



Agencies that maintain beaches have an obligation to do so in the most professional manner possible. Having an agency policy describing the how and why of proper ecological based maintenance will greatly assist staff not only in providing ecologically appropriate maintenance, but also to help educate beach users as to the “why” of proper maintenance.

The primary goal would be to provide direction for the management and maintenance of beaches, seeking to protect, maintain, and where feasible, enhance and restore the overall quality of the beach environment.

Beaches are an important environmental resource that provide coastal protection from erosion and extreme weather and oceanic events, natural habitat for marine and coastal species, recreational activities and space, and an economic revenue source. To continue to provide these services, the beach must be maintained and managed in a way that ensures the user’s safety and enjoyment, as well as a sustainable beach ecosystem. A sustainable beach is structurally safe, ecologically healthy, productive and resilient, and aesthetically enjoyable and memorable to users.

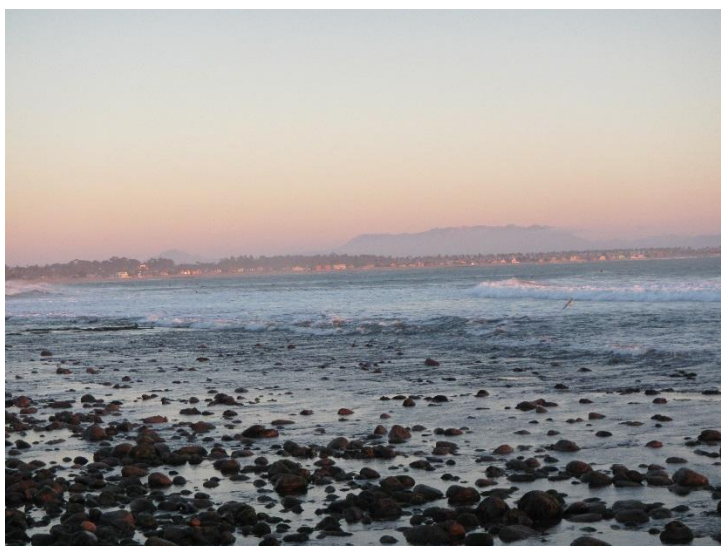
There are a variety of issues to be addressed in a proper policy.

## **Safety**

- Maximizing the safety, health and wellbeing of the beach user is a primary concern, and the use of emergency and maintenance vehicles and equipment is necessary to ensure this safety.
- Safety shall take precedence in implementation of policy and operational practices.

## **Cobble**

- Cobble is a native geomorphological feature of many beaches, occurring due to



natural processes, and its removal has unknown consequences to the health of the beach structure.

- Cobble shall not be removed from the beach.

### **Kelp**

- Kelp has an important role in the ecological and structural conditions of the beach, provides habitat and nutrients for coastal marine animal and vegetative species, and provides direct and indirect support for sand retention.
- Removal of excessive kelp from upper beach sand areas above the wrack line (set at the highest semilunar tide, not the daily tide) can be done during the summer season to provide maximum towel space for the beach user, while protecting grunion spawning grounds in the intertidal sand areas.
- Kelp can remain on the beaches during the winter season without major impact to users.



### **Native Beach Vegetation**

- Native beach vegetation has a natural role in the ecological, structural and aesthetical conditions of beaches, providing habitat for coastal marine species, and sand retention support.
- Protect existing native beach vegetation in established sand hummocks and dunes. Seek to identify locations where planting of native beach vegetation can be established.



### **Driftwood and Large Debris**

- Driftwood and large debris can wash up on beaches, and while usually comprised of natural material, the size and shape can create potential dangers from wave action, or by its presence on the sand.
- Removal of large woody debris may alter beach sediment flow and retention, but its presence may impact recreational use of the beach.
- Generally, it is most appropriate to remove large driftwood and debris.

## **Sand**

- Sand has a primary role in the use and enjoyment that beaches provide. If sand grooming is needed, priority should be during summer use months, on dry sand areas, avoiding the wet sand area in an effort to protect grunion spawning grounds and kelp wrack.
- Sand pushing is the action of moving sand mechanically with the intention to protect beach facilities, often employing the creation of berms.
- If sand pushing is needed to protect beach amenities, this work shall be accomplished in the fall prior to the storm season. Sincere attention to weather and tides should be done prior to scheduling any such work.
- If possible, attempt to stockpile sand whenever available in late autumn or early winter; prevent loss of towel space into the ocean; and then to remove manmade berms in the late spring to prepare for summer use.

## **Recreation**

- Recreation is a vital aspect of beach use, and non-permanent amenities such as fire rings, volleyball courts, picnic tables, and exercise and/or playground equipment contribute to the use and enjoyment of beaches.
- It is important to maintain the existing amenities and review changes or additions to beach amenities through the appropriate regulatory bodies.

## **Education**

- Education of the beach user has an important role in sustaining beaches. It is important to develop educational messages on beach safety, ecosystems, and the role of cobble, kelp, native beach vegetation, sand, and user impacts in maintaining the beach in a sustainable condition.
- Use existing communication channels, such as websites, public service announcements, public signage and outreach events, and develop new sources to provide this education.
- Provide support for volunteer and non-profit based groups to provide educational messages and events promoting the importance of a policy for sustaining a healthy beach ecosystem.

