

Florida Department of Environmental Protection



What is Decision Support?

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Goal





What is the OFR Marine Planner?

Online map based tool for visualizing data, obtaining reef use information from the public, and supporting spatial decision making by the Community Working Groups.

Map
Viewer

The screenshot shows the OFR Marine Planner web application. The browser address bar displays the URL: `marineplanner.io/visualize/#x=-80.05&y=26.46&cz=14&logo=false&dls%5B%5D=true!`. The browser tabs include "MARCO Marine Planner" and "Our Florida Reefs". The application interface features a search bar, a "Sign In" button, and a vertical toolbar with icons for home, layers, location, link, print, and full screen. A "Map Viewer" sidebar is open, showing a list of data layers under the "ACTIVE" tab:

Layer Name	Visibility	Opacity	Remove
Boat Ramps	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Artificial Reefs - Florida	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of Fish Speci...	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SE FL Lidar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

At the bottom of the sidebar is a "Tutorial" button. The main map area shows an aerial view of a coastal area with overlaid data layers in various colors (red, yellow, green, blue). A scale bar at the bottom right indicates a distance of 6000 feet, with the current coordinates being Lat/Lng: (26.439, -80.077). A "feedback" button is located at the bottom center of the map area.



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Online map based tool for visualizing data, obtaining reef use information from the public, and supporting spatial decision making by the Community Working Groups.

Reef
Use
Survey

marineplanner.io/visualize/#x=-80.05&y=26.46&z=14&logo=false&dls%5B%5D=true! MARCO Marine Planner Our Florida Reefs

Sign In

What activity?

- Diving
- Fishing
- Boating

How many times?

DATA ACTIVE LEGEND

- Boat Ramps
- Artificial Reefs - Florida
- Number of Fish Speci...
- Habitat Data
- SE FL Lidar

Tutorial

Lat/Lng: (26.439, -80.077)

FEET

0 3000 6000

Report a map error



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Decision Support



What is Decision Support?

Methods and software to help incorporate best available information (data) into decision making.

Many different tools out there, but they all help:

- Organize the best available information about your system
- Visualize complex data in a meaningful way
- Facilitate stakeholder involvement in planning processes
- Help visualize spatial options based on spatial descriptors

The logo for the Florida Department of Environmental Protection is located in the top left corner. It features a stylized bird in flight over a palm tree, with the word "FLORIDA" below it and "DEPARTMENT OF ENVIRONMENTAL PROTECTION" in a curved banner above. The background is a light blue and green gradient.

What is Decision Support?

Help you visualize spatial options for your management recommendation that fit the input and values you provide.

Input:

- **(Spatial) Features** provided by the community working group members
- **Values of those (spatial) features** provided by the community work group members and refined by advisors when necessary
- **Consensus** of community working group members to determine the balance of the various features



Completely Imaginary Scenario

Your group is involved in a process to determine how to manage coastal and offshore waters. A threat that was identified was air pollution from coal plants, which causes acid rain that decreases the pH of the ocean.

After listening to months of presentations so you understand the situation, and collecting oodles of data....



Completely Imaginary Scenario



Group Recommendation: There should be more offshore lease block areas with wind turbines to reduce the need for coal power plants, and thereby reduce acid rain.

Group Recommendation: The Dept.of Energy should build more offshore (at least 10 mi) wind turbines to eliminate the need for 1 coal power plants and thereby reduce acid rain by 25%.

To the marine planner!



Completely Imaginary Scenario



Browser address bar: <http://portal.midatlanticocean.org/planner/#x=-73.85&y=39.66&z=8&logo=true&controls=true> MARCO Marine Planner

Find: halpin Previous Next Options

MARCO Help iwaters

DATA	DESIGNS	ACTIVE (10)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input type="radio"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input type="radio"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input type="radio"/> <input type="checkbox"/>
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/> <input type="checkbox"/>

Identify Features Helpful for your recommendation

Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, NAVTEC, Geonames.org, and others

Completely Imaginary Scenario



Group Recommendation: The Dept. of Energy should build more offshore (at least 10 mi) wind turbines to eliminate the need for 1 coal power plants and thereby reduce acid rain by 25%.

Features and Values:

- Distance to shore – >10miles
- Soft coral habitat- 0 acres
- Sufficient wind speeds- ?
- Near a landbased place to “plug-in”-?

Other Questions

Still don't know how many turbines that is?

Doesn't tell you how many turbines can be in each lease block?

What is the maximum distance offshore?

To the advisors!





Completely Imaginary Scenario

Assistance from Technical Advisors & North East Fisheries Council “NEFCRI”

Group Recommendation: The Dept. of Energy should build **20** offshore (at least 10 mi) wind turbines to eliminate the need for 1 coal power plants and thereby reduce acid rain by 25%.

Features and Values:

- Should be at least 10 miles offshore
- Should not be in an area of soft coral habitat- 0 habitat
- Should be in an area with sufficient wind speeds- **7-9.5 m/s**
- Should be within **45** miles to “plug-in” and not cost **\$\$\$\$\$**

How many turbines can be in each lease block? **2**

What is the maximum distance offshore??

Will it interrupt shark migration?

Will it interrupt shipping traffic?

To the decision support program!





What CAN it do?

- Help incorporate a wider array of ecosystem & human considerations into decision making.
- Help guide you through processes so you can move from data to decision making more quickly.
- Save you time and help you explore a wider range of alternatives by **automating analyses or processes** that occur repeatedly.
- **Transparency** - Help you document what inputs and parameters were used in analyses and reasons that decisions were made.
- Help build collaboration among project participants by creating a forum where stakeholder groups learn about and need to account for each others' goals and concerns.
- **Provide you options based you your criteria.**



What it CAN'T do?

What tool does NOT do:

- Come with all the data they need. We have the best available information, but it may not be sufficient to answer some questions.
- Eliminate the need to make tradeoffs between competing objectives. However, they may be able to help identify solutions that reduce negative impacts.
- **Prioritize** spatial components or the options. It will not tell you if an option is better. It can show you if it better fits some of your criteria.
- Replace the need for intensive human interaction and collaboration, or eliminate conflict.
- **Make decisions.** They can provide quantitative results and visualization of options to help make decisions.



Process Moving Forward

Spatial Descriptor Criteria DRAFT template.docx - Word

FILE HOME INSERT CoSign DESIGN PAGE LAYOUT REFERENCES MAILINGS REVIEW VIEW ADD-INS ACROBAT

Clipboard Font Paragraph Styles Editing

Find Replace Select

1 2 3 4 5 6 7 8 9

The Decision Support function of the OFR Marine Planner can help guide the placement of management recommendations within the SEFCRI area based on predetermined criteria. If your management option is spatial in nature, and you believe data in the OFR Marine Planner can be used to help guide the placement of your management recommendation, please fill out the following criteria to help us develop the tool to address your needs.

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1. **Spatial Component**. This is the spatial component of your management recommendation. How much? This will be a unit of measure, e.g. #/distance/amount. If you are unsure you can state high, medium, low and allow input from advisors on how much is high, medium, low for our region. Also you can make a statement like "far enough away to allow for _____", "has enough of x to accomplish y"; again allowing reviewers to help provide necessary input.
2. **Amount of that Spatial Component**. How much? This will be a unit of measure, e.g. #/distance/amount. If you are unsure you can state high, medium, low and allow input from advisors on how much is high, medium, low for our region. Also you can make a statement like "far enough away to allow for _____", "has enough of x to accomplish y"; again allowing reviewers to help provide necessary input.

What should the area contain or not contain? E.g., artificial reefs, natural reef, sandy bottom	How much? # / % / High, Medium, Low

What should the recommendation be near to or away from? E.g., inlets, shore, State Park etc.	How much? # / % / High, Medium, Low
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PAGE 1 OF 1 249 WORDS 100%



What if we use the tool, but the option isn't “feasible”?



The options from the tool will be more objective and have data supporting them...

The tool will let you know what you are starting with and you can scale your expectations...