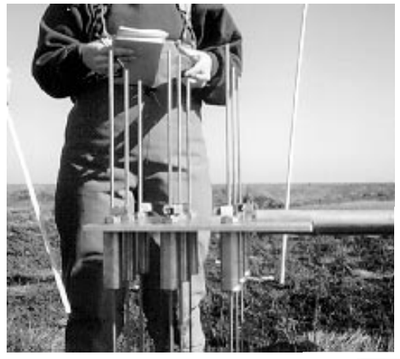
Project Monitoring: Keeping An Eye on the Coast

Completing a CWPPRA project is always cause for celebration, but after the dedication is over, there's still plenty of work to be done — specifically, making sure that a project lives up to its planned potential. It's this exacting work of project monitoring that continues long after the ribbons are cut and the officials head home.

A project monitor tosses a throw trap into a project area. Throw traps are used to capture fishery species in a project area so that their density, size and biomass can be measured. (DNR photo)

The Process

The Louisiana Department of Natural Resources (DNR) and the National Wetlands Research Center (NWRC) are responsible for monitoring all CWPPRA projects. These agencies, along with federal representatives and ecological and statistical consultants, comprise a highly-trained technical advisory group. This group has the task of developing a monitoring plan for each project based on a standardized set of guidelines called protocols. These protocols, which are established for water quality, soils, hydrology, vegetation, wildlife, fisheries and habitat mapping, "...lay out specific tests and procedures for assessing particular aspects of a project's performance," says Greg Steyer of DNR.



Project monitors shown here use the sediment erosion table technique to measure the accretion (build-up) of sediment in a project area. A flat table is suspended above the marsh surface and nine aluminum rods are inserted through it. Monitors measure the rate of sediment accretion as the distance between the table and the marsh surface decreases. (DNR photos)

Once the monitoring plan is approved — usually before construction begins — DNR initiates baseline monitoring. DNR establishes "on-the-ground monitoring stations," and NWRC obtains high-resolution, color-infrared aerial photographs of the project. "Aerial photography literally gives us a clear picture of where we started, where we're at, and eventually where we've gone," says Steyer.

While these images provide monitors with a visual representation of wetlands growth and development, less apparent factors, such as water quality or vegetation health, require constant testing throughout each project's 20-year monitoring schedule. Steyer explains, "Ecological changes in the wetlands don't happen overnight. In most cases, it takes years of data to ascertain changes in a project area."

In addition to high-altitude aerial photography, DNR also obtains low-altitude images. This shot shows the Boston Canal-Vermilion Bay Shoreline Stabilization Project after the installation of rock breakwaters along Boston Canal. (DNR photo)

The Long Run

Although data collection on CWPPRA projects didn't begin until 1994, today monitoring is taking place on 23 Louisiana projects, and the process is always being improved. "In late 1995, DNR established a quality management program to ensure that monitoring is consistent throughout coastal Louisiana and meets minimum quality standards," explains Steyer. This program ensures the continued production of biannual progress reports comparing results to project goals as well as to the results achieved in similar projects located in different ecological settings. As Steyer clearly points out, "Our success in planning for tomorrow depends on the quality of the data we gather from project monitoring today." ❍

Measuring wildlife and fisheries species in any project area is one of the most important elements of project monitoring. When sampling for fisheries, monitors will frequently use seines such as this to obtain species for measurement. (DNR photo)