

==== *NEWS RELEASE* ====

Grass Roots Coalition of Organizations Representing Thousands of Alabama Citizens Request David Sessions and Bill Hightower to Sponsor a Bill to Prevent Beach Erosion Caused by Dredging in the State’s Coastal Inlets

Mobile, Al – On November 12, a contingent of individuals met with Senator Bill Hightower (Dist. 35) and State Representative David Sessions (Dist. 105) in Mobile to present proposed legislation they requested be enacted into law by the Alabama State Legislature.

The proposed bill would prevent the interruption of the natural flow of beach quality sand across Alabama’s coastal inlets by dredging of navigation channels and other engineering projects. The primary goal of the proposed bill is to prevent erosion of Alabama’s beaches and shorelines adjacent to dredged inlets. Beach erosion occurs when large quantities of sand are dredged from inlets and by carried to other locations for disposal. Such dredging interrupts the natural movement of sand across inlets. If the dredged sand was placed closer to the shore, as would be required by the proposed bill, beach erosion would be prevented.

Rep Sessions and Rep Chad Fincher introduced similar legislation in 2014. Designated as House Bill 386, it was assigned to the House’s Commerce and Small Business Committee. A public hearing was held on HB 386 on March 12, 2014 in Montgomery. The Alabama State Port Authority was the only entity to speak against that bill, expressing concern that if enacted into law, the Authority’s share of the cost to maintain the Mobile Harbor ship channel could be increased. No action was taken on HB 386 and it was allowed to die in committee.

The November 12 meeting with Hightower and Sessions was organized by a grassroots coalition of individuals and organizations that desire the proposed legislation be introduced into the Legislature. The individuals and the groups they represent are concerned about the erosion of Alabama’s coastal shorelines. While the meeting participants are concerned about the beaches along the State’s entire Gulf Coast, they are particularly concerned about the significant erosion that has affected Sand, Pelican, and Dauphin Islands since the early 1970s.

The organizations represented at the meeting included the South Bay Communities Alliance, Organized Seafood Association of Alabama, Dauphin Island Restoration Task Force, Dauphin Island Property Owners Association, and the Mobile Bay Sierra Club. The group also

included property owners along the Baldwin and Mobile Counties mainland coastline and business owners in the seafood industry.

Glen Coffee, one of the meeting organizers, explained that “beneath the Gulf waves that break upon the beaches and extending offshore to depths of around 20 feet or so, an unseen river of sand is in constant motion. The movement of that sand, referred to as littoral drift by scientists, is fueled by the Gulf’s waves, tidal action, and longshore currents. Over the course of a year, the net movement of sand is in an east-to-west direction, from Florida toward Mississippi. The amount of sand that can move past a given point along Alabama’s coastline is enormous, over the course of a year, over 200,000 tons by some estimates, a volume that is equivalent to over 10,000 large dump trucks.”

Alabama’s beaches as we know them today were originally created by the natural system of sand movement in the shallow waters of the surface zone. Begun between 4,000 and 6,000 years ago, when the present level of the Gulf was reached, natural littoral drift not only maintained stable beaches, but was capable of healing localized erosion events created by an untold number of pre-historic hurricanes.

Even where the beach shoreline was broken by the mouth of an interior bay, the littoral drift of sand was maintained across the “inlet” to the beach shoreline on the other side. The natural width and depth of an inlet was determined by an interaction of hydrodynamic forces that produced a state of dynamic equilibrium within the inlet. That equilibrium allowed the littoral drift of sand to pass across the inlet and nourish the “downdrift” beaches.

In the latter half of the 20th century, the demand increased for reliable recreation channels through coastal inlets. At the same time, the ever increasing size of commercial shipping also demanded significantly deeper navigation channels be constructed through the shallow natural inlets. To maintain navigation depths, dredging is required on a regular basis to remove sands carried by natural littoral drift into the inlet channels. Historically, much of the beach quality sand dredged from the inlets was disposed at locations away from the inlets that resulted in the sand being lost from the littoral drift system. This caused many downdrift beaches to erode.

Coffee says “the scientific literature is filled with numerous studies from around the United States and the world, including Alabama’s coastline, documenting the adverse effects on shoreline erosion caused by dredging of inlets. Many of the studies also show that beach erosion

can be minimized by carefully selecting a location for dredged sand placement that is in harmony with natural coastal processes.”

Recognizing the connection between beach erosion and dredging of inlets, Florida, Texas, Louisiana, and Mississippi enacted state laws to govern the manner in which beach quality sands are disposed during dredging of inlet navigation channels. Their respective laws treat beach quality sands as a valuable natural asset of the State to be conserved during dredging and to be retained within the coastal littoral drift system to prevent beach erosion. Coffee said “only Alabama has failed to enact a similar state law”. The meeting with Hightower and Sessions was held as a first step to work toward passage of such a law in Alabama.

Coffee pointed out that “only three inlets occur within Alabama’s 53 miles of Gulf Coast shoreline: Perdido Pass, Little Lagoon Pass, and Main Pass at the Mouth of Mobile Bay.”

Of these, the Corps of Engineers maintains a navigation channel through Perdido Pass, responsibly placing dredged material on the shoreline west of the inlet to avoid beach erosion.

As part of its bridge and seawall project at Little Lagoon Pass, the Alabama Department of Transportation is required to dredge the inlet to keep it open to maintain good water quality in little Lagoon. Following a 1991 lawsuit by property owners that experienced beach erosion as a result of the State project, DOT now dredges the pass to keep it open, pumping the sand to the west side of the pass. Such dredging is required two to three times each year.

The 45-foot deep Mobile Harbor ship channel passes through Main Pass. That large inlet separates the Fort Morgan peninsula from Dauphin Island. Before the pass was dredged for navigation, the natural depth of the inlet was 20 feet. The Corps maintains the ship channel which has been incrementally deepened several times since WWII. The Corps will soon begin a study to determine if sufficient benefits exist to support the channel being deepened from 45 to 55 feet

Erosion of Dauphin Island and the smaller Sand and Pelican Islands to the east began to be noticed in the 1970s. After watching the island steadily decrease in size, the Dauphin Island Property Owners Association filed a lawsuit against the Corps and the State of Alabama in 2000. The lawsuit alleged that the ship channel’s maintenance program was contributing to Dauphin Island’s erosion. In an attempt to counter the erosion problem, the Corps changed the locations at which sands dredged from the ship channel were placed, eventually settling upon a site referred to as the Sand Island Beneficial Use Area located south of the Sand Island Lighthouse

and west of the ship channel. The decade-long lawsuit was settled in 2009 without a final decision being reached.

The US Geological Survey published a report in 2007 on the Alabama-Mississippi barrier island system. The report contained the following conclusions about the relationship between the Mobile Harbor ship channel and the erosion of Dauphin Island:

- After 1958, Dauphin Island began to erode, which has not only persisted to the present, but accelerated in recent years.
- The Mobile Harbor outer bar channel acts as a sediment sink, trapping sand that would have been passed across the inlet to nourish Dauphin Island and Mississippi's barrier islands to the west.
- Maintenance dredging practices permanently removed large volumes of beach quality sand from the littoral drift system that otherwise would have nourished the adjacent barrier islands to mitigate land losses.
- After considering storm events and sea level rise, the increased reduction in sand supply resulting from increasing the dredging depths of the ship channel, is the only factor that matches Dauphin Island's progressively increased loss of land.
- The shortage of sand which is contributing to barrier island land loss can be mitigated by placing dredged sands on adjacent barrier island shores for nourishment and rebuilding.

Stan Graves, another meeting organizer, stated "no effective plan has been developed to date to address the adverse impacts on the erosion on Dauphin Island that result from the location at which sands dredged from the Mobile Harbor ship channel are placed."

"While we are hopeful" said Graves "that the State Lands Division's \$4.6 million Alabama Barrier Restoration Study will finally acknowledge that sands dredged from the ship channel should be placed nearer to and in more shallow waters closer to Dauphin Island, that study will not be completed for at least four years. And of great concern, the final report is not intended to make firm recommendations for implementation. That means at the end of that four year study, we could find ourselves and the eroding island in the same or even worse situation we are now. It is for that reason, we believe it is important that the proposed legislation be enacted to require beach quality sands dredged from the State's inlets be placed on adjacent eroding beaches."

Carol Adams-Davis of the Mobile Bay Sierra Club added “the concern over the erosion of Dauphin Island is much larger than the loss of beachfront property. Everyone, especially our environmental resource agencies, need to understand the adverse consequences on the productive estuarine ecosystems of lower Mobile Bay and Mississippi Sound that could occur if Dauphin Island is allowed to continue to be weakened by erosion until it cannot withstand the powerful force of a future catastrophic hurricane. It is only a matter of time until that happens.”

Avery Bates of the Organized Seafood Association of Alabama emphasized the important role Dauphin Island plays in helping to create conditions favorable for the propagation of commercial and recreational seafood. Bates reminded the group of the disastrous effects that Katrina Cut in the island had on oyster populations for years after the 2005 storm. Bates said that “even after the cut was closed following the 2010 BP oil spill, oyster production has still not recovered in Alabama”. Bates also pointed out numerous areas within the Mississippi Sound where increasing wave action is causing erosion of small islands and marsh shorelines.

Dr. Bob Shipp of the University of South Alabama provided a letter supporting the legislation. Dr. Shipp urged “our elected representatives to support legislation that requires administrators of engineering activities to be cognizant of potential impacts and to include mitigation measures in their projects to prohibit their activities in Alabama’s coastal inlets from contributing to the erosion of downdrift shorelines. It is crucial to the maintenance of Alabama’s valuable beaches and coastal resources that the natural sand volumes crossing Gulf inlets are not interrupted by engineering activities like channel dredging and jetties”.

Lori Bosarge of the South Bay Communities Alliance conveyed her concerns over the possibility Mobile County’s mainland coastal communities could be exposed to more severe wave action and flooding if nothing is done to reverse the erosion of Dauphin Island.

Dennis Knizely, representing the Dauphin Island Property Owners Association Board of Directors, said “the DIPOA’s nearly 3,000 members would support the proposed legislation”. The DIPOA passed a resolution in 2014 supporting legislation to require sand dredged from coastal inlets be placed on adjacent beaches to prevent beach erosion. That resolution pointed out that Dauphin Island serves as a critical first-line-of-defense for Alabama’s mainland during catastrophic hurricanes and other disastrous events like the 2010 BP oil spill.

Laura Martin of the Dauphin Island Restoration Task Force pointed out that “Dauphin Island is Alabama’s only Barrier Island”. And, she asked “what are we going to do to fix the erosion problem?”

Hightower and Sessions committed to consider the information they had been provided by the meeting participants before reaching a decision to introduce the proposed legislation. They also pointed out that a bill often must be considered several times by the State Legislature before it is successfully enacted into law.

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