

## Meeting Summary

Bureau of Ocean Energy Management (BOEM), Marine Minerals Program

### Florida Sand Management Working Group

*Tuesday, February 2, 2016*

*1:00 pm – 5:00 pm*

*Jacksonville, Florida*

#### I. Introduction

The Bureau of Ocean Energy Management (BOEM) convened the Florida Sand Management Working Group (SMWG) meeting on February 2, 2016 at the Omni Hotel in Jacksonville, Florida. As part of BOEM's collaborative engagement, this meeting was also webcast to support remote participation. The hybrid meeting took place the day before the Florida Shore and Beach Preservation Association's 2016 National Conference on Beach Preservation Technology. Twenty seven participants attended the meeting in person, and 12 participated via webinar. Participants included representatives from federal, state, and local agencies, academic and research institutions, non-governmental organizations.

The meeting purpose and objectives were to:

- Provide updates on BOEM Marine Mineral Program operations and current leases
- Solicit input on future anticipated sand needs
- Provide updates on efforts to evaluate sediment resources in federal water
- Apprise stakeholders on where data on these resources are organized, maintained, and available
- Identify and assess SW Florida and other statewide needs and challenges

The webinar was recorded and is available to the public [here](#). The meeting agenda is available as Appendix B, and the presentations from the meeting are available on the [SMWG project website](#).

This meeting summary document summarizes key outcomes and next steps from the meeting. It focuses on group discussions and SMWG input received rather than the formal presentations made. It is not intended to be a detailed transcript. The meeting was facilitated by Kearns & West (K&W).

#### II. Discussion Highlights

##### A. Welcome (Jeffrey Reidenauer, BOEM)

Dr. Jeffrey Reidenauer, Chief of BOEM's Marine Minerals Branch, opened the meeting by describing MMP's roles and responsibilities, which include assessing federal resources, conducting environmental reviews for federal action, and conducting environmental studies through funding received via BOEM's Environmental Studies Program. Dr. Reidenauer also provided a brief history of MMP's SMWG efforts in

Florida and highlighted the importance of SMWGs in helping to coordinate federal, state, and local partners.

## **B. MMP Overview and Projects**

### *1. Lease updates*

Dr. Paul Knorr, BOEM, discussed the leasing process and the complementary roles of BOEM and the U.S. Army Corps of Engineers (USACE) in approving a lease (BOEM's authority for this work falls under the Outer Continental Shelf Lands Act (OCSLA)). The key mechanism BOEM uses to convey sand and gravel are negotiated non-competitive agreements, of which there are three types:

- 2-party memorandum of agreement (MOA)
- 3-party MOA
- 2-party lease

Dr. Knorr noted in particular that completion of the necessary environmental consultations takes a significant amount of time and is not controlled by BOEM. Specifically, it often takes a long time for a locality to provide the environmental information and documentation for the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), Essential Fish Habitat (EFH), and other requirements. If applicants want to lease sand, it is advised that they start the process early.

There are three active lease sales in Florida, at the following locations:

- Patrick Air Force Base
- Collier County
- Longboat Key

Dr. Knorr also provided an overview of pending lease requests in the following six counties: Duval, Miami/Dade, Brevard, Flagler, St Johns and St Lucie. Dr. Knorr noted that the Miami-Dade request is about three years out and has been unusual and controversial because of its distance from the borrow area. The amount of sand needed for this project (5.2 million cubic yards) will not all be coming from the outer continental shelf (OCS).

### *2. Briefing on Jacksonville District USACE projects*

Jason Engle, USACE, offered a brief overview of USACE projects in Jacksonville and explained that the mission for BOEM and USACE is to manage competing sand needs in a non-competing way.

Mr. Engle began by discussing the Duval County project. He explained that during recent exploration, a sand ridge was found within the proposed expansion footprint of the Jacksonville Harbor Offshore Dredged Material Disposal Site (ODMDS) which included good, beach-quality material. By removing sand at this expanded site, USACE actually improved the site's capacity

for future disposal because there is a limit in elevation to which it can be filled before it interferes with shipping.

Mr. Engle also touched briefly on Regional Sediment Management (RSM) and Storm Response, and the Corps' RSM Regional Center of Expertise (RCX). Particularly, he highlighted that the total estimated value to Flood Risk Management projects (i.e., the increased value to the nation and benefit to the beach or near shore) is quantified at \$27,406,012. Relatedly, Mr. Engle noted that RSM extends the life of these non-renewable resources and that the primary goal of the RCX is to quantify the true costs of sediment management alternatives (e.g., in actuality, disposal cost is not free, as may be thought by some decision makers).

Mr. Engle also presented the St. Johns Feasibility study, which explored a project that was justified using closer inlet shoals for borrow materials because OCS borrow resources were found to be too costly for project justifications.

Mr. Engle concluded by discussing fine content in sand. Of note, more than 90% of beach projects lost more than 50% of fine content in sand. This means there may be OCS resources available that have not been previously considered as an option, which can satisfy beach quality sand needs.

### 3. *Environmental Studies update*

Doug Piatkowski, BOEM, reviewed the background and purpose of MMP's Science Strategy, which involves developing a roadmap for BOEM to engage with stakeholders (BOEM seeks partnerships with federal, state, and community groups). Stakeholder engagement helps BOEM identify worthy future research efforts.

BOEM receives stakeholder input on recommended research efforts and studies via targeted email solicitations, interactions at conferences, and other methods. This input helps identify data gaps. BOEM then tries to prioritize where these ideas fit in with current projects and incorporates new recommendations into its Studies Development Plan (SDP). Through the SDP, BOEM develops its National Studies List. To date, BOEM has invested over \$40 million in Environmental Studies. New studies are important because potential mitigation and minimization measures can be derived from research findings. Currently, BOEM is working FY2016-18 studies through the procurement process. Ultimately, studies are critical for providing the information needed to predict, assess, and manage impacts from offshore marine mineral exploration, development, and production activities on human, marine, and coastal environments.

Mr. Piatkowski then highlighted new studies coming up in the FY2016-18 SDP as well as proposed studies for FY2017-19, detailing their goals and contributions to the MMP program.

Mr. Piatkowski directed meeting participants to BOEM's online compilation of literature and studies, which are sortable by state and/or relevance: [www.boem.gov/Marine-Mineral-Studies/](http://www.boem.gov/Marine-Mineral-Studies/)

Following the presentation, meeting participants were provided with an opportunity to ask clarifying questions. Key discussion takeaways included:

- **Length of lease agreements for borrow areas:** the length of leases depends on the borrow area. For small borrow areas, one beach nourishment project alone may reduce its capacity. Yet, for larger borrow areas (e.g., Ship Shoal in the Gulf of Mexico), there are essentially unlimited borrows. However, the typical lease term has been two years, although BOEM has recently had discussions about changing it to three years.

### C. Resource Evaluation

Leighann Brandt, BOEM, introduced BOEM's resource evaluation efforts and noted that successful resource management requires: 1) inventory of the resource location and extent, and 2) evaluation of resource characteristics. Ms. Brandt then provided a high level overview of the Atlantic Sand Assessment Project, noting that BOEM worked with 13 states through cooperative agreements on this initiative and that the reconnaissance level field work from Maine to Florida has been completed.

#### 1. Florida co-op work update

Dan Phelps, Florida Geological Survey, presented on existing geophysical data on the OCS along Florida's central east coast. Mr. Phelps also touched on previous work and data that was collected off of Florida's northeast coast, providing an example of work completed north of Cape Canaveral, and detailing a sediment study that assessed the thickness of shoals off of St. Lucie County.

Additionally, Mr. Phelps compared two geophysical data sources: Boomer data and Chirp data. Boomer data were collected from 1996-2005 and, typically, 150 feet of the seafloor can be seen on these data. Chirp data, however, do not penetrate as deeply as the Boomer source. Mr. Phelps also commented that vibrocore data, although there appears to be a significant amount available, does not get to top of rock. After detailing additional studies, Mr. Phelps ended his presentation by pointing out a fault line recently discovered south of Cape Canaveral.

#### 2. Atlantic Sand Assessment Project update

Beau Suthard, CB&I, provided a more in-depth review of ASAP, primarily on the results of the 2015 Reconnaissance Phase. Out of \$13.6 million allocated to BOEM from Hurricane Sandy funding, \$5 million was directed to ASAP, 40% of which had to be used in New Jersey and New York. Overall, CB&I collected 4,338 km of geophysical data on the OCS. After completing the reconnaissance phase and presenting these data to BOEM, CB&I will turn to the design phase.

Mr. Suthard then focused on six areas in Florida where the project collected data. He provided results on the percentage of fines in each sample, color, and analysis on the sample area's potential for beach compatible sand.

Following the presentation, meeting participants had the opportunity to ask clarifying questions. Key discussion takeaways included:

- **Needs for Florida and challenges for BOEM’s Environmental Studies Program:** ASAP is the first time BOEM has spent funds on a large reconnaissance scale. As states begin to exhaust resources in their own waters, they will start looking to federal waters to address their sand needs. Mr. Suthard suggested that approaches in other regions (e.g., the Gulf of Mexico) could serve as a model which can be applied to other federal sand resource initiatives. Florida has a robust program and CB&I was able to find and use a lot of sand; however, some of these areas are now getting thin after prolonged heavy use. Of note, other states have a lot of sand but do not have significant historic data on the extent of the resource.
- **Data gaps:** older data can present problems. Data gaps reveal where to look further to tighten up the map identifying the location of resources. The idea is to look at various potential resources, to investigate, and utilize what is possible. The needs are there, and BOEM will have to address them.
- **Data availability/public access:** BOEM plans to archive the geological and geotechnical data with the NOAA National Climatic Data Center, called NCEI. The cores will likely be available in Spring 2016 and can be viewed at that time.

### 3. *Next steps*

Ms. Brandt concluded the Resource Evaluation portion of the meeting by outlining next steps for the program, which include a second round of state cooperative agreements to start later in 2016. Key next steps and the overarching goal of resource evaluation is to analyze the collected ASAP data. Ms. Brandt also introduced BOEM’s potential plans for a Gulf Sand Assessment Project, which would include consideration of the entire Gulf coast of Florida. BOEM is looking at different funding sources for this and to coordinate with state partners.

## **D. Data Repositories/Data Registry**

### 1. *MMP/GIS*

Lora Turner, BOEM, provided summary of MMP’s Geospatial Information System (GIS) efforts and the status of its current data repository. BOEM’s geodatabase is still a prototype, and the data are still being developed. The database focuses on the Atlantic and Gulf OCS resources. Primarily, BOEM is seeking to incorporate data from all of their cooperative agreements and derived datasets from resource evaluation projects like the Atlantic Sand Assessment Project into a relational database system. Specifically, the geodatabase will include, digitally-derived data sets linked to source data documentation. Raw geophysical and geotechnical source data will be archived with [NOAA National Centers of Environmental Information](#). In addition to data collected and maintained by BOEM, the geodatabase will also leverage other agency datasets, including those from the U.S. Geological Survey (USGS), NOAA and USACE.

Ms. Turner noted that, ideally, the geodatabase will have multiple data layers in the Atlantic area so that BOEM can see where resources are before a project gets underway (currently, this is done on a project by project basis).

## 2. *ROSSI Update*

Dr. Jennifer Steele, Florida Department of Environmental Protection (FDEP), presented on Florida's Regional Offshore Sand Source Inventory (ROSSI) and encouraged meeting participants to explore this coastal sediment tool, noting that it is easy to navigate and user friendly (the tool can be accessed here: [www.rossi.urs-tally.com](http://www.rossi.urs-tally.com)). FDEP was granted a BOEM cooperative agreement award, which helped support the overhaul of the tool. This award also allowed FDEP to update and add to feature datasets and provided means for hosting the site for two years.

Dr. Steele then walked meeting participants through a demonstration of the website, highlighting features such as the user manual, direct data uploads, and the ROSSI map view that includes the following capabilities:

- Data layers
- Bookmarking a locality
- Identifying a borrow area
- Geologic description of specific borrow areas

Dr. Steele outlined a few additional features that FDEP is working to include in ROSSI. These include populating the Gulf and Panhandle counties with additional data; enabling users to link directly to and search by joint coastal permits (JCPs) numbers; and, a direct data upload interface.

## 3. *[Marine Cadastre](#)*

Christine Taylor, BOEM, provided an overview of the Marine Cadastre (<http://www.marinecadastre.gov/>), a layered map/dataset used for regional and ocean planning, which is a joint BOEM and NOAA initiative. She emphasized that the data are easily accessible and regularly updated. Data categories include marine habitats, physical and oceanographic features, and bathymetry, with data availability varying by region.

After introducing the tool, Ms. Taylor walked through a demonstration of the marine cadastre, outlining the various filters available to use, the ability to download data directly from a source, search options, and map sharing features. The tool is intended for a wide variety of audiences that would need marine spatial data, including federal agencies, universities, NGOs, and state ocean planners, among others.

## 4. *[GeoESPIS Environmental Studies Program Information System](#)*

Dr. Jonathan Blythe, BOEM, discussed the Environmental Studies Program Information System--a collaboration between BOEM and the NOAA Office of Coastal Management. Currently, there are approximately 3,500 reports available, documenting 40 years of research in the Environmental Studies Program. BOEM is working on enhancing this project, using the latest technology to disseminate this information from BOEM.

Specifically, Dr. Blythe noted the search feature of the GeoESPIS tool (<http://marinecadastre.gov/espis/#/>), which allows users to type in a geographic area and pull up results based on that area. Additionally, studies on third-party websites can also be pulled out as a product. BOEM has also enabled spatial searches within the product and there are 1,500 geofootprints that can be used. Once derived GIS data are selected, the MMP geodatabase will support data products under the study information.

## **E. Goals/Challenges**

Following the above presentations, meeting participants were invited to reflect on key goals and/or challenges facing Florida sand management. The discussion focused first on Southwest Florida and then expanded to include other parts of the state.

### *1. Regional sand source investigation needs for Southwest Florida*

Bob Brantly, FDEP, opened the discussion on regional sand source investigation needs for Southwest Florida. Mr. Brantly spoke of Florida's work in the southeastern part of the state that is part of a cooperative agreement with BOEM. This work has helped FDEP enhance their website and develop their database.

At present, FDEP has additional resources to support their work and would like to focus more on Southwest Florida. Out of the six counties in the southwestern part of the state, Mr. Brantly noted that three are using OCS sand, which, given the proximity of Southwestern Florida counties, is often offshore of a neighboring county. Therefore, the state is looking at opportunities to collect more data and improve local planning and coordination. FDEP wants to make a systematic decision about where to conduct an inventory of regional offshore sand and is looking to ROSSI and Southwest Florida sponsors to develop a project for this area. The state would likely do a minimum 15 year and maximum 50 year permit. FDEP would have to work with local sponsors to determine this duration.

Following Mr. Brantly's talk about Southwest Florida needs, participants were invited to engage in a discussion based on his presentation. Key discussion takeaways included:

- **Moving from state waters to federal waters:** Thus far, Florida has been focusing on its sand resources in state waters, but with three Southwestern Florida counties planning to explore federal sand resources, FDEP anticipates that it will need to move into federal waters as well. In this instance, FDEP may seek partnerships with BOEM.
- **Insight for Environmental Studies Program:** it would be helpful if FDEP, as it turns its focus to Southwestern Florida, provides BOEM with insight on specific challenges identified by counties. Doing so may help identify a science need that BOEM uses for its Environmental Studies program. Mr. Brantly noted that there will likely be more benthic resources in the Atlantic than the Gulf, especially farther offshore.
- **Support for going offshore:** one meeting participant concurred with Mr. Brantly's statement about the need to focus more on offshore sand resources, due to many counties using sand from the cost-effective inlet shoals for small projects. Furthermore,

many project sponsors have not developed long-term plans behind their 15 year permits, so it is expected that there will be increased future need to develop OCS resources to satisfy long-term plans.

- **Industry practices vs. standards:** Mr. Brantly posed a question to meeting participants about how far offshore studies should be conducted, noting that FDEP would defer to consultants for advice on this topic. Mr. Brantly also questioned the spacing for the geophysical lines. He noted that industry practices, more so than industry standards, exist, but that these are always subject to change. He expressed that FDEP will need to look back at the work that was conducted under the Atlantic Sand Assessment Project by BOEM. Specifically, Mr. Brantly suggested that FDEP could study the information that had been produced from this work, as well as practices used in other cooperative agreements to help inform the statements of work FDEP writes for its consultants for future work.
2. *Open Discussion – what are some key issues in your area that you want BOEM to be aware of?*
- BOEM encouraged stakeholders to help the Bureau determine where best to focus its energy. BOEM makes a point to engage stakeholders and wants to hear what their different needs are (e.g., studies, resource evaluation, etc.).
  - One meeting participant suggested that a potential BOEM partner could be Florida SeaGrant. If BOEM wanted to host forums, SeaGrant may be a mechanism by which BOEM could do that, and may possibly help fund some of these activities.

#### **F. Wrap Up & Next Steps**

Eric Poncelet, Kearns & West, concluded the meeting by summarizing key points shared. He also requested input on topics that participants would like to discuss at future SMWG meetings. Suggested topics included:

- Mitigation, minimization, and best management practices (BMPs), and hearing about what BOEM is learning from research and how they are translating that into BMPs. One participant also wanted to hear more about what is constrained on the OCS, especially with regard to sand ridges, and whether there would be a BMP dictating the maximum amount of dredging from a sand ridge and the frequency of that dredging.
- More detail on the outcome of studies as they're being done.
- Convene a panel discussion with the top dredge communities to let others know what technology and equipment they use.
- Participants agreed that it was helpful to hold the SMWG meeting in conjunction with a larger meeting (i.e., the FSBPA conference).

Dr. Reidenauer closed the meeting by thanking guests for their participation and encouraging stakeholders to let BOEM know if they have suggestions on an improved meeting format or structure (e.g., panel discussion). He noted that BOEM intends to have these SMWG meetings on an annual basis.



## Appendix A: Participants

### In-person

- Jeffrey Andrews, CB&I
- Lisa Armbruster, FSBPA
- Richard Bouchard, St. Lucie County
- Leighann Brandt, BOEM
- Bob Brantly, FDEP
- Katie Brutsche, USACE ERDC
- Alexandra Carvalho, CMar Consulting, LLC
- Jennifer Coor, USACE – SAJ
- Jason Engle, USACE, Jacksonville District
- Jason Gershowitz, Kearns & West (facilitation team)
- Terri Jordan-Sellers, USACE
- Paul Knorr, BOEM
- Jackie Larson, FSBPA
- Patricia French-Pacitti, Presidents’ Council of Hutchinson Island
- Kara Nave, Kearns & West (facilitation team)
- Dan Phelps, FDEP/FGS
- Doug Piatkowski, BOEM
- Michael Poff, Coastal Engineering Consultants
- Eric Poncelet, Kearns & West (facilitation team)
- Jeffrey Reidenauer, BOEM
- Jason Spinning, USACE
- Jennifer Steele, FDEP
- Beau Suthard, CB&I
- Margaret Thomas, BOEM
- Lora Turner, BOEM
- Robert Weber, Town of Palm Beach
- Leanne Welch, Palm Beach County ERM

### Webinar

- Bridgette Duplantis, BOEM
- Christine Taylor, BOEM
- Debby Tucker, FDEP
- Geoffrey Wikel, BOEM
- James Flocks, USGS
- Jeffrey Waldner, BOEM
- Jesse Baldwin, Ocean Surveys, Inc.

Summary – Florida Offshore Sand Management Working Group Meeting (February 2, 2016)

- Jonathan Blythe, BOEM
- Mike Miner, BOEM
- Pace Wilber, NOAA Fisheries Service
- Peter Zaykoski, SeaPlan
- Roxane Dow, FDEP

Appendix B

**AGENDA**  
**Florida Offshore Sand Management Working Group**  
**Bureau of Ocean Energy Management**  
**Marine Minerals Program**  
**1:00 - 5:00 p.m., Tuesday, February 2, 2016**  
**OMNI JACKSONVILLE HOTEL**  
**245 Water Street, Salon D**  
**Jacksonville, FL 32202**

**The objectives of this meeting are to:**

- Provide updates on BOEM Marine Mineral Program operations and current leases
- Solicit input on future anticipated sand needs
- Provide updates on efforts to evaluate sediment resources in federal water
- Apprise stakeholders on where data on these resources are organized, maintained, and available
- Identify and assess SW Florida and other statewide needs and challenges

TIME	AGENDA ITEM
12:30-1:00 p.m.	<b>Registration</b>
1:00-1:10 p.m.	<b>Welcome and Introductions</b> BOEM MMP personnel introductions and overview of responsibilities, program history – Jeffrey Reidenauer, Ph.D., BOEM
1:10-1:55 p.m.	<b>MMP Overview and Projects</b> <ul style="list-style-type: none"> <li>• Lease updates (active/ongoing lease updates, new lease requests, solicitation of input for future anticipated lease requests) – Paul Knorr, Ph.D., BOEM</li> <li>• Briefing on Jacksonville District USACE projects – Jason Engle, P.E., USACE</li> <li>• Environmental Studies update – Douglas Piatkowski, BOEM</li> </ul>
1:55-2:45 p.m.	<b>Resource Evaluation</b> <ul style="list-style-type: none"> <li>• Introduction – Leighann Brandt, P.G., BOEM</li> <li>• Florida co-op work update – Daniel C. Phelps, P.G., FGS</li> <li>• Atlantic Sand Assessment Project update – Beau Suthard, P.G., CB&amp;I</li> <li>• Next steps - where we go from here</li> </ul>
2:45-3:00 p.m.	<b>Break</b>
3:00-4:15 p.m.	<b>Data Repositories / Data Registry</b> <ul style="list-style-type: none"> <li>• MMP-GIS - Lora Turner, BOEM</li> <li>• ROSSI Update - Jennifer Steele, Ph.D., FDEP</li> <li>• Marine Cadastre - Christine Taylor, BOEM (via webinar)</li> <li>• GeoESPIS Environmental Studies Program Information System - Jonathan Blythe, Ph.D., BOEM (via webinar)</li> </ul>
4:15-4:50 p.m.	<b>Goals / Challenges</b> <ul style="list-style-type: none"> <li>• Open floor discussion on regional sand source investigation needs for Southwest Florida -Introduction: Robert Brantly, P.E., FDEP</li> <li>• Open floor discussion of statewide needs/challenges</li> </ul>
4:50-5:00 p.m.	<b>Wrap Up &amp; Next Steps</b>
5:00 p.m.	<b>Adjourn</b>