



## **Palm Beach County Chapter**

### **Beach Preservation Committee**

*Position Statement Regarding:  
Coastal Projects Currently Under Consideration in Palm Beach County*

Natural sand flow patterns along the Palm Beach County coastline have been altered by human activity such as inlet creation, construction on the coastal dune and coastal armoring, over the past hundred years. The result is an uneven distribution of sand, accelerating erosion, endangering both recreational and commercial interests. Surfrider Foundation's short term and long term goals are to protect our natural sand beaches and mitigate erosion.

Unquestionably, erosion is a critical issue in Palm Beach County. The responses and proposed "solutions" to this problem have been numerous and diverse, some experimental, but always costly. Over the past fifty years, Florida taxpayers have paid hundreds of millions of dollars for dredge and fill projects alone. While these efforts and enormous expenditures have not stopped the erosion of most of Florida's beaches, they have created a sense of complacency that has allowed increased development in Florida's most hazardous coastal zone. Most of the methods used to date have proven to be short-term in duration and therefore a questionable use of taxpayer dollars. State and County Officials must consider long-term solutions, with the input of the scientific community, other experts, non-governmental organizations, coastal user groups, and the community at large.

Recently, in Palm Beach County, we experienced the effects of Tropical Storm Andrea, a storm uniquely destructive because of its uncharacteristically long-period ground swell and long fetch, propagating a storm surge and waves that were much more powerful than we normally experience here, even in hurricanes. As a result, Palm Beach County beaches experienced significant sand movement, wave run-up, and even dune over-wash. Structural damage included damage to lifeguard facilities, restrooms and beach stairways.

Following Tropical Storm *Andrea*, on May 14, 2007, a State of Emergency was issued by Florida DEP Secretary Michael W. Sole for three general areas in Palm Beach County: Jupiter, Singer Island, and the area from the Lake Worth Pier to Lantana. This declaration allows for expedited responses with relaxed environmental impact review procedures.

This Chapter Position Statement addresses the problems associated with protecting our natural sand beaches, the proposed "solutions" pertaining to the three areas under emergency order, and other coastal projects in Palm Beach County under consideration by local, state and federal agencies. This statement also emphasizes the need to include expected sea level rise in the planning process when determining the feasibility of coastal projects along Palm Beach County's oceanfront.

## **Jupiter**

### Situation:

An area of accelerated erosion exists along the beach south of the Jupiter Inlet. The Jupiter Inlet channel and jetties interrupt the normal migration of sand down the coast, starving the beaches to the south. The resulting localized build-up of sand in the Inlet is periodically moved via dredge by the Jupiter Inlet District. Additionally, southbound sand is diverted offshore by the inlet to Jupiter's large Ebb Tidal Shoal.

### The County's Proposed Emergency Response:

At Palm Beach County's Jupiter Beach Park, overwash damaged lifeguard structures and restrooms and entered parking areas. Managed relocation, through movement of structures and parking, has recently been considered. The County's short-term storm response will be to protect the lifeguard structures and restrooms through installation of sheet pile and construction of a dune area with high quality sand trucked in from inland sources. Dune restoration will also take place in a large area south of the park where erosion occurred in front of residential structures on the dune.

### Surfrider Foundation's Position regarding the County's Emergency Response:

Surfrider Foundation finds the County's short-term solution appropriate under the circumstances.

### The County's Proposed Long-Term Response:

Palm Beach County has advocated for the construction of a permanent sand transfer plant at the Jupiter Inlet to facilitate sand bypass in a manner more consistent with littoral drift. This is similar to the solution employed at the next two inlets to the south, Palm Beach and Boynton Inlets. The Jupiter Inlet District resisted due to cost/benefit concerns.

### Surfrider Foundation's Position regarding the County's Long Term Response:

Surfrider Foundation asserts that a new sand transfer plant at the Jupiter Inlet, coupled with active sand transfer from the Ebb Tidal Shoal, would benefit down-current beaches including Jupiter Beach Park. It should be noted that the amount of sand available to such a transfer plant has yet to be determined. While the amount of sand available in this Ebb Tidal Shoal is significant, the method of moving this high-quality sand to the beach needs to be determined.

In the area of the park impacted by dune overwash, it is Surfrider Foundation's position that managed relocation is inevitable, and should include relocating affected parking and structures to preserve public beach access.

### Timeframe:

The County's short-term plan for the Jupiter area is already in progress, and the County is expected to complete this work in the immediate future. In addition, a scheduled (and budgeted) dredge of the Inlet Sand Trap by the Jupiter Inlet District is approaching.

## **Singer Island**

### Situation:

The risks of erosion at Singer Island are greatly magnified by the location of existing buildings that were constructed too close to the ocean, as well as additional construction currently proposed for the barrier island. The normal dynamic barrier island movement has been inhibited by these structures, increasing the hazardous situation. Consequently, the potential for property loss has prompted demands for immediate action. The County has responded with an emergency dune restoration project. This dune restoration project area contains numerous active nesting sites of endangered and threatened sea turtles.

The County's Proposed Emergency Response:

The County has authorized dune restoration pending relocation of the nests.

Surfrider Foundation's Position regarding the County's Emergency Response:

Surfrider Foundation generally supports the County's dune restoration project in this particular instance, provided that native beach compatible sand is obtained from inland sources and the dunes are planted immediately with appropriate dune vegetation. However, it is Surfrider Foundation's position that the County must identify and relocate all nests of endangered and threatened sea turtles before public funds are used to restore private property. Great care must be taken to avoid violation of federal law, which protects sea turtle nesting sites.

County's Proposed Long-Term Response:

The County is in the process of completing permit requirements, including an Environmental Impact Statement, for the *Singer Island Erosion Control Project*. This proposed project includes the construction and placement of a series of protruding granite/limestone breakwater structures in the ocean in front of the most seriously threatened condominiums.

Surfrider Foundation's Position regarding the County's Long-Term Response:

The County's *Singer Island Erosion Control Project*, like any coastal armoring, must be studied carefully. The success and efficacy of these breakwater structures is questionable and largely unknown. The historical Ocean Reef Park beach access/surfing location must be recognized and not harmed. For these reasons, a full Environmental Impact Statement must be completed, as required, before any action is taken. This EIS process must include adequate opportunity for public input.

In addition, the Coastal Management section of the County's Comprehensive Land Use Plan needs to be evaluated to look at long-term policies and procedures for barrier island development. Under Florida law, Land Use Plans are required documents that provide guidance for long term growth. For this reason, expected sea level rise needs to be part of that document as a responsible guide for development.

Timeframe:

The dune restoration in the Singer Island area is scheduled to begin immediately.

An Environmental Impact Statement is currently scheduled as part of the permitting requirements for the *Singer Island Erosion Control Project*. It is anticipated the study could take 18 months. It is critical that the Environmental Impact Statement be thorough, and that it allows time for public input, since this type of project is unprecedented in Palm Beach County.

## **Palm Beach/Lake Worth/South Palm Beach/Lantana**

### Situation:

1) Dunes: As a result of Tropical Storm Andrea, this area's previous 2006 dune restoration project has been almost completely washed away.

2) Reach 8: The Town of Palm Beach proposes that the area known as "Reach 8" should undergo a dredge and fill project with the same poor quality material.

### The County's Emergency Response:

The County is now actively engaged in emergency restoration of the dune system, with improved beach compatible sand, which will be less likely to wash away.

### Surfrider Foundation's Position regarding the County's Emergency Response:

Surfrider Foundation supports the County's emergency dune restoration in this instance because, among other things, it utilizes compatible sand from inland sources rather than the poor dredged material used in previous projects. Immediate planting of appropriate vegetation will also significantly stabilize this dune.

### The County's Long-Term Response:

1) South Palm Beach is considering the use of breakwater structures. This requires approval from Palm Beach County and will also need state and federal approval.

2) The Town of Palm Beach is currently seeking a permit from the U. S. Army Corps of Engineers (ACOE) for the Reach 8 Dredge and Fill Project (from approximately the Par 3 Golf Course in Palm Beach, to about one third mile south of the Lake Worth Pier).

### Surfrider Foundation's Position regarding the County's Long Term Responses

1) South Palm Beach Breakwater Structures: Surfrider Foundation believes the success and efficacy of these experimental breakwater structures for erosion control is questionable and largely unknown. For this reason, a full EIS must be completed before any action is taken on this project.

2) Town of Palm Beach's Reach 8 Project: Surfrider Foundation asserts that the proposed Reach 8 Project carries serious negative impacts, including, but not limited to:

- Town's Beach Management Plan is out of date and not in compliance with DCA requirements;
- Degradation of near-shore and off-shore reefs by increasing turbidity and sedimentation. This turbidity also increases the potential for shark attacks;

- Harm and destruction to wildlife, wildlife habitats and feeding areas. This includes harm to sea turtle nesting areas. Hundreds of species of animals that live and feed on both near-shore and off-shore reefs will be adversely impacted;
- Harm to recreational areas, including historical surfing areas, as well as fishing and diving areas;
- Harm to other recreational areas, including the Lake Worth Pier reconstruction project. The Reach 8 dredge and fill project would virtually “dry dock” the reconstructed pier, severely limiting any use for fishing (see more under other coastal projects);
- Harm to the golden beaches of Palm Beach County, the City of Lake Worth, the Town of Palm Beach, the Town of South Palm Beach and the Town of Lantana, by covering the area with silty, fine or coarse, gray fill, deterring tourists and beachgoers alike. This poor material can be expected to adversely impact the down-drift beaches of South Palm Beach, Lantana and Manalapan, including the valuable diving and fishing areas in near-shore waters there;
- Waste of millions of taxpayer dollars by utilization of poor quality fill, which easily washes away. Distant Tropical Storm Andrea recently illustrated how the use of poor quality dredged material is ill-advised. Two examples are:
  - 1- The recently washed-away 2006 dredge and fill project by the Town of Palm Beach at Reach 7 (Phipps Park to the Par Three Golf Course).
  - 2- The recently washed away 2006 dune restoration project by the Town (within Reach 8), which was constructed of 6,000 truckloads of the same poor quality dredged material and caused increased unmitigated impacts to nearshore hardbottom in Reach 8.

Tourism and coastal recreation is vital to the long-term economic success of Palm Beach County. For this reason we believe projects such as Reach 7 and Reach 8 have, and will, adversely affect Palm Beach County’s Natural Near-Shore Coastal Resources, yielding significant negative economic impacts.

Surfrider Foundation would posit that a false sense of security is being given to coastal residents who allow poor material to “protect” their property.

Timeframe:

The County’s dune restoration project is in process.

South Palm Beach’s proposed breakwater response has not been formally submitted for consideration.

The Town of Palm Beach’s Reach 8 Project is currently before the ACOE. At this juncture, the ACOE has not approved this project because of concerns about nearshore environmental habitat and concerns regarding the quality of fill material proposed for the project.

## **Other Coastal Projects: Construction at Lake Worth Beach**

Situation: The City of Lake Worth is planning major construction at its public beach by a private developer. In a separate project, work is starting to replace the public pier, which had been largely destroyed by Hurricane Wilma and further damaged by Tropical Storm Andrea.

### Surfrider Foundation's Position:

The City of Lake Worth and its developer should consider the long term impacts of sea level rise and establish appropriate setbacks to ensure that the new buildings are not victims of erosion during the lifetime of the structures. Surfrider Foundation asserts that any significant new buildings at the Lake Worth public beach should be located west of the dune, away from the ocean, with the majority of parking east of the buildings as a buffer. In terms of the construction of the pier itself, it appears the City of Lake Worth did consider some of these impacts, and decided to further elevate much of the pier in an attempt to avoid future damage by the ocean.

### Time Frame

The City of Lake Worth's Pier Construction has been funded, and work is about to begin. Permitting for major new construction at the Lake Worth Public Beach is in process.

## **FINAL CONSIDERATIONS**

The Palm Beach County Chapter of the Surfrider Foundation is dedicated to protecting Palm Beach County's ocean, waves, and beaches. It is vital that government agencies, policymakers, non-governmental organizations, user-groups and the community work together toward this common goal. By law, all of Florida's beaches are set aside for the recreational use of the public. Coastal projects that do not include adequate public access must not be funded with local, state or federal tax dollars. Taxpayer subsidies to protect and insure private oceanfront property cannot continue. It is imperative that we achieve the best possible balance among the concerns for beach protection, wildlife protection, property rights of upland land owners, public safety and recreational uses. All these interests include significant economic considerations, and all may pay a price, monetary or otherwise.

*The Surfrider Foundation is a non-profit environmental organization dedicated to the protection and enjoyment of the world's oceans, waves and beaches, for all people, through conservation, activism, research and education.*

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