



Item No. 5b

# AGENDA ITEM MEMORADUM

**Public Information Office**

**Steve d'Oliveira**

Department

Department Director

<b>COMMISSION MEETING DATE (*) - 7:00 PM</b>	<b>Deadline to Town Clerk</b>
<input checked="" type="checkbox"/> Dec 13, 2011	Dec 2 <sup>nd</sup>

**\*Subject to Change**

- Presentation     Reports     Consent     Ordinance  
 Resolution     Quasi-Judicial     Old Business     New Business

**FY2011 DESIGNATED HIGH PRIORITY ITEM - PRIORITY TOPIC**

**SUBJECT TITLE:** Upcoming Broward County Beach Renourishment Project

**EXPLANATION:** Broward County plans to widen two long segments of beach in the near future and our shoreline and reefs (at the north and south ends of the Town) will be impacted. Eric Myers, the Natural Resources Administrator with Broward County's Environmental Protection and Growth Management Department, has agreed to make a PowerPoint presentation at the Dec. 13th meeting to explain the project to the Commission.

**EXHIBITS:** Memo dated 12/8/2011 from the Public Information Officer on this project.

Reviewed by Town Attorney  
 Yes     No

Town Manager Initials SO

**Town of Lauderdale-By-The-Sea  
4501 Ocean Drive  
Lauderdale-By-The-Sea, Florida 33308-3610**

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## Memorandum

**Date:** Dec. 8, 2011  
**To:** Connie Hoffmann, Town Manager  
**From:** Steve d'Oliveira, Public Information Officer *SD*  
**Subject:** Broward County Beach Renourishment Project

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Broward County is planning to widen two long segments of beach that will potentially impact the Town of Lauderdale-By-The-Sea and our near-shore reefs. The start date for the project is uncertain. The County plans to seek permit approval from the U.S. Army Corps of Engineers early next year. The review process will take several months to complete. Florida environmental groups, as they have done in the past, are expected to file suit opposing this project, citing the detrimental impact that beach widening has sometimes had on South Florida's coral reefs.

The County recently completed widening 6 miles of beach south of Port Everglades (Segment 3). That area of the County has a thinner shoreline, since the Port Everglades inlet stops the north-south flow of sand. As a result, the beach just north of the port is the widest in the County. Our area (Segment 2) was delayed because it was considered more environmentally sensitive. The reefs off Broward County are all considered critical coral habitat by the federal government.

### Project Scope

The longest beach area to be widened stretches about 4 miles. It begins a few blocks south of the Bonnet House in Fort Lauderdale and extends north to the Oriana, just south of Anglin's Pier. The distance from our southern Town border to just south of the pier is about half a mile.

The second segment of beach the County plans to widen stretches from just south of the Pompano Pier to the Aquazul Condominium here in Town. The distance from our northern municipal border on State Road A1A south to the Aquazul Condo is just under half a mile.

Our beaches, which the County says are in good shape, are not the main focus of this project. Our shoreline would mostly be used for the tapers needed for the south end of the north segment and north end of the south segment. Sand placed on the beach is gradually tapered along the shoreline so that there is not a stark visible demarcation in the width of the beach.

### **History**

The last widening project in Town was in 1983, when 1.7 million cubic yards of sand was dredged offshore and placed on the beach stretching from Pompano Beach south to the our southern border. This occurred between May and August. The beach was widened by 79 feet. Our beach was also widened in 1969-70. Since beach widening projects are only expected to last about 15 years due to natural erosion caused by ocean currents, the Town has been very fortunate indeed, because the County has not seen a need to widen our beaches in 28 years.

According to Christopher Creed, a senior engineer with Olsen Associates, a coastal engineering firm working with the County on this project, the Town's beach is 2.4 miles in length. Between April 2009 and April 2011, our beaches gained 57,900 cubic yards of sand. Creed said most of that gain was concentrated in the middle area of our Town, an area from Sea Ranch Lakes Building A south to about Washingtonia Park. He said the north part of our beach experienced "minor net erosion." The beach at the south end of the Town is also not as wide as it is north of the pier. The Town has benefited from improved dredging operations at the Hillsboro Inlet dating back to 2002, which allows more sand to bypass the inlet and make its way south to our beach.

### **Sand Source / Project Timeline**

The County plans to widen the beaches along those two stretches by about 30 feet. It expects to truck about 750,000 cubic yards of sand from a sand mine in Central Florida. The north part of the project would use 200,000 cubic yards of sand; the south would receive 550,000 cubic yards. The downside is that the trucks used for the project can only haul 20 cubic yards of sand per load. So it would take 37,500 truckloads of sand over three winter seasons (Nov. 1 – Feb. 29) to complete the work, since the project cannot be done during the annual sea turtle nesting season. Our Town would not see all those trucks, of course, and different geographic segments of the project would be done in different years. The number of trucks that might be driving through Lauderdale-By-The-Sea is not known at this time. The County is still in the process of deciding what roadway access points it would need and what it might request from the Town.

### **Environmental Impact**

In the past the County has dredged the sand it needed for these projects from offshore borrow areas. This method is more harmful to the reefs, since sand cannot be cleaned before being deposited on the beach. Once the dredged sand hits the water, a greater volume of sediment can be expected to settle onto the near-shore reefs; some reefs can actually be considered buried. An environmental analysis of our 1983 beach widening project, prepared by Continental Shelf Associates, indicated our reefs were impacted. "The surf zone and upland stations adjacent to the nourished beach were nearly devoid of life," the report stated. "The decline in both diversity and density was attributed to the placement of fill in these zones 30 days earlier." It should be noted that beach renourishment methods have improved over the decades. The County has said it will try to minimize and reduce any potential harm to the Town's coral reefs.

### **Project Cost**

It is estimated this project will cost \$38 million. A few years ago, the Town budgeted \$200,000 for our contribution. We do not know if this figure will stay the same. In all likelihood, this project will be funded locally with the County and participating cities paying the entire cost. The federal government and the State are no longer willing to assist the County financially as they did in the past. In fact, the federal government still owes the County \$12 million for the Segment 3 project.

### **Town Considerations**

Cost considerations aside, the Commission needs to if Lauderdale-By-The-Sea wants to be included in this project, given that:

1. Beach erosion in Town has not been significant; the central section of our beach has actually gotten wider, a result of improved sand bypassing at the Hillsboro Inlet.
2. The disruption to our beach during tourist season.
3. The potential for significant truck traffic and noise on our roadways.
4. The potential negative impact on our reefs at a time when the Town will be marketing itself as the "Shore Dive Capital of South Florida."
5. County staff has indicated no one wants to force us to take part in this project. If the Town were to formally request not to be included, the County would honor our request.

### **PowerPoint Presentation**

To explain the project and answer any questions, Eric Myers, the Natural Resources Administrator for Broward County's Environmental Protection and Growth Management Department, will present a PowerPoint presentation to the Commission at its Dec. 13 meeting.