon	NOAA Nautical Chart	NOAA				X	varies by chart
Charts	San Francisco to Cape Flattery	NOAA Nautical Chart	NOAA				X	varies by chart
Charts	San Luis Obispo Bay	NOAA Nautical Chart	NOAA			X		varies by chart
Charts	San Diego to Santa Rosa Island	NOAA Nautical Chart	NOAA					varies by chart
Charts	Point Sur to San Francisco	NOAA Nautical Chart	NOAA			X	X	varies by chart
Consumptive Use	Abalone Landings	Summary of CDFG abalone punch cards 2002 - 2005	CDFG	Yes			X	low
Consumptive Use	Commercial fishery Catch	Summary of commercial landing receipts (1992 - 2006) for 11 different fisheries	CDFG	Yes	X			low
Consumptive Use	CRFS Creel survey data	Summary of effort from CRFS private vessel interviews 2004 - 2005	CDFG	Yes	X			high

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Consumptive Use	Commercial Passenger Fishing Vessel Effort (1987-1998)	Summary of effort sampled in DFG CPFV observer survey 1987 - 1998 (avail for north central CA only)	CDFG	Yes		X	X	medium
Consumptive Use	Commercial Passenger Fishing Vessel Survey Data (2004-2006)	Summary of surveyed CPFV landings by 1' block for 2004, 2005 and 2006 (from CRFS)	CRFS	Yes	X	X	X	high
Consumptive Use	MRFSS 1999-2004 CPFV Observer Data	MRFSS data summarizing Black RF, Bocaccio, Canary RF, Lingcod & Yelloweye RF	CDFG	Yes	X	X	X	medium
Consumptive Use	Kayak Fishing Sites	Location of kayak fishing in central Ca	Kayak Fishing Association	Yes		X	X	high
Consumptive Use	Skiff survey effort data (2004-2005)	Summary of surveyed skiff effort by 1' block for 2004 and 2005 (from CRFS)	CRFS	Yes	X	X	X	high
Consumptive Use	Spot Prawn Trap Logs	Spot prawn trap logbook summary for California, 1994 - 2001	CDFG	Yes	X	X	X	low
Consumptive Use	Spot Prawn Trawl Logs	Spot prawn trawl logbook summary for California	CDFG	No	X	X	X	low
Consumptive Use	Market Squid Catch	Squid logbook summary for California - 2000-2005	CDFG	Yes	X	X	X	medium
Cultural	California Cities	Coastal cities of California (from GNIS)	USGS	Yes	X	X	X	high
Cultural	Coastal Geographic Points	255 geographic points (headlands) of California	CDFG	Yes	X	X	X	high
Cultural	Coastal Access Points	Coastal access points from the California Coastal Access Guide	CA Coastal Conservancy	Yes	X	X	X	high
Cultural	California Counties	County boundaries of California	CDFG	Yes	X	X	X	high
Cultural	Geographic Names of California	U. S. Geographic Names Information System locations for California (GNIS) - 2005	U.S. Geological Survey	Yes	X	X	X	high
Cultural	Harbors of California	Harbors of California	CDFG	Yes		X		high
Cultural	Ocean Outfalls	Ocean outfalls	State Water Resources Control Board	No	X	X	X	high
Cultural	Ports	Ports of California - 194 port codes for recording landings of marine fisheries	CDFG	Yes	X	X	X	high
Cultural	Marine Research Institutes	Marine research institutions of the central and north central coast	U.C. Santa Barbara	Yes		X		high
Cultural	Shipwrecks (MBNMS)	Shipwrecks of the Monterey Bay National Marine Sanctuary	Monterey Bay National Marine Sanctuary	Yes		X	X	high

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Cultural	Shoreline Features	Shoreline features of California	unknown	No	X	X	X	high
Cultural	Urban Areas	California urban areas	Census 2000	No	X	X	X	medium
Cultural	Piers	Point locations of piers (limited n = 4)	Ken Jones "Pier Fishing in California"	No			x	high
Cultural	Coastal Access points for Sea Ranch	Access points at Sea Ranch in Mendocino County CA	unknown	No			x	high
Habitat	Coastal Marsh	Coastal marshes of California	CNDDDB, NWI, CalVeg 2000, CDF FRAP, Humboldt Bay Atlas, NPS, SFEI	No	X	X	X	high
Habitat	Eelgrass	Zostera (eelgrass) beds of California	CDFG, Humboldt Bay Atlas, NOAA, NPS	Yes	X	X	X	high
Habitat	Estuaries	California estuaries	NWI, USGS, NOAA ESI	Yes	X	X	X	high
Habitat	Course Scale Hard and Soft Bottom Habitats	Course scale hard and soft bottom habitats from the essential fish habitat analysis (2004)	NOAA EFH, Moss Landing Marine Lab	Yes	X	X	X	high
Habitat	Shoreline Types	Shore types from NOAA Environmental Sensitivity Index (2002 and 2006)	NOAA	Yes	X	X	X	high
Habitat	Surf Grass	Surfgrass of California	Tenera /Minerals Management Service	Yes	X	X	X	high
Habitat	Predicted Substrate	Substrate (hard / soft) classified from bathymetric imagery provided by Rikk Kvitek	CDFG / The Nature Conservancy	Yes			x	medium
Management	Exclusive Economic Zone	Exclusive Economic Zone in California	National Marine Fisheries Service	Yes	X	X	X	low
Management	Aquaculture leases	Aquaculture leases of north central California	CDFG	Yes			X	high
Management	10 minute Trawl Blocks	10' caltrawl blocks	CDFG	Yes	X	X	X	low
Management	mlpa.MLPALoader.MAN_CA_points	California conservation areas	unknown	No	X	X	X	high
Management	mlpa.MLPALoader.MAN_CA_wq_protection	California conservation areas water quality protection	unknown	No	X	X	X	high
Management	Cordell Banks Fishing Closure	Fishing closure at Cordell Banks	Pacific Fishery Management Council	Yes			X	medium
Management	CRFS Sample Sites	CRFS sample sites	CDFG	No			x	medium

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Management	Essential Fish Habitat	Essential fish habitat (EFH) boundaries from NMFS final rule to implement Amendment 19 to the Pacific Coast Groundfish Management Plan	Pacific Fishery Management Council	Yes	X	X	X	medium
Management	Essential Fish Habitat - conservation area	Essential fish habitat (EFH) conservation areas from NMFS final rule to implement Amendment 19 to the Pacific Coast Groundfish Management Plan. These are no-trawl or no-bottom contact zones.	Pacific Fishery Management Council	Yes	X	X	X	medium
Management	Farallon Island Fishing Closure	Fishing closure at Farallon Islands	Pacific Fishery Management Council	Yes			X	
Management	California Coastal National Monument	California Coastal National Monument, includes thousands of offshore rocks		Yes	X	X	X	
Management	National Marine Sanctuaries	National marine sanctuaries	NOAA	Yes	X	X	X	medium
Management	Administrative Kelp Beds	Administrative kelp beds	CDFG	Yes	X	X	X	medium
Management	Terrestrial and Coastal Public and Protected Lands	Terrestrial and coastal public and protected lands from various sources	The Nature Conservancy	Yes	X	X	X	high
Management	1 minute CRFS Microblocks	1' California Recreational Fisheries Survey microblocks	CDFG	Yes	X	X	X	medium
Management	CRANE Monitoring Sites	CRANE monitoring locations	CDFG	Yes		X		high
Management	Marine Monitoring Sites	Monitoring sites for PISCO, LIMPET, CRANE, MARINe	U.C. Santa Barbara	Yes	X	X	X	high
Management	National Estuarine Research Reserve (NERR) Boundaries	National estuarine research reserve boundaries	NOAA CSC	Yes	X	X	X	high
Management	Offshore Oil Bed Leases	Oil bed leases	GreenInfo	Yes		X		high
Management	Rockfish Conservation Area (2007)	Rockfish conservation areas persistently closed for 2007	CDFG	Yes	X	X	X	medium
Management	Restricted Areas	Restricted areas (military, power plant, etc.)	CDFG	Yes	X	X	X	high
Management	California Areas of Special Concern	California areas of special concern (California Coastal Commission)	California Coastal Commission	No		X	X	

Data Type	Layer Name	Layer Description	Source	Metadata	State	CCSR	NCCSR	Data Resolution
Management	Coastal Zone Boundary	California Coastal Commission boundaries (shoreward boundary varies from other state agencies)	California Coastal Commission	Yes	X	X	X	high
Management	California Department of Fish and Game Facilities	Locations of CDFG facilities	CDFG	Yes	X	X	X	high
Management		Location of CDFG land	CDFG	Yes	X	X	X	high
Management	Existing State Marine Protected Areas	Current California state marine protected areas	CDFG	Yes	X	X	X	high
Management	State Water Quality Protection Areas (ASBS)	State water quality protection areas (AKA - areas of special biological significance)	State Water Resources Control Board	Yes	X	X	X	high
Management	State Park Lands	California State Park lands		No	X	X	X	high
Management	State Waters (Offshore Line)	Offshore line boundaries for California state jurisdiction	CDFG	Yes	X	X	X	high
Management	State Waters (Polygon)	Boundaries for California state jurisdiction	CDFG	Yes	X	X	X	high
Physical	Submarine Canyons	Submarine canyons from essential fish habitat 2004	NOAA, EFH process	Yes	X	X	X	medium
Physical	Coastal Rivers	Coastal rivers of California	NHD	Yes	X	X	X	high
Physical	Coastal Rivers and Streams	Rivers and streams of coastal California	CDFG	Yes	X	X	X	high
Physical	California Watersheds	Watersheds of California - Calwater 2.2.1	Cal Interagency Watershed Mapping	Yes	X	X	X	high
Physical	Impaired Streams and Rivers	303d listed impaired rivers of California - 2002	State Water Resources Control Board	Yes	X	X	X	high
Physical	Impaired Water Bodies	303d listed impaired waterbodies of California - 2002	State Water Resources Control Board	Yes	X	X	X	high
Physical	Submarine Features	Point locations of named submarine features	unknown	No		X		medium