Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

Long Island Sound Inventory and Blue Plan Advisory Committee
December 4th, 2018
10:00AM – 12:00PM
Vicki G. Duffy Pavilion
155 College Street
Old Saybrook, CT

MINUTES

Advisory Committee Attendance:

Robert Klee, Commissioner

Sylvain De Guise, Connecticut Sea Grant

Catherine Finneran (by phone), Eversource

Nathan Frohling, The Nature Conservancy (TNC)

David Carey [ABSENT], Department of Agriculture, Bureau of Aquaculture

Christine Nelson, Town of Old Saybrook Town Planner

Evan Matthews [ABSENT], Connecticut Port Authority

Jason Bowsza, Connecticut Department of Agriculture

Eric Lindquist, Connecticut Office of Policy and Management

Melanie Bachman [ABSENT], Connecticut Siting Council

Leah Schmaltz, represented by Bill Lucey, Connecticut Fund for the Environment/Save the Sound

William Gardella, General Manager and Dockmaster, Rex Marine Center, Norwalk

Bruce Beebe, Beebe Dock and Mooring Systems, Madison

Mike Theiler [ABSENT], Commercial finfish industry representative

Alicia Mozian, Town of Westport Conservation Director

Sid Holbrook, recreational fishing/hunting community representative

Other attendees:

Emily Hall, NOAA Coastal Fellow

David Blatt, DEEP

Mary-beth Hart, DEEP

Brian Thompson, DEEP

Kevin O'Brien, DEEP

Emily Shumchenia, E & C Enviroscape

Christian Fox, TNC

Yolanda Cooley, DEEP

Shirley McCarthy

Susan Bryson

Frank Hall

Mark Pappalardo, Eversource (by phone)

Melissa Gates, Surfrider (by phone)

Other members of the public did not sign in

Welcome, Introductions, and Update

Commissioner Klee welcomed the Advisory Committee to the spectacular locale of the Vicki G. Duffey pavilion in Old Saybrook, and thanked Advisory Committee member Christine Nelson in helping to secure the location. The Commissioner emphasized that this meeting is a culmination of more than two years of work, and that the development of Ecologically Significant Areas (ESAs) and Significant Human Use Areas (SHUAs) has integrated stakeholder and scientific expert knowledge from both Connecticut and New York.

The Commissioner then introduced Brian Thompson, Director of Land and Water Resources, CT DEEP, to update the Advisory Committee on other state and regional partnerships pertaining to Long Island Sound. Thompson noted that the Connecticut proposal for a National Estuarine Research Reserve (NERR), was in the process of completing its nomination package. The NERR would serve as a unique assemblage of estuary along Long Island Sound, and was a great partnership between the State, UConn, Save the Sound, and more Long Island Sound interests. Thompson then updated the group on another regional ocean planning partnership of the Northeast Regional Planning Body (NERPB). The NERPB was originally created under President Obama, and a current executive order has now eliminated the regional planning bodies in their current form. The Northeast Regional Ocean Council has thus decided to take up the ocean planning efforts of the NERPB, so that plans can still be implemented and their can still be a regional-federal partnership.

The Commissioner then recognized that as part of the Blue Plan's outreach efforts, the group is in the process of developing a series of Blue Plan related informative videos. The film team would be filming parts of today's meeting, and the Commissioner appreciated everyone's willingness to be on camera.

Ecological Experts Group and Ecologically Significant Areas

Nathan Frohling, Chair of the Stakeholder Subcommittee and Ecological Working Group, started his discussion by thanking Commissioner Klee for all his support throughout this planning process, and that much of this work is possible because of the Commissioner. Frohling also introduced Emily Shumchenia, a consultant working on the Blue Plan, who has played a key and expert role in the formation of the ecological portion of the Plan.

Frohling noted that his presentation would provide an overview the development process, unveil the ESAs, and introduce a policy example of how ESAs may be utilized. Frohling also mentioned that although ESAs are important spatially, they are not trying to illustrate all the ecological complexity of Long Island Sound, and the whole Sound does remain important.

To develop ESAs, Frohling said that first data was pulled from the Long Island Sound Inventory of Natural Resources and Human Uses. The Ecological Experts Group (EEG), with the guidance of Shumchenia, outlined specific ESA criteria, definitions, and supporting data. Frohling mentioned that the ESA criteria definitions are controlling, while the maps are the best current guidance for where an ESA is. This means that if an ESA is not present on a map, an ESA could still be proven to be present based on the definition.

Frohling then explained that the criteria were organized into two main groupings:

Criteria Pillar (1): Areas w rare, sensitive, or vulnerable species, communities or habitats including:

1. Hard bottom and complex sea floor
2. Areas of submerged aquatic vegetation
3. Endangered, threatened, species of concern or candidate species listed under state or federal ESA, and their habitats
4. Areas of cold water corals
5. Coastal wetlands

Criteria Pillar (2): **Areas of high natural productivity, biological persistence, diversity and abundance, including areas important for supporting or exhibiting such features relative to …**

6. Cetaceans (marine mammals)
7. Pinnipeds (seals)
8. Sea turtles and other reptiles
9. Birds
10. Fish
11. Mobile invertebrates (e.g. American lobster)
12. Sessile-mollusk-dominated communities (e.g. blue mussels)

Shumchenia then began to explain some of the technical aspects of an ESA. First all ESAs were developed using a common 8 meter grid. Each criterion is associated with a single presence/absence layer that represents the ESA. Some ESA layers required a threshold to determine what is significant, and the EEG

decided to use the top quintile of data for those circumstances. Also developed were a series of overlap maps that depict all the ESAs present for a Criteria pillar; the number of overlaps indicates the minimum number of ESAs known in that location (Appendix 1). Shumchenia then overviewed each of the final ESA maps that were developed.[1]

Frohling then provided an example of how the ESAs may be used in decision making in Long Island Sound. Frohling used the example of the Islander East pipeline that had been proposed in the past, and was particularly controversial because the proposed project would have run through significant shellfish beds. Frohling displayed benthic based ESAs on the proposed site, showing that it would have indeed been difficult to site a project in the proposed location (Appendix 2). Frohling also showed an example of the Cross-Sound cable project, and how that actually did avoid most of the ESAs that area mapped. This example also showcased that projects don't necessarily have to avoid contact with any ESA, but they may have to build in a certain way that would avoid, minimize, and mitigate the impact (Appendix 2).

Bruce Beebe then asked if the Islander East pipeline proposal were to come back and propose a different spot, what would happen. Frohling affirmed that we have the data to understand where certain uses and resources area now, and with that the process may not be as controversial. Klee noted that there are data gaps, blanks spaces in some of the ESA maps. Frohling agreed with this and mentioned that the plan has to be updated no later than every five years, so that new data and information can be incorporated. The presence of the data gaps was another reason why the definitions are the controlling factor. Alicia Mozian asked how significantly adverse impact to an ESA may be defined. Frohling answered that those types of questions would be analyzed through the permitting process and would have to be specific to the application. Mozian wondered from a legal standpoint if having no definition of "significant adverse impact" would cause questionable interpretation. Brian Thompson noted that we do have to be flexible in our language to allow differently regulatory programs to interpret the policies, and that interpreting the significance of impacts is already being done by existing permit analysis and would be the same with Blue Plan policies.

Significant Human Use Areas (SHUAs)

Kevin O'Brien, member of the Planning Team and EEG, then provided an overview of the Significant Human Use Areas. O'Brien noted that the goal was to synthesize human use map product information by incorporating all relevant data, providing a format that would be easy to understand and interpret, and depicting as accurately and as reasonably as possible human use areas of Long Island Sound.

O'Brien gave a brief overview of 1) what types of human use data was used and 2) how different types of human use data were combined to create synthesis maps, based on a 1000m grid (Appendix 3).[1]

O'Brien also revisited what the Planning Team has been able to accomplish since June 2018:

- **Aggregating Data**: Combined multiple layers that inform a particular policy criteria
    - Ex: Public property that provide visual and scenic resources
- **Removing Data**: Took out data that was redundant or deemed not critically relevant as a SHUA

[1] All draft ESA and SHUA maps and descriptions can be found at: www.ct.gov/deep/lisblueplansignificantareas

    - Ex: Historic building points represented by various federal, state, and local historic districts
- **Addition of Data**: Added new data (new versions/gained stakeholder input)
    - Ex: New areas defined recreational fishing locations, updated sailing race areas
- **Establishing Thresholds**: Removed large parts of map products to focus on key elements
    - Ex: 2016 AIS Vessel Transit Count data covers all of LIS, set threshold to higher than average so that the key transit corridors emerge

O'Brien then provided some examples of how synthesis maps have changed over time with the above data development steps (Appendix 4).

O'Brien wrapped up the discussion by noting that revised maps more closely reflect SHUAs, SHUAs can provide insights to what uses are occurring where and where they are clustered together, and reflecting the ESA discussion that SHUA definitions are controlling and new data can be updated in the Blue Plan over time. He also noted that some next steps included creating three new SHUA synthesis maps that regroup map products by their location (bottom, water column, or surface), documenting the processes used to finalize map products, and working with UConn CLEAR (Center for Land Use and Education) to create a web-based map viewer for both SHUAs and ESAs.

Klee congratulated the group for the development of both the ESAs and SHUAs, and observed what an interesting evolution the data has undergone through the years. Sylvain De Guise affirmed this point, noting that some of our broad goals were to have a transparent process through this data development and create easy public access to the data.

Klee then asked a technical question pertaining to the difference in the SHUA and ESA grid scale, being 1000m to 8m, respectively. Shumchenia remarked that it would only be an issue if you were doing an ESA and SHUA overlay, but that GIS analysis deals with similar problems every day. O'Brien agreed and added that the ESA process would lose data if the grid went larger. Frohling also stated that the individual layers will also be important to Blue Plan use and analysis. Bill Lucey wondered that if the plan has to be updated every five years or less, where is the updated data going. Frohling noted that CT DEEP is the state agency responsible for the maintenance and adaptation of the Blue Plan, but it doesn't mean that the Planning Team will not reach out for assistance. There were no questions on the phone.

Policy and Blue Plan Development Timeline

Emily Hall, member of the Planning Team, started her discussion by giving some brief updates on what has changed in terms of the policy document. These changes included clarification on what types of uses the Blue Plan would apply to, reworking of a few public trust policies to be consistent with Advisory Committee input, and clarification on some general ESA and SHUA policies.

Hall then gave an overview of what the chapters in the Blue Plan may include:

Table 1. Blue Plan Chapter Outline.

Chapter 1: Introduction	General overview of why the Blue Plan is needed in Long Island Sound and how the Blue Plan is developed.
Chapter 2: Management Framework	Where the Blue Plan fits into local, state, and federal laws and regulatory programs.
Chapter 3: Long Island Sound Overview and Characterization	Description of Long Island Sound, and the designation of significant ecological and human use areas (ESAs and SHUAs).
Chapter 4: Policy Recommendations	Policies and standards to protect the ecological value and traditional human uses in Long Island Sound, and reduce future conflict.
Chapter 5: Implementation and Adaptive Management	How the Blue Plan will be implemented and adapted over time.
Chapter 6: Issues for Future Consideration	Considerations for the future of Long Island Sound and the Blue Plan, including climate change and potential future projects.

Hall then gave an overview of the Blue Plan drafting and review timeline, noting the role of the Blue Plan Advisory Committee which can be found in Appendix 5.

Christine Nelson asked how members of the Advisory Committee can spread the word once the Blue Plan is completed. Hall replied that we would need the Advisory Committee to help, "sell the Blue Plan," and request feedback and input from their respective sectors. Catherine Finneran acknowledged that the Planning Team with the Energy sector, Eversource and the CT Siting Council, had a really productive meeting in regards to policy and thanked the group. Hall also mentioned that it was a really productive meeting, and that the Planning Team would be happy to host other sectors in a similar way. She also mentioned that there would be an upcoming Policy Subcommittee meeting that everyone would be welcome to join and provide input.

Stakeholders, Outreach, and Messaging

Christian Fox, Blue Plan Outreach Coordinator and member of the Planning Team, then provided an overview of the outreach completed since the last Advisory Committee Meeting. Fox noted that the Planning Team held two in-person meetings with commercial fisheries, completed a participatory mapping project with recreational fishermen, and presented at a CT Conservation Advisory Council meeting.

Fox also mentioned in particular that the Planning Team has been focused on conducting outreach and collecting input on the draft Blue Plan policies. He noted that the team had in-person meetings with Eversource and the CT Siting Council, as well as the State Office of Historic Preservation. Additional forms

of policy-specific outreach included webinars related to ports, SCUBA, recreational boating, and marine trades; public meetings at Avery Point and Port Jefferson; and a public hearing at the Stamford Government Center. The team is also trying a new type of outreach where we identify, "sector champions" for each stakeholder group that can 1) identify some of the gaps in the policy document, and 2) be a representative of the Blue Plan policies for their sector.

Fox also gave an update for the Blue Plan video series that are being developed. The video interview series, including Advisory Committee members and engaged stakeholders, will showcase how the Blue Plan is representing and interacting with each sector. The plan is to wrap up interviews around December and then release the videos in February or March.

Final Discussion

Commissioner Klee then opened the discussion up to any final comments and reflections from the Advisory Committee. Alicia Mozian mentioned she was struck by the progress between the last meeting and this meeting, how visible the maps and data were, and how the process is starting to gel together. Mozian noted that the next key thing is ensuring that the policies are user friendly, and suggested that it would be useful to have an application form or checklist. Klee responded that there would be a Blue Plan user guide developed and perhaps there would be other tools available to orient people to apply the plan, like leveraging CLEAR story maps. Christine Nelson also mentioned that it may be really useful for the policy subcommittee and Advisory Committee to run potential projects or examples through the Blue Plan and see how it functions.

Nathan Frohling noted that with the diverse array of maps and their context, the Blue Plan is sincerely trying to make thigs better for 1) the applicant, and 2) the resources and uses being protected. Frohling confirmed that the policy is designed to not stop uses but stop impacts.

Klee affirmed that the outreach and messaging will be the next significant phase, once the Blue Plan is complete. Klee wrapped up the meeting by noting that he has really enjoyed his time working on the Blue Plan as its Chair, and that growing up and recreating on the Sound he feels particularly connected to this project. Klee then thanked the group for all their work.

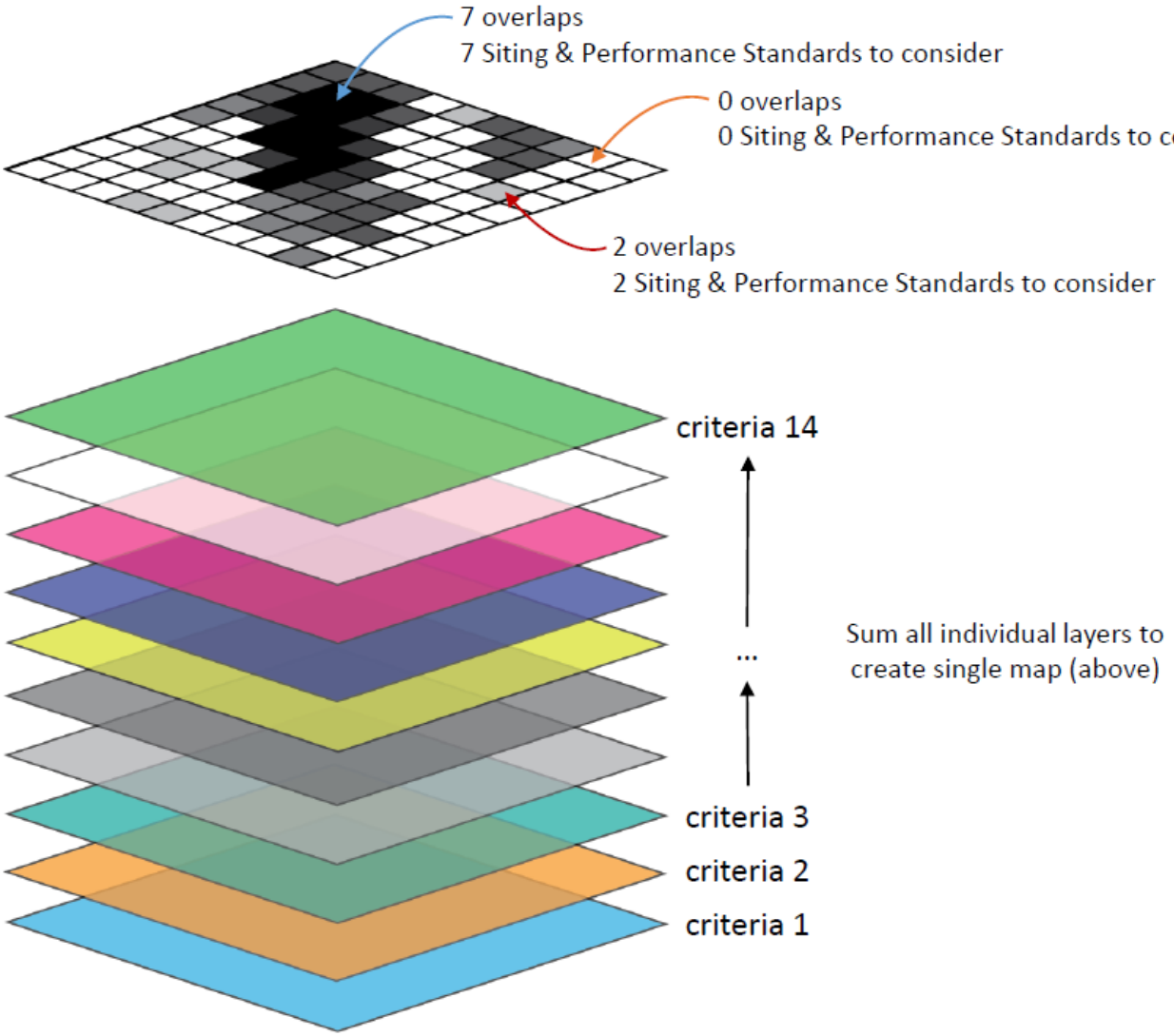
Public Comment Period

Frank Hall, a member of the sailing community, said that he has been following the project for the past year and applauded the Advisory Committee for their effort. He has been sailing for over 40 years and has seen the overall quality of Long Island Sound improve. He mentioned that he is looking forward to viewing the final document and hopes the document will have an ongoing usefulness.

The meeting adjourned at 11:56 am.

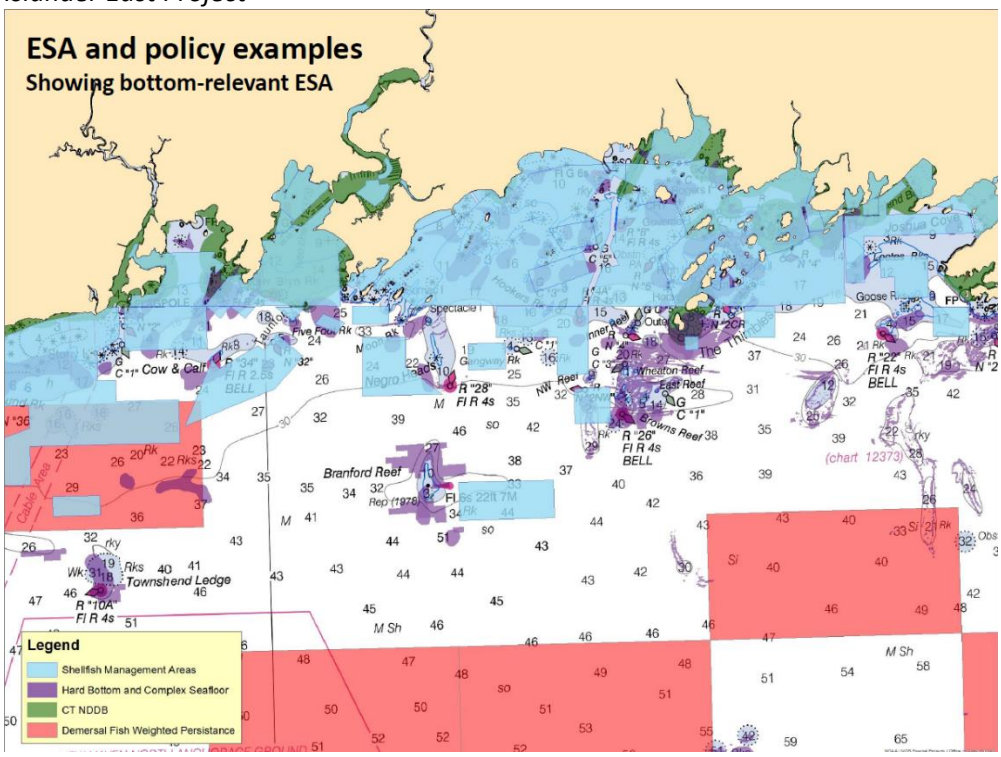
http://www.ct.gov/deep/lisblueplan

Appendix 1. Visual Depiction of ESA "Overlap" Maps

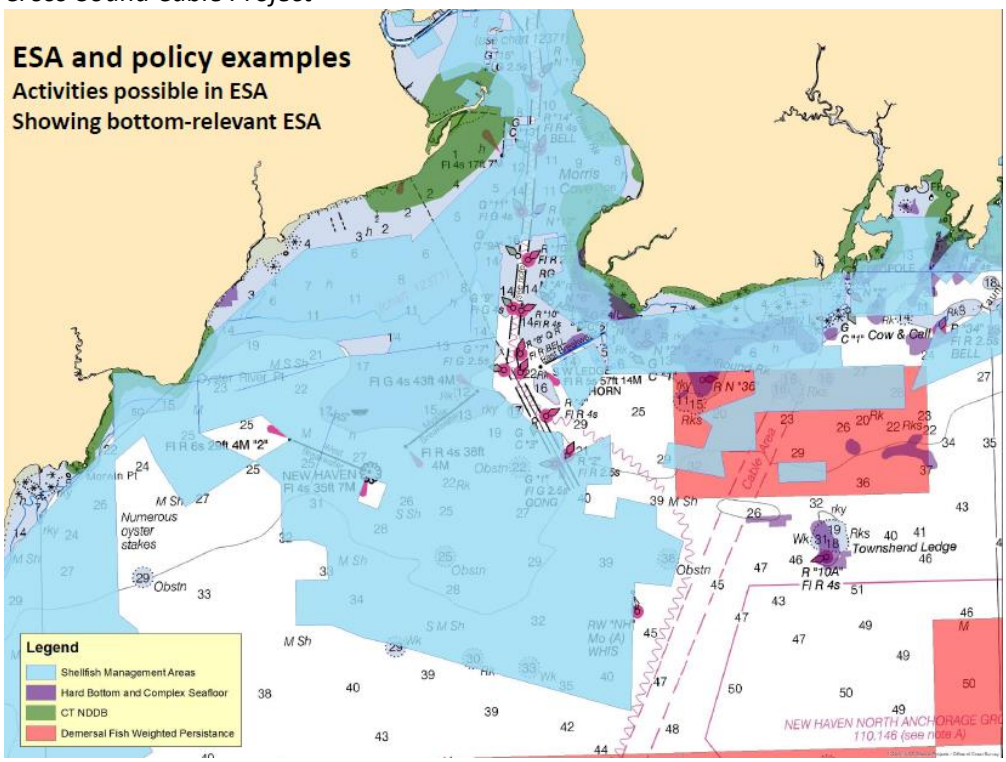


Appendix 2. ESA and Relevant Policy Examples

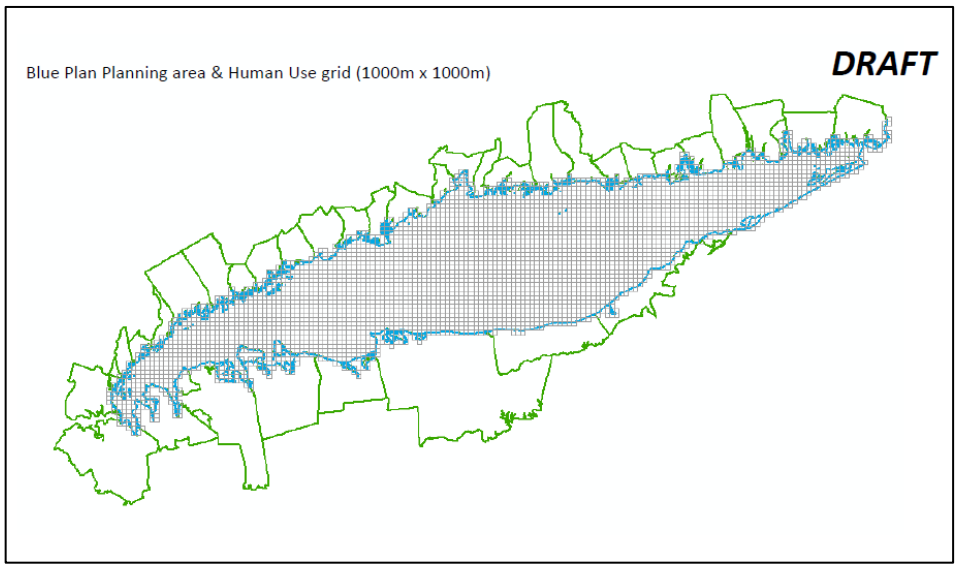
Islander East Project

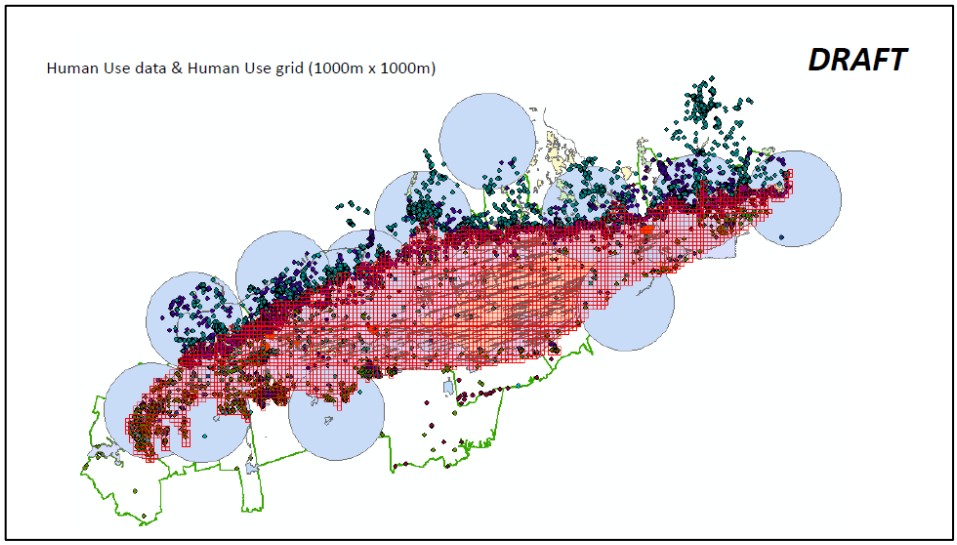


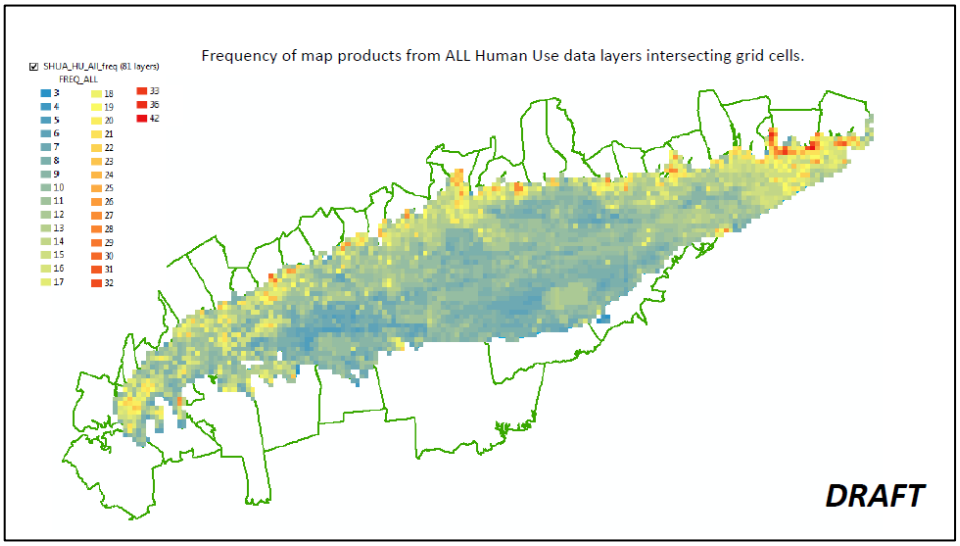
Cross-Sound Cable Project



Appendix 3. Human Use Synthesis Development







Results of clustering analysis[1] across ALL human use interests.

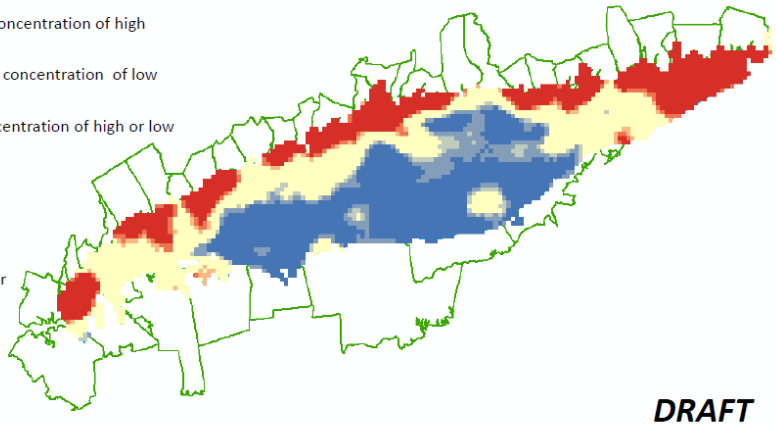
Looking for like values surrounded by other like values that exceed the likelihood of random chance.

REDS = hot spots = concentration of high frequency values

BLUES = cold spots = concentration of low frequency values

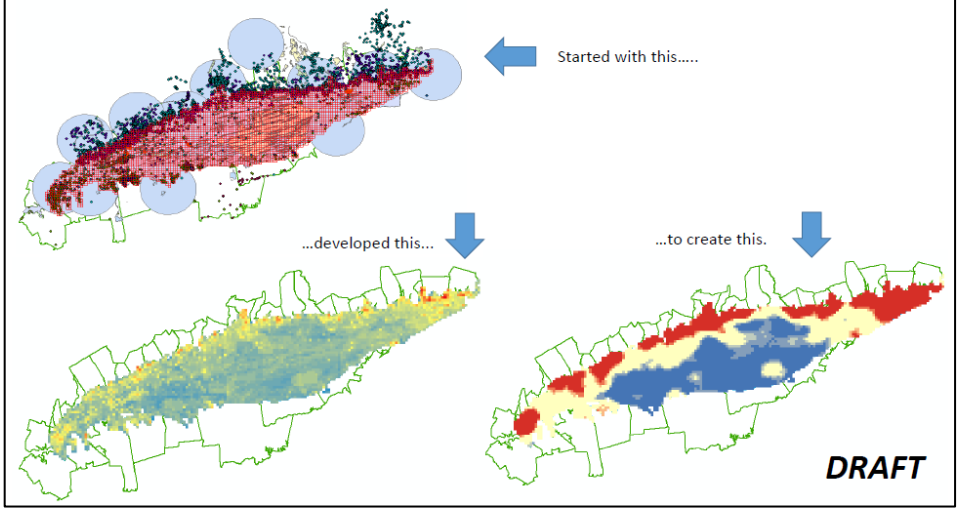
YELLOW = not a concentration of high or low frequency values

Variations in color scales reflect confidence intervals (99, 95, 90%). Darker colors = higher confidence.

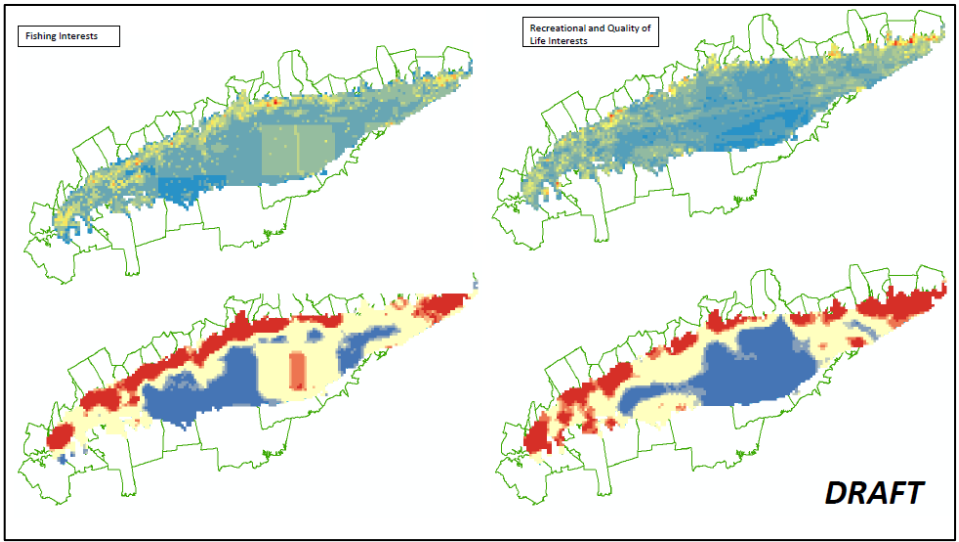


[1] Getis-Ord Gi* (optimized)

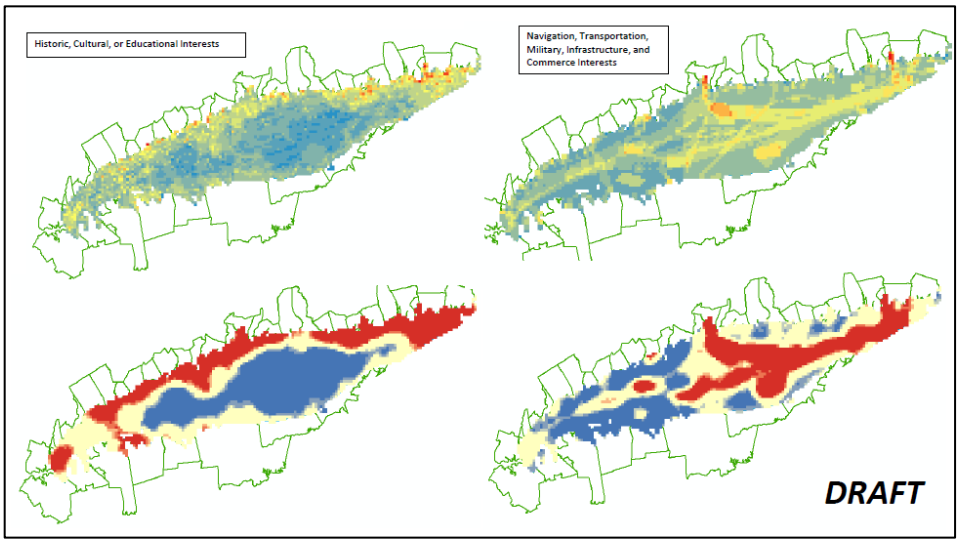
DRAFT



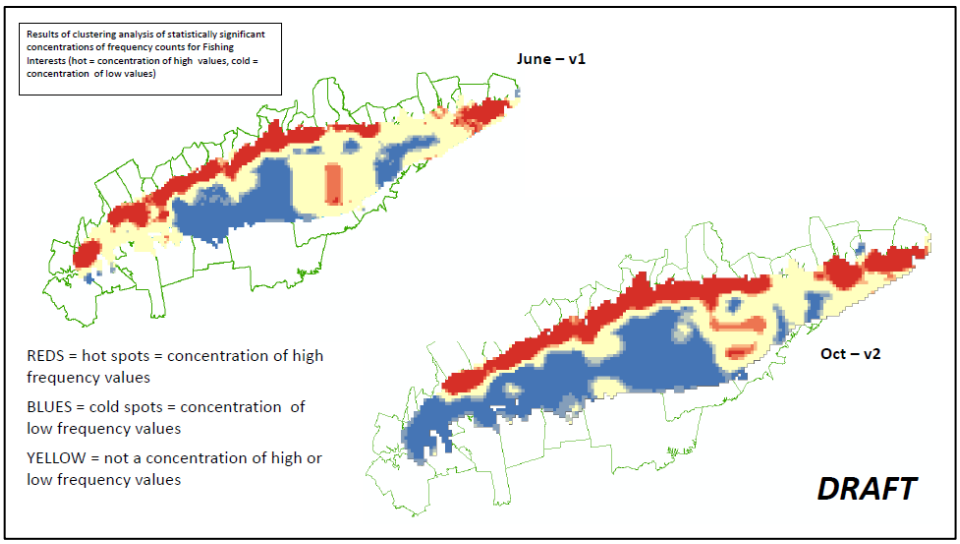
DRAFT

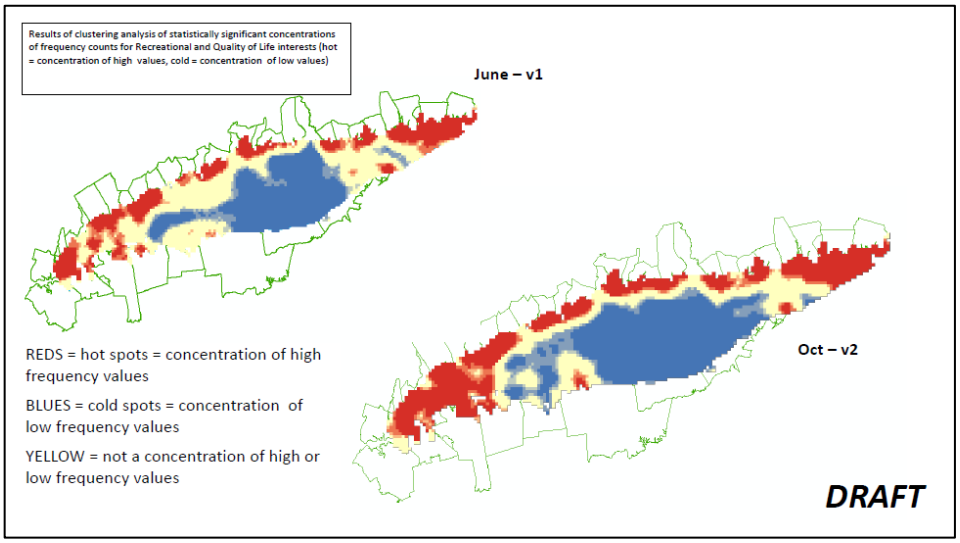


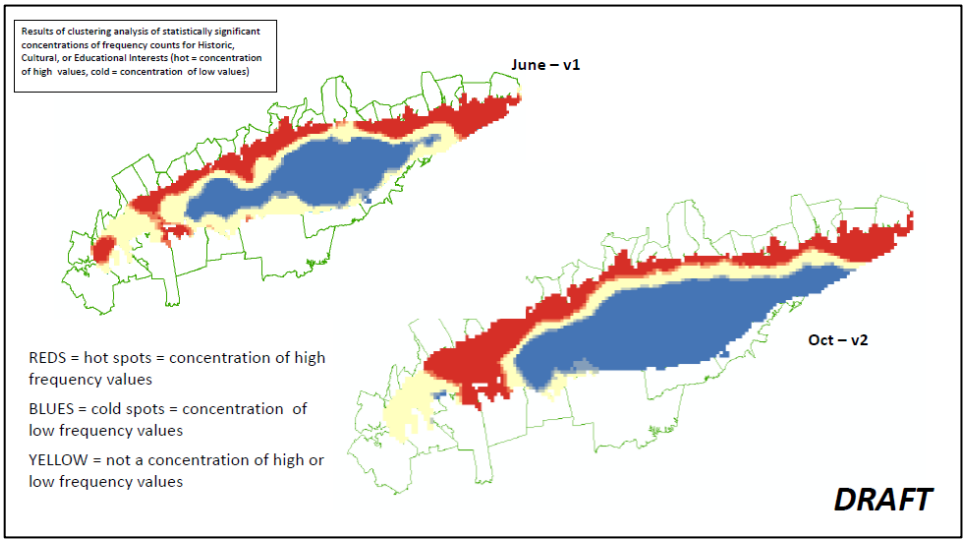
DRAFT

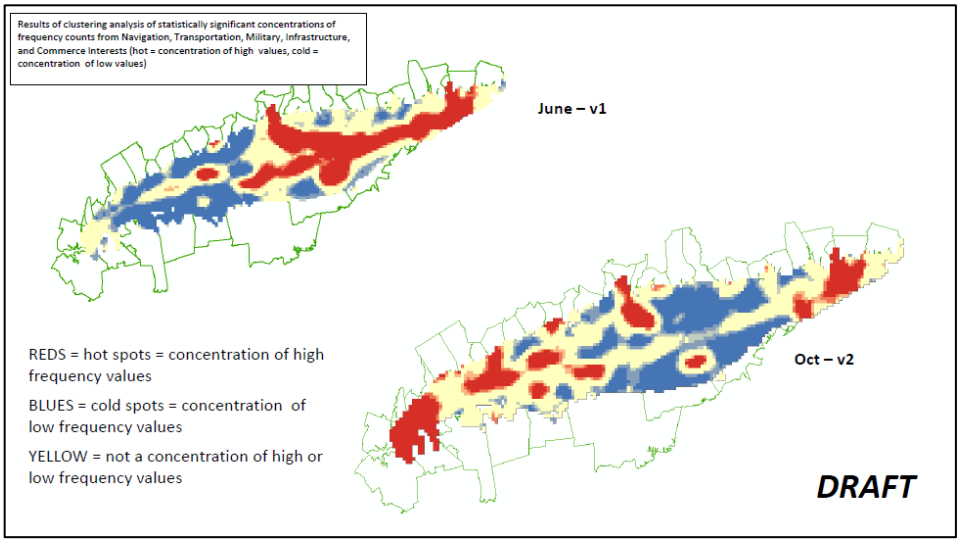

Historic, Cultural, or Educational Interests
Navigation, Transportation, Military, Infrastructure, and Commerce Interests
DRAFT

Appendix 4. Updates to Human Use Synthesis Maps








Results of clustering analysis of statistically significant concentrations of frequency counts from Navigation, Transportation, Military, Infrastructure, and Commerce Interests (hot = concentration of high values, cold = concentration of low values)
June – v1
Oct – v2
REDS = hot spots = concentration of high frequency values
BLUES = cold spots = concentration of low frequency values
YELLOW = not a concentration of high or low frequency values
DRAFT

Appendix 5. Blue Plan Drafting and Review Timeline