

Richard L. Watson, Ph.D.

Consulting Geologist

P.O. Box 1040 Port Aransas, TX 78373

(361) 749-4152 (253) 981-0412 fax

(361) 332-9720 cell TexasCoastGeology.com

Richard@TexasCoastGeology.com

October/30/2005

Mr. Eddie Fisher
Director, Coastal Stewardship Division
Texas General Land Office
P.O. Box 12873
Austin, TX 78711-2873
(transmitted by email attachment)

Dear Mr. Fisher:

Thank you very much for our previous communication by email and telephone.

Here are the latest developments in the beach management and sand removal operations by the City of Port Aransas.

Since we spoke, the City has continued to remove vast quantities of pure dune quality sand from the "beach road" directly in front of the foredune ridge at Port Aransas and dump it in the edge of the surf at low tide.



As you can see, this sand is pure sand with no Sargassum weed nor debris which was scraped from the adjacent beach road by a grader and accumulated as a several foot thick shelf of sand against the edge of the foredune ridge. All of this sand on the beach road was deposited on the beach road by wind or by water and was migrating to form coppice dunes and add to the dune ridge, forming the best and most stable type of dune system. Instead, sand has been mechanically removed and is being dumped well below the high tide line at the edge of the surf at low tide where it will be washed away and will not contribute to our natural dune seawall. This process results in a net sand loss to our beach as the longshore currents carry the sand away to downdrift beaches.



The sand shown in the photograph on the right is the amount of sand removed from immediately in front of, and connected to our dunes in just one morning. This procedure has been continued all day long, every day, including the weekend. *This is clean, pure, dune-quality sand, not a Sargassum sand mix.*

The long range implications of removal of sand which accumulates on the “beach road” and deposition of that sand back in the water are serious. Instead of this sand continuing its journey to build and strengthen our natural dune seawall, it is discarded in the surf. The prevailing attitude seems to be that this is ok as long as the existing vegetated dunes are not disturbed. This is not good planning, since it is preventing the natural seaward growth of our protective dune system, but rather holding it to an artificial position relative to the beach road. The position of the beach road is not important compared with maintaining and enhancing our first line of defense against storms. If this method of beach maintenance is continued, there will be immense loss of natural growth of our protective dunes. We will be far more vulnerable to destruction in future hurricanes.

The following page contains a scanned image of an article from the Corpus Christi Caller Times published on the 28th of October. I was interviewed by reporter Brandi Dean as was Michael Kovacs, Port Aransas City Manager.

According to the Caller Times, “the city has been redistributing the sand to the water's edge, where it can be washed away, which City Manager Michael Kovacs said is allowed because the city has a coastal management plan that was approved by the state and predates many state regulations. Port Aransas, Kovacs said, is in the unique position of having a growing beach, where most Texas beaches are eroding. The sand the city is currently redistributing was built up during Hurricanes Emily, Katrina and Rita, and Kovacs said it needed to be moved to keep the beach's road clear.”

Regardless of whether we have a growing beach or not, we should not be inhibiting the natural growth of the dunes and removing sand deposited right in front of the dunes, no matter how that sand got there, by wind or by storm. It would be most unusual for a storm to deposit sand on the upper beach and it is more likely sand that was brought down on to the road from higher on the beach in the coppice dune area. As you know, the normal storm process is for sand from the upper beach and dunes to be transported seaward, lowering and flattening the beach profile. If indeed, the

City has permission to remove pure, clean dune-quality sand from the upper beach on the road, or adjacent to the dunes and deposit it in the surf, that is very bad beach/dune management because it greatly decreases growth of the natural dune seawall.

10/29/05

LOCAL

Man sparks beach action

He says Port A not practicing best way of maintenance

BY BRANDI DEAN
Callier-Times

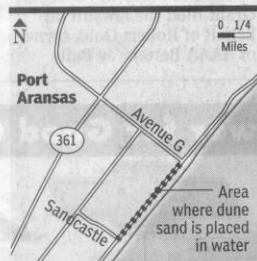
Richard Watson has been troubled by the City of Port Aransas' beach maintenance policy for years, and after seeing the destruction caused by Hurricanes Katrina and Rita, he made up his mind to do something about it.

"I've been talking about it quietly with the city people for about 10 years," Watson said. "But I decided it was time to make some noise."

Watson, a Port Aransas resident who has been a geologist for more than 40 years, recently wrote a paper about the city's practice of pushing sand that has blown onto the roadway back into the sea, and distributed it to city officials. Watson said that according to state law, the sand is supposed to be deposited between the line of vegetation — the point on the beach where plants begin to grow — and the average high tide line, where it can strengthen the sand dunes



Patrick Cone and Jae Reuthinger walk along Port Aransas Beach near several piles of sand that the city has dumped back on the beach after it had washed up onto the roads from the last couple of hurricane storm surges.



that protect the city from surge water during storms.

Instead, the city has been redistributing the sand to the water's edge, where it can be washed away, which City Manager Michael Kovacs said is allowed because the city has a coastal management plan that

was approved by the state and predates many state regulations. Port Aransas, Kovacs said, is in the unique position of having a growing beach, where most Texas beaches are eroding. The sand the city is currently redistributing was built up during Hurricanes Emily, Katrina and Rita, and Kovacs said it needed to be moved to keep the beach's road clear.

But he said the city is willing to listen to Watson's suggestions — in fact, a panel is being formed to do just that. Within the new few weeks, Kovacs hopes to have representatives from the General Land Office, University of Texas Marine Science Institute and Nueces County discussing Port Aransas' coastal management plan.

"Anytime the scientific com-

munity gives us information, we definitely want to consider that against what we're doing now," Kovacs said. "We want to keep an open mind — there's some suggestion that another system could save us money. And there's suggestion that it could offer better hurricane protection ... We're willing to look at other options."

General Land Office Spokesman Jim Suydam said that after storms there are exceptions to state laws regarding sand redistribution. He said the office was looking into Watson's concerns and has accepted Kovacs' invitation to discuss the city's coastal management plan.

Contact Brandi Dean at 886-3778 or deanb@caller.com.

I would appreciate it if you will send me a copy of the agreements between the Texas General Land Office and the City of Port Aransas for beach maintenance which constitute exceptions to Rule 15.7, part (1). The present Texas Administrative Code (Title 31, Part I, Chapter 15, Subchapter A, Rule 15.7, part (1) clearly states: *All sand moved or redistributed due to beach maintenance activities shall be returned to the area between the line of vegetation and mean high tide.* This does not mean placing that valuable dune-quality sand in the surf. I am sure that the author of that provision wrote it in order to ensure that the natural dune seawall would continue to grow unimpeded by any beach management practices and that the vegetation line would be able to grow seaward. If indeed, the

City of Port Aransas is operating under an agreement which provides lesser protection for the growth of our natural dune seawall, then that agreement needs to be changed and brought in line with the current Texas Administrative Code which protects those dunes.

Unfortunately, our “beach road” is presently located directly adjacent to the foredune ridge and is preventing the natural seaward growth of the dunes. The same paragraph in the Texas Administrative Code also states: *Local governments shall prohibit beach maintenance activities unless such activities will not materially weaken dunes or dune vegetation or reduce the protective functions of dunes. Local governments shall prohibit beach maintenance activities which will result in significant redistribution of sand or which will significantly alter the beach profile or the line of vegetation.*

The present beach management activities are ignoring all of these considerations, are significantly weakening the dunes by preventing their natural growth, are significantly lowering the profile of the upper beach, by scraping the “beach road” until its level is significantly below the normal profile for that part of the beach and are inhibiting the natural seaward advance of the vegetation line. The present management activities as shown in the previous photographs are certainly redistributing *very significant* quantities of sand to the detriment of our natural dune seawall.

A high, wide and well-vegetated natural dune seawall is the very best hurricane overwash protection available. We are fortunate on Mustang Island that conditions are present to build our natural dune seawall higher and wider in the time between major hurricanes. We should take advantage of this free gift of nature and not retard its growth by short-sighted beach management practices.

Please make this document a part of the permanent record with regard to beach management by the City of Port Aransas and by Nueces County. This letter will be widely distributed.

Larger copies of the photographs in this document are available at:

<http://texascoastgeology.com/pabeach/sandremoval.html>

More information is available at:

<http://texascoastgeology.com/pabeach/naturalduneseawall.html>

Thank you very much for your consideration.

Sincerely,

Richard L. Watson, Ph.D.
Consulting Geologist