

## **BEACH AND SHORE PRESERVATION ADVISORY COMMITTEE**

The Indian River County (IRC) Beach and Shore Preservation Advisory Committee (Beach) met at 3:00 p.m. on Monday, March 19, 2012, in the County Administration Building, Building B, 1800 27<sup>th</sup> Street, Vero Beach, Florida. You may hear an audio of the meeting; review the agenda and the minutes on the IRC website - [www.ircgov.com/Boards/BSPC/2012](http://www.ircgov.com/Boards/BSPC/2012).

Present were Chairman David Barney, Mark Tripson, Chris Hendricks, Bob Anderson, Board of County Commissioners (BCC) Appointees; Councilmember Bill Troxell, Town of Orchid Appointee; Councilman Joel Tyson, City of Fellsmere Appointee; and Councilmember Mike Ochsner, Town of Indian River Shores Appointee.

Absent was Mayor Jim Hill, City of Sebastian Appointee; Robert Lindsey and Cheryl Gerstner, BCC Appointees and Dick Winger, City of Vero Beach Appointee (all excused)

Also present were IRC staff: Commissioner Liaison Peter O'Bryan; James Gray, Coastal Engineer; and Terri Collins-Lister, Commissioner Assistant, District 4.

Others present were: Marty Smithson, Sebastian Inlet Taxing District (The District); Jim O'Connor, City of Vero Beach (COVB), Steve Boehning, Coastal Waterways; Tem Fontaine, Coastal Technology; Henry Stephens, Press Journal; Al Stock and William Suddath, Sea Oaks; Marie Yarbrough and Jeff Tabar, Atkins Global – North America; Dr. Bill Dally, Surf Break Engineering Sciences, Inc; and Tuck and Cathy Ferrell, Interested Citizens.

### **Call to Order**

Mr. Barney called the meeting to order at 3:00 p.m.

### **Approval of the Minutes of February 20, 2012**

**ON MOTION BY Councilman Tyson, SECONDED BY Councilmember Ochsner, the members voted unanimously (7-0) to approve the minutes of February 20, 2012.**

## **Status of the Sector 3 Beach Restoration Project – Mr. James Gray, IRC Coastal Engineer**

Mr. James Gray, IRC Coastal Engineer, handed out and reviewed the information contained in his report Indian River County/Sector 3 Beach Project Update, a copy of which is on file in the Commission Office.

Mr. Gray gave brief project descriptions for each phase of construction for the Sector 3 Beach Project. He stated the contractor, Ranger Construction, placed approximately 100,000 of the estimated 111,000 cubic yards of sand needed to fill the Phase 2b project design template. The contractor notified the County the Sector 3 Phase 2b project would be 11,000 cubic yards short of upland sand. He said Ranger Construction proposed eliminating the final 11,000 cubic yards of sand for the dune and would build a berm dune component. He added the redesign/proposal from the Contractor was going before the BCC at their meeting on March 21, 2012.

A discussion ensued on the shortfall of sand from the mine and Mr. Gray pointed out because the material had never been placed on the beach or surveyed on the beach, the County would not compensate Ranger Construction for the material and there would be no additional costs to the County.

Mr. Gray discussed the proposed completion schedule for Phase 2b and hoped to re-open Treasure Shores Beach Park by Monday, March 26, 2012 and the contractor would place 58,000 dune plantings from March 27th through March 30<sup>th</sup>.

Chairman Barney suggested forming a Lessons Learned Sub-Committee after the Sector 3 Phase 2b Project was completed.

## **2012-2013 Legislative Session – Update on Funding for Florida Beach Restoration Projects – Mr. James Gray, IRC Coastal Engineer.**

Mr. Gray gave a summary of the Florida Shore & Beach Preservation Association's Beach Watch 2012 Legislative Wrap-Up, a copy of which is on file in the Commission Office. He shared that House Bill 5001 provided approximately \$27 million for statewide beach management and the legislature provided recommended funding; together there was enough to partially fund seven of the top-ranked beach projects proposed by the Department of Environmental Protection. He continued the Sector 3 Beach Project reimbursement was not part of the top ranking. He added the County could

apply for 50% reimbursement up to three years from the end of the project. A lengthy discussion followed on state cost-share of beach projects.

### **Status Update on Shoreline Modeling Scope of Work – Mr. James Gray, IRC Coastal Engineer**

Mr. Gray stated over the last few months, the Beach Committee formed a Coastal Structures Sub-Committee to develop a scope of work for a numeric modeling of the shoreline and Sector 3 was the major focus location. He said the Sub-Committee discussed going through a Request for Qualification Process; however, it would be a timely process. He continued that County staff was not aware, but there was a continuing services dual contract between Utilities, Solid Waste, and Public Works with Atkins Global Inc and the County under the Consultants Complete Negotiations Act (CCNA) had the ability to fast track at least a portion of the numeric modeling. He indicated County staff approached Atkins Global through the CCNA contract and it was believed if there was a way to expedite a portion of the numeric modeling as directed by the Coastal Structures Sub-Committee. He suggested the phase approach such as phase 1 would be collecting wave data if approved by the BCC, then go forward with the next phase such as the numeric modeling with either Atkins Global or another contractor.

Mr. Gray introduced Jeff Tabar, Project Director of Coastal Engineering Services Division, Atkins Global – North America and Dr. Bill Dally, PhD, P.E., Surf Break Engineering Sciences, Inc., who would discuss phase 1 of the scope of work for the collection of wave gauge data.

Dr. Dally presented on the complexity introduced by the near shore reef system in Indian River County as well as the existence of the reef and the fact it was not well behaved in uniform along the beach which provided an issue of hotspots on a meandering shoreline. He noted a lot of wave energy was stopped by the sandy bed as they crossed over the Continental shelf.

Dr. Dally brought up another issue regarding how much wave energy decreases as it crosses over the reef system in Indian River County. He stated the reef system cut out as much wave energy as the entire Continental shelf; however, because it was irregular, hotspots were created and prevented sand from going back on the beach.

Dr. Dally discussed an instrument called Acoustic Doppler Current Profile (ADCP), a sophisticated wave gauge that measured the waves, their energy, height and direction, as well as handled the confusion from a directional wave

spectrum. He gave an example of an ADCP placed in the year 2005 and was only able to collect two weeks of data, which was not nearly enough information and generally needed a significantly longer collection of data. He added prior to 2005, an ADCP and an Acoustic Doppler Velocimetry (ADV) was placed in very shallow water in shore of the reef system in 2002. He pointed out how important understanding the reef system and wave climate along the beach in Indian River County.

Dr. Dally said during the first phase Atkins Global proposed to collect wave data with the best instrumentation available by putting out two ADCP and one ADV simultaneously. He felt collecting the wave data around Golden Sands Beach Park was a good location because it was in the heart of the Sector 3 Project and readily accessible. He indicated Atkins Global would collect data for up to ten weeks and hoped to fast track documented wave data before the wave climate slowed down for the summer months.

A lengthy discussion ensued on a wave model verifying hotspots and the optimal time and location for the study. Mr. Dally preferred to perform the study at the end of hurricane season and the beginning of nor'easter season. A question was raised regarding the cost of the wave study. Mr. Gray replied the proposal was still in draft form and the cost based on the draft County staff worked and reviewed with Atkins Global – North America was in the amount of \$49,500 for the placement of the gauges for up to ten weeks, and generating a report.

**ON MOTION BY Mr. Hendricks, SECONDED BY Mr. Barney, the members voted unanimously (7-0) to identify an optimal schedule and methodology on a wave model to identify hotspots in Sector 3 at a future Beach and Shore Preservation Advisory Committee Meeting.**

### **Update from the Sebastian Inlet Taxing District Commission (The District)**

Mr. Marty Smithson, The District, stated the dredge contractor Dickerson Florida was currently dredging the sand trap and bypassing the material onto the Sectors 1 & 2 project area of the beach. He added the contractor had placed approximately 72,000 cubic yards of the estimated 148,000 cubic yards of sand on the beach.

### **Status of County Parks**

Mr. Gray stated Treasure Shores Beach Park was still closed; however, was estimated to re-open on March 26, 2012.

### **Committee Members Matters**

There was none.

### **Chairman Matters**

Chairman Barney brought up the Beach meeting dates for January and February 2013 which fell on Martin Luther King and the President's Day Holidays respectively. He suggested alternate meeting dates of January 28, 2013 and February 25, 2013 at 3:00 p.m.

**ON MOTION BY Mr. Anderson, SECONDED BY Councilman Tyson, the members voted unanimously (7-0) to adopt the change in the meeting dates to January 28, 2013 and February 25, 2013.**

### **Other Matters**

There was none.

### **Adjournment**

There being no further business, the meeting adjourned at 5:05 p.m.