



General Marine/Estuarine Priority Resource Conservation Targets and Metrics

Human influence (urbanization, hardened shorelines/development)

- Linear feet of hardened shoreline
- Percent impervious surfaces
- Number of boat registration by population
- Coastal population density
- Number of citations by FDEP/EPA (water treatment issues)
- Septic system age
- Level of treatment at waste water facility
- Percent watershed covered by treatment sites
- Fecal coliform

Marine pollutants (debris, pollutants, microplastics, personal care products, pharmaceuticals)

- Pounds removed/pounds per unit effort
- Concentration
- Artificial sweetener as a surrogate for pharmaceuticals

Habitat connectivity (commercially/recreationally important species, i.e., red drum)

- Habitat/species link
- Size class of species by habitat

Interactions between habitats (shifting ranges, intrusion)

- Extent of buffering systems
- Extent of beneficiary systems
- Aragonite saturation state/buffering capacity/total alkalinity

Biological hotspots

- Number of hotspots
- Extent of hotspots
- Cluster analysis

Bioindicators (across habitat type and trophic level; key indicators: hard corals, lobster, gray snapper, pink shrimp, green sea turtle, goliath grouper, manatees, blue crab, crocodilians, wading birds, shorebirds)

- Abundance
- Density
- Size class
- Biomass
- Fecundity (total and batch)



Megafauna (key indicators: manatees, sea turtles, dolphins, sturgeons, birds, seabirds, pelicans, sharks, whales)

- Mortality
- Necropsy results
- Population trends
- Sex ratios (sea turtles)
- Nest success (birds)

Oyster trends (*virginica*)

- Density
- Recruitment/spat density
- Disease prevalence/intensity
- Size class
- Percent live/dead
- Extent
- Leases/harvest data
- Harvest closures
- Reef height
- Density
- Size frequency distribution

Water quality/quantity

- Salinity: ppt
- Turbidity: NTU
- Dissolved oxygen: mg/L, %
- pH
- Total suspended solids (TSS)
- Colored dissolved organic matter (CDOM)
- Nutrient load: NPK
- Light attenuation: Kd
- Photosynthetically active radiation (PAR): μ Einstein/lux
- Temperature (at surface and depth): degrees
- Ballast water from vessels
- Shipping related pollutants

Freshwater inputs

- Monitoring of quality/quantity
- Acres of wetland restored
- Shoreline hardening of coastal dune lakes
- Salinity of coastal dune lakes
- Fish assemblages of coastal dune lakes



Hydrology (freshwater inputs from land)

- Proximity to altered hydrology
- Percent watershed impacted
- Area impacted by channels
- Size of water control structure vs size of the system
- Quantity: ft³/second, number of permits for water withdrawals
- Timing: volume/flow over time
- Distribution: volume/flow over area

Harmful algal blooms (HABs)/plankton

- Number cells/ml
- Concentration of toxins: number/unit volume
- Mortality of dolphins/fish