Beach Quality

Sustaining ecosystems while attracting tourism and development: a balance needed so the beach can be enjoyed for generations.

What determines beach quality?

When you think of an ideal beach what comes to mind? Plenty of clean sand covering an expansive beach, clear water surrounded by healthy plant and animal life? There are several definitions of beach quality. One is scientific and refers to the ability to sustain the ecosystem that is made up of the resident plants and animals. Another refers to the ability to attract tourism and development. The challenge is to balance both so the beach can be enjoyed for generations.

State and federal programs monitor the beach to determine health and safety conditions such as harmful algae bloom events, pathogen or microbial outbreaks, rip tides, and storm surge or dangerous surf conditions.

Why is it important?

Knowing the condition of beaches and coastal waters is important to planners: for vacations, recreational and commercial fishing, business and residential construction, and coastal development.

How do different activities throughout the Gulf monitor and report beach conditions?

Federal, state, and municipal agencies, as well as universities, monitor the beaches and coastal waters by taking samples of the water manually. They also make observations using sensors in the water, on land, and in space, and by placing cameras along the shoreline. Many of these monitoring systems have web sites that show the current conditions and any warnings for the beaches.

The web sites below provide various sensor readings as well as links to beach webcams to view the wave conditions.

Each Gulf of Mexico state has a program to monitor the bacteria levels at beaches. Water samples are taken and laboratory analysis is performed to determine if pathogens (disease causing bacteria, protozoa, and viruses) are at levels that present a risk to humans.

Links to useful sites:

Florida Healthy Beaches Program
http://www.floridahealth.gov/environmental-health/beach-water-quality/

Coastal Alabama Beach Monitoring Program
http://www.adem.state.al.us/fieldops/Monitoring/BeachMonitoring.htm

Mississippi Beach Monitoring Program
http://www.usm.edu/gcrl/msbeach/index.cgi

Louisiana Beach Monitoring Program
http://new.dhh.louisiana.gov/index.cfm/page/288

Texas Beach Watch
http://www.texasbeachwatch.com/

Shoreline data
http://shoreline.noaa.gov

Buoy data
http://www.ndbc.noaa.gov

Beach Webcams

FL - Destin – http://www.beachview.com/destin_640.htm

TX - South Padre – http://www.spadre.com/beachcam.htm

TX - Galveston – http://www.galveston.com/webcams