III. Citizens' Action And Community Involvement Forum



A. Shore And Coastal Erosion: Proactive Measures To Prevent Beach And Shoreline Erosion

Dunes Day In Brazoria County

Charles G. Moss

County Extension Agent - Marine Brazoria County, Texas

The science involved in dune construction and stabilization is basic. Whatever moves water moves sand. This could be wind, current, or tide. On the beach, sand is moved by wind, little people with spoons and pails, and big people with shovels and heavy equipment.

In the midst of this obedience to the laws of physics, the beach seems to breathe in and out like a living organism, croding and accreting with the season, severely accelerated by storms. The trick is to make the sand stop in place, pile up, and stay put.

Here, science is less functional than art and magic -- the art of politics and the magic of salesmanship.

Philosophy precedes politics. Why have sand dunes? Because, they are possible. Because, they exist in their own right.

Aesthetically, they are beauty in the eye of the beholder and relief from the monotony of flatness. Functionally, they are life giving to a complex array of plants and animals. They are the land's first line of defense in the eternal struggle between sea and shore. They have a right to be here.

The citizens of Brazoria County have walked on flattened beaches and looked landward for surviving vegetation following destructive storms.

In 1978, the concept of rebuilding destroyed dunes was demonstrated by the Texas Agricultural Extension Service and the Soil Conservation Service, Waters Davis District. This demonstration consisted of placing ten yards of discarded Christmas trees in a row on the beach and tying them down with stakes. It was a prophecy of possibility.

Additionally, the Corps of Engineers has a history of erosion control projects, from stacking old car bodies on the beach to building sand fences for beach grass propagation. These projects are very interesting, and the Corps of Engineers is a good resource for information.

Enter politics. In Texas, according to State law, beaches belong to the citizens, up to the vegetation line, and access

to the beaches shall not be denied. This is known as the "Open Beaches Act," which is administered by the Texas General Land Office and enforced by the Texas Attorney General.

The ten yard demonstration dune was easily forgiven, but how to get permission to work on nineteen miles of beach crossing several jurisdictions? For instance, the Texas Parks and Wildlife Department administers a state recreation area with frontage on the Gulf of Mexico.

The local county judge and commissioner's court are the key to gaining permission in each jurisdiction. The local County Commissioner and County Judge should be informed and updated throughout the planning process. Because their support will open agency doors, it is important to include each official with jurisdiction in the decision making process.

Enter salesmanship. The Pearland Action 4-H Club's Sea & Shore Project Group collected and installed the Christmas trees in the first demonstration dune. The media was interested in a story about boys and girls performing community service projects. The recycling cause was not yet popular, but saving landfill space appealed to city administrators. It was a winning proposition.

Each year, the Dunes Day event grew under the leadership of the Save Our Beach Association and volunteers like Dow Chemical-Texas Operation's "Beach Buddies", scout organizations, church groups, and people who just turned out.

Four major storms have taken away the dunes they built. Each time the people built them back, but subsidence has cut away sections that once supported dunes, exposing old trees laid down in the early 80's. Those old trees are stark memorials that the sand could be held in place for awhile, but all things change.

In 1993, Dunes Day volunteers will begin construction a little further back from the shore and in fewer areas. The dunes of '79 and '80 are gone, but the sand is not. Neither are people who love the beach and are willing to make the most of it.