Coral Reefs at Kaloko-Honokōhau National Historical Park

The coral reefs of Kaloko-Honokōhau National Historical Park are an integral part of an ancient Hawaiian coastal settlement that includes over 250 archeological sites and three large fishponds traditionally used for fish aquaculture. Park waters receive significant groundwater inputs that deliver nutrients to the coral reef, but also provide lower salinity nursery habitat for several culturally important fish species.

Major Threats

- Overfishing
- Urbanization / non-point source pollution
- Physical damage from overuse

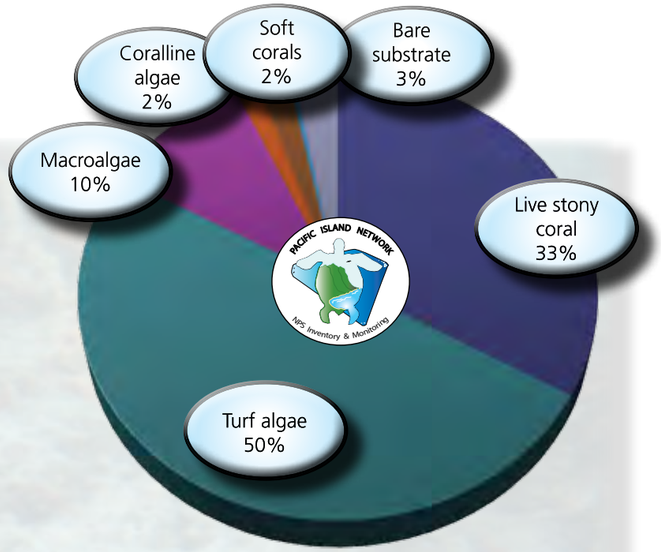
The park is surrounded on two sides by heavy urban development

Status and Trends: Coral reef monitoring began in 2001. Coral cover at 30 monitoring sites was moderately high (32%) with low levels of coral disease in 2007. The rate of coral recruitment (arrival of juveniles) has been extremely low in the last few years, and is a concern. Relatively low cover (10%) of macroalgae suggest that herbivorous fish, invertebrates, and marine turtles may be helping to control algal overgrowth of corals.

The reef is heavily used by tourists, fishers, and recreational boaters

Many species, such as this blenny, use corals for shelter

Action: The state of Hawaii manages fisheries within the park. Fishing for the aquarium-fish trade is banned and lay-gill nets must be handmade of local fibers. All other fishing that is consistent with state regulations is allowed, . Data on fisheries harvest are needed. Protection of ground water from excess nutrient and urban contaminant inputs is a primary focus of park management. Two alien marine species, an alga and a jellyfish, have invaded Kaloko fishpond but have not yet been found on the adjacent reef. Monitoring and control of these species is ongoing.



Composition of selected coral reefs in Kaloko-Honokōhau National Historical Park

Fast Facts

- Adult corals are relatively healthy, but natural replenishment of juvenile corals has been low for several years
- There is a resident population of threatened juvenile green sea turtles
- Urban development impacts ground-water quality and coral reefs in the park

This Hawaiian fishpond is a testament to the fact that humans have been altering the near shore marine environment for generations

Once harvested throughout the Pacific, the green sea turtle is now fairly common on park reefs