FDOU Project 26A Part3: Our Florida Reefs Community Meeting Decision Support Tool Demonstration and Public Response Summary



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Southeast Florida Coral Reef Initiative (SEFCRI) Fishing Diving and Other Uses (FDOU) Project 26A Part 3 Task 4



FDOU Project 26A Part3 Task 4 Report

Final Report

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Project 26A Part 3 Task 4

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I. Purpose

The purpose of FDOU Project 26 Part 3 was to assist the Florida Department of Environmental Protection Coral Reef Conservation Program (FDEP CRCP) staff members, who oversee the Southeast Florida Coral Reef Initiative (SEFCRI) teams and projects, by providing a professional assessment of various spatial analysis tools as well as technical support throughout SEFCRI's *Our Florida Reefs: Your Voice, Our Future* process. This report addresses Task 4: Meeting support for the Process Rollout Public Meeting. This portion of the project required the contractors to attend the 12 community meetings and interact with the public at the decision support tool information kiosk. Contracts provided information on the planned tool, answered questions, addressed concerns, and received feedback and suggestions.

II. Introduction to the Southeast Florida Coral Reef Initiative

In 2002, the U.S. Coral Reef Task Force (USCRTF) adopted the "Puerto Rico Resolution" which called for the development of Local Action Strategies (LAS) by each of its seven member U.S. states, territories and commonwealths. These LAS are locally-driven roadmaps for collaborative and cooperative action among federal, state, territory and non-governmental partners, which identify and implement priority actions needed to reduce key threats to valuable coral reef resources.

The goals and objectives of the LAS are linked to those found in the U.S. National Action Plan to Conserve Coral Reefs, adopted by the USCRTF in 2000. From the thirteen goals identified in the National Action Plan, the USCRTF prioritized six threat areas as the focus for immediate local action: over-fishing, land-based sources of pollution, recreational overuse and misuse, lack of public awareness, climate change, and coral bleaching and disease. Additional focus areas were identified in some jurisdictions; and for Florida, the impacts of the maritime industry and coastal construction were added.

With this guidance from the USCRTF, the FDEP and the Florida Fish and Wildlife Conservation Commission (FWC) coordinated the formation of a team of marine resource professionals (state, regional, and federal), scientists, non-governmental organization representatives, and other coral reef stakeholders. This team, named the Southeast Florida Coral Reef Initiative (SEFCRI) Team, gathered to develop local action strategies targeting coral ecosystems from Miami-Dade County through Broward, Palm Beach, and Martin counties. This region was chosen because its reefs are close to an intensely developed coastal region, with a large and diverse human population. Prior to the development of the SEFCRI, there was no coordinated management plan proposed for reefs located north of the Florida Keys and Biscayne National Park.

Led by the FDEP CRCP, the SEFCRI is targeting four focus areas that address threats to coral reef ecosystems. The four focus areas are: (1) Land-Based Sources of Pollution (LBSP), (2) Maritime Industry and Coastal Construction Impacts (MICCI), (3) Fishing, Diving, and Other Uses (FDOU), and (4) Awareness and Appreciation (AA). The SEFCRI Team is comprised of four focus teams, one for each focus area, whose members are working with the FDEP CRCP to develop and

implement LAS projects. The project described in the following overview was developed from the outcomes of a FDOU focus area project.

III. Project Background

Under the FDOU Focus Area, the SEFCRI Team identified projects that would engage local stakeholders in making management recommendations to the appropriate agencies for improved conservation of southeast Florida coral reefs. These projects are part of a 10-step process, called the "Our Florida Reefs" (OFR) process, which includes a series of 12 initial community meetings to educate and receive input from the public. Step 2 of the process was the formation of a Process. Planning Team (PPT), dedicated to planning the details of each additional step in the OFR process. The PPT identified the need for a mapping and spatial analysis computer program to allow for visual representation of data and information to all stakeholders, to allow for surveying of stakeholders, to provide working group members with a tool to conduct real-time analysis and planning, to model potential outcomes of different management options, and for other needs that may arise throughout the Our Florida Reefs process.

In Project 26A Part 3 Task 1, a comprehensive assessment of available decision support tools revealed that Ecotrust, a non-government organization based out of Oregon, was superior over all other decision support tool developers for the OFR process. SEFCRI and the PPT team chose to contract them based on these recommendations. Project 26A Part 3 Task 4 was to provide meeting support for the process rollout community meetings. Originally the tool was to be developed and published in time for the initial community meetings; however, several delays resulted in the contract not being executed in time. For this reason, no formal presentation was prepared to showcase the tool. Instead, a kiosk was designated to inform the community about the planned OFR decision support tool. Here the Mid-Atlantic Regional Council on the Ocean's (MARCO) decision support tool was presented as an example. This tool, known as the MARCO Portal Marine Planner, was developed by Ecotrust and had much of the same functionality envisioned for the OFR tool. Thus, it was displayed to give the community an idea of how the future OFR tool will look and function.

IV. Our Florida Reefs Community Meeting Decision Support Tool Kiosk

The key concepts presented to the public at the kiosk were the use of the tool: 1) as a data viewer to display various spatial data sets that have been collected for the SEFRCI region, 2) as a survey to collect data to be incorporated as a social data layer for the OFR process, and 3) by the working groups to conduct real-time analysis of available data in order to make informed management recommendations. Community members were told that the tool will focus on the SEFCRI region and this process, and that if recommendations are given that are outside the scope of the OFR process, those features may be added at a later date. Community members were shown how to add layers, change the order and transparency of the layers, turn on the layer legend, and click on areas of interest to bring up further information. They were also shown the interactive capabilities of the

tool including creating a PDF of the current map, emailing the map to friends, and book marking the map for future use.

To make members of the community feel more comfortable about providing data in the online survey, it was explained how the data would, and would not be used. It was clearly stated that all location information would be general in nature, that map and reef use data provided during the survey would not be linked to an individual, and that all data would be combined to generate one final map layer referred to as a "heat map". That is, through analysis of the data, areas of high or intense use would appear as red or magenta; and that areas of less use would be green or blue. This "heat map" can provide Community Working Group (CWG) members with a timely dataset of reef use by activity and intensity, allowing them to suggest reasonable and effective management strategies. The example that was given to demonstrate this point was that of mooring ball installations, e.g., if CWG members note an area of intense diving on a particular area of reef, it may be reasonable to install mooring balls there to prevent anchor damage. Because the data is pooled, and location information will not be to a specific discrete point, neither the CWG nor others in the Our Florida Reefs community will be able to see an individual's "secret spot". After all aspects of the tool were explained, save-the-date flyers were handed out at the kiosk to remind the public to check back on the website next month to access the tool and participate in the spatial survey.



Figure 1. Photograph of the decision support tool kiosk at one of the community meetings. Photo by Christopher Boykin, FDEP.

V. Decision Support Tool Kiosk Community Feedback

Every community member that visited the OFR decision support tool kiosk was enthusiastic about the process and about having access to the tool. Even those who said they were not fond of computers found the tool to be interesting, beneficial, and easy to use. Although people wanted to see a demonstration and learn how the tool functions, they were not as interested in navigating the tool themselves. This could be due to the fact that the region displayed was the Mid-Atlantic region rather than the SEFCRI region. Overall, those who visited the kiosk felt the decision support tool would be an asset to the OFR process and were excited for the tool to be made available to them in the near future. They were interested in taking the online survey and many asked various questions, provided suggestions, and voiced their concerns about the decision support tool. Below is a list of questions that were asked by attendees and the feedback that was given during the twelve community meetings held in June 2013.

Community Questions

• Question: Can the benthic habitat map on the smart phone application be used to report illegal anchoring on the reef?

Answer: No. It is possible, but often hard to enforce and prove illegal anchoring. The mapping data in the tool has a minimum mapping unit of 1 acre. There may be sand patches that are smaller than this present in the delineated reef area that the vessel owner is legally anchored in.

• Question: Will you be able to view the data layers from the decision support tool on a smart phone, similar to the benthic habitat layers available on the ESRI application?

Answer: No. Currently, the capability is not available, but it could be a possibility in the future. We have not evaluated using the website application on a mobile device.

• Question: Will the shapefiles for the data be accessible on the OFR website?

Answer: No. The tool is not currently being designed as a data portal. Although the shapefiles will not be accessible on the website, if they contact FDEP, the requested data may be provided.

• Question: Will water data such as storm water runoff be available?

Answer: Maybe. It is possible to add if a dataset currently exists. In the initial stages, data such as water runoff will not be incorporated; however, it will be considered depending on the working group needs.

• Question: Will you be able to enter exact coordinates to locate a specific point on the map? Will you be able to point to a location on the map and get the coordinates?

Answer: Yes. We will enable these functions for different purposes. During the surveys, exact coordinates can be entered to report use locations. The map will provide the ability to extract a coordinate at the cursor location.

• Question: Will the community be able to report data themselves? For example, will they be able to report if they see a goliath grouper aggregation, a net on the reef, or anything they believe is noteworthy?

Answer: Maybe. This capability is not planned for the initial stages of the tool but may be incorporated at a later date. The Southeast Florida Action Network (SEAFAN) reporting network currently addresses these concerns.

• Question: In association with reporting what they encountered, will members be able to post pictures that they took on the reef?

Answer: No. This function is not a focus for the initial stages of the tool.

• Question: Will real-time data (like a weather map) or seasonal data be available? For example, real-time oceanographic data (e.g. sea surface temperature, currents, wind) or migrations of goliath grouper aggregations or lemon sharks.

Answer: No. This is not a planned function for the tool. It is unclear whether real-time or seasonal data can be incorporated but it is something to be considered. One requirement is that the data are currently available. There are no plans to collect new data as part of this effort.

• Question: Will data from the Florida Keys be integrated into the tool?

Answer: No. In order to focus on the area being considered during the OFR process, only data for the SEFCRI region will be available on the decision support tool during the initial stages of the OFR process.

• Question: Will the public be able to see maps that the CWG is working on?

Answer: Maybe. All personal maps made when a user logs in are private, and can only be shared if the user chooses to share them. The public will ultimately see the results of the CWG efforts during Step 3 of OFR.

Community Suggestions

- Link the flyover 3-D benthic habitat video to the OFR website.
- Place a live camera on the reef linked to a website so those in the community that don't dive can experience the reef.
- Allow uploading of photos and videos.
- The Snook and Game foundation offered to provide recreational catch data that they had collected to be incorporated into the tool.
- Members of the South Florida Spearfishing Club, South Florida Free Divers Club, and the Hollywood Hills Swordfish Club requested to have a speaker attend a meeting to explain the OFR process and the decision support tool.
- Integrating SEAFAN reporting into the tool.
- Add Keys specific data, when appropriate, to reach a larger audience and increase management awareness.
- Add NOAA buoy data.
- Add tide data.

Community Concerns

- A concern was raised regarding the ability to obtain exact coordinates of resources, namely the fish populations, and how that might be exploited.
- There was concern regarding the quality of the data received, for instance, how there would be quality control of survey participants that might input false or inaccurate data.
- There was concern regarding the public being able to view maps the CWG may be working on, given that at times they will not be final products.