

BEACH & SHORE PRESERVATION ADVISORY COMMITTEE

The Indian River County (IRC) Beach and Shore Preservation Advisory Committee (BSPAC) met at 3:00 PM on **Monday, September 19, 2022**, in Building B, Conference Room B1-501, 1800 27th St, Vero Beach, FL. You may hear meeting audio and review the agenda and minutes on the IRC website: www.ircgov.com/Boards/BSPAC/2022.

Members present

David Barney, Chairman, BCC Appointee

Bob Auwaerter, Town of Indian River Shores Appointee

Robbie Brackett, City of Vero Beach Appointee

David Cox, BCC Appointee

Commissioner Joe Earman, BCC Representative (*non-voting member*)

William "Tuck" Ferrell, Vice Chairman, BCC Appointee

Inocensia Hernandez, City of Fellsmere Appointee (*late arrival*)

Fred Jones, City of Sebastian Appointee

David Morgan, BCC Appointee

Cherry Stowe (for Paul Knapp), Town of Orchid Appointee (*early departure*)

Members absent

Francisco San Miguel, BCC Appointee

Mark Tripson, BCC Appointee

IRC staff present

Jason Brown, County Administrator

Quintin Bergman, Environmental Specialist

Eric Charest, Natural Resources Manager

Melissa Meisenburg, Lagoon Plan Environmental Specialist

Dylan Reingold, County Attorney

Rich Szpyrka, Director of Public Works

Ed Offutt, Commissioner Assistant, Recording Secretary

Others present

Doug DeMuth, Sandpointe Homeowners Association Board of Directors

Tem Fontaine, Vice President, Coastal Tech-GEC, Inc.

James Gray, Executive Director, Sebastian Inlet District

Paul Hart, General Manager, Disney's Vero Beach Resort

Call to Order

(3:00 PM) Chairman Barney called the meeting to order and noted a quorum was present.

Approval of Minutes from July 18, 2022

(3:00 PM) ON MOTION BY Mr. Jones, SECONDED BY Mr. Auwaerter, the members voted unanimously (8-0) to approve the July 18, 2022, minutes as presented. (Ms. Hernandez arrived late to the meeting.)

Coastal Division Updates

A. Sectors 3 and 5 Beach Restoration Project Updates – Mr. Charest

(3:01 PM) Mr. Charest reported the latest results of the Sector 5 and Sector 3 renourishment projects, including the fact that 68,000 dune plants in Sector 3 Phase 2 would be replaced by the contractor for failure to meet survival and growth requirements, primarily due to lack of rainfall over the hot summer months. (See Attachment 1 for a full summary of Mr. Charest's report.)

B. Sector 7 Beach Restoration Project Update – Mr. Charest

(3:05 PM) Mr. Charest detailed that the county staff had received approval from the State of Florida to use Federal Emergency Management Agency (FEMA) beach repair funds associated with Hurricane Dorian through November of 2023, but the county needs the funds extended further (directly by FEMA) to use them through the winter 2023-24 building season. He commented that there had been no transfers of properties located on the beachfront in Sector 7, and thus no additions to the Sector 7 easement count. (See Attachment 1 for a full summary of Mr. Charest's report.)

(3:08 PM) Ms. Hernandez arrived at the meeting.

C. Sea Turtle Updates – Mr. Bergman

(3:11 PM) Mr. Bergman reported favorable turtle nesting numbers across the board for the 2022 nesting season. (See Attachment 1 for a full summary of Mr. Bergman's report.) Chairman Barney asked if most of the nests had already hatched, and Mr. Bergman said they had while adding that staff was seeing only about five new nests per day now, a number that would continue to lessen in the coming weeks. Commissioner Earman asked if other counties in Florida were also seeing strong sea turtle nest counts, and Mr. Bergman replied that he'd know more in January after a statewide conference. As an aside, Mr. Bergman mentioned the county had received its coastal monitoring "drone" (i.e., remotely piloted aircraft), and that staff was taking pictures and experimenting with its capabilities.

D. Indian River Lagoon Updates – Ms. Meisenburg

(3:19 PM) Ms. Meisenburg highlighted the results of the International Coastal Cleanup event held on September 17th. (See Attachment 1 for a full summary of Ms. Meisenburg's report.) She also recounted the staff's partnership with the Florida Fish and Wildlife Conservation (FWC) Commission in rescuing and releasing manatees. Mr. Charest added that the county was seeking full access to a new FWC database for derelict vessels, relating that new state funding for removals is available but hinges on staff's ability to interact with the state via the new database; he mentioned there were only two derelict vessels in the Indian River Lagoon approved for removal right now.

Shoreline Performance Modeling Efforts Associated with Support of County Participation in the Sebastian Inlet District (SID) Technical Advisory Committee – Mr. Charest

(3:24 PM) Mr. Charest summarized the purpose of the Inlet Management Plan (IMP) and detailed the goals, objectives, and history of the SID Technical Advisory Committee (TAC); he reviewed the progress of the current TAC (since December of 2021) over three previous meetings, and IRC's intention to perform additional modeling to support a minimum sand bypass objective of 95,000 cubic yards to downdrift IRC beaches, including Sector 3 and further south. (See Attachment 2 for a full summary of Mr. Charest's report.) Mr. Gray mentioned that Florida Department of Environmental Protection (FDEP) has a "seat at the table" and uses TAC recommendations to develop a comprehensive strategy document. Chairman Barney inquired about how often the TAC is held, and Mr. Gray replied that a 5-

10-year interval is typical, after an IMP is passed.

(3:37 PM) Mr. Charest then focused on the lengthy second TAC meeting on June 1, 2022, recounting the committee's deliberations about how tide and storm surges, sea level rise, the gulfstream, and changing weather patterns affect the inlet. The SID acknowledged that data outside a 30,000-foot radius is not currently considered as within the inlet's area of influence. Mr. Charest added that IRC has good data downstream of the inlet, but Brevard's upstream data is spotty. Chairman Barney asked where the 30,000-foot radius figure had originated, and Mr. Gray specified that, at the year 2000 TAC, data suggested the inlet's primary influence extended between 5,000 and 15,000 feet, both north and south, eventually being extended to a 30,000-foot total zone of influence on both sides of the inlet. He asserted that "this is what the TAC is all about," specifically to establish the extent of the inlet's effects. Chairman Barney wondered how the data gaps from Brevard County would permit an accurate assessment of the inlet's actual retention, and Mr. Gray voiced that the TAC would help to identify data requirements for the future but that nothing could be done to make up for missing historical data. Mr. Charest added that if it's determined, through modeling, that the inlet has a sand impact of 95,000 cubic yards on IRC beaches, then the SID would be responsible for bypassing that amount of sand "whether they have it or not." Dr. Cox questioned how much data was available to assist with the modeling effort, and Mr. Gray disclosed that there is accurate, semi-annual survey data dating back to 2007 for the area encompassing 30,000 feet north and south of the inlet.

(3:46 PM) Referring back to third TAC meeting, Mr. Charest said the county staff had proposed the 95,000 cubic feet of sand figure as an estimate in lieu of any proposals from other participants and had agreed to fund a new modeling effort to support that figure. He went on to show data suggesting a bypass shortfall of approximately 695,000 cubic yards of sand since the year 2000, with Mr. Gray noting that the data accounted for only sand renourishment efforts and not "natural bypass," which the SID estimated at about 30,000 cubic yards of sand per year. Mr. Charest continued, revealing that the new modeling task was brought before the BCC for approval on September 13th, but the Board had asked for a recommendation from the BSPAC before approving the funds; he noted the time-critical nature of gaining approval, specifying that the modeling effort would take between 5-8 weeks, followed by a 3-4-week opportunity for TAC participants to review the study. Mr. Charest affirmed that all available data would be included in the effort to make the model's results as robust as possible. Chairman Barney inquired as to what area would be modeled, and Mr. Charest answered that it would encompass all of IRC, advising there were signs of the inlet's influence all the way south through at least Sector 5.

(4:07 PM) Mr. Fontaine informed the BSPAC that the model APTIM Environmental & Infrastructure would use was the same one from 2015 and was already prepared to accept the updated data inputs. Chairman Barney expressed doubt about the scope of the inlet's influence extending so far to the south and advocated for a smaller study, but Mr. Fontaine countered that shrinking the model size at this time would increase the cost of the effort because the data-ready model would have to be changed. Mr. Gray questioned how the model would be mechanized and what it would analyze, and Mr. Fontaine replied that, once the data was entered into the model, different inlet bypass volumes could be set to see what values most closely resembled historical sand deficits. Mr. Fontaine further opined that the \$40,000 cost of the new study was insignificant when compared to \$29M, the current value of the "lost" 695,000 cubic yards of sand (since the year 2000). Mr. Charest asserted that FDEP was looking for the TAC to come to an agreement on what constitutes an accurate assessment of sand bypass volume. Mr. Gray explained that the TAC would be considering numerous different technical opinions and examining many data sources to reach its final conclusions.

(4:10 PM) Ms. Stowe departed the meeting.

(4:20 PM) Chairman Barney asked how the SID assesses the value of the county's proposed modeling effort, and Mr. Gray replied that, while a model is a good planning tool, the best models will incorporate all facets of the actual environment to achieve the highest degree of accuracy.

(4:22 PM) ON MOTION BY Mr. Auwaerter, SECONDED BY Mr. Brackett, the members voted by 6-2 to recommend the Board of County Commissioners vote to fund the Shoreline Performance Modeling efforts associated with support of county participation in the Sebastian Inlet District Technical Advisory Committee, with Chairman Barney and Dr. Cox in opposition.

Update from the SID – Mr. Gray

(4:25 PM) Mr. Gray announced that, at its recent budget hearing, the SID requested a “13.51% budget increase above the roll-back rate” from both Indian River and Brevard Counties. He declared that the SID was planning a dune repair project that would place 30,000 cubic yards of sand where needed in Sectors 1 and 2. Continuing, Mr. Gray affirmed the north shoreline stabilization (“armoring”) project was complete and that repairs to riprap on the south shore would take 7-10 more days, with a total project cost of \$1.1M. He finished by highlighting the SID’s participation in International Coastal Cleanup Day.

Status of County Beach Parks

(4:28 PM) No one was present from Parks and Recreation to provide an update.

Commissioner’s Matters – Commissioner Earman

(4:29 PM) Commissioner Earman stated that he was trying to bring the long-delayed Sector 7 beach renourishment project to closure. He disclosed that he’d started to meet with beachfront residents one-on-one, where they’re willing, to discuss ways to protect and maintain county beaches; he also stated he would propose changes to the perpetual easement to see if consensus could be reached between staff and residents. Mr. DeMuth opined there are two “colonies” of holdout homeowners, and he believed the dozen or so in the northern portion of Sector 7 were the most critical. Mr. Ferrell recited that, without sand renourishment, coastal homes would be at great risk from tropical storms.

Committee Members Matters

(4:38 PM) There were none.

Chairman’s Matters

(4:39 PM) There were none.

Public Discussion Items

(4:39 PM) There were none.

Adjournment

(4:39 PM) With no further business, Chairman Barney adjourned the meeting.

The next meeting of the BSPAC is scheduled for **October 17, 2022, at 3:00 PM**, in Building B, Conference Room B1-501, at 1800 27th Street, Vero Beach, FL.

Attachments

Attachment 1 -- BSPAC Updates from the Coastal Engineering Division, 9/19/22 (E. Charest)

Attachment 2 – Slide Presentation, “Shoreline Performance Modeling to Support the County’s Efforts on the Sebastian Inlet Technical Advisory Committee,” 9/19/22 (E. Charest)