

Long Island Sound Inventory and Blue Plan Advisory Committee

June 19, 2018

7:00PM – 9:00PM

South Central Connecticut Regional Water Authority

Welch Room, 90 Sargent Drive

New Haven, CT

MINUTES

Advisory Committee Attendance:

Robert Klee, Commissioner

Sylvain De Guise, Connecticut Sea Grant

Catherine Finneran, represented by Mark Pappalardo, Eversource, Gas and electric distribution industry representative appointed by Governor Malloy

Nathan Frohling, The Nature Conservancy (TNC)

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

Christine Nelson [ABSENT], Town of Old Saybrook Town Planner

Evan Matthews [ABSENT], Connecticut Port Authority, Commissioner Redeker's designee

Jason Bowsza [ABSENT], Connecticut Department of Agriculture, Commissioner Reviczky's Designee

Eric Lindquist [ABSENT], Connecticut Office of Policy and Management, Secretary Barnes' Designee

Melanie Bachman [ABSENT], Connecticut Siting Council

Leah Schmaltz [ABSENT], Connecticut Fund for the Environment/Save the Sound

William Gardella [ABSENT], 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 [ABSENT], Town of Westport Conservation Director

Sid Holbrook [ABSENT], Westbrook, recreational fishing/hunting community representative

Other attendees:

Emily Hall, NOAA Coastal Fellow

David Blatt, DEEP

Brian Thompson, DEEP

Kevin O'Brien, DEEP

Christian Fox, TNC

Yolanda Cooley, DEEP Boating Division

John Sievec, Guilford Shellfish Commission

Susan Bryson

Suzanne Burns

Shirley McCarthy

Nat Trumbull (by phone)

Other members of the public did not sign in

Welcome, Introductions, and Update

At 7:00 pm Commissioner Klee welcomed the group to the Blue Plan Advisory Committee Meeting and provided updates on other ocean planning efforts. The Mid-Atlantic Regional Planning Body has been progressing on their ocean plan, and the Northeast Regional Planning body is meeting on Thursday June 21st.

Klee also noted that Connecticut has released a Request for Proposals for renewable energy, including wind energy that would be constructed in federal waters offshore of Rhode Island and Massachusetts. The wind turbines would not be constructed in Long Island Sound (LIS), nor would there be connections through LIS.

Inventory Updates

Sylvain DeGuise, Chair of the Inventory and Science Subcommittee, updated the group on the progress of reviewing the Inventory. DeGuise noted that the Inventory has undergone two rounds of review, 1) an informal review process of reaching out to sector experts and the general public, and 2) a formal review process following the May 8, 2018 Public Hearing.

The comments from both rounds of review have been received and will be incorporated into future revisions of the Inventory. Comments will continue to be accepted up to March 2019, when the final draft of the Blue Plan is due. Currently the Blue Plan development group is also addressing the data gaps presented in the Inventory. This task is difficult as the data is not always in a shareable, digital format. However, the effort to fill these gaps will be important as Significant Human Use Areas (SHUAs) and Ecologically Significant Areas (ESAs) are identified.

Ecological Experts Group, and Ecologically Significant Area Development

Nathan Frohling, Chair of the Stakeholder Engagement Subcommittee and the Ecological Characterization Work Team, updated the Advisory Committee on the progress of developing Ecologically Significant Areas (ESAs) with the help of an Ecological Experts Group (EEG).

Frohling introduced the EEG as including a range of scientific professionals who specialize in various ecological topics, who come from both academia and government in both Connecticut and New York (Appendix 1). The EEG will be tasked with developing an Ecological Characterization (EC) of the Sound, as well as ESAs. The format and structure of the EC document is still being developed, but the goal is to have a collection of maps that represent certain datasets with a narrative around those maps. The EC document will encompass ecological groupings in LIS, while the ESAs will call out specifically unique, rare, or sensitive areas. There are different methods for how ESAs will be defined spatially, and a flow chart of those methodologies can be found in Appendix 2.

The tentative timeline for this development is as follows:

- *June*: Complete Basic Map Product Development
- *June-October*: EEG In-Person Meetings, EC Draft and Review, ESA Identification and Synthesis
- *September-November*: Finalize EC and Conduct Outreach, Draft ESA Maps
- *November – December*: ESA Review and Outreach (including EEG, BPAC, Scientists, General Public)
- *December – January*: ESA Revision and Consensus

Significant Human Use Area Development

Parallel to the development of ESAs, there is an ongoing process to develop Significant Human Use Areas (SHUAs). Sylvain DeGuise introduced the idea behind SHUAs, noting that SHUAs are not defined in the legislation but there is a need to define specific areas of human use to reduce conflict and protect traditional uses. DeGuise mentioned that there are currently four major criteria to determine SHUAs:

- Areas with features of historical, cultural, or educational significance
- Areas of substantial recreational and/or “quality of life” value
- Areas important for navigation, transportation, infrastructure, and energy
- Areas important to fishing and aquaculture

Within these major criteria, there is also a list of sub-criteria (Appendix 3). The initial idea is that each sub-criteria will have representative maps, and an applicant will use those maps to understand where the SHUAs are.

Kevin O'Brien of DEEP introduced a complementary idea of creating cluster maps, which would represent multiple sets of SHUA criteria and/or sub-criteria. O'Brien accomplished these draft maps by overlaying all applicable layers on top of a 1000m x 1000m grid covering the planning area of Long Island Sound. The resulting map represented the frequency of all human use data layers intersecting the grid cells (Appendix 4). O'Brien took that analysis another step further by creating a map that represents concentrations of high frequency values (red) vs low frequency values (blue) (Appendix 5). O'Brien also presented these cluster maps for each major criterion (Appendix 6).

Commissioner Klee mentioned that he wondered if this type of aggregation and combination would lose detail about vertical (water column) conflict. Brian Thompson noted that policies are organized based on potential impact area: bottom, water column, or surface, so it could be very useful to also cluster data based on impact area. DeGuise wondered if weighting certain uses based on "movability" or "permanence" may be appropriate. DeGuise also raised the issue of whether thresholds would be appropriate in understanding where the areas of highest use may be, and suggested the use of data to engage stakeholders.

Policy and Blue Plan Progress

Emily Hall, NOAA Coastal Management Fellow, introduced the Blue Plan Policy Development packet. Within the packet were a series of draft policy development documents that were open for Blue Plan Advisory Committee comment, including:

- Policy Development Timeline
- Draft Definitions of the ESA/SHUA Criteria
- Draft Policy Layout
- ESA/SHUA Policy Incorporation Image
- Policy "Lenses" Funnel Image
- SHUA Data Table
- Compatibility Matrices
 - Human Use v. Human Use
 - Human Use v. Ecological Resource
 - Impact Area v. Ecological Resource

Hall walked the Committee through the document and emphasized the importance of the Draft Policy Layout, as it was this draft language that could be developed into the final Blue Plan Policy Chapter¹. The potential table of contents for the Policy Chapter can be found in Appendix 7.

Commissioner Klee noted that cluster maps could be particularly useful in highlighting specific geographic areas of special use, such as Charles Island, in Part IIc of the policy (also known as, Area Based

¹ Copies of the Blue Plan Policy Development packet are available on request from DEEP.BluePlanLIS@ct.gov.

Priority Standards) (Appendix 7). Sylvain DeGuise also questioned the criteria that would be used to determine if an area had a special use type and should be so designated, without being completely subjective. Hall mentioned that the process could relate back to overlapping the SHUA maps, and if there is an area with many similar type uses that it could be defined as a special use area. The Committee discussed the various pros and cons of designating special use areas, and Hall mentioned that as this policy evolves, we will be able to tweak the process. DeGuise noted that the Blue Plan may be able to be used by others besides permit applicants. Hall mentioned that she initially saw the plan being used by an applicant and reviewing agency, but can see other planning efforts using the resources the Blue Plan has to offer.

Stakeholders, Outreach and Messaging

Christian Fox, TNC's Blue Plan Outreach Coordinator, updated the group on the most recent outreach and stakeholder engagement efforts. The Blue Plan held its first public meeting in New York on May 31st at Port Jefferson Village Hall, in partnership with the Suffolk County Department of Economic Development and Planning. There were approximately 14 attendees, including stakeholders from charter fishing, local government, outreach and education, recreational diving, and the general public. Feedback from the meeting included sources of information to fill data gaps, further outreach opportunities, and excitement about the utility of the Inventory and Blue Plan.

Ongoing outreach includes participatory mapping efforts to fill data gaps. These efforts have taken place with the sailing, recreational fishing, and recreational diving sectors. Future outreach efforts may include discussions on the development of SHUAs, focusing on what datasets to use, the possibility of weighting datasets, etc. Policy will also be a topic of future outreach, and will be the subject of the future two formal public hearings.

Emily Hall gave an update on the prospect of creating informational and marketing type videos for the Blue Plan. With the assistance of funding from the Long Island Sound License Plate Fund, CT DEEP was able to enter into a partnership with Middlesex Community College to produce the videos in the summer and fall of 2018, to be completed in early 2019. Yolanda Cooley mentioned that the CT DEEP Boating Division also has completed a series of educational videos that are being promoted and broadcast by local television stations, and she would be happy to share this information.

Public Comment Period

There were no public comments at this time.

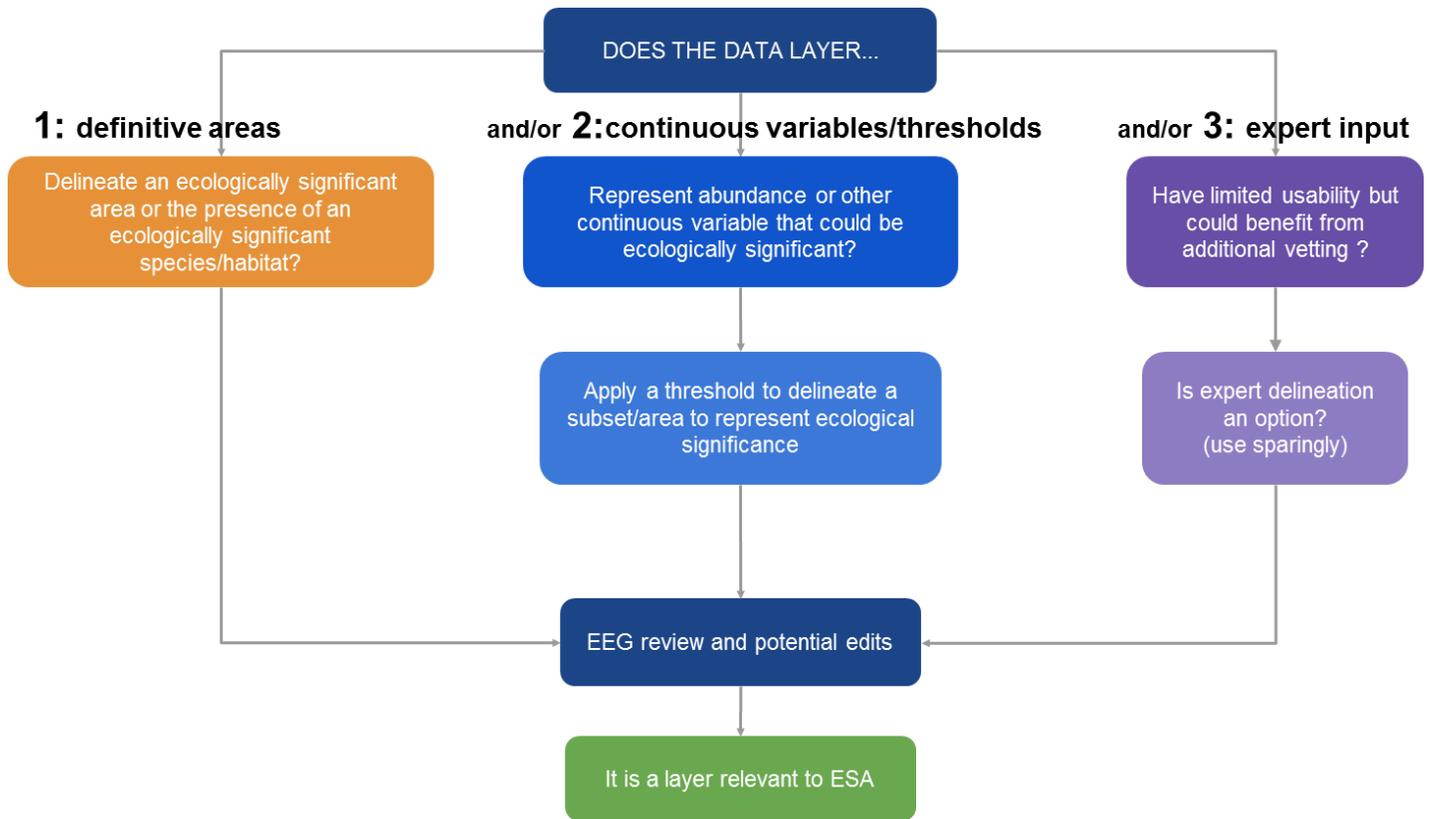
The meeting adjourned at 8:58 pm.

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

Appendix 1. Ecological Experts Group

Name	Affiliation	Expertise
Peter Auster	UConn, Mystic Aquarium	Fish, Benthos, Marine Ecology
Maxine Montello	Riverhead Foundation	Marine Mammals, Sea Turtles
Penny Howell	CT DEEP Marine Fisheries (retired)	Fish
Justin Davis	CT DEEP Marine Fisheries	Fish
Giancarlo Cicchetti	EPA	Marine Ecology
Chris Elphick	UConn	Birds
Melissa Albino-Hegeman	NY DEC	Marine Scientist
Tessa Getchis	CT Sea Grant	Shellfish

Appendix 2. Methods for Spatially Defining ESAs



Appendix 3. Draft List of Major Criteria and Sub-Criteria

Ecologically Significant Areas (ESA)

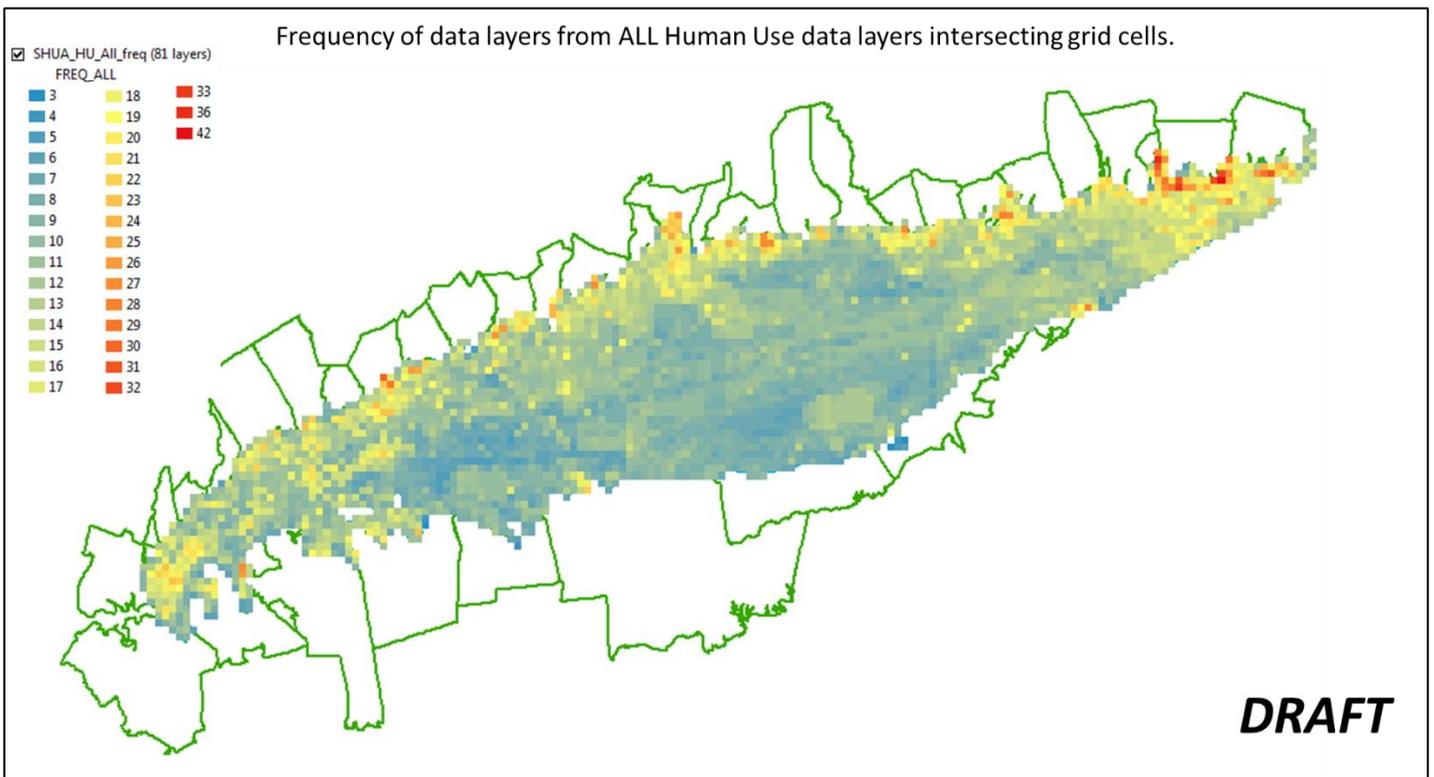
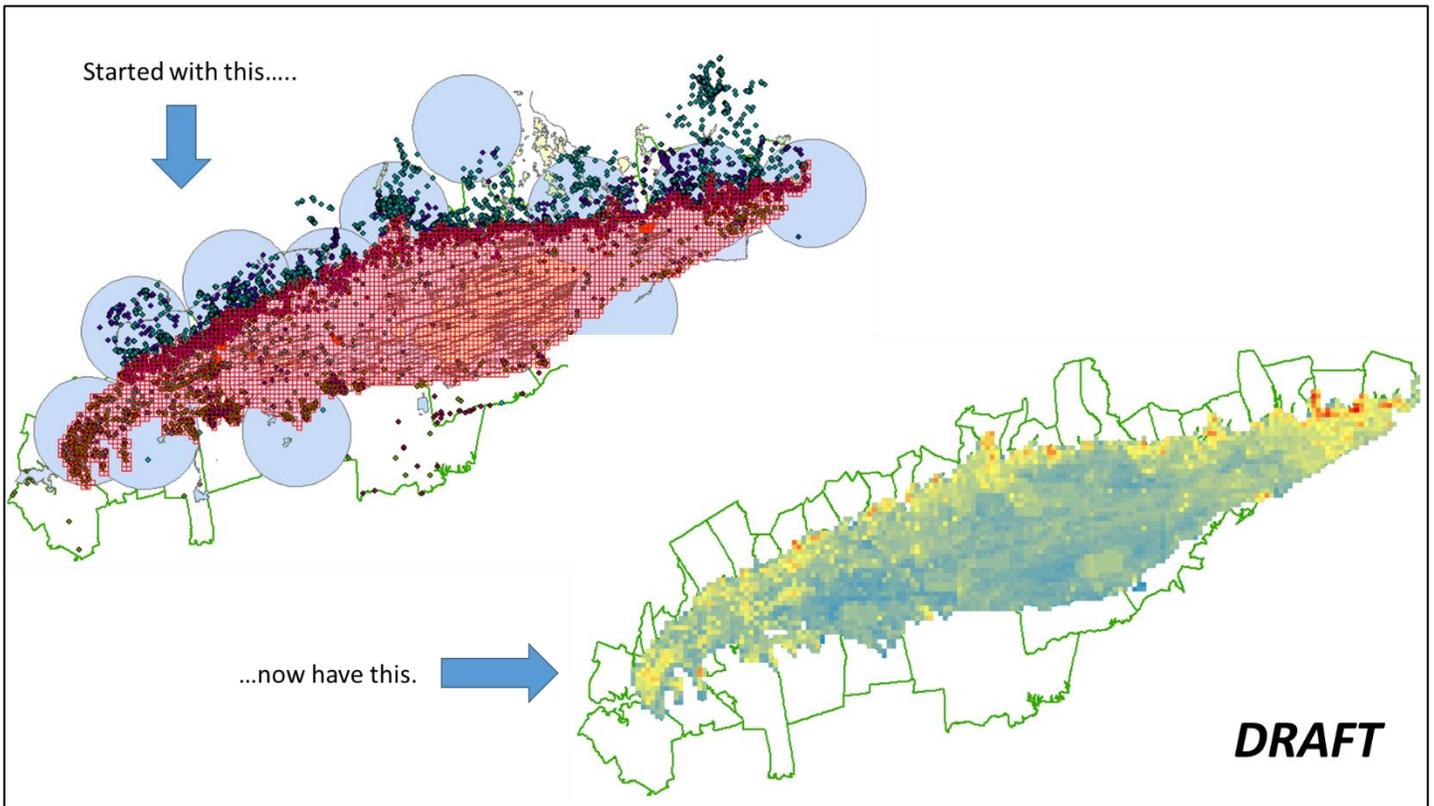
- Areas with unique or fragile physical features, or important natural habitats
 - Hard Bottom/Sea Floor Complexity
 - Eel Grass Beds
 - Sensitive, Rare, Sensitive, and Unique
 - Coastal Wetland
 - ESA Critical Habitats
 - Migratory Bird Sanctuaries/Stop-overs
- Areas of High Natural Productivity
 - Areas of High Biological Persistence, Diversity, Abundance
 - Natural High Primary Productivity
 - Migratory Corridors
 - Important Fish Habitat
 - Nursery Areas and/or Feeding Grounds

Significant Human Use Areas (SHUA)

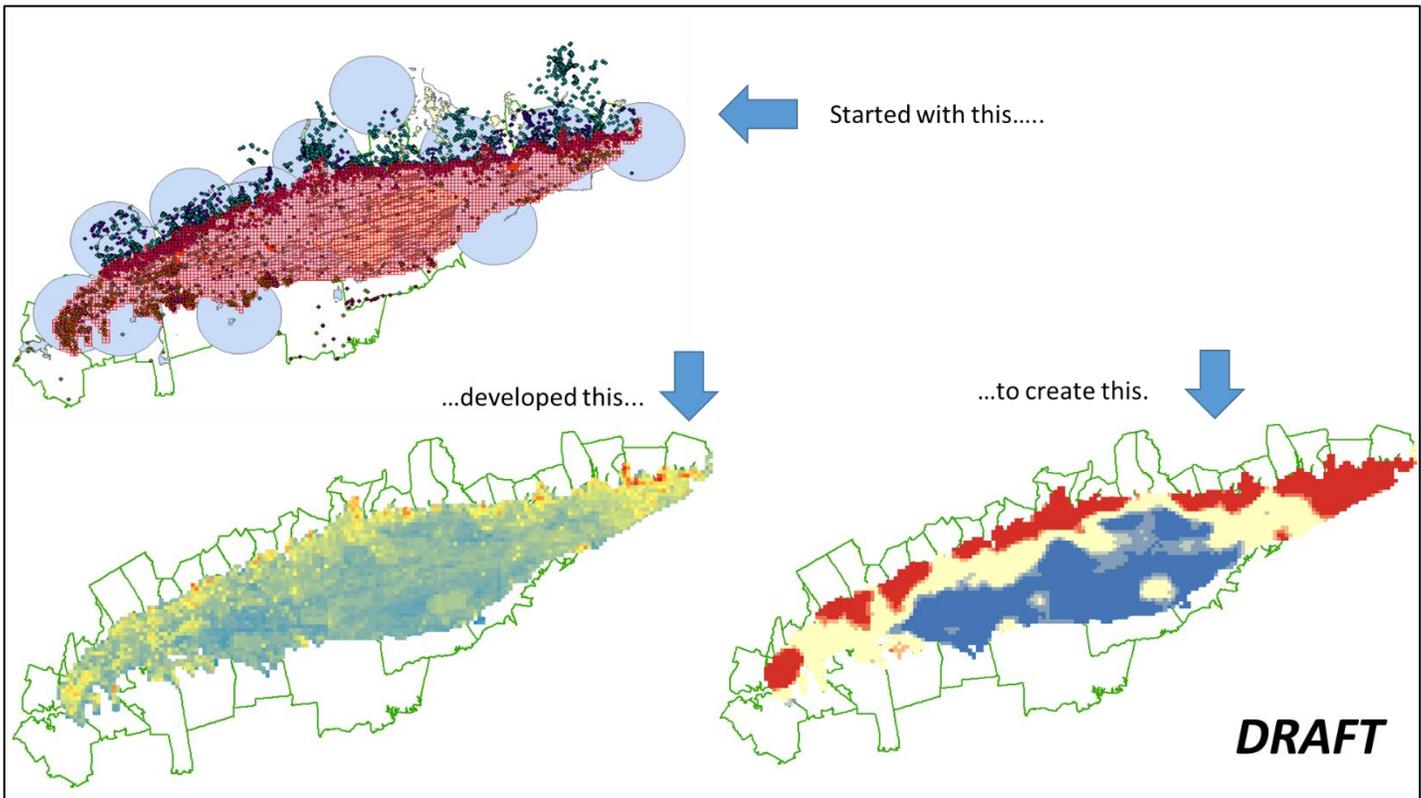
- Areas with features of historical, cultural, or education significance
 - Areas associated with lighthouses and other historic buildings
 - Shipwrecks
 - Visual and Scenic Resources
 - Submerged Archaeological Areas
 - Submerged Archaeological Sensitivity
 - Discrete Areas for Research, Education, and Citizen Science
- Areas of substantial recreational, and/or “quality of life” value
 - Sailing or Rowing Races
 - Marine Events
 - High Activity Recreational Boating Areas
 - Mooring Fields and Anchorage Areas
 - Marinas, Yacht Clubs, and Boat Launches
 - Waterfowl Hunting
 - Dive Sites
 - Coastal Access Sites
 - Beaches and Swimming Areas
 - High Use Kayak and Paddle Boards
 - State Parks
 - Wildlife Watching and other Sightseeing
- Areas important for navigation, transportation, military, infrastructure, and economic activity
 - Ports and Working Waterfronts

- Designated Navigation Channels
- Commercial Anchorage Areas
- Security Zones
- Aids to Navigation
- Areas of Lightering Activity
- Ferry and Shipping Routes
- Dredged Material Disposal Areas
- Existing Cables and Pipelines
- Existing Offshore Terminals
- Existing On-Shore Terminals with Nearshore Moorings
- Coastal Power Plants
- Areas Important to Fishing and Aquaculture
 - Recreational Fishing
 - Commercial Fishing
 - Charter and Party Boat Fishing
 - Recreational Shellfish Areas
 - Active Commercial Aquaculture Locations

Appendix 4. Human Use Cluster Analysis based on Frequency of Data Layers in a Grid Cell



Appendix 5. Human Use Cluster Analysis based on Concentrations of Grid Cell Frequency



Results of clustering analysis¹ across ALL human use interests.

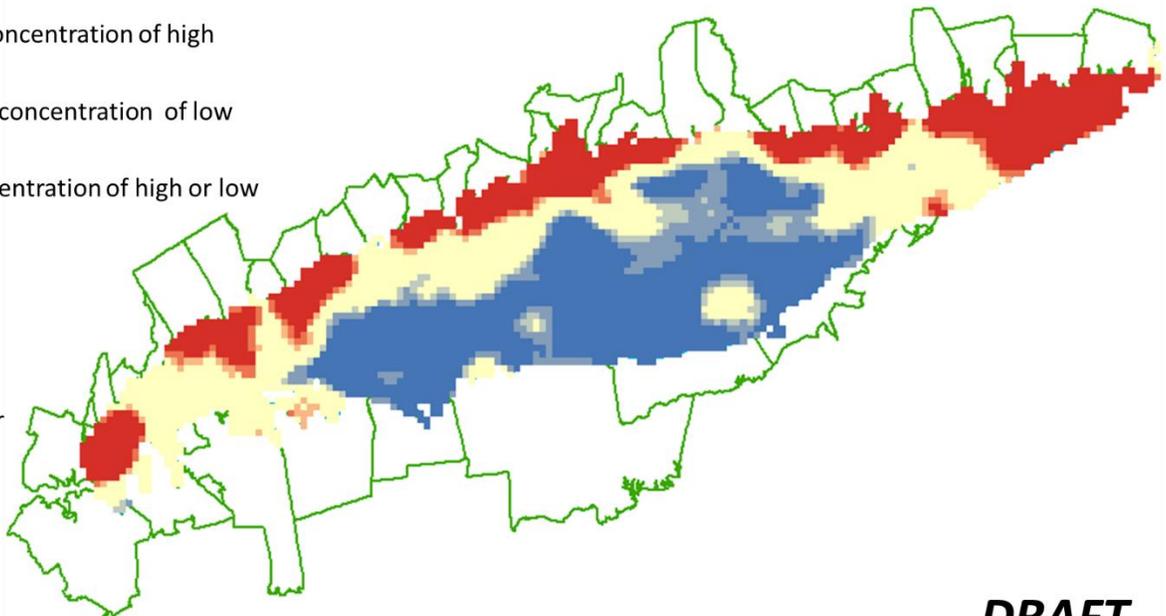
Looking for like values surrounded by other like values that exceed the likelihood of random chance.

REDS = hot spots = concentration of high frequency values

BLUES = cold spots = concentration of low frequency values

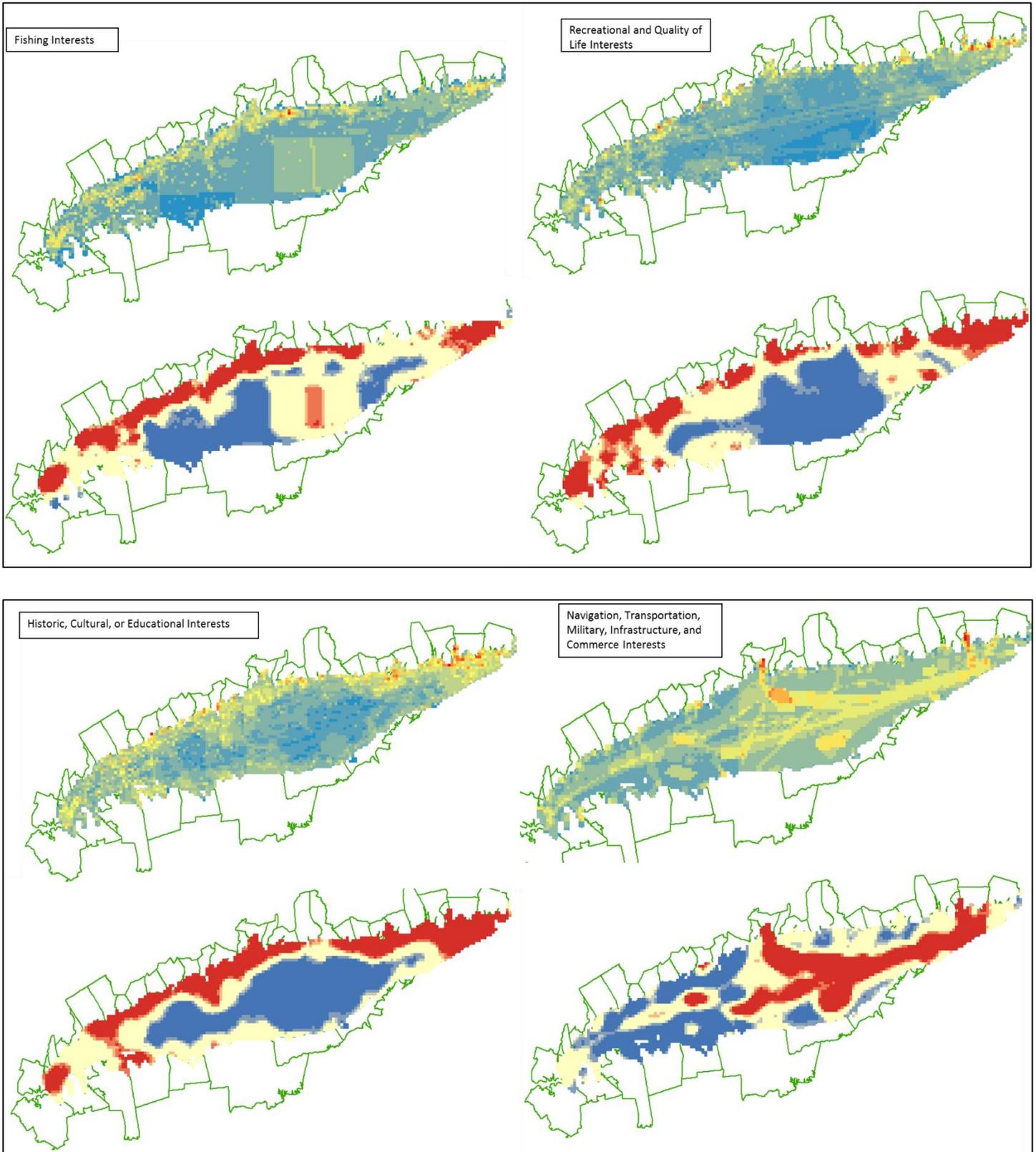
YELLOW = not a concentration of high or low frequency values

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



¹ Getis-Ord Gi* (optimized)

Appendix 6. Human Use Cluster Analysis based on Major Criteria



Appendix 7. Draft Policy Chapter Table of Contents

Chapter 4: Blue Plan Policy Recommendations

- Introduction
 - Overview of policy chapter and description of how to read policies
- Part I: Sound Wide Policies
 - Policies encompassing the entire Sound
- Part II: General ESA/SHUA Policy
 - Overarching policy applying to Part IIa, IIb, IIc
 - Part IIa: Siting and Performance Standards by Ecologically Significant Resource Category
 - Part IIb: Siting and Performance Standards by Significant Use
 - Part IIc: Area-Based Priority and Performance Standards
- Part III. Lenses by Which to Analyze Policy
 - Existing Laws and Regulations
 - Reference to chapter 3
 - Degree of Conflict (ex. Fixed structure in navigation channel)
 - Reference to conflict/compatibility matrices either in chapter or in appendix
 - Reliability of Data (navigational channels vs. recreational boating areas)
 - Duration and Permanence of Resource or Use (ex. Duck Hunting or Sailboat races)
 - Social and Community Equity