



Glossary

Sea Level Rise Adaptation & Coastal Processes

ADAPTABILITY	The ease of adjusting or being modified to new conditions.
ADAPTIVE CAPACITY	The ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.
ASTRONOMICAL TIDE	Tides (the rise and fall of sea levels) that result from gravitational effects related to the Earth, Sun, and Moon, without any atmospheric influences.
BEACH EROSION	The removal of beach sand by coastal processes such as wave action, tides and currents, exacerbated by sea level rise.
CLIFF RETREAT	Breaking waves and stormwater runoff erode cliffs, causing the leading edge of the cliff to move landward.
CLIMATE CHANGE	Any significant change in the measures of climate lasting for an extended period of time, including major shifts in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer.
COASTAL FLOODING	Coastal flooding occurs when water inundates or covers normally dry coastal land as a result of high tides or storm surges.
COASTAL HAZARD	When a coastal process has the potential to impact and damage infrastructure and other assets.
COASTAL PROCESSES	The natural processes that characterize the interaction between the ocean and local geology that are responsible for reshaping the coastline.
COASTAL STRAND	Characterizes the ecological habitat on the beach above the high-water mark.
CULTURAL RESOURCES	Indigenous archaeological resources or historic features.
ECOLOGY	The relationship between living organisms and the environment.
EL NIÑO EVENT	A form of temporary sea level rise caused by a warming of the Pacific Ocean water, during which thermal expansion can result in an ocean level rise of one foot.





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EXTREME WEATHER EVENTS	Unusual weather events, such as heat waves, intense precipitation, and drought.
GLOBAL WARMING	The global average increase in temperature near the Earth's surface.
GROUNDWATER RISE	When groundwater is pushed up through the soil because of tidal action, storm surge, and/or high amounts of precipitation. Groundwater rise can cause flooding and allow saltwater into drinking water supplies.
IMPACT	How much State Parks assets are affected by a hazard.
INUNDATION	The submergence of land by water, particularly in a coastal setting.
NATURAL RESOURCES	Physical processes, biologic processes, scenic vistas, and sounds.
NATURE-BASED RESILIENCE	The placement of landscape features on or along the shoreline to improve resilience to coastal hazards; such features include rocky shoreline habitat, dunes, coastal strand, beach nourishment, cobble blankets, coastal platform enhancement, habitat enhancement, and plantings.
PARKS ASSETS	Park features and amenities encompassing public access and recreation, parks facilities, and natural and cultural resources.
PARKS FACILITIES	Buildings, utilities, and shoreline protective structures.
PUBLIC ACCESS	Infrastructure that supports visitation including roads, parking, trails, stairways, and ramps.
RECREATION	Campgrounds, ramadas, picnic areas, fire pits, and BBQs.
RELATIVE SEA LEVEL RISE	The increase in ocean water levels at a specific location, taking into account both global sea level rise and local factors, such as local subsidence and uplift. Relative sea level rise is measured with respect to a specified vertical datum relative to the land, which may also be changing elevation over time.
RESILIENCE	A capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.
SALTWATER INTRUSION	Displacement of fresh or ground water by the advance of salt water due to its greater density, usually in coastal and estuarine areas.





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SAND TRANSPORT	The movement of sand by waves, currents, wind, and gravity.
SCOUR	The erosion of material at structures.
SEA LEVEL RISE	The upward trend in average sea level height.
SEA LEVEL RISE VULNERABILITY	As sea level rises, park assets can experience greater and greater impacts.
SENSITIVITY	The degree to which a system is affected, either adversely or beneficially, by climate variability or change.
SHORE PLATFORM	The gently sloping bedrock surface under the sand at the base of the cliff.
SHORELINE ARMORING	The placement of fixed engineering structures, typically rock or concrete, on or along the shoreline to mitigate the effects of coastal erosion and protect infrastructure; such structures include breakwaters, seawalls, revetments, bulkheads, and riprap.
SHORELINE RETREAT	Loss of sand causes the shoreline to move landward and the beach to become narrower.
STORM SURGE	Storm surge is the rise of water over and above the predicted astronomical tides generated by a storm pushing water against the shore.
VERTICAL LAND MOTION	Up or down movements of land at a coastline, such as sinking caused by the compaction of sediments, or the rise and fall of land masses driven by the movement of continental or oceanic tectonic plates.
VULNERABILITY	The degree to which people, natural, or built systems are likely to be affected.
WAVE ACTION	The movement of waves.
WAVE ATTENUATION	The reduction of wave action by landscape features.
WAVE OVERTOPPING	The part of a wave that splashes over a landscape feature.
WAVE RUNUP	Wave energy pushing turbulent seawater up the beach towards higher elevations. Can cause flooding along the shoreline.
10-YEAR STORM	A storm with a one in 10 chance of occurring or being exceeded in a given year





Glossary

Landscape Elements

LANDSCAPE ELEMENTS

Structures and features incorporated to protect or increase the resilience of the shoreline to the effects of coastal processes and sea level rise.

BEACH NOURISHMENT

Material placed on a beach to renourish an eroding shoreline, usually pumped via dredge or delivered by truck.

BREAKWATER

A structure constructed offshore, generally of rock, designed to protect the shore from the force of waves.

CLIFF STABILIZATION

Protection of the base of the cliff against wave action and strengthening of the integrity of the cliff formation to reduce the risk of rockfalls.

COBBLE ENHANCEMENT

A blanket, mound or berm consisting of rounded stone (cobble) placed under the beach sand to reduce or slow coastal erosion.

EROSION CONTROL PLANTING

Plantings on cliff wall selected for their ability to hold soil in place

GROINS

A linear structure of large boulders built perpendicular to the shoreline, frequently constructed as a series of structures.

HABITAT ENHANCEMENT

An area of vegetated land designated to provide habitat for wildlife and native plant species.

KELP FOREST

An area of rocky seafloor where kelp plants attach and create a forest-like underwater habitat capable of supporting a diversity of marine species.

RAISED ASSETS

Elevation of road and other infrastructure and assets above projected flood levels

ROCK REVETMENT

A facing of stone (riprap) to protect an embankment or shore structure against erosion by wave action and currents.

ROCKY REEF HABITAT

A mound of stones with a crest below sea level, suitable for attachment of kelp.

SEAWALL

A concrete structure built along a portion of the coast to prevent erosion and damage by wave action and alleviate flooding due to wave overtopping.

SETBACK

An area along the edge of the cliff within which all or certain types of new development are prohibited

SHORE PLATFORM ENHANCEMENT

Enhancement of the bedrock at the base of the cliff with outcrops, mounds or gradually rising features of cemented native material.

VEGETATED DUNE

An area with mounds of loose, wind-blown sand with various stages of dune vegetation cover.

