SCOPING MEETING FOR ALTERNATIVE SAND SOURCES
Dade County, Florida Beach Erosion Control and Hurricane Protection Project

AGENDA

- 6:30 – 7:00: Presentation
- 7:00 – 7:30: Poster session and Q/A
- 7:30 – 8:00: Public comment period
SCOPING MEETING FOR
ALTERNATIVE SAND SOURCES

Dade County, Florida
Beach Erosion Control
and Hurricane Protection Project

Presented by:
Matt Schrader, P.E. and Terri Jordan-Sellers
U.S. Army Corps of Engineers
Jacksonville District
PURPOSE OF PRESENTATION

- Sediment Assessment and Needs Determination (SAND) Study overview
- Dade County Beach Erosion Control and Hurricane Protection (BEC & HP) Project sand need
  - History of alternative sand source investigations
- Process for selecting sand
  - National Environmental Policy Act (NEPA)
SEDIMENT ASSESSMENT AND NEEDS DETERMINATION (SAND) STUDY

- Study initiated in December 2011; completed in June 2013
- Extensive coordination between Florida Department of Environmental Protection (FDEP), the five southeast Florida counties, the Corps, and the Bureau of Ocean Energy Management (BOEM)
- Each county determined their own 50-year sand need for federal and non-federal projects; needs assessments were peer reviewed and contingencies applied
- Geological investigations identified sand sources meeting FDEP criteria; contingencies were applied to reach a volume available
- FDEP funded and independent review of the volume reports and coordinated final volumes with the Corps
SAND STUDY RESULTS

- The report is available at:

<table>
<thead>
<tr>
<th>County</th>
<th>Sand Needs (cy)</th>
<th>Sand Availability (cy)</th>
<th>Excess (cy)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50-Year Volume Need</td>
<td>50-Year Volume Need + 55% Contingency</td>
<td>2012 Total Volume Available Per County</td>
</tr>
<tr>
<td>St. Lucie</td>
<td>18,017,487</td>
<td>27,927,105</td>
<td>175,847,874</td>
</tr>
<tr>
<td>Martin</td>
<td>22,111,000</td>
<td>34,272,050</td>
<td>107,593,227</td>
</tr>
<tr>
<td>Palm Beach</td>
<td>45,577,000</td>
<td>70,644,350</td>
<td>191,951,814</td>
</tr>
<tr>
<td>Broward</td>
<td>11,650,000</td>
<td>18,057,500</td>
<td>-</td>
</tr>
<tr>
<td>Miami-Dade</td>
<td>14,968,300</td>
<td>23,200,865</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>112,323,787</td>
<td>174,101,870</td>
<td>475,392,915</td>
</tr>
</tbody>
</table>

100,000,000
Southeast region of Florida has excess sand of 100,000,000 cubic yards beyond its 50-year need.
Sand sources offshore of Miami-Dade County are nearly depleted.

A small volume of “renewable” sand sources remain viable in the vicinity of Miami-Dade County.

Approximately 7,250,000 cubic yards of sand will be needed for the remaining period of federal participation:

- 12 years remain for the original project (Baker’s Haulover to Government Cut and Haulover Beach Park)
- 25 years remain for the Sunny Isles Segment
SAND SEARCH HISTORY

1986
WRDA ’86
Section 935
Limiting
acquisition
of Non-
Domestic
Sand Sources

1987
Dade Design
Memorandum -
Investigates
Aragonite

1986 - 98
USACE
Workshops Seek
Industry Input; Proposed Test
Beach Using Bahamian Sand

1999
Energy &
Appropriations
Bill (H8842) Limits
acquisition of
Foreign Sources of Sand

2000
Deep Water
Explorations of
Miami-Dade
County

2001
Dade
Evaluation
Report outlines all
potential sources

2002
Solicitation
for Test Beach
Using Upland
Sources (cancelled -
funding constraints)

2005 - 2006
Borrow Areas
Offshore of
Other
Counties in the
Region
Researched for
Use in
Miami-Dade
County

2007
Draft
Letter Report
Recommending
Non-Domestic Sand
for Miami-Dade
County beaches; ASA*
Recommends
3-Tiered
Approach

2009
Southeast
Atlantic RSM
Identifies Small
Domestic
Sand Surplus -
Recommends
Non-Domestic
Sand Source

2011
Updated Cost
Estimates
Indicate
St. Lucie & Palm
Beach Counties
to be More
Economical
Sources of Sand
Than Bahamas

2012
Contract E:
Uses Last
300,000 cy
Sand Offshore
and at
Lummus Park

2013
Contract G:
300,000 cy
Sand From
Baker’s
Haulover
Ebb
Shoal

*Assistant Secretary of the Army
ALTERNATIVE SAND SOURCES

Alternative sand sources may include, but are not limited to:

- Material remaining in previous Miami-Dade County borrow areas
- Upland sand sources
- Deepwater sites offshore of Miami-Dade County
- Borrow areas offshore of Palm Beach County
- Borrow areas offshore of Martin County
- Borrow areas offshore of St. Lucie County
- Borrow areas offshore of Broward County
- Flood and ebb shoal at Bakers Haulover Inlet
- Sand relocation from the accreting South Beach area (Lummus Park)
- Carbonate materials (aragonite) from foreign sources
FEDERAL LAWS REGARDING NON-DOMESTIC SAND SOURCES

Section 935 of WRDA ‘86: “Notwithstanding any other provision of law, in any case in which the use of fill material for beach erosion and beach nourishment is authorized as a purpose of an authorized water resource project, the Secretary is authorized to acquire by purchase, exchange, or otherwise from non-domestic sources and utilize such material for such purposes if such materials are not available from domestic sources for environmental or economic reasons.”

Conferee Report on the FY 99 Energy and Water Appropriations Bill (H8842): “The conferees direct that none of the funds provided for the Dade County, Florida project be used for acquisition of foreign source materials for the project unless the Secretary of the Army provides written certification to the Committees on Appropriations that domestic sources of material are not available.”
The National Environmental Policy Act (NEPA) requires a federal agency to disclose its actions and evaluate the effects of those actions on the environment.
NEPA

- Applies to all Federal Actions
- Does not manage or protect one or more specific resources (unlike Endangered Species Act, Clean Water Act, Clean Air Act, etc.)
- Federal agencies CONSIDER and document the environmental impacts of their proposed actions as part of an agency’s OVERALL planning and decision-making
- Action agencies cooperate with federal, state and local governments, and other concerned public and private organizations and citizens during planning
Federal agencies (Corps) are required to determine the effect of their actions on the human environment

- Social, economic, natural, cultural and historical resources

Scoping is where the agency asks for initial input from the public (citizens, agencies, government, non-profit organizations, etc.) about information pertaining to the project area, resources, etc.
WHAT HAPPENS AFTER SCOPING?

- Iterative Screening of Alternatives
- Resource studies
  - Natural resources (fisheries, benthic communities)
  - Archeology
  - Geology
- Consultation under Federal laws: Endangered Species Act (ESA), Essential Fish Habitat (EFH), National Historic Preservation Act (SHPO), Marine Mammal Protection Act (MMPA), Coastal Zone Management Act (CZMA)
- Corps prepare draft document (referred to as NEPA document)
- Draft released to the “public” for comment
### NEPA SCOPING
### SCREENING CRITERIA

<table>
<thead>
<tr>
<th>Screening criteria may evolve as public input is received</th>
</tr>
</thead>
</table>

- Begin with every borrow area known to exist
- Use screening criteria to narrow the list
- Examples of screening criteria:
  - Grain size/color
  - Environmental resource impacts
  - Cost
  - Proximity of source to project area
  - Permitted sources for other counties
  - Other (i.e.; conflicts with fishing grounds, cultural resource conflicts, etc.)
- Application of screening criteria leads to potential options; there may be more than one option
The NEPA process requires the acknowledgement of constraints during alternative evaluation.

The Dade BEC&HP NEPA process will consider the following known information as constraints:

- Borrow areas in state waters, in close proximity to existing federal and non-federal projects
- Borrow areas already permitted for use, or with significant investment
- Non-domestic sand sources
- Borrow areas with sand that is incompatible for use on the Dade BEC&HP Project
- Etc.
SUMMARY

- Consideration of screening criteria will lead to the selection of one, or multiple, sand sources.

- The NEPA document will disclose how all alternatives were considered, and the reasons for the source selection(s).

- Use of a sand source, other than source(s) selected during this process, would require a new NEPA analysis.
### ANTICIPATED PROJECT SCHEDULE

<table>
<thead>
<tr>
<th>MILESTONE</th>
<th>INITIATE</th>
<th>COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEPA SCOPING LETTER SENT</td>
<td></td>
<td>July 22, 2013</td>
</tr>
<tr>
<td>NEPA SCOPING</td>
<td>July 22, 2013</td>
<td>September 17, 2013</td>
</tr>
<tr>
<td>NEPA DOCUMENT PREPARATION</td>
<td>September 17, 2013</td>
<td>January 15, 2014</td>
</tr>
<tr>
<td>INTERNAL AGENCY REVIEW</td>
<td>January 15, 2014</td>
<td>June 15, 2014</td>
</tr>
<tr>
<td>PUBLIC REVIEW OF DRAFT NEPA DOCUMENT</td>
<td>June 15, 2014</td>
<td>August 14, 2014</td>
</tr>
<tr>
<td>INCORPORATION OF PUBLIC COMMENTS</td>
<td>August 14, 2014</td>
<td>September 11, 2014</td>
</tr>
<tr>
<td>NEPA DECISION DOCUMENT SIGNED</td>
<td></td>
<td>October 5, 2014</td>
</tr>
<tr>
<td>WATER QUALITY CERTIFICATE PERMIT</td>
<td>Fall 2014</td>
<td>Summer 2015</td>
</tr>
<tr>
<td>ADVERTISE AND AWARD CONTRACT</td>
<td>Summer 2015</td>
<td>Fall 2015</td>
</tr>
<tr>
<td>CONSTRUCTION</td>
<td></td>
<td>Winter 2015</td>
</tr>
</tbody>
</table>
Comments are needed by September 17, 2013

E-mail: terri.jordan-sellers@usace.army.mil

Mail:
701 San Marco Blvd
Jacksonville, Florida 32207
Attention: Terri Jordan-Sellers

For Additional Information:
www.saj.usace.army.mil/missions/civilworks/shoreprotection