## **City Council presentation**











In 1934, my grandparents were married on Daytona Beach. For generations, our family has enjoyed Daytona Beach. The beach was much larger than it is today and I remember walking a considerable distance to get to the ocean. After hurricane Ian and other storms, it's where it is today. The sea walls have been battered and some properties destroyed completely. Some look like doll houses with the sides gone but furniture still intact inside. I recently walked down the beach with my dad and we talked about the different types of seawalls like grading the 3<sup>rd</sup> little pig's house of brick. Surely this would withstand the next big bad wolf of a storm.

I began researching different seawall strategies and stumbled upon a berm strategy that one man created on "Washaway Beach" in North Cove, WA. It started with his property being even with his neighbors, but over time, the erosion continued claiming land everywhere but his property. Over the course of a decade or two, his property is now a peninsula.





This strategy has been repeated in other areas like Shark River, NJ where they used coconut husks and fibers. Basically, these berms act as speed bumps. They are not intended to block the waves, but they can help trap the sand from the waves. Waves come in carrying sand in and then back out to sea hundreds of times a day, thousands of times a week, hundreds of thousands of times a year. The sand goes in and then right back out, sometimes carrying more sand out than in. With a berm, the wave stumbles over it and loses some sand, then with less energy, it returns. Each time dropping sand and eventually burying the berm.

In Galveston TX, they used Sargassum bales to create dunes. I believe in nature, the Sargassum acts as a sort of flat berm and would help rebuild the beaches, but it's unsightly for the general public. So it generally gets hauled away, hindering nature's way of rebuilding the beach. What if we could roll the sargassum into berms AND use them in building dunes? Encourage the public to plant sea grasses to help engage the public to participate in the efforts. Rolled sargassum could be more visually appealing than spread out on the beach.

I encourage this council to be pioneers in testing the uses and if successful, those successes could be repeated in other cities along our coast. Imagine if we could rebuild Florida's coastline and save potentially billions of dollars in property values at a fraction of the cost. A transformation like that would be truly inspiring and spread to other coastal areas.



