



Corals Priority Resource Conservation Targets and Metrics

Water chemistry (nutrient enrichment, non-nutrient pollutants (metals), water clarity)

- Chlorophyll A: $\mu\text{g/L}$
- Persistent organic pollutants, trace metals: ppm/ppb
- Light attenuation: K_d
- Total alkalinity and dissolved inorganic carbon: $\mu\text{mole/kg}$
- Temperature at depth: degrees
- Photosynthetically active radiation (PAR): $\mu\text{Einstein/lux}$
- Total suspended solids (TSS)
- Turbidity: NTU
- Salinity: ppt

Water quality

- Salinity: ppt
- Turbidity: NTU
- Dissolved oxygen: mg/L, %
- pH
- TSS
- CDOM
- Chlorophyll A: $\mu\text{g/L}$
- Nutrient load: NPK
- Light attenuation: K_d
- PAR: $\mu\text{Einstein/lux}$
- Harmful algal blooms (HABs): cells/L
- HABs: frequency and duration
- Temperature (at surface and depth): degrees
- Personal care products
- Chemicals (herbicides, pesticides, oil, dispersants)
- Sewage: E. Coli
- Nutrients: dissolved organic carbon
- Heavy metals/pesticides/herbicides/pharmaceuticals

Water clarity

- CDOM
- Turbidity: NTU
- PAR: $\mu\text{Einstein/lux}$
- Chlorophyll A: $\mu\text{g/L}$
- Light attenuation: K_d

Connectivity (inter/intra)

- Genetic connectivity
- Genome sequence



Extent

- Acres/hectares

Hard coral

- Percent live/dead
- Species composition
- Density
- Percent cover

Assemblage structure (percent stony, richness, diversity)

- Percent cover by taxa composition
- Percent cover by species
- Number of species
- Diversity index
- Rugosity
- Listed coral species

Disease/bleaching

- Prevalence
- Severity
- Presence/absence
- Percent cover (within colony)
- Fate tracking of individuals (dead, live)

Mortality

- Percent of colonies recent vs old mortality
- Attributes of mortality (predators, disease, physical damage)

Algae

- Percent live coral vs algae

Faunal assemblage (key indicators: snapper, goliath, other grouper, diadema, parrotfish, grunts, inverts, sponges, sharks, lionfish)

- Diversity
- Age/size structure

Reef associated indicators (key indicators: grazers/herbivores: butterfly fish, parrot fish, urchins, snails, sharks, groupers, snappers, barracuda)

- Species diversity
- Frequency of occurrence
- Density
- Size class