

Irvine Coast

AREA OF SPECIAL BIOLOGICAL SIGNIFICANCE

HIGH LEVEL OF HIGH THREAT DISCHARGE

Area of Special Biological Significance = Zero Pollution Discharge

In the 1970s, to preserve biologically unique and sensitive marine ecosystems for future generations, California designated 34 regions along the coast as Areas of Special Biological Significance (ASBS). These areas support an unusual variety of aquatic life, and are important building blocks for a sustainable, resilient coastal environment and economy. Although the State Water Board's Ocean Plan prohibits all waste discharges into these areas, pollution continues to damage these important habitats.

With YOUR help, California Coastkeeper Alliance is working to ensure important marine ecosystems are protected from pollution.



This ASBS contains popular Crystal Cove State Park, which includes an underwater park that is home to diverse tidal and offshore communities featuring tide pools, kelp beds, and dolphin birthing grounds.

Irvine Coast borders close to 3.5 miles of coastline and includes approximately 940 ocean acres near the City of Laguna Beach in Orange County. Low tide reveals vividly colored sea stars, giant green anemones and two-spotted octopi. Giant kelp beds sway in deeper water providing refuge and food for California sheephead, sand bass, kelp and gopher rockfish, and cabezons. Closer to the sea floor, hermit crabs and kelp humpback shrimp prowl near the rock dens of California spiny lobsters. This ASBS includes a birthing area for bottlenose dolphins, providing them important protections during this miraculous and extraordinary event.



A scuba diver follows a bright California sheephead. Photo by Robert Schwemmer.

Pollution

The State Water Board has determined that despite protection under California law, the Irvine Coast ASBS is contaminated with hexavalent chromium, copper, zinc, arsenic, cadmium, lead, nickel and bacteria. Contaminants come from a variety of sources including urban runoff, highway runoff, golf courses and local recreational facilities. These contaminants threaten water quality and can harm fish and wildlife.

One Threat and Solution: Urban Runoff

One pollution source that particularly threatens the Irvine Coast ASBS is polluted stormwater that runs off city surfaces. In urban areas, rainwater washes over paved areas, such as streets, parking lots and roofs, picking up a potentially toxic mixture of oil, dirt, trash, metals and fertilizers. City storm drains funnel polluted stormwater directly to natural waterways, where it can cause beach closures and poison aquatic plants and animals, particularly in sensitive marine ecosystems like ASBSs.

By incorporating Low Impact Development (LID) techniques, many city surfaces such as rooftops, streetscapes, parking lots, sidewalks, and medians can work with nature to filter polluted stormwater. For example, streetscapes can be constructed to funnel stormwater into landscaped elements called bio-swales that capture and filter rainwater. Native plants in the bio-swales create habitat and naturally remove silt and pollution from stormwater before reaching the ocean. Stormwater filtration devices can also be inserted into storm drains for added protection.

Learn More

http://www.waterboards.ca.gov/water_issues/programs/ocean/asbs_map.shtml

<http://www.cacoastkeeper.org/programs/clean-abundant/stormwater-runoff>

Pollution Threats At A Glance

- Number of High Threat Discharges: 16
- State Board Identified Contaminants: Hexavalent Chromium, Copper, Zinc, Arsenic, Cadmium, Lead, Nickel and Bacteria
- Pollution Sources: Urban runoff, highway runoff, golf courses and recreational facilities