

## **COASTAL HAZARDS**

### **OBJECTIVE 12**

PRESERVE, ENHANCE, AND RESTORE THE OCEAN BEACH SHORELINE WHILE PROTECTING PUBLIC ACCESS, SCENIC QUALITY, NATURAL RESOURCES, CRITICAL PUBLIC INFRASTRUCTURE, AND EXISTING DEVELOPMENT FROM COASTAL HAZARDS

#### **POLICY 12.1**

The City shall implement the following adaptation measures to preserve, enhance, and restore public access, scenic quality, and natural resources along South Ocean Beach and to protect wastewater and stormwater infrastructure from impacts due to shoreline erosion, coastal flooding, and sea level rise.

- (a) As the shoreline retreats due to erosion and sea level rise, incrementally remove shoreline armoring, rubble that has fallen onto the beach, roadway surfaces, and concrete barriers south of Sloat Boulevard.
- (b) Relocate public beach parking and public restrooms to areas that will not be affected by shoreline erosion or sea level rise in the foreseeable future and that will not require the construction of shoreline armoring.
- (c) Close the Great Highway between Sloat and Skyline boulevards, and reroute traffic to Skyline Boulevard.
- (d) Import sand to restore the beach and construct dunes, and stabilize dunes with vegetation, beach grass straw punch, brushwood fencing, or other non-structural methods.
- (e) Extend the coastal trail to Fort Funston and Lake Merced by constructing a multi-use public access pathway along the shoreline from Sloat Boulevard to Skyline Boulevard.
- (f) Protect coastal water quality and public health by preventing damage to wastewater and stormwater infrastructure due to shoreline erosion, and maintaining service vehicle access necessary for the continued operation and maintenance of wastewater and stormwater infrastructure systems.

#### **POLICY 12.2**

The City shall conduct detailed sea level rise vulnerability assessments and develop adaptation plans to minimize risks to life, property, essential public services, public access and recreation, and scenic and natural resources from shoreline erosion, coastal flooding and sea level rise for the remaining areas of the Western Shoreline that are not addressed under Policy 12.1. The vulnerability assessments shall include a scenario that does not rely on existing shoreline armoring. Adaptation measures shall be designed to minimize impacts on shoreline sand supply, scenic and natural resources, public recreation, and coastal access. The adaptation plans shall consider a range of alternatives, including protection, elevation, flood proofing, relocation or partial relocation, and reconfiguration. Adaptation measures that preserve, enhance, or restore the sandy beach, dunes, and natural and scenic resources such as beach nourishment,

dune restoration, and managed retreat shall be preferred over new or expanded shoreline armoring.

### **POLICY 12.3**

The City shall work with the U.S. Army Corps of Engineers to develop and implement a beach nourishment program involving the placement of sand dredged from the San Francisco bar navigation channel offshore of the Golden Gate onto Ocean Beach. Other sources of suitable sand may also be permitted. Sand shall not be removed from stable dunes.

### **POLICY 12.4**

The City shall maintain sea level rise hazard maps designating areas within the coastal zone that would be exposed to an increased risk of flooding due to sea level rise. The maps shall be based on the best available science and updated when new information warranting significant adjustments to sea level rise projections becomes available.

### **POLICY 12.5**

New development and substantial improvements to existing development located in areas that would be exposed to an increased risk of flooding due to sea level rise shall be designed and constructed to minimize risks to life and property due to flooding.

### **POLICY 12.6**

New development shall assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

### **POLICY 12.7**

Shoreline armoring structures such as rock revetments and seawalls may only be permitted when necessary to protect critical public infrastructure and existing development from a substantial risk of loss or damage due to erosion and only when less environmentally damaging alternatives such as beach nourishment, dune restoration, and managed retreat are determined to be infeasible. New or expanded shoreline armoring structures shall not be permitted solely to protect parking, restrooms, or pedestrian or bicycle facilities.

### **POLICY 12.8**

All shoreline erosion control and flood protection structures shall be designed and constructed to avoid, minimize, and mitigate impacts on shoreline sand supply, environmentally sensitive habitat areas, public recreation, and coastal access.