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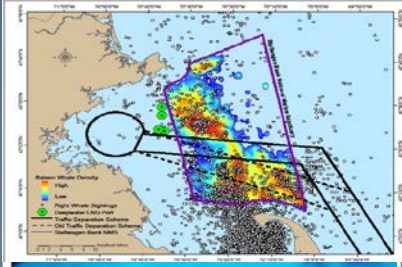
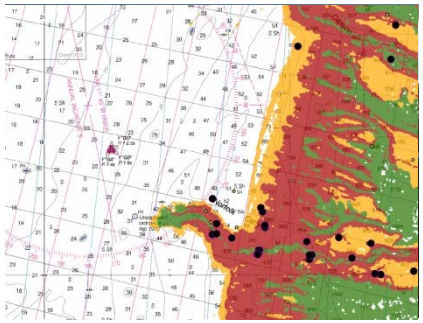
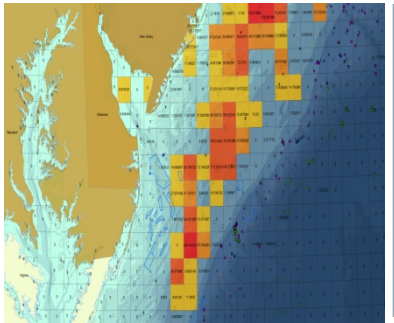


MARCO's Mapping and Planning Portal

Coastal Geotools 2011
Special Interest Meeting-CMSP Portals & Atlases
March 21, 2011
Jay Odell





Overview

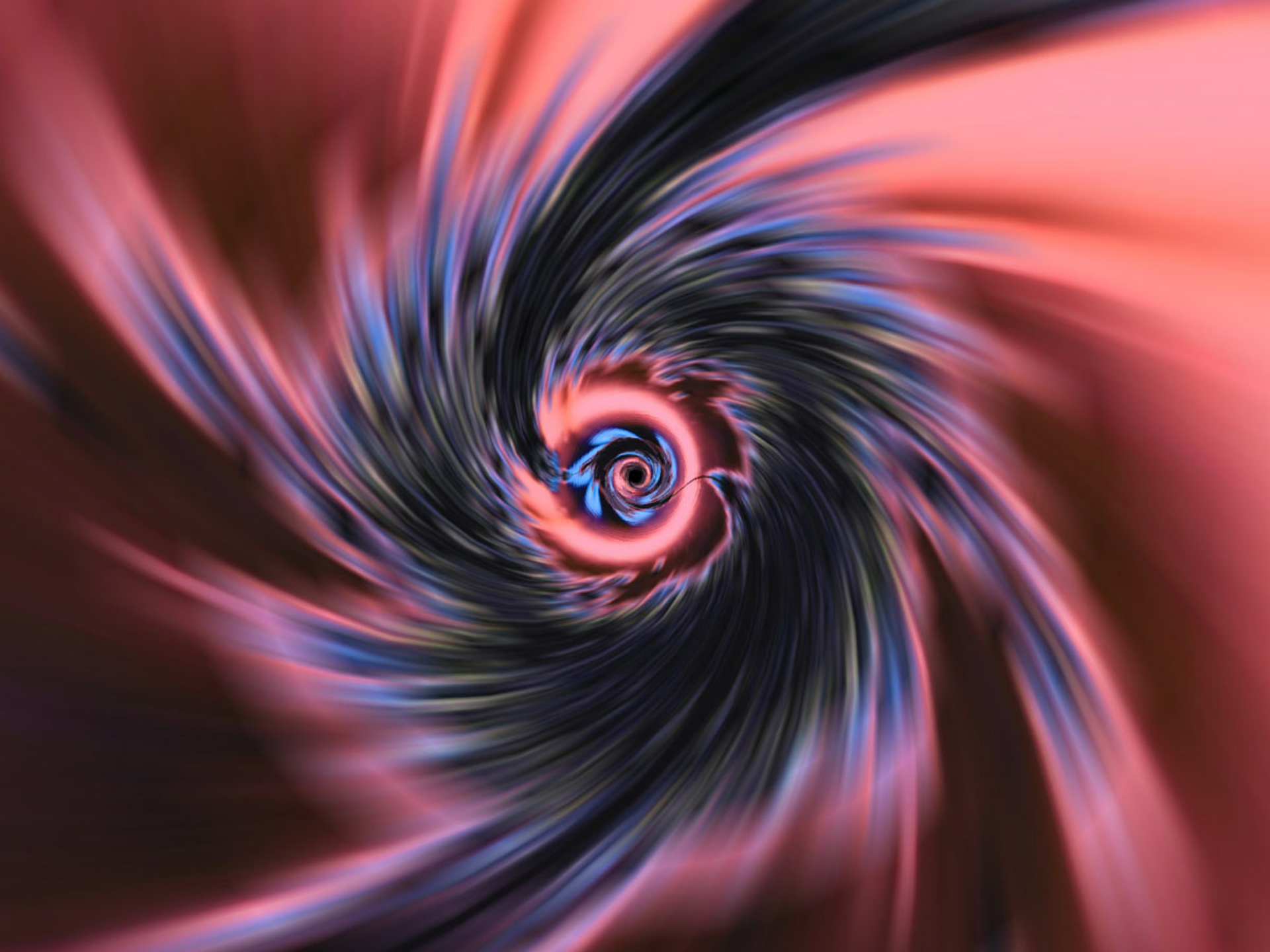
- What is a Portal?
- Description and demo of Mapping and Planning Portal data and features
- Data needs
- Next steps-what does the portal want to be when it grows up?
- Your ideas and questions

What is a portal?

Well, the dictionary says:

A portal is a magical or technological doorway that connects two distant locations, separated by time and/or space. It usually consists of two or more gateways, with an object entering one gateway leaving via the other instantaneously.

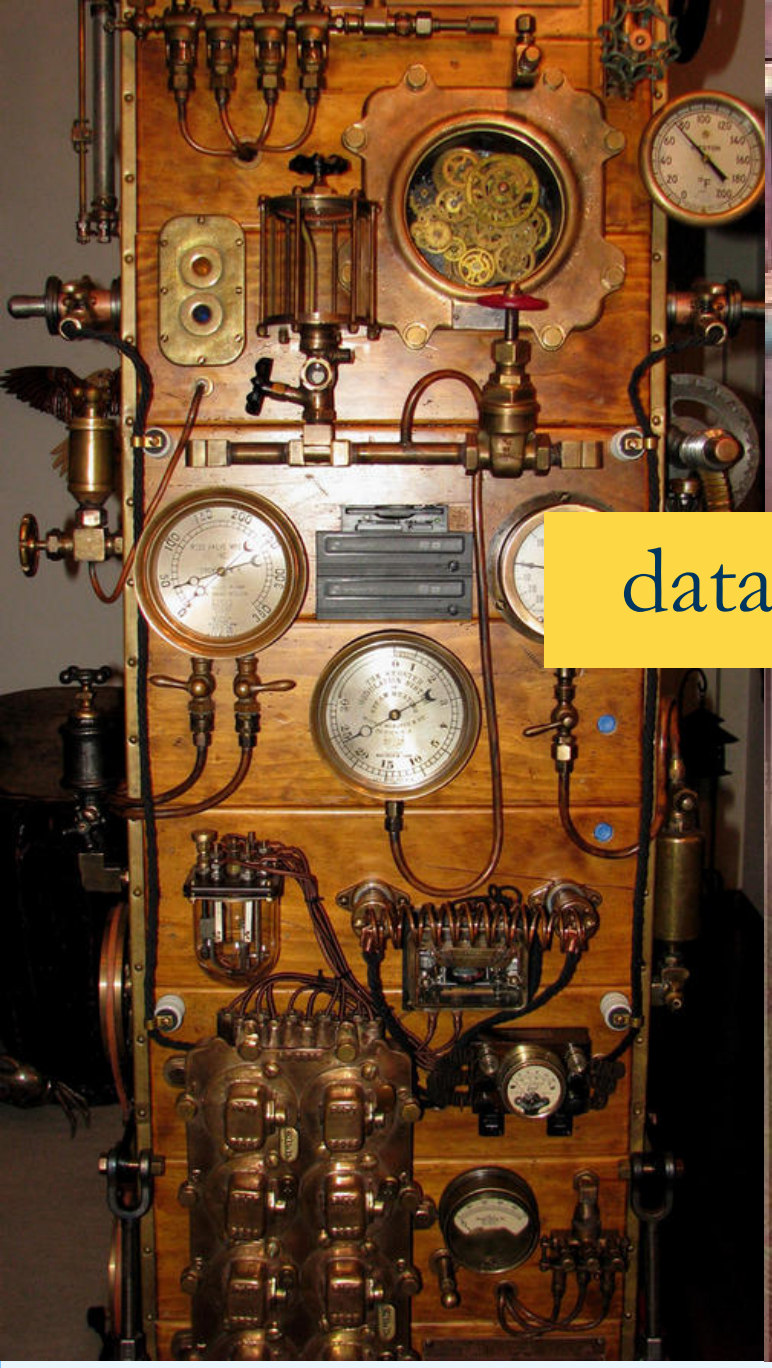
Portals will take you to magical lands, full of adventure…



Well, actually that sort of portal was well beyond the scope of work for this project...

Implementing the new National CMSP Framework means Regional Ocean Partnerships like MARCO will need portals that empower managers and stakeholders with shared access to marine spatial data and decision support tools.

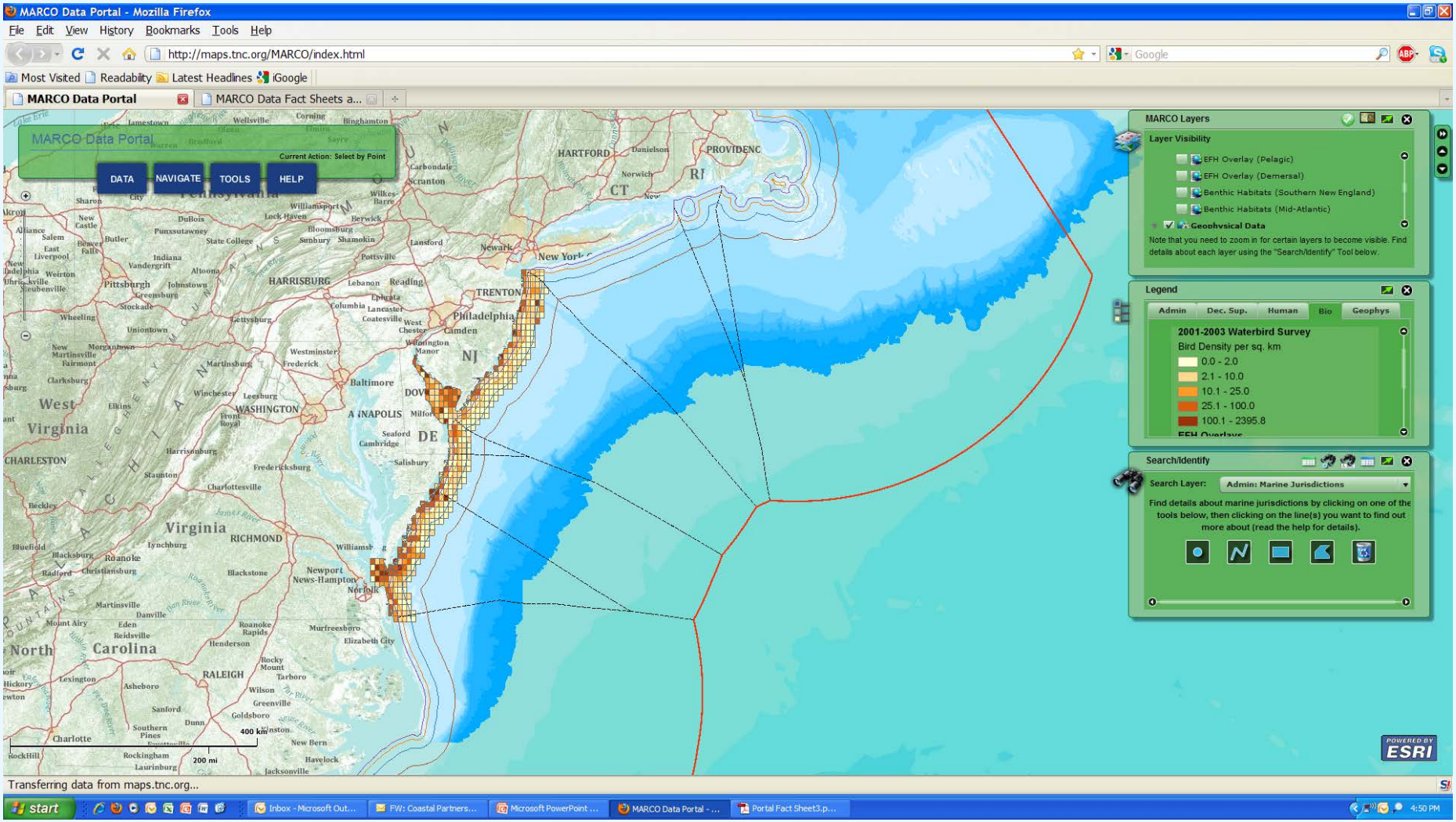
We made a good start at this with less than $100K, still a work in progress



data & decision support tools

Just put in the cloud!
ESRI
OPEN SOURCE
Don’t worry & maybe it will be hybrids
Who will host it and how is that going to work?

MARCO Mapping and Planning Portal

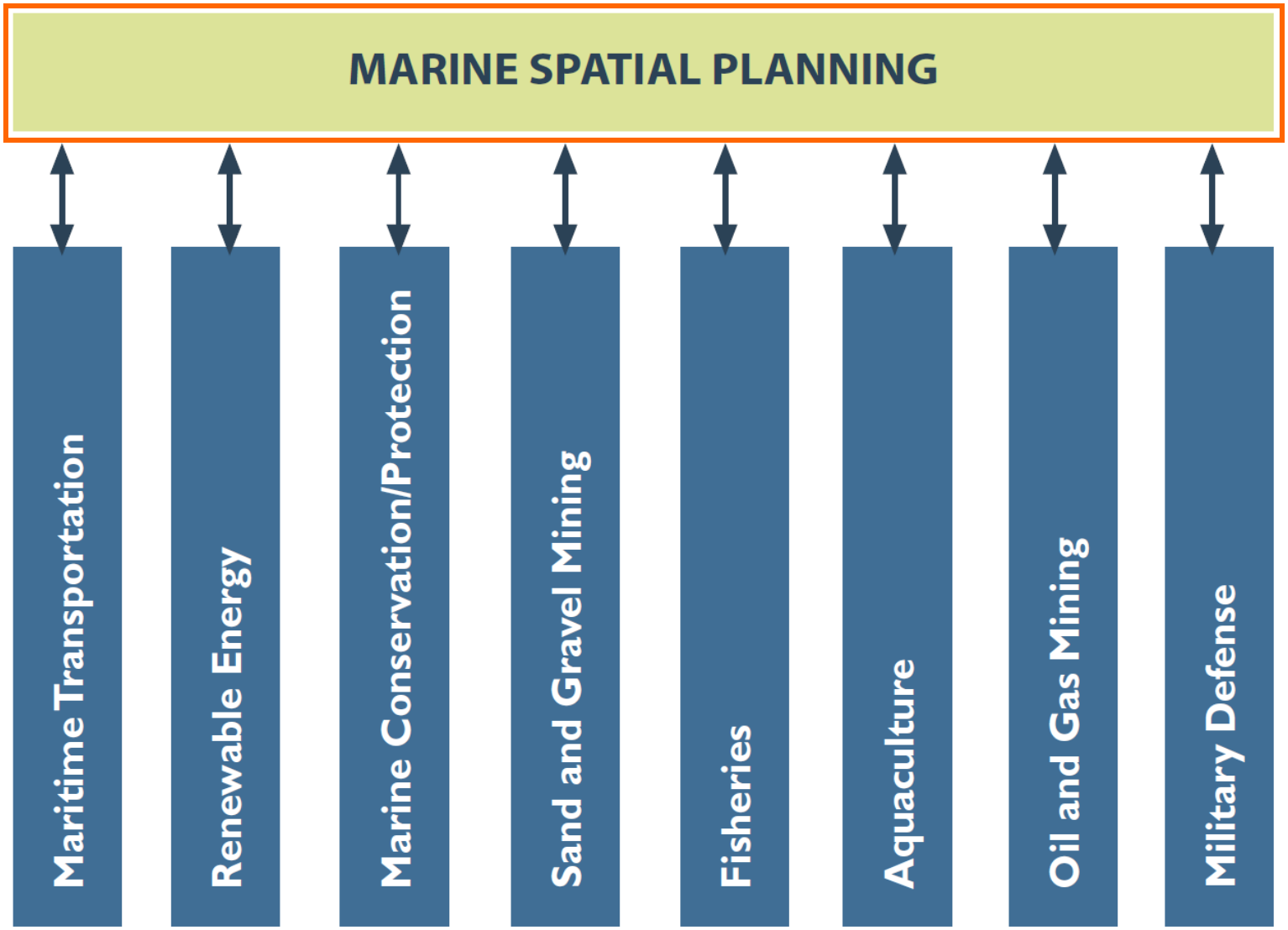


Summary of current functions

- Choose from 3 base maps: topographic, streets, satellite view
- Draw and measure tools
- Select combinations of layers to create custom maps
- Adjust transparency to enhance overlays
- Search & identify tools to select & query data
- Save and print custom maps
- Moving ArcGIS Server 10 test to production server in next couple weeks, some nice new features like dynamic legends

Current Status of Data & Features

- 23 spatial data layers grouped into 4 themes
  - Administrative (official boundaries)
  - Geophysical (bathymetry, wind speed, etc)
  - Biological: (seabird density, benthic habitats, etc)
  - Human uses: (ship traffic density, commercial fishing, etc)
- Fact sheets and metadata for all layers
- www.midatlanticocean.org


MARINE SPATIAL PLANNING
Maritime Transportation
Renewable Energy
Marine Conservation/Protection
Sand and Gravel Mining
Fisheries
Aquaculture
Oil and Gas Mining
Military Defense

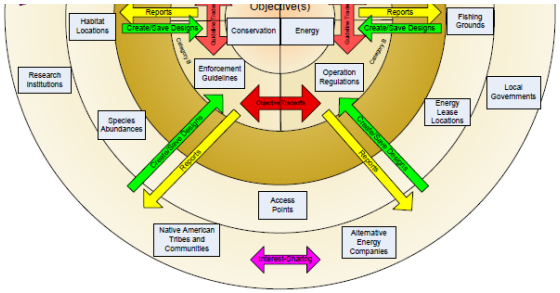
Unmet Data Needs (highest priorities)

- Marine mammal migration paths
- Seabirds & sea duck critical areas and migration paths
- NFMS VMS & FVTR databases
- NMFS Observer Program database
- Recreational fishing
- Military restricted areas
- Sand, gravel, cobble mining
- Communications and transmission cables
- AIS ship traffic density data (AIS plus radar even better)
- *Sector specific goal evaluation metrics*

MarineMap Consortium Project

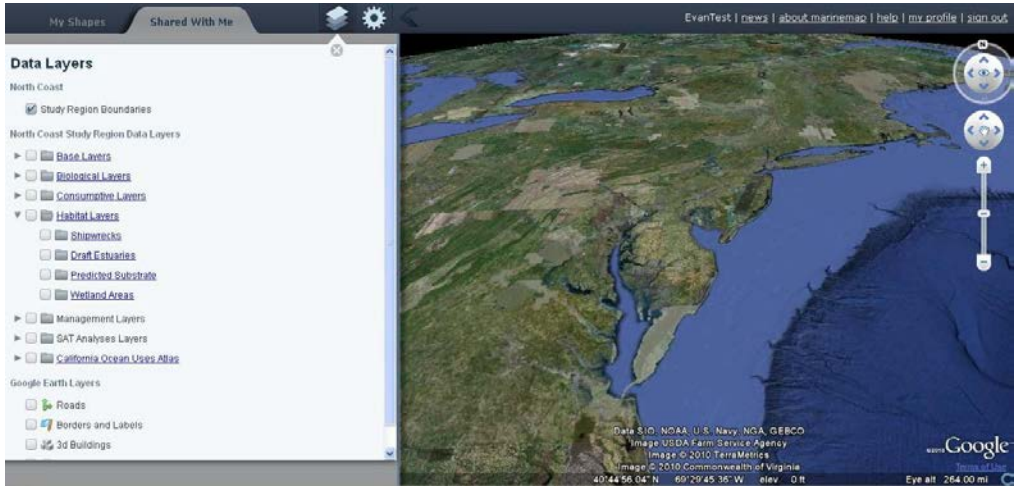
Of The
Interagency Ocean Policy
Task Force
July 19, 2010

Policy

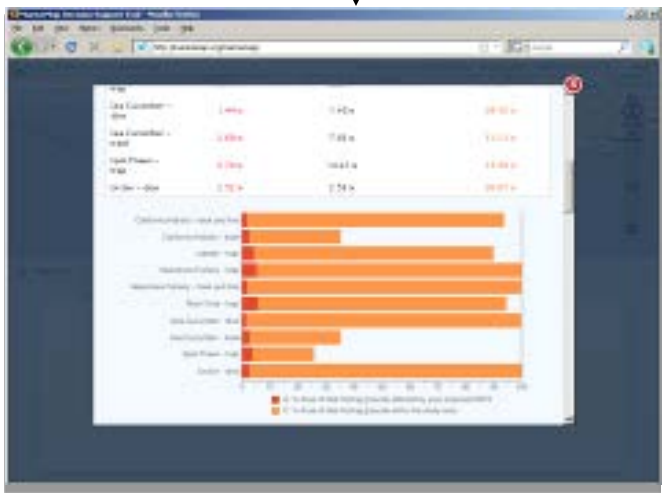


Conceptual Model

Illustrative Storyboard



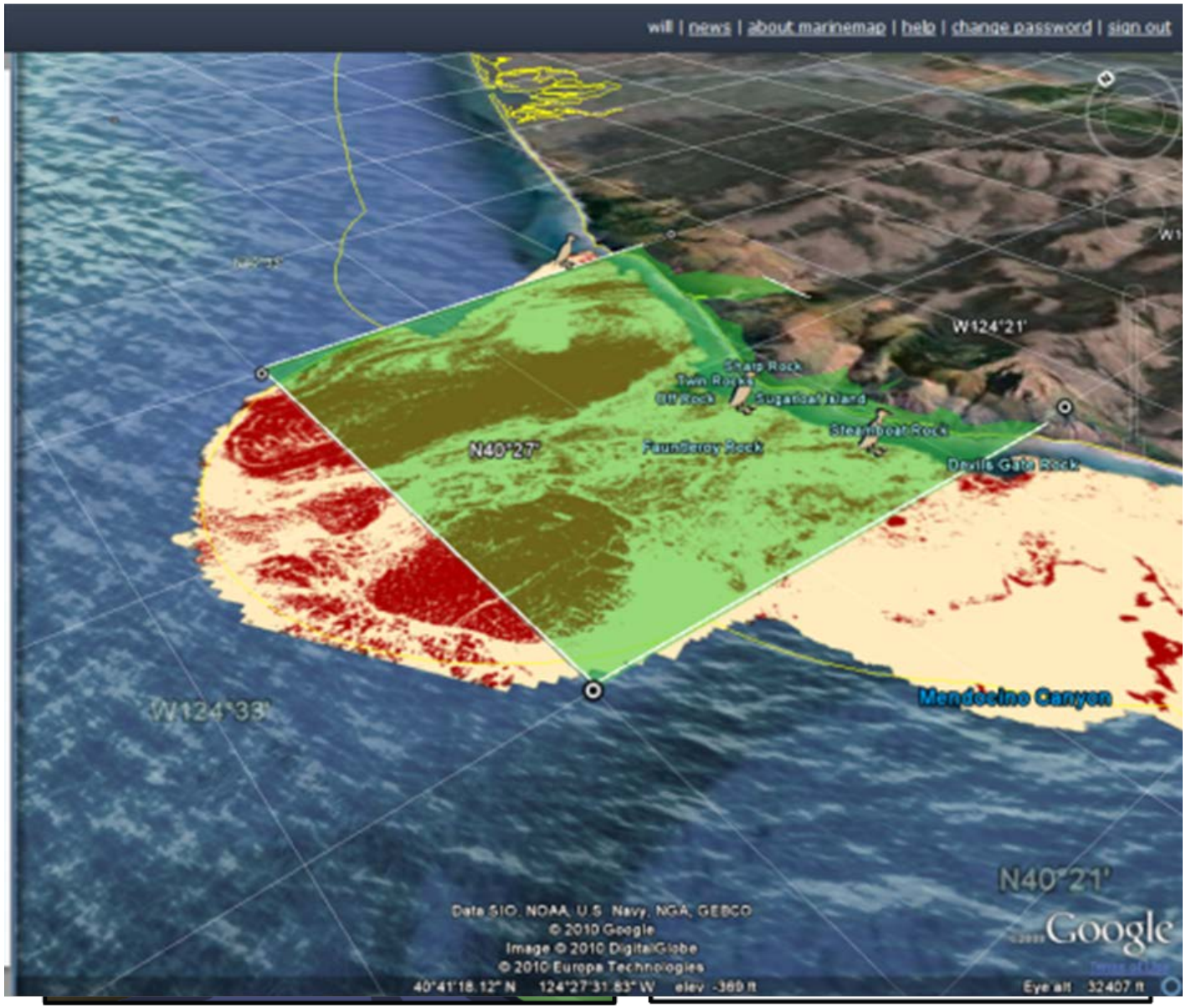
Example Tool Functions



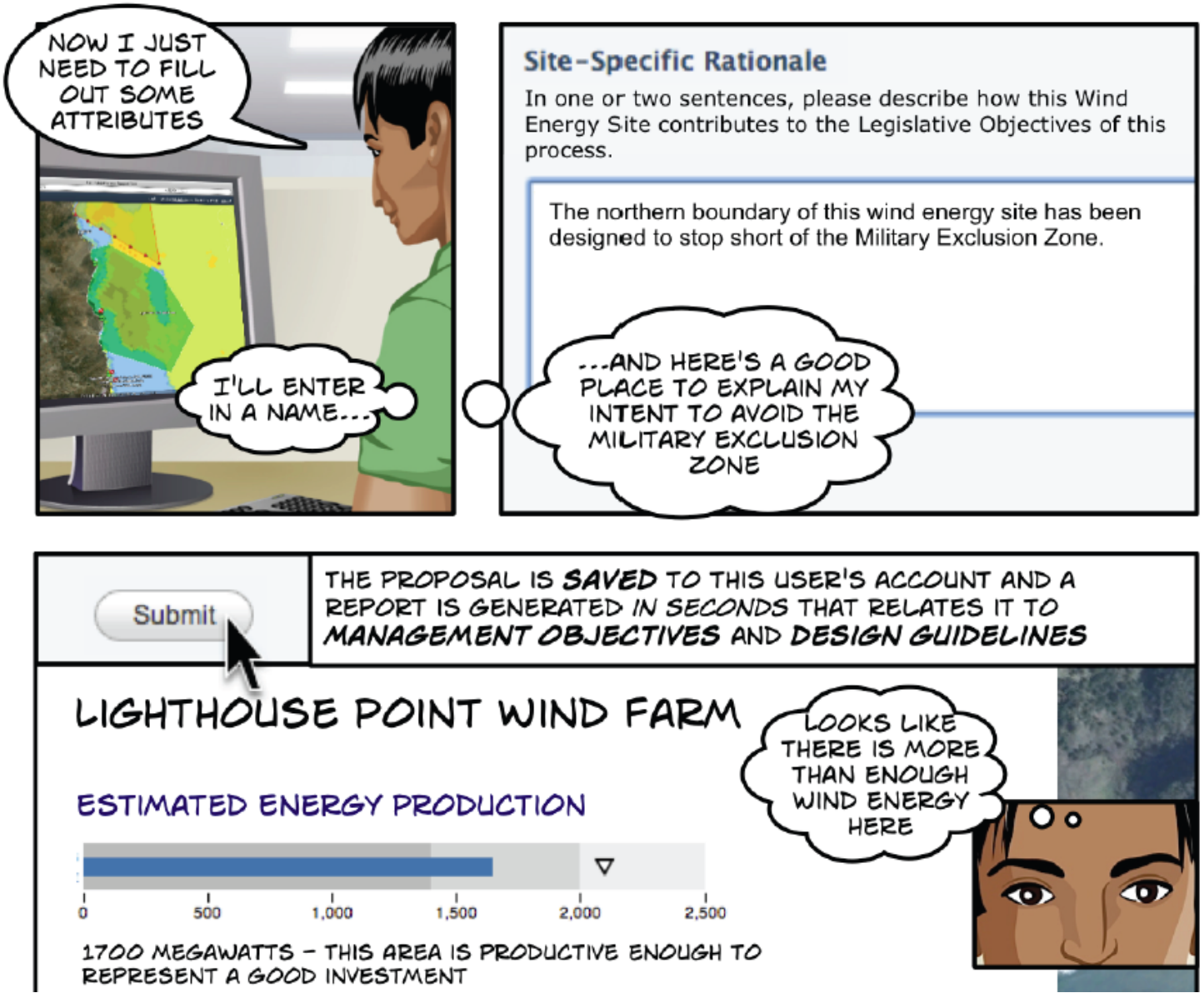
Example Tool Outputs

Organizing and Sharing Data

Creating/Saving Designs

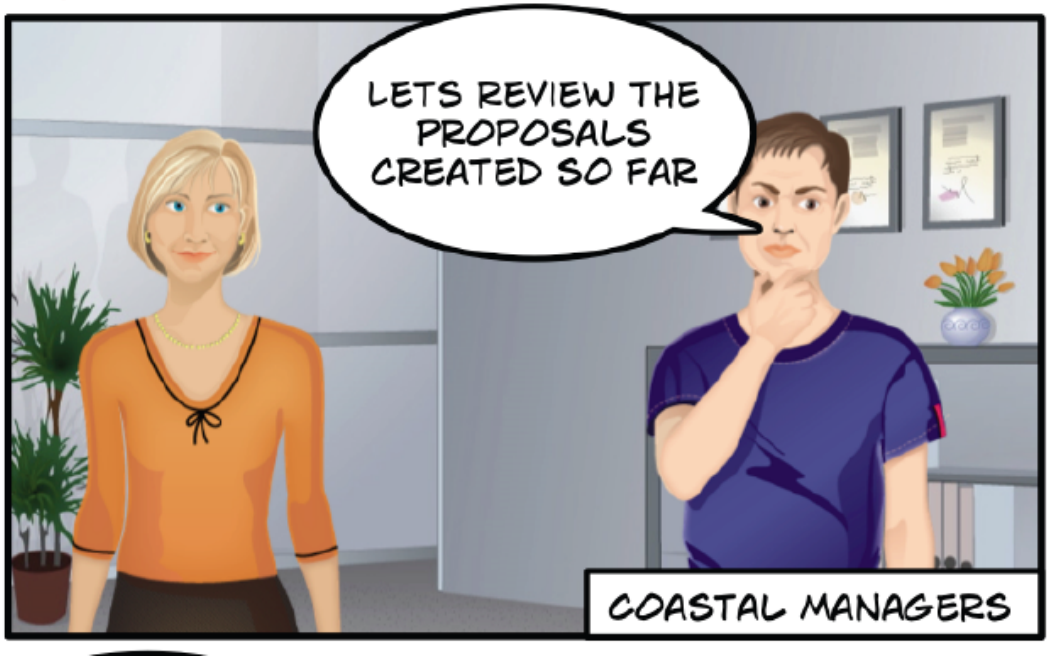


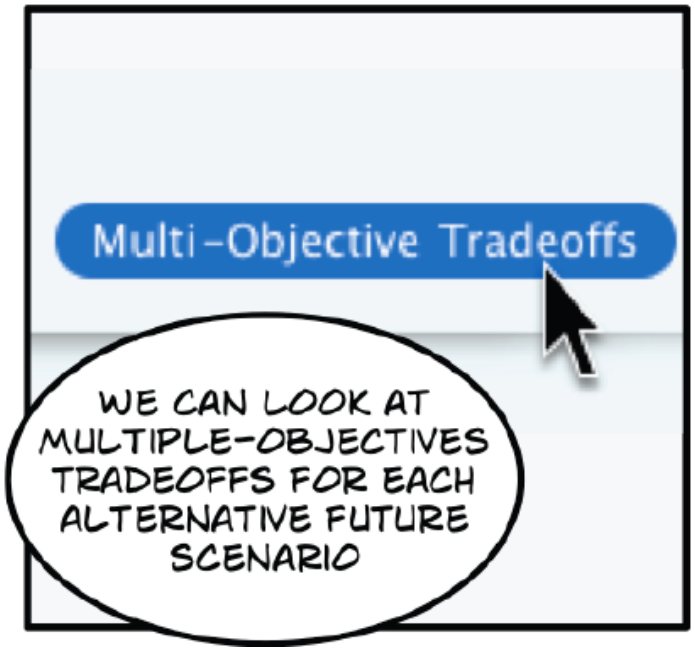
Generating Reports



Weighing Tradeoffs

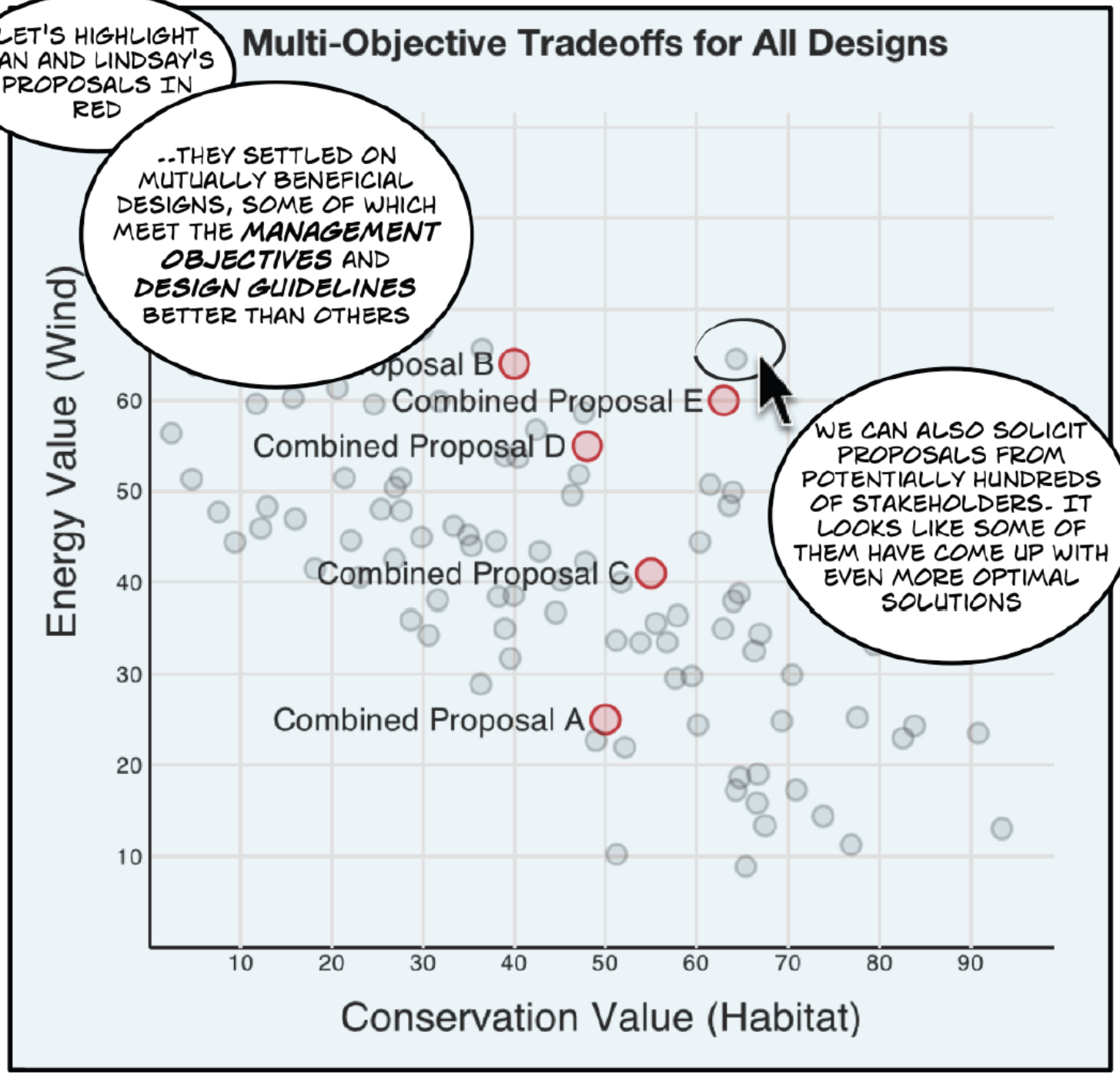
Page 22



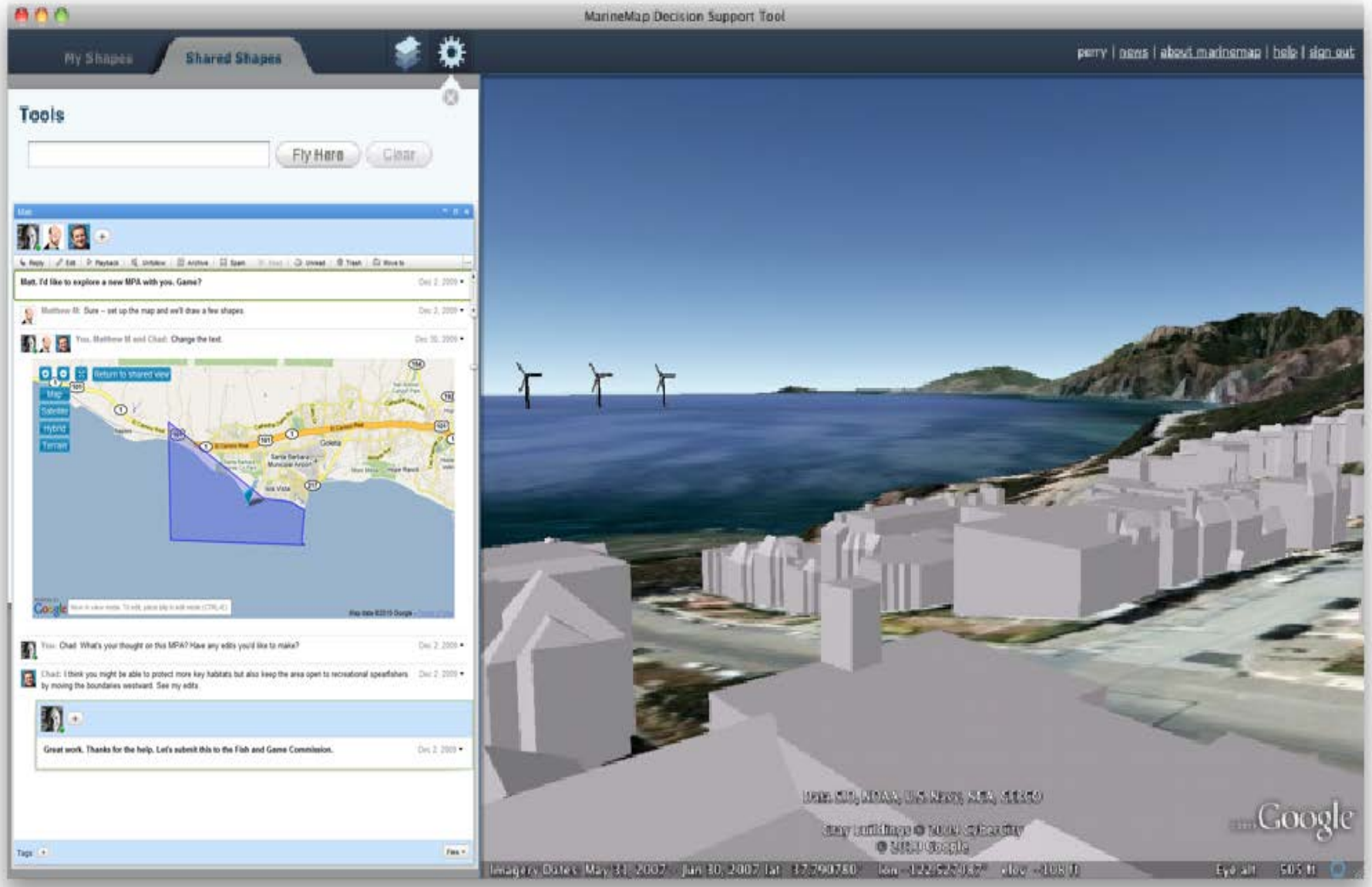


LET'S HIGHLIGHT DAN AND LINDSAY'S PROPOSALS IN RED

--THEY SETTLED ON MUTUALLY BENEFICIAL DESIGNS, SOME OF WHICH MEET THE ***MANAGEMENT OBJECTIVES*** AND ***DESIGN GUIDELINES*** BETTER THAN OTHERS



WE CAN ALSO SOLICIT PROPOSALS FROM POTENTIALLY HUNDREDS OF STAKEHOLDERS. IT LOOKS LIKE SOME OF THEM HAVE COME UP WITH EVEN MORE OPTIMAL SOLUTIONS


MarineMap Decision Support Tool
My Shapes
Shared Shapes
perry | news | about marinemap | help | sign out
Tools
Fly Here
Clear
Matt, I'd like to explore a new MPA with you. Game?
Return to shared view
Map
Satellite
Hybrid
Terrain
Goleta
Santa Barbara Municipal Airport
Isla Vista
You: Chad: What's your thought on this MPA? Have any edits you'd like to make?
Chad: I think you might be able to protect more key habitats but also keep the area open to recreational spearfishers by moving the boundaries westward. See my edits
Great work. Thanks for the help. Let's submit this to the Fish and Game Commission.
Tags
Files
Google

Next Steps

- Continue to use VA CZ Program Support to acquire and format high priority map layers for the Portal and to
- Upgrade Portal software to support more features and
- Secure funding to enhance current Portal to state-of-the-art CMSP decision support system

Observations

- Aesthetics, speed, and intuitive interfaces are all very important CMSP App design considerations
- For CMSP apps, < data layers may be > useful
- Decision support tool development must serve stakeholder/policy needs & requirements
- We need to develop sector specific socio-economic data needed to evaluate how well alternative scenarios meet diverse and shared goals.

Acknowledgments

- NOAA Coastal Services Center staff: Darlene Finch, Adam Bode, Brian Smith, David Stein
- VA, MD, NJ, DE and NY Coastal Zone Programs: Laura McKay, Nick Meade, Chris Cortina, Kevin Hassel, Dave Carter, Jeff Herter
- Chris Bruce, Gwynn Crichton (TNC)
- MarineMap Consortium (UCSB, TNC, Ecotrust): Evan Fox, Chad Burt, Zach Ferdana
- Funding: VA Coastal Zone Program, NOAA, TNC

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Discussion