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Differences Between the Port Aransas Beach Management Regulations and State Beach Management Regulations.

Texas Administrative Code (State Regulations)

31 TAC§15.7(l) “(l) Maintaining the public beach.

Local governments shall prohibit beach maintenance activities unless maintenance 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 the significant redistribution of sand or which will significantly alter the beach profile or the line of vegetation. **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.** The General Land Office encourages the removal of litter and other debris by handpicking or raking and strongly discourages the use of machines (except during peak visitation periods which disturb the natural balance of gains and losses in the sand budget and the natural cycle of nutrients.”

Port Aransas Coastal Management Plan

Page 39: Part VIII, B. General Standards, Section 12. Maintaining the Public Beach

“The City of Port Aransas shall prohibit beach maintenance activities unless maintenance activities will not materially weaken dunes or dune vegetation or reduce the protective functions of the dunes. **The City of Port Aransas shall prohibit beach maintenance activities which will result in the significant redistribution of sand or which will significantly alter the beach profile. All sand moved or redistributed due to beach maintenance activities shall be returned to a location seaward of a dune protection line or within critical dune areas.**”

Port Aransas is Not Complying With the Port Aransas Coastal Management Plan

Note: The primary difference (red print) between the Texas Administrative Code requirements for beach management and the Port Aransas Management regulations are in where the sand can be placed. The state code prohibits placing sand below the high tide line so that the sand will not be washed away from the immediate vicinity. Port Aransas regulations allow placing the sand in the dunes or any distance seaward, including in the water where the sand may be lost to the local system. The state code wisely restricts placement of sand to between high tide and the vegetation line where the sand will neither be lost, nor will it smother critical dune vegetation. It will, however, be able to be blown to the foot of the

dunes where it will accumulate in coppice dunes (baby dunes) that will become vegetated and grow the dune ridge and the vegetation line in the seaward direction. This will make our natural dune seawall stronger and better able to resist further storm attack.

On 10/31/2005, Port Aransas City Manager, Michael Kovacs informed me that it is perfectly legal for the City to transport pure dune grade sand from the foot of the dunes and deposit in the water, since there is no high tide line restriction in the Port Aransas regulations which pre-date the state regulations. This, unfortunately is correct according to the letter, but not the intent of the law. We should not be concerned with what we can get away with under the letter of the law but what is best for our natural dune seawall protection. The State regulations improve on the Port Aransas Coastal Management Plan and enhance our safety. However, moving hundreds of dump trucks of sand from the upper beach and depositing it at the edge of the water at low tide is definitely contrary to another of the regulations which Port Aransas is required to follow according to the Port Aransas Coastal Management Plan which states: “*The City of Port Aransas shall prohibit beach maintenance activities which will result in the significant redistribution of sand or which will significantly alter the beach profile.*” Moving huge quantities of sand from the upper beach to the surf will also significantly alter the beach profile by making the upper beach profile much lower than it would be naturally. Finally, though this sand removal is *not materially weakening dunes or dune vegetation* at the instant that the sand is being removed, it is seriously *compromising the protective functions of the dunes* for the future because it is stifling the upward and seaward growth of both the dunes and the dune vegetation by starving them of naturally provided sand.

Our first line of defense, our natural dune seawall, should be allowed to grow to the maximum height, width, and volume possible. It is our only protection from destructive hurricane overwash. It is better protection than a rigid man-made seawall because it also nourishes the beaches during storms and reduces the rate of storm beach erosion. Better yet, the natural dune seawall rebuilds itself with wind-blown sand and rebuilds up and seaward between major storms at no cost to us, if we will just let it happen. If we are ever unfortunate to have two major storms hit us in quick succession, as Katrina and Rita just did in Louisiana, we will need a very strong natural dune seawall to hold the sea back. The strongest dune system consists of large, tall continuous well-vegetated dunes ridges fronted by baby coppice dunes growing on the upper beach nearest to the roadway. Storms will first have to remove those small dunes before they can attack the main dune ridges. Even more importantly, the small dunes will take the entire brunt of small storms and leave our primary natural dune seawall intact to protect us from the next big one. We need a natural dune seawall strong enough to protect us when a second storm hits before it has had the many years needed to naturally rebuild.

Even though Port Aransas does not have to comply with the State regulations which prohibit placing sand below the high tide line, we should comply because the State regulations better protect our first line of defense, our natural dune seawall. However, Port Aransas regulations do *prohibit* significant redistribution of sand and prohibit significant alteration of the beach profile and Port Aransas is *not* complying with that part of the regulations.

Sincerely,

Richard L. Watson, Ph.D.
Consulting Geologist