

SoBR 2010 Data

Story		Data Used	Data Source	Indicator
HABITAT CONDITIONS	Creeks and Streams	- Volume of imported water as proxy and cause of unnatural water flow	- LADWP 2008 report: Securing LA's Water Supply & West Basin 2008 report: Water Reliability 2020 (strategic planning documents)	
		- Channalization of creeks and streams in the watershed	- No source	
		- Barriers to upstream migration of Salmonids	- CalTrout 2006: Steelhead habitat assessment	
		- Restoration projects	- No source	
		- Invasive species	- NZMS surveys, no quantifiable data on other invasives (ie crayfish)	
		- Unfavorable municle codes	- No source	
		- Polluted runoff	- No source	
	Coastal Wetlands and Lagoons	- Loss of acreage	- No source	
		- Loss of hydrological and ecological functions	- No source	
		- Restoration efforts	- No source	
	Coastal Dunes and Bluffs	- Loss of acreage	- Longcore 2005: Beach Bluffs Master Plan	
		- Needs of endangered species	- Longcore 2005	
	Sandy Beaches	- Location and level of beach manipulation (grooming, development, coastal armor, stormdrain inputs)	- No source	
		- Shoreline changes	- Maalouf 2001 (paper given at conference)	
		- Success of nesting shorebirds	- Audubon surveys (least tern) & OSPR surveys (snowy plover)	
		- Success of grunion runs	- No source	
	Rocky Intertidal	- Overharvest of species	- No source	
		- Visitor activities	- Ambrose and Smith 2004 (one-time study)	
		- Compliance with collection prohibition	- No source	
		- Polluted runoff	- No source	

QUALITY	Seagrass Beds	- Sea grass abundance	- Historical survey, present anecdotes		
		- Suitable substrate	- No source		
	Rocky Reefs	- Aerial extent of kelp canopy	- CRKSC overflights		
		- Burial of suitable substrate	- No source		
		- Presence of urchin barrens	- No source		
		- Fish diversity, biomass, and trophic levels	- VRG surveys		
	Soft Bottom	- Abundance of urchin predators	- VRG surveys		
		- BRI	- LACSD and CLA-EMD trawl surveys		
	Open Ocean	- PVS contaminated sediments	- EPA Superfund monitoring data		
		- Decline of pelagic species	- Worm et al 2009		
		- Contaminant burdens in apex predators	- Bearzi 2005		
		- Power Plant Impingement rates	- MLPA SAT and other technical studies and reports		
		- Severity of HABs	- Scientific papers, Newspaper reports		
	Story		Data Used	Data Source	Indicator
	Pathogens and Indicator Bacteria	- TMDLs developed for impaired waterbodies	- SMBRC/Waterboard list		
		- Number of samples exceeding TMDL standards for bacteria	- CLA-EMD and LA County Department of Health Services water quality monitoring		
- Number of dry-weather samples		- CLA-EMD and LA County Department			
- Percent of all C, D, and F grades		- Heal the Bay			
Trash	- Cubic feet of trash generated in the City of Los Angeles by area	- City of LA Department of Public Works 2002 (study)			
	- Tons of trash collected at LA County Beaches	- LA County Department of Beaches and Harbors			
	- Trash associated with shoreline	- Ocean Conservancy (Annual Report)			

Water Resources	- Sources of water supply	- City of Los Angeles DWP 2008 and West Basin 2008 (strategic plans)	
	- Water demand and population growth in the City of LA	- City of Los Angeles DWP 2008 (strategic plan)	
	- Acre feet of wastewater recycled in the Los Angeles area	- West Basin	
	- Acre feet of non-potable water	- LACSD	
	- Gallons per minute of seawater converted to drinking water	- West Basin	
	- Potential acre feet of stormwater infiltrated or captured and reused	- NRDC Study	

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Habitat Restoration	- Acreage of habitat restored	- SMBRC	
	- Connectivity between existing riparian communities	- No source	
	- Water quality on restored site (Las Virgenes Creek)	- No source	
	- Miles of accessible habitat for salmonids	- No source	
	- Water quality on restored site (Malibu Lagoon)	- No source	
	- Invasives removed and natives planted	- No source	
	- Kelp density	- SMBK	
Invasive Species Control	- List of problematic terrestrial, aquatic and marine invasive species	- BPJ (Topel, Miller, Maloney)	
	- Distribution of New Zealand Mudsnail	- SMBK surveys	
	- Crayfish trapped	- Katz (2008)	
	- Newt egg masses observed	- Katz (2008)	

Remediation of Contaminated Sediments on the PV Shelf	- Concentrations of DDT in surface sediments	- EPA	
Species of Special Interest	- Species of special interest list	- CDFG, SMBRC, and Audubon Society	
	- Reappearance of El Segundo Blue	- Longcore 2005	
	- Number of least tern nesting pairs	- Audubon surveys	
	- Number of family groups of	- CLA-EMD surveys	
	- Wintering population of western	- OSPR surveys	
	- Number of giant seabass observed	- VRG surveys	
	- Number of steelhead trout in	- RCD surveys	
	- Map of feeding locations of	- Bearzi observational studies	
Fish, Fishing, and Fishery Management	- Landings of kelp bass	- CDFG	
	- CPUE of kelp bass	- CDFG	
	- Density of kelp bass	- VRG surveys	
	- Kelp bass densities at different sites in SMB	- VRG surveys	
	- Commercial landings of white seabass	- Allen 2007 paper	
	- Commercial and recreational landings of Halibut	- CDFG	
	- CPUE of Blacksmith	- CDFG	
	- Density of Sheephead at Rocky Point	- VRG surveys	
Marine Protected Areas	- None	- None	Trophic structure, Unfished species populations, fish size, fish diversity, fish density, ecosystem resilience

Story		Data Used	Data Source	Indicator
EAD	Climate Change	Drought		Annual rainfall, Sierra snowpack
		- Sea level rise and flood risk	- Herberger et al 2009 (model)	
	- Surface pH of ocean	- Caldeira and Wickett 2003 (paper)	Also populations of shell forming organisms	
Harmful Algal Blooms	- Frequency and severity of HABs	- Anderson et al 2008 (paper)	Also nutrients and trace metals, temperature, solar input, storms	

LOOKING AHEAD

Atmospheric Deposition	- Dominant sources for trace metals in CA waterways	- Stolzenback 2009 (paper)	Also loads of other types of contaminants and nutrients from atmospheric deposition
Contaminants of Emerging Concern	- Common sources and Pathways for contaminants of emerging concern entering waterways	- SCCWRP	Also types levels and effects of these contaminants on the SCB, humans, and biota
	- Concentration of legacy contaminants and contaminants of emerging concern	- SCCWRP	