Long Island Sound Blue Plan

Ecologically Significant Areas and Significant Human Use Areas

Available for Public Review

January 2019

Ecologically Significant Area Definitions

Criteria	Supporting Datasets	Description
(Pillar I) Areas with rare, sensitive, or vulnerable species, communities, or habitats		
1. Hard bottom and complex sea floor	• Long Island Sound Ecological Assessment (LISEA) hard bottom (pts) • USGS Surficial sediment map, gravel areas (polys) • Long Island Sound Mapping and Research Collaborative (LISMaRC) Phase II SEABOSS hard bottom observations (pts) • Terrain Ruggedness Index (top quintile) • Wrecks and obstructions (pts)	Areas of hard bottom are characterized by exposed bedrock or concentrations of boulder, cobble, pebble, gravel, or other similar hard substrate distinguished from surrounding sediments and provide a substrate for sensitive sessile suspension-feeding communities and associated biodiversity. Complex seafloor is a morphologically rugged seafloor characterized by high variability in neighboring bathymetry around a central point. Biogenic reefs and man-made structures, such as artificial reefs, wrecks, or other functionally equivalent structures, may provide additional suitable substrate for the development of hard bottom biological communities. Areas of hard bottom and complex seafloor are areas characterized singly or by any combination of hard seafloor, complex seafloor, artificial reefs, biogenic reefs, or wrecks and obstructions.
2. Areas of submerged aquatic vegetation	Seagrass surveys from 2002, 2006, 2009, 2012, 2017 (polys)	Areas where submerged aquatic vegetation, e.g., eelgrass (*Zostera marina*),

		etc., are present or have been found to be present.
3. Endangered, threatened, species of concern, or candidate species listed under state or federal ESA, and their habitats	• Atlantic sturgeon gear restriction areas (polys) • Atlantic sturgeon and shortnose sturgeon high and medium use areas (polys) • Atlantic sturgeon migratory corridor (polys) • Predicted summer occurrence of roseate tern (raster) • Connecticut Natural Diversity Database approximate locations of endangered, threatened, species of concern (polys) • Connecticut Critical Habitats (estuarine, polys) • New York rare plants and rare animals (polys) • New York Significant Natural Communities (polys) • New York Significant Coastal Fish and Wildlife Habitats (polys) • US Endangered Species Act Critical Habitat for Atlantic sturgeon (polys)	The species listed by federal or state statutes (e.g., the US Endangered Species Act, the CT Endangered Species Act, the NY Endangered Species Act) as endangered, threatened, species of concern, or candidates for listing, and their associated habitats, recognizing that detailed spatial data depicting the distribution and abundance for these marine species in Long Island Sound are potentially unavailable.
4. Areas of cold water corals	LISMaRC Phase I and Phase II cold water coral observations near Stratford Shoals and eastern LIS (polys)	Areas where cold-water corals have been observed or where habitat suitability or other scientific models predict they occur.

5. Coastal wetlands[1]	National Wetlands Inventory, clipped to Long Island Sound Study boundary (polys)	According to Connecticut General Statute (CGS) 22a-29: "Those areas which border on or lie beneath tidal waters, such as, but not limited to banks, bogs, salt marshes, swamps, meadows, flats, or other low lands subject to tidal action, including those areas now or formerly connected to tidal waters, and whose surface is at or below an elevation of one foot above local extreme high water; and upon which may grow or be capable of growing some, but not necessarily all, of [a list of specific plant species found in CGS section 22a-29(2)].
Criteria	Supporting Datasets	Description
(Pillar II) Areas of high natural productivity (HNP), biological persistence, diversity, and abundance, including areas important for supporting or exhibiting such features, relative to the following characteristics or species[2]:		
6. Cetaceans (marine mammals)	• Cetacean density models for the US Atlantic Coast, Duke University Marine Geospatial Ecology	Areas where cetaceans occur in higher concentrations and/or particular significant areas as noted in the general description (above) that

[1] Long Island Sound Blue Plan policies do not apply to areas landward of the 10-foot contour, and therefore, while considered Ecologically Significant Areas, Coastal Wetlands and any associated existing statues or policies relevant to Coastal Wetlands are not within the scope of the Long Island Sound Blue Plan.

[2] Areas where natural productivity, biological persistence, diversity, and abundance are high, as well as migratory sanctuaries, stopovers and corridors, nesting areas, feeding areas, and nursery grounds for cetaceans, pinnipeds, sea turtles, marine birds, fish, mobile invertebrates, sessile-mollusk-dominated communities, managed shellfish beds, and soft-bottom benthic communities.

	Lab, for species with predictions in LIS (raster) • Expert participatory mapping (polys; P. Comins, Connecticut Audubon Society, 1/4/19)	support cetaceans (e.g. particular feeding areas, nursery grounds).
7. Pinnipeds (seals)	• NOAA Environmental Sensitivity Index seal concentration areas (polys) • Expert participatory mapping included in the Blue Plan Inventory (polys)	Areas where pinnipeds occur in higher concentrations and/or particular significant areas as noted in the general description (above) that support pinnipeds (e.g. particular haul-out locations, feeding areas).
8. Sea turtles and other reptiles	• Northern diamondback terrapin probability of occurrence (polys) • Locations of 2018 coastal CT sea turtle strikes (pts) • Live sea turtle strandings, rescues, and in-water observations, Riverhead Foundation for Marine Research and Preservation (pts) • Live sea turtle strandings and rescues, Mystic Aquarium (pts)	Areas where sea turtles and other reptiles occur in higher concentrations and/or particular significant areas as noted in the general description (above) that support sea turtles and other reptiles (e.g. particular feeding areas, nesting grounds, hibernation areas).
9. Birds	• Seabird occurrence models, University of Connecticut (raster) • Expert participatory mapping (polys; P. Comins, Connecticut Audubon Society, 1/4/19)	Areas where birds are abundant or diverse including feeding areas; areas of high bird productivity including nesting areas.

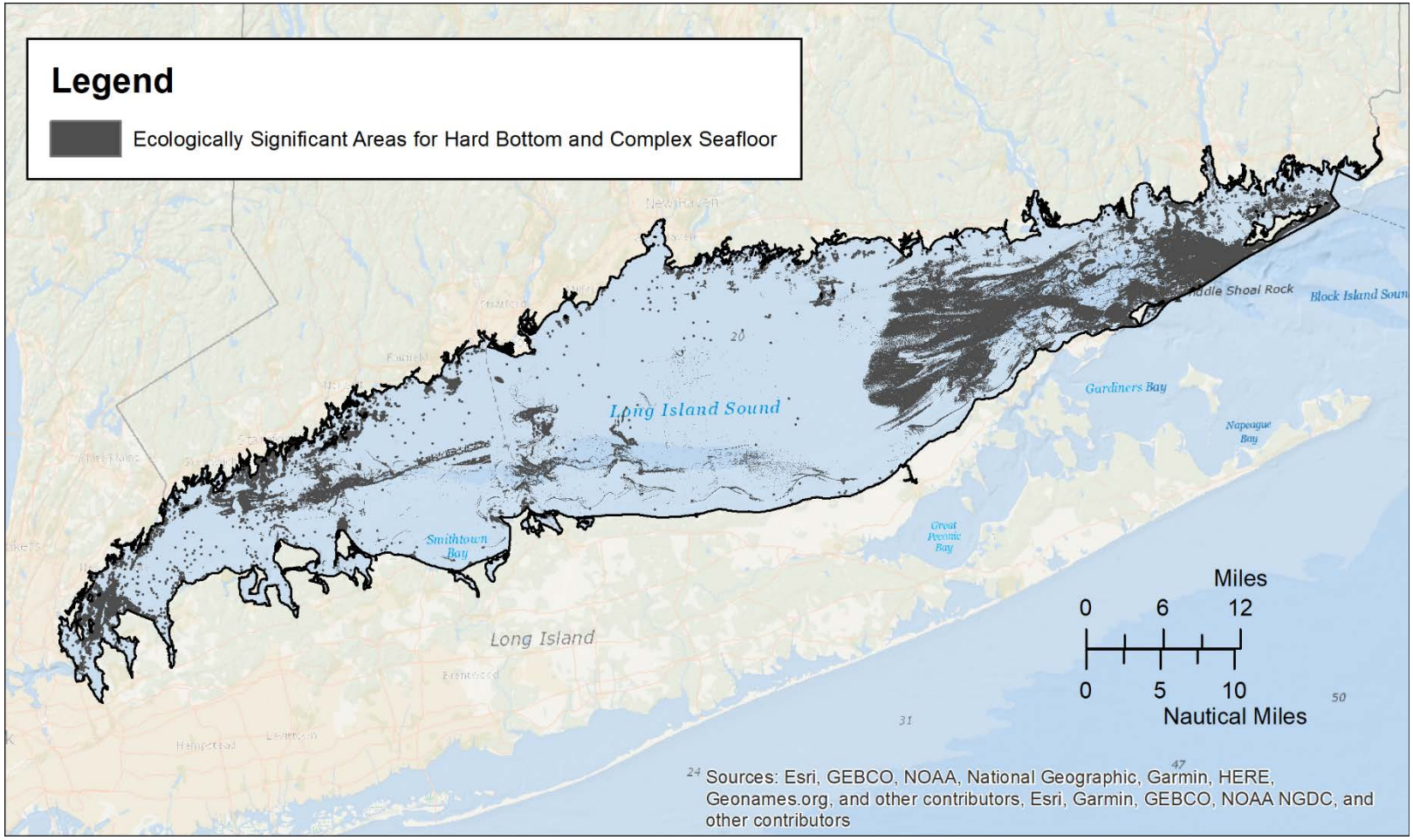
10. Fish	• Persistently productive places for fish (polys; LISEA high weighted persistence) • Areas of high fish abundance and concentration (polys; CT DEEP Marine Fisheries Long Island Sound Trawl Survey, 1995-2004 and 2005-2014, spring and fall data for species caught in >5 tows)	Areas of high weighted fish persistence and high fish abundance and concentration.
11. Mobile invertebrates	• Areas of high mobile invertebrate biomass and concentration (polys; CT DEEP Marine Fisheries Long Island Sound Trawl Survey, 1995-2004 and 2005-2014, spring and fall data for crabs, lobster, squid, and horseshoe crab) • Horseshoe crab offshore hotspots (polys) • Horseshoe crab predicted high and medium use areas (polys) • Horseshoe crab predicted spawning beaches (polys) • American lobster projected thermal refuge (polys)	Areas of high mobile invertebrate (e.g., lobster, other crustaceans, squid) abundance and concentration.
12. Sessile-mollusk-dominated communities	LISMaRC Phase I and Phase II observations of Slipper shell (*Crepidula fornicata*) aggregations and blue	Areas where wild, natural sessile-mollusk-dominated communities occur.

	mussel (*Mytilus edulis*) aggregations near Stratford Shoals and eastern LIS (polys)	
13. Managed shellfish beds	• Oyster seed beds (CT Natural Shellfish Beds) (polys) • CT Recreational Shellfish Beds (polys) • CT State-managed Shellfish Beds (polys) • CT Town-managed Shellfish Beds (polys)	Locations of commercial and recreational shellfishing harvest areas, including shellfish restoration activities and areas closed to shellfishing.
14. Soft-bottom benthic communities	*Adequate data not available*	Areas of soft-bottom seafloor communities where natural productivity, biological persistence, diversity, and/or abundance of marine flora and fauna are high, as well as areas of soft-bottom seafloor communities known to support important life history or important ecological functions of mobile species (e.g., migratory stopovers and corridors, feeding areas, and nursery grounds).
Zooplankton	*Adequate data not available*	Not an ESA criterion at this time, but noted for ecological relevance to productivity.

Ecologically Significant Area Maps

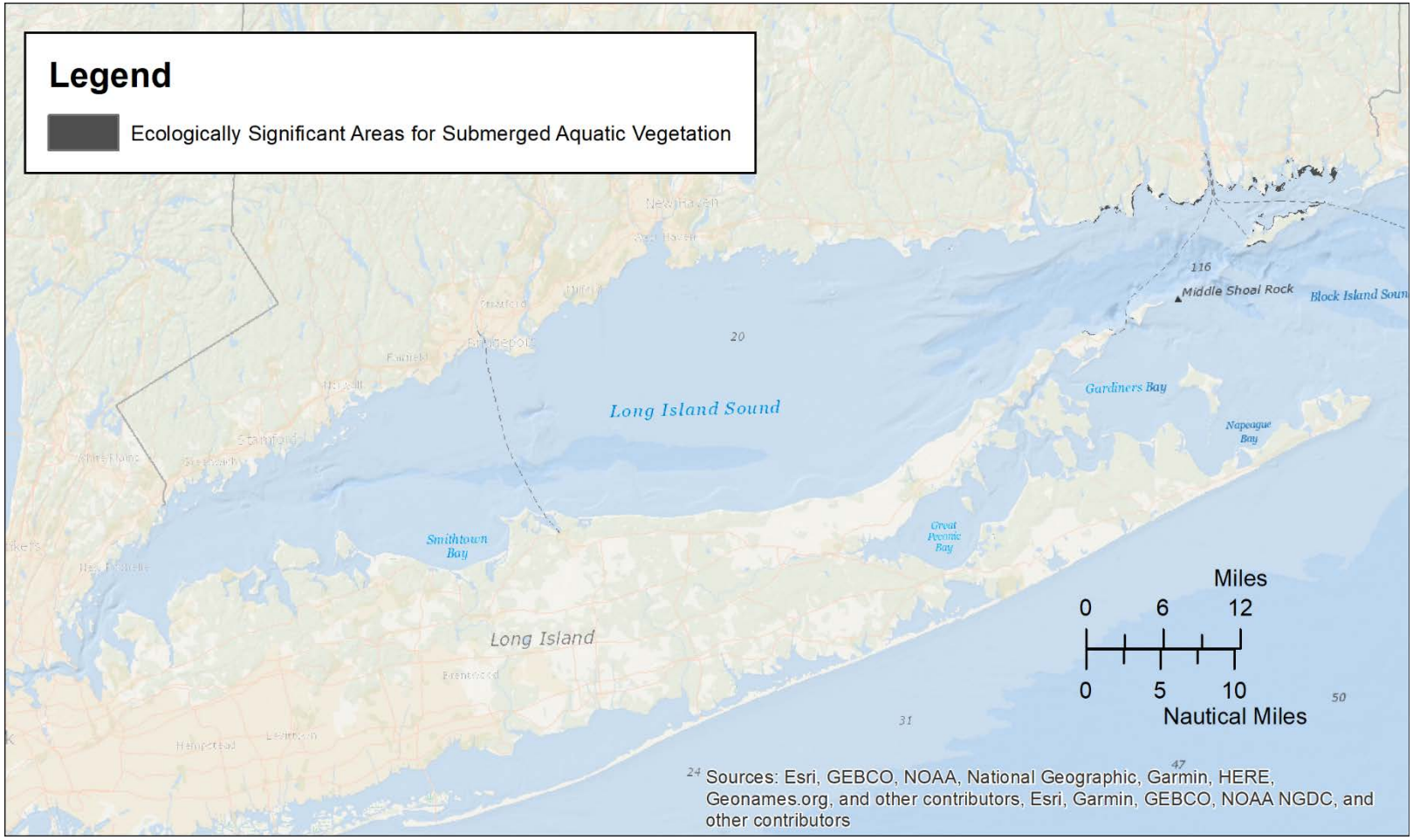
DRAFT Ecologically Significant Area Map: Hard Bottom & Complex Seafloor

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Submerged Aquatic Vegetation

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Endangered, Threatened, and Species of Concern

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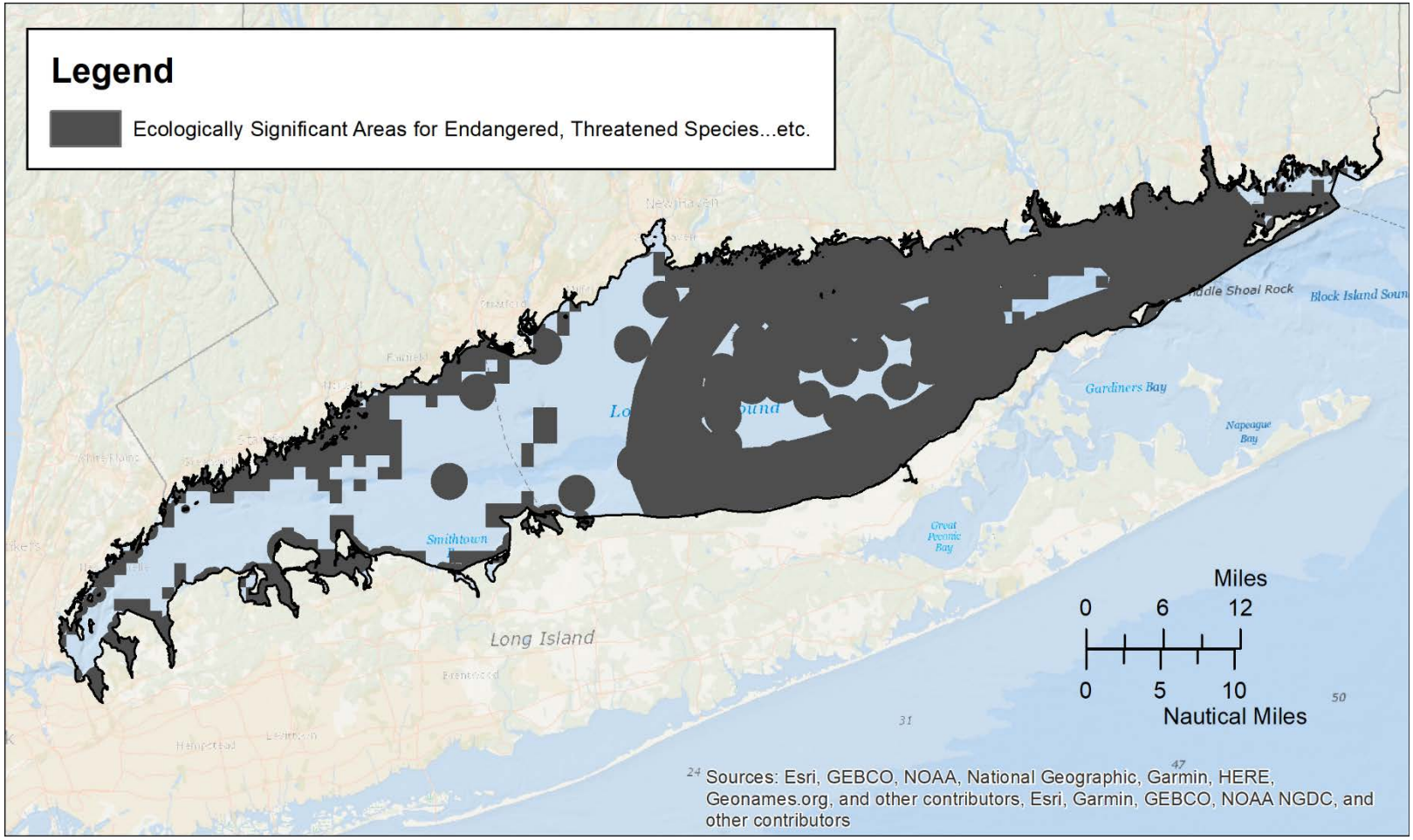
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Cold Water Corals

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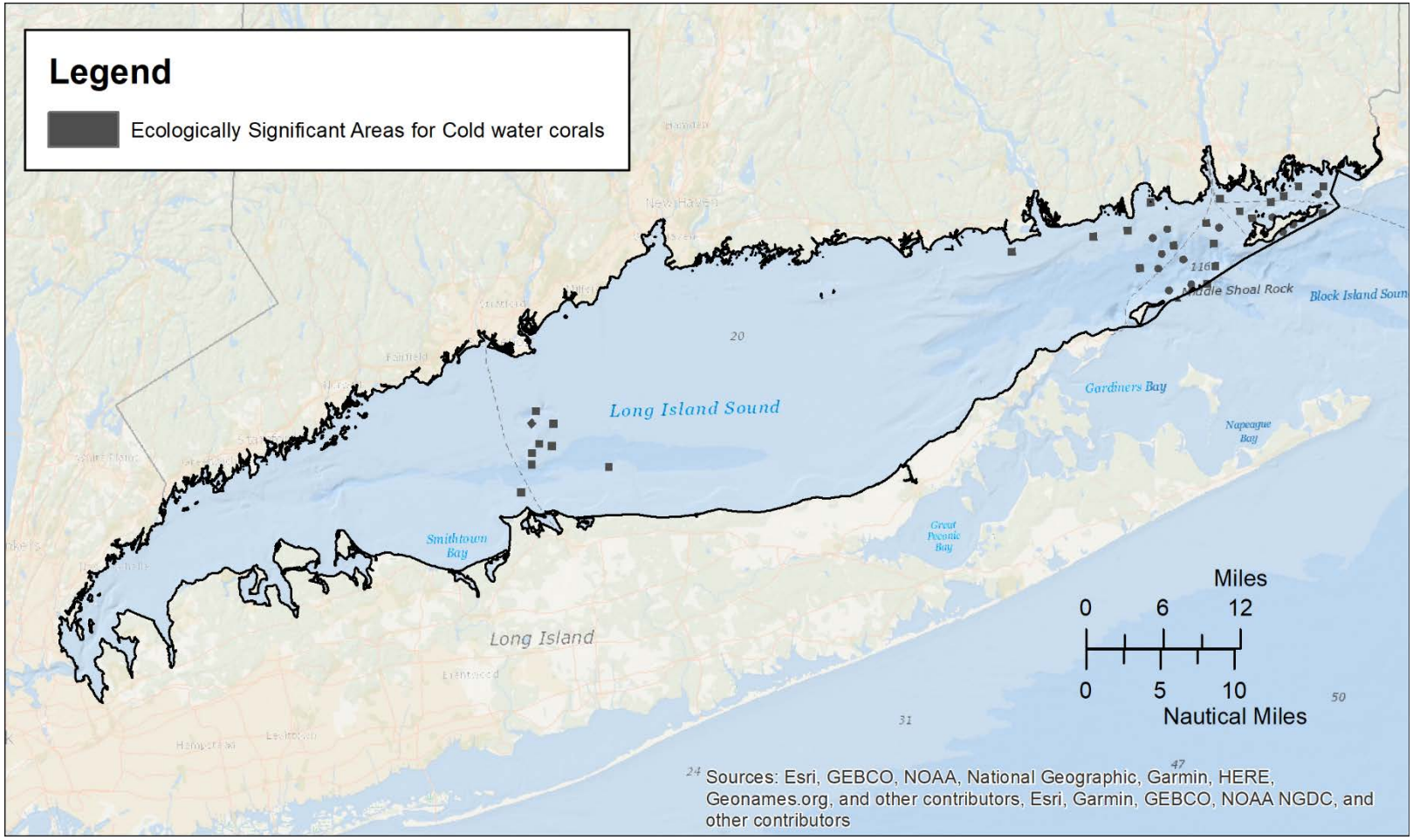
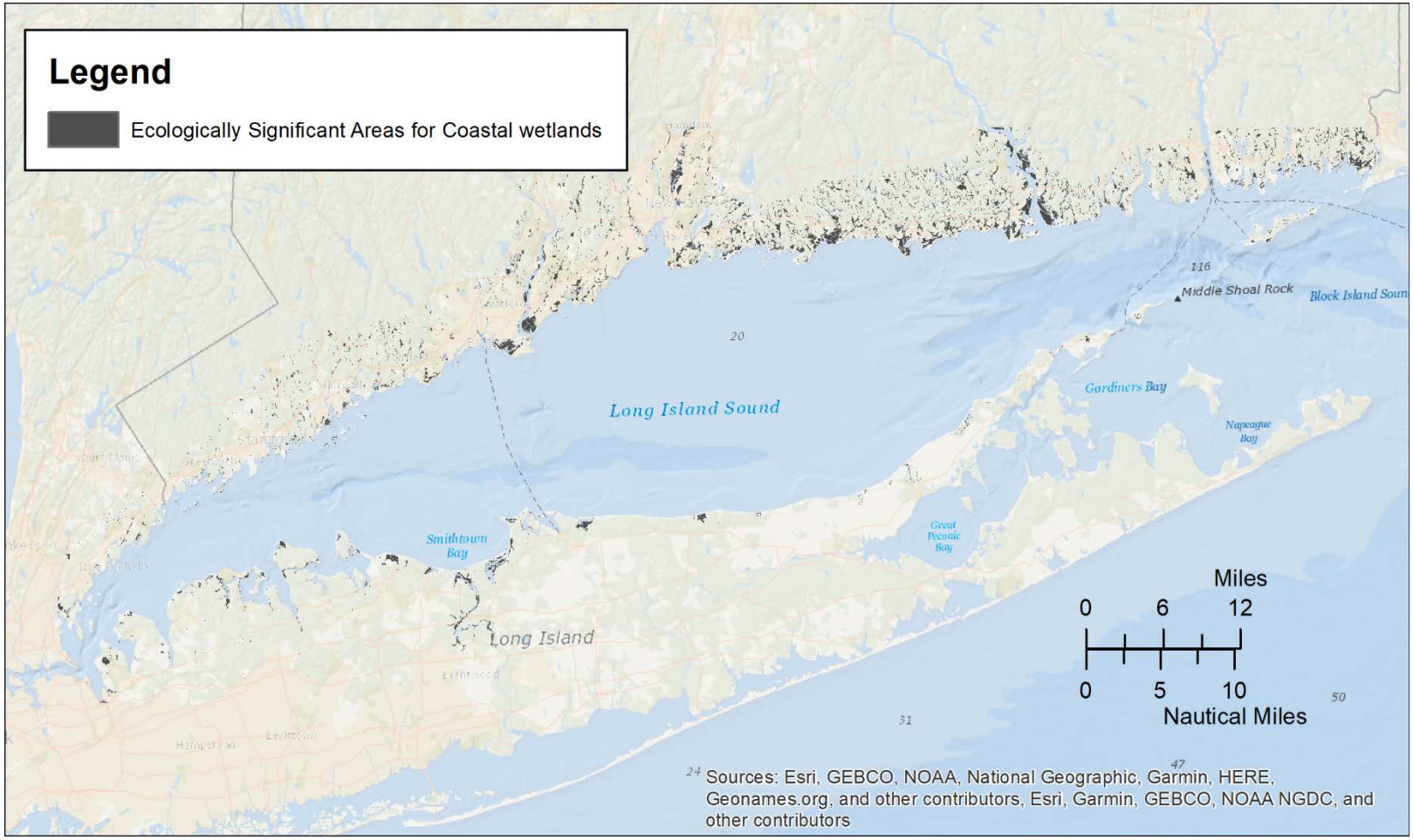
Sustainable Ecosystems - Compatible Uses



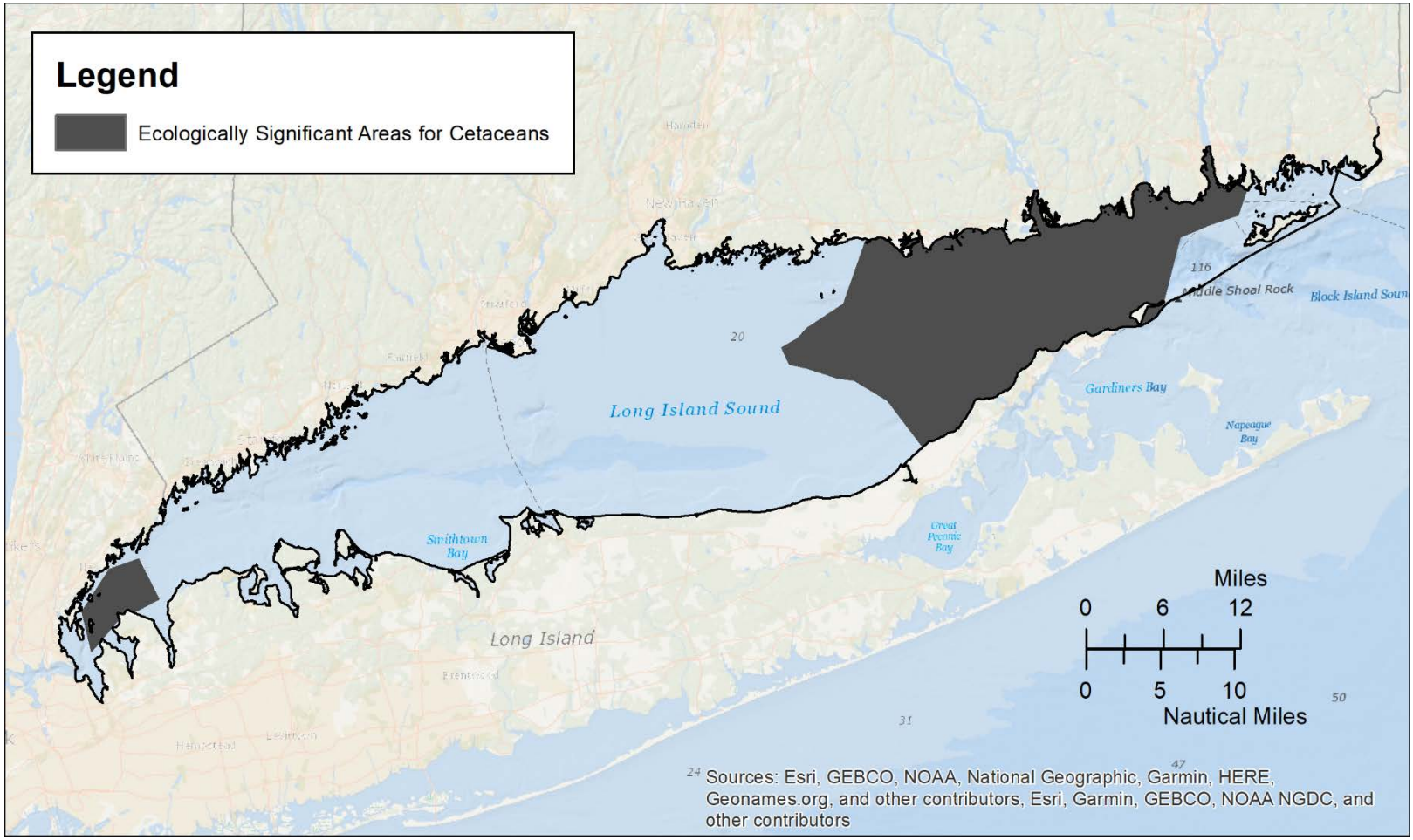
DRAFT Ecologically Significant Area Map: Coastal Wetlands

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



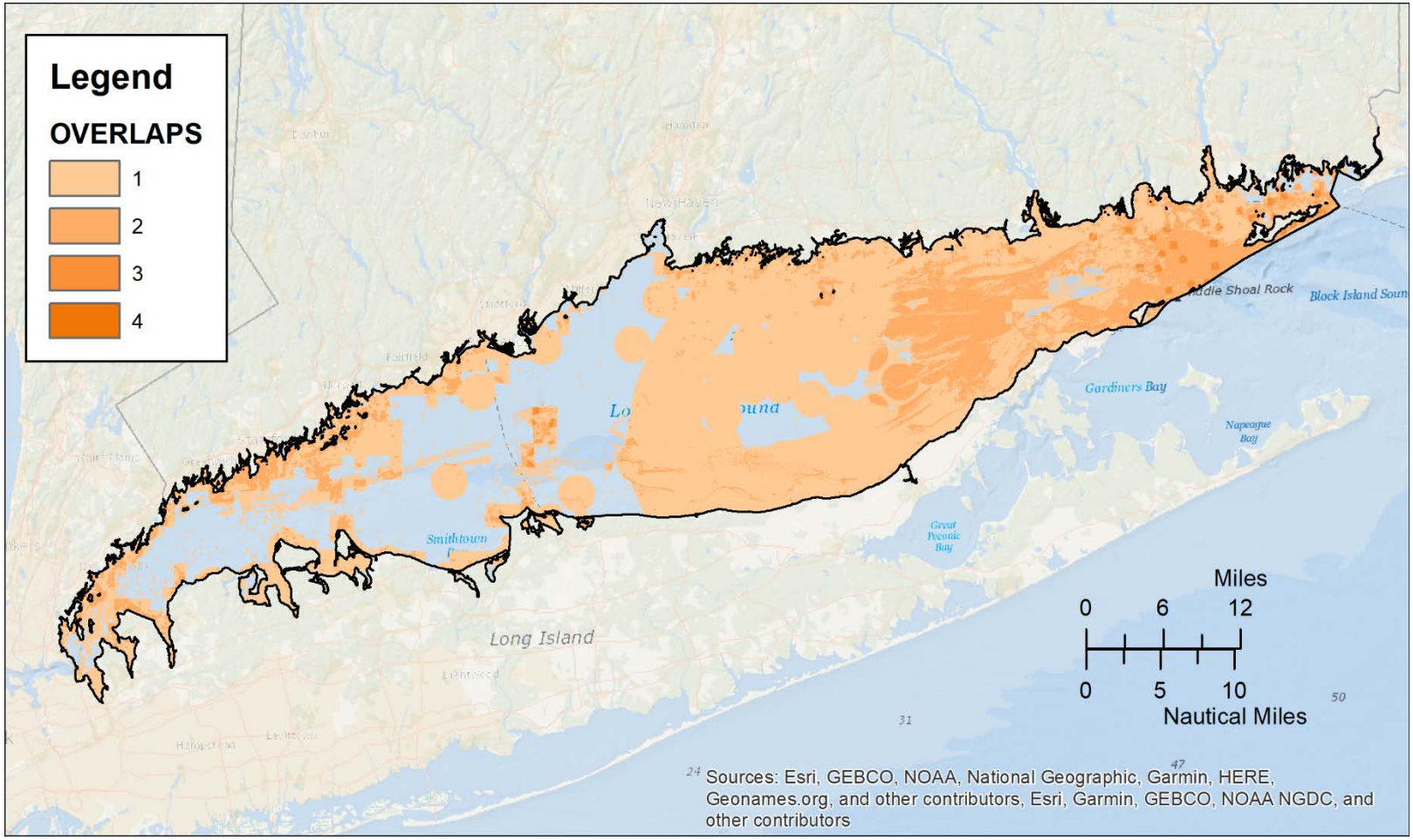
DRAFT Ecologically Significant Area Map: Cetaceans (e.g., whales, dolphins, porpoises)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Overlap areas with rare, sensitive, or vulnerable species, communities or habitats (Pillar 1)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Cetaceans (e.g., whales, dolphins, porpoises)

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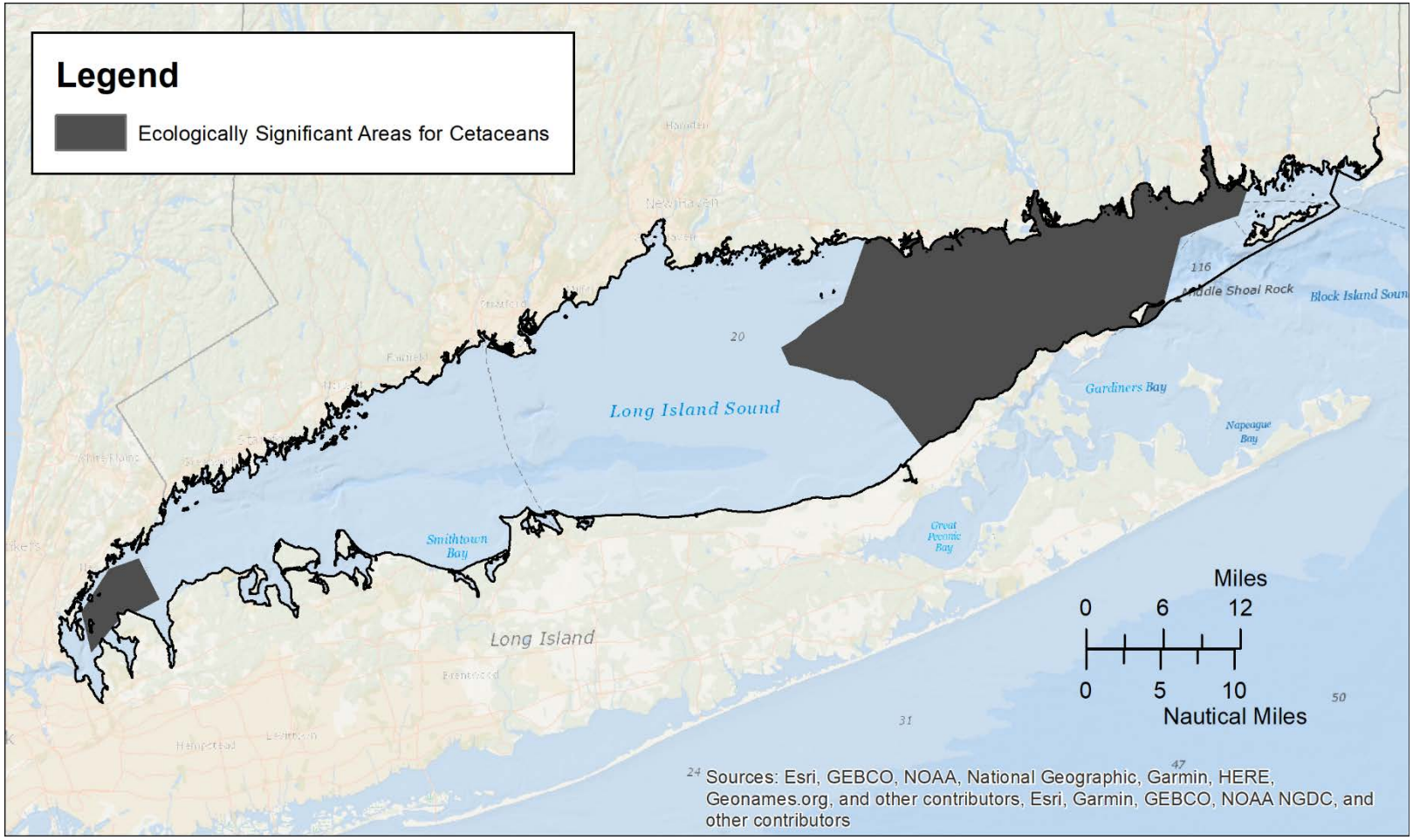
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Pinnipeds (e.g., seals)

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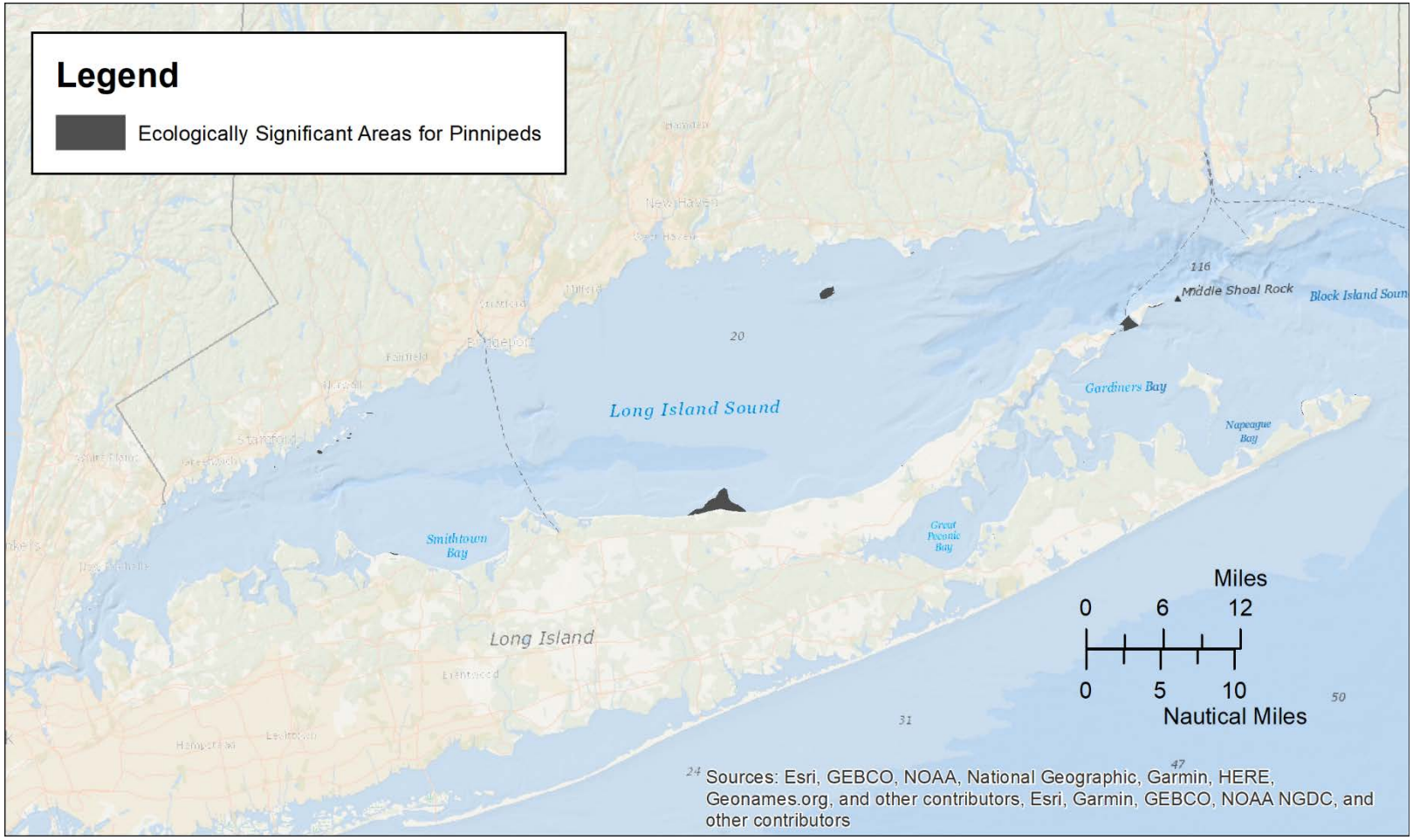
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Sea Turtles and other reptiles

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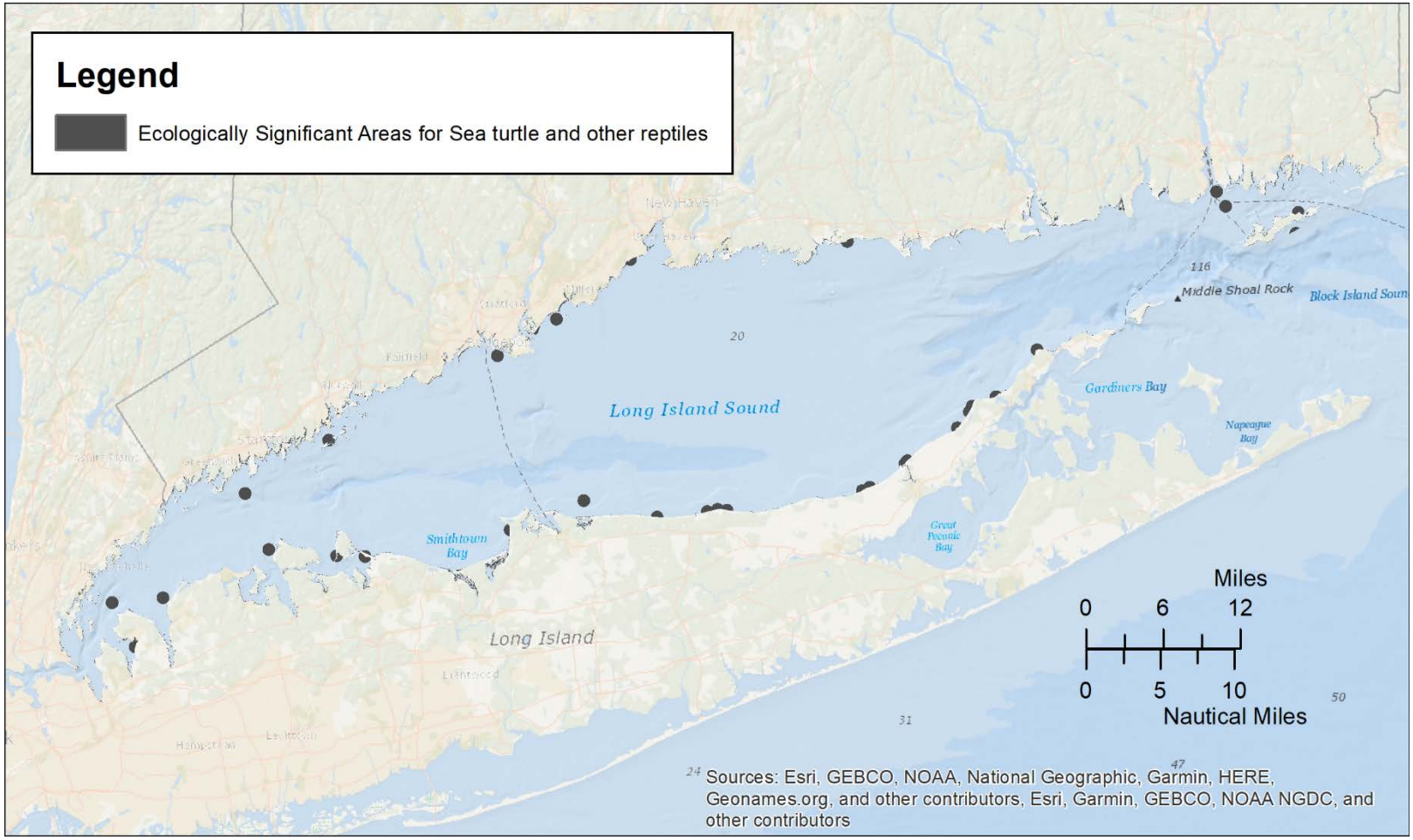
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Birds

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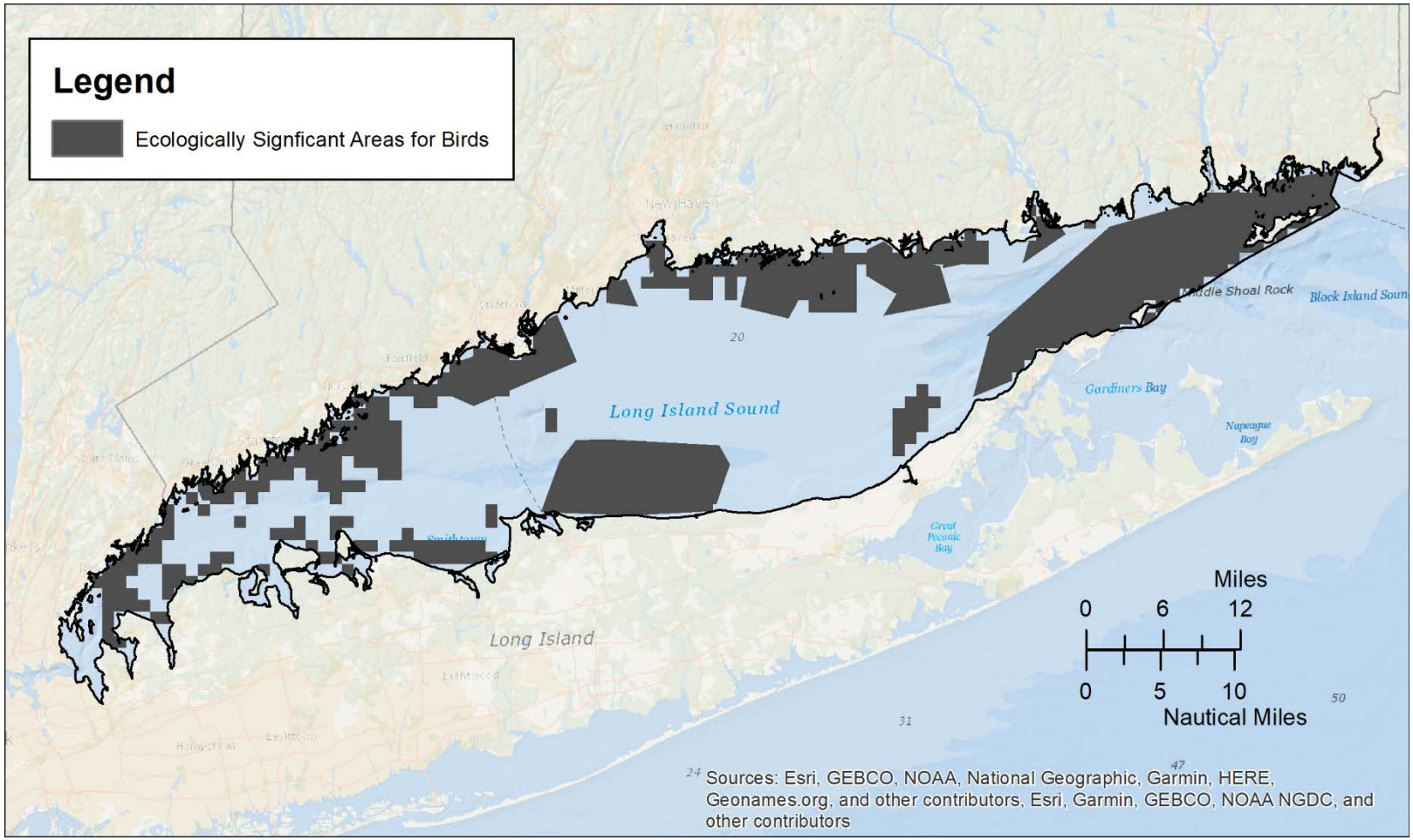
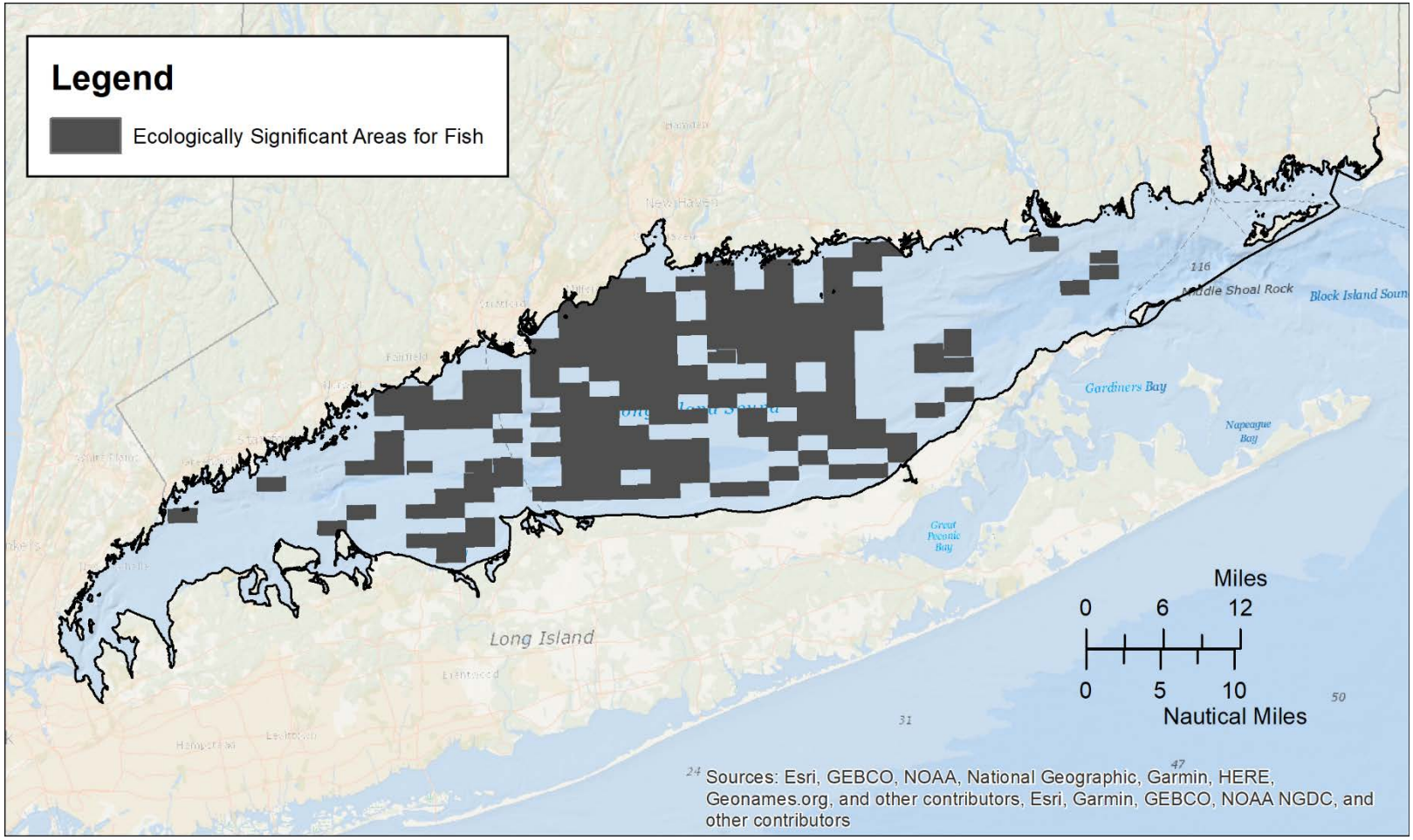
Sustainable Ecosystems - Compatible Uses



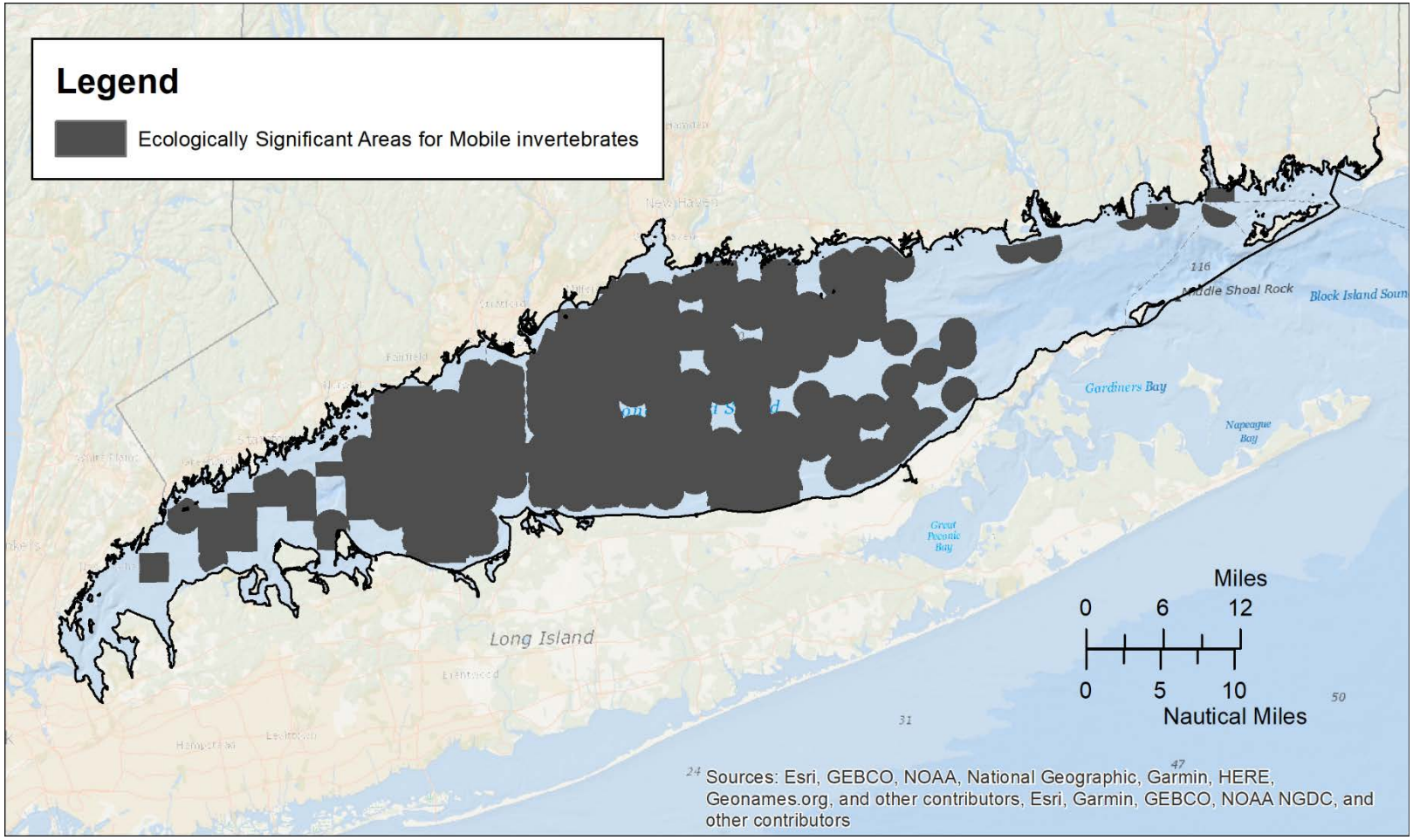
DRAFT Ecologically Significant Area Map: Fish

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Mobile Invertebrates (e.g., lobsters, crabs, squid, etc.)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: Sessile/Mollusk Communities (e.g., mussels, clams, etc.)

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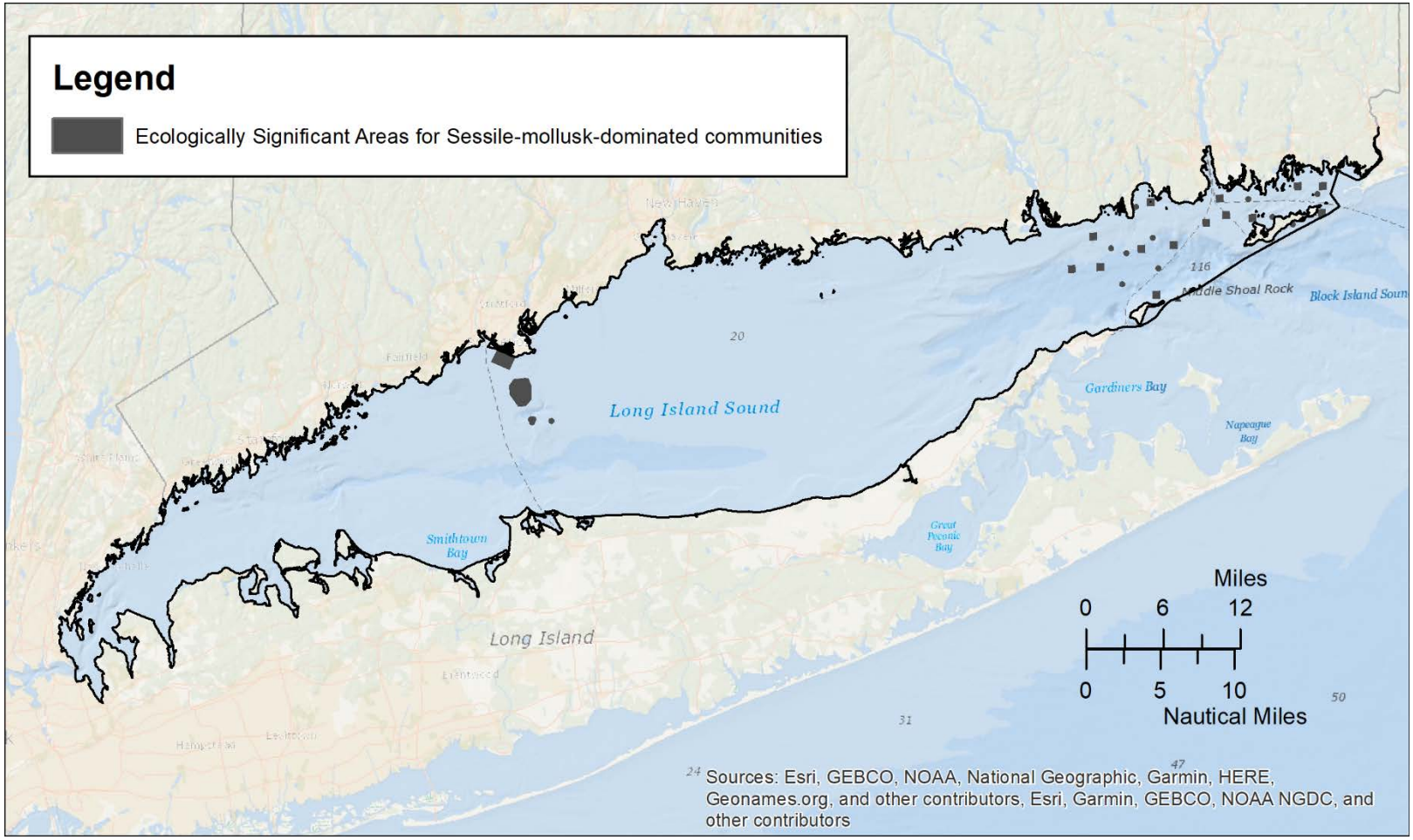
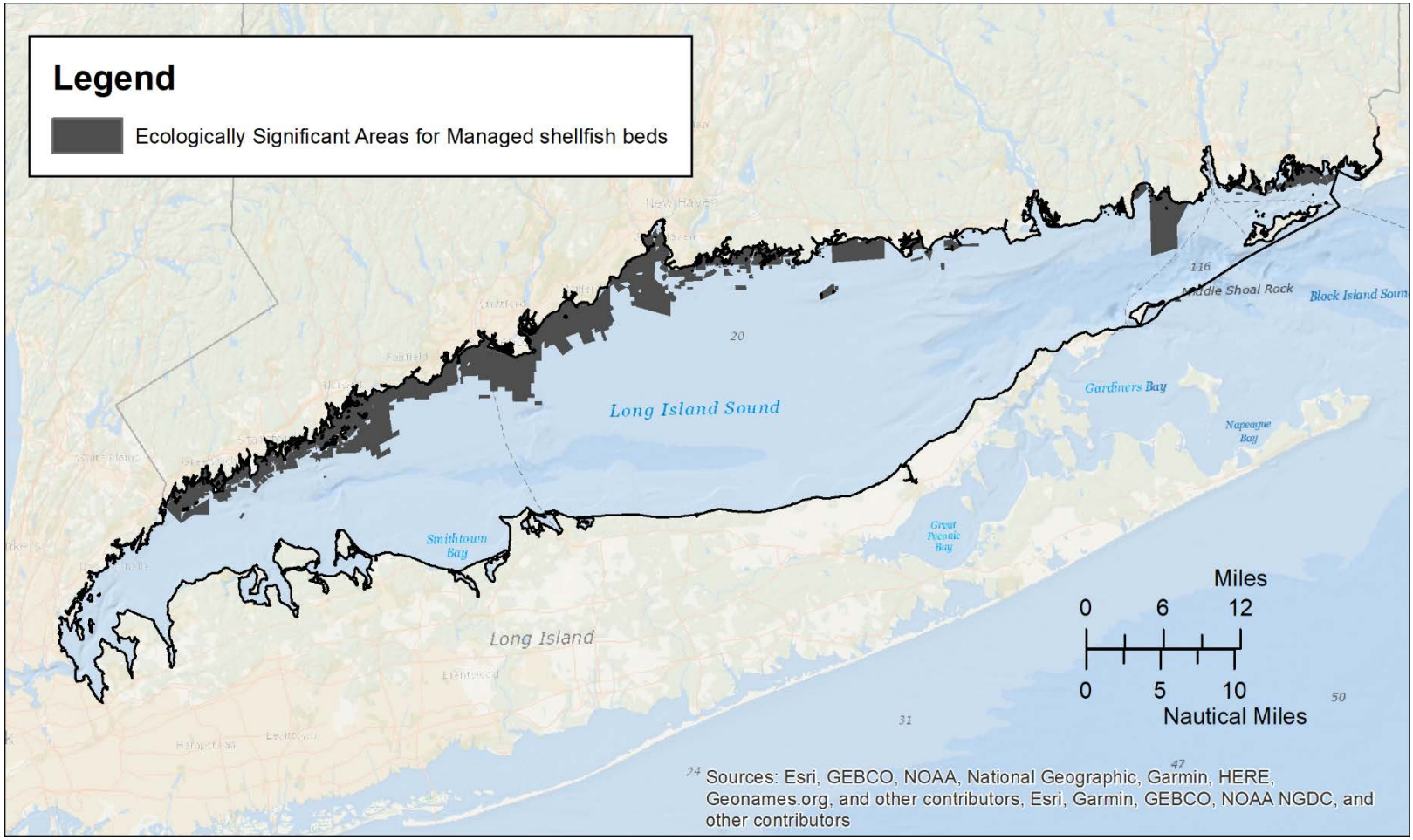
Sustainable Ecosystems - Compatible Uses



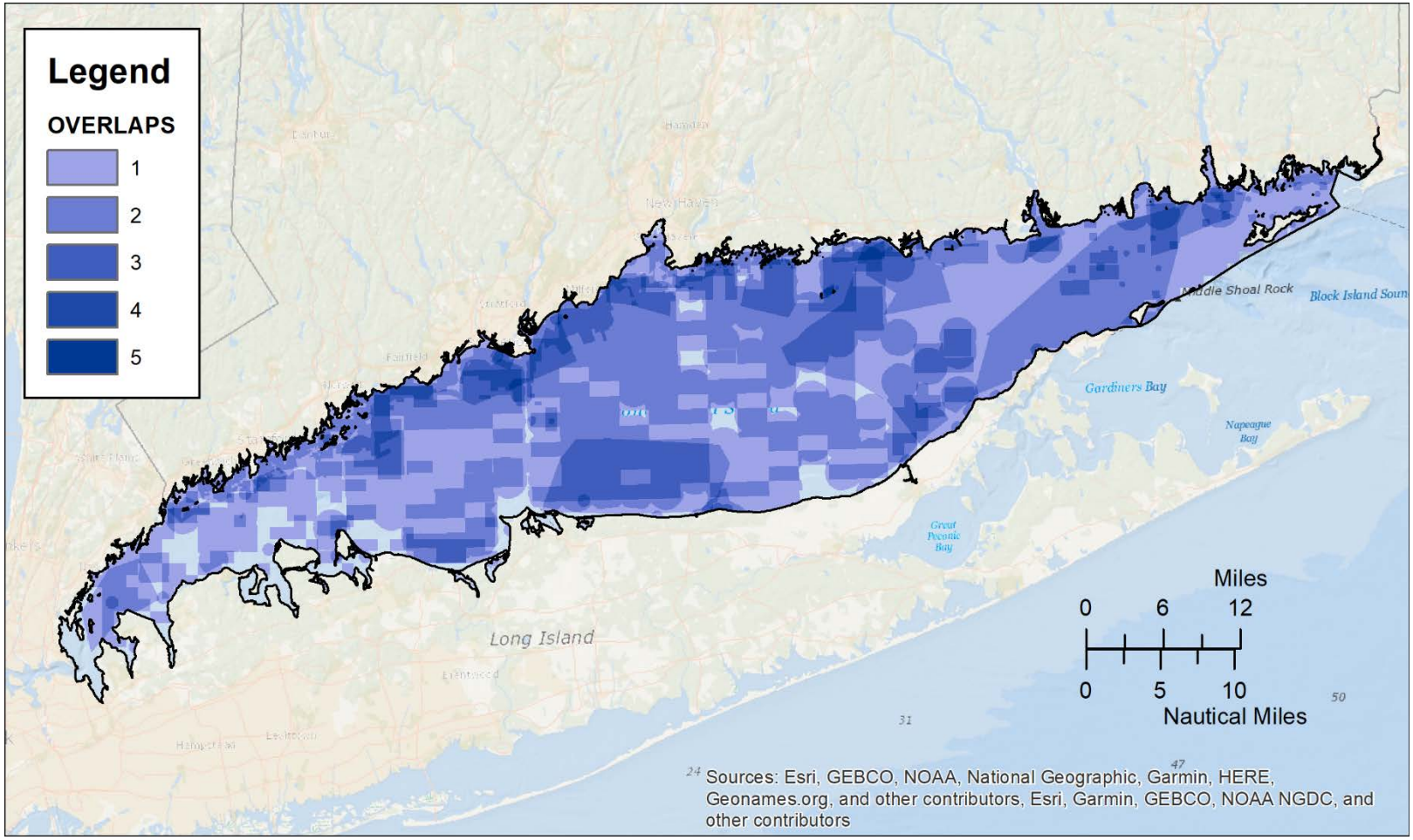
DRAFT Ecologically Significant Area Map: Managed Shellfish Beds

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



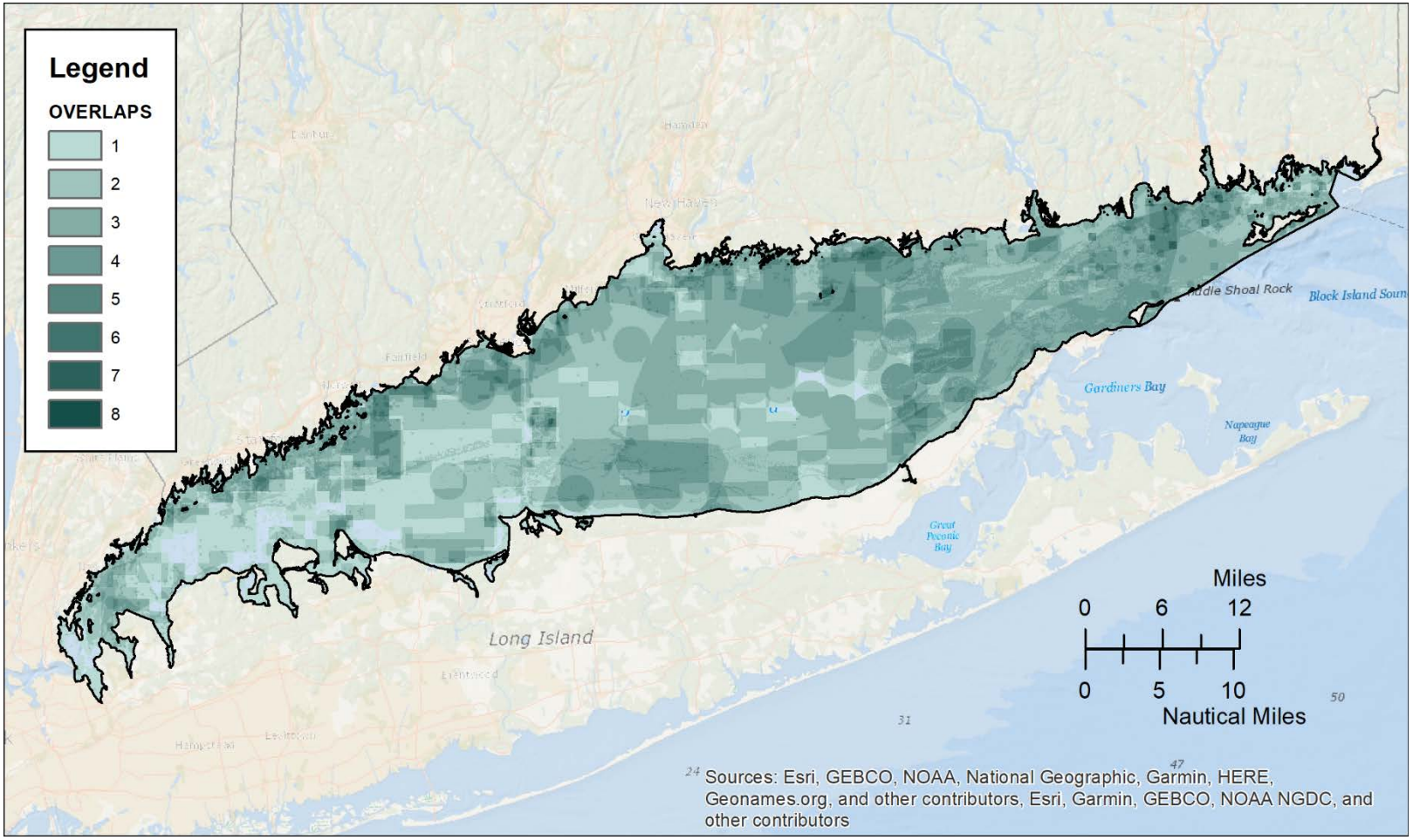
DRAFT Ecologically Significant Area Map: Overlap Areas of high natural productivity, biological persistence, diversity and abundance (Pillar 2)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



DRAFT Ecologically Significant Area Map: All ESA Overlaps (Pillar 1 & Pillar 2)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Significant Human Use Area Definitions

Criteria	Supporting Data	Description
(3) Areas with features of historical, cultural, educational, or research significance	*Datasets from the Significant Human Use Characterization that relate to each sub-criterion*	*A narrative that describes how the SHUA criterion is defined*
Areas associated with lighthouses and other historic areas	• CT & NY Historic Districts (poly) • LIS Lighthouses (pts)	Lighthouses, waterfront historic districts, or in-water structures of historical significance, excluding wrecks, and areas of Long Island Sound immediately adjacent to such resources.
Shipwrecks	• LIS Shipwrecks (pts)	Wrecks of historical or cultural significance.
Visual and Scenic Resources	• CT & NY Open Space and Parklands	Views of Long Island Sound's scenic resources from publicly accessible coastal land.
Submerged and Coastal Archaeological Areas	• CT SHPO & OSA Upland Sites (pts) • CT SHPO & OSA Underwater Sites (pts) • CT OSA Potential Holocene Underwater Sites (polys)	Submerged or coastal locations of archaeological sensitivity and/or significance.
Areas of Tribal Significance	*No available data*	Submerged or coastal locations recognized by Tribes as having historical or cultural significance.
Discrete Areas for Research, Education, and Monitoring	• LIS Water Quality Sampling Sites (pts) • LISICOS Sites (pts)	Areas actively and consistently used for research activities, including but not limited to long term monitoring sites, and Sound-dependent experiential educational programming.
Criteria	Supporting Data	Description
(4) Areas of substantial recreational and/or "quality of life" value		
Sailing or Rowing Races	• LIS Sailing Areas (poly) • LIS Sailing Routes (lines)	Areas consistently used by organized clubs and associations. Including but not limited to racing and training areas, and long-distance sailing race routes.

Marine Events	*Data available in USCG weekly Notice to Mariners and 33 CFR 100.100 table.*	Recurring marine events including those described in 33 CFR 100.100 Table.
High Activity Recreational Boating Areas	• LIS Boating Density (Top 2/5 Quantity Classes)	Approximate areas where the density of recreational boating is substantially higher than the overall mean for LIS.
Mooring Fields and Anchorage Areas	• LIS Observed Boat Clusters (poly) • NOAA ENC Anchorages (poly)	Formally designated or traditional mooring fields and anchorages, as designated or managed by NOAA, municipal Harbor Management, or other organizations.
Marinas, Yacht Clubs, and Boat Launches	• CT & NY Marinas and Yacht Clubs (pts) • LIS Boat Launches (pts)	Locations of marinas, yacht clubs, and boat launches that are within the Blue Plan planning area.
Waterfowl Hunting	• CT Waterfowl Hunting (poly)	Areas in Long Island Sound important for waterfowl hunting, including sea duck habitat.
Dive Sites	• LIS Dive Sites (pts) • MARCOS LIS Dive Areas (poly) • NEODP Dive Areas (poly)	Locations in Long Island Sound important for SCUBA activities.
Coastal Public Use Areas	• CT Coastal Access Sites (pts) • NEODP Individual Ocean Uses (pts) • CT & NY Open Space Parkland (poly) • NEODP Water Trails (lines) • CT Waterfowl Concentration Areas (poly) • CT & NY NWI Beaches	Areas important for public access and use of Long Island Sound for recreational activities including but not limited to swimming, paddling, and wildlife watching.
Criteria	Supporting Data	Description
(5) Areas important for navigation, transportation, infrastructure, and economic activity		
Working Waterfronts, Ports, and Marine Commercial Areas	• LIS Working Waterfronts (pts) • Offshore Terminals (pts)	Commercial facilities that are water dependent, or service water dependent uses on Long Island Sound, including but not limited to onshore and offshore terminals and port facilities.

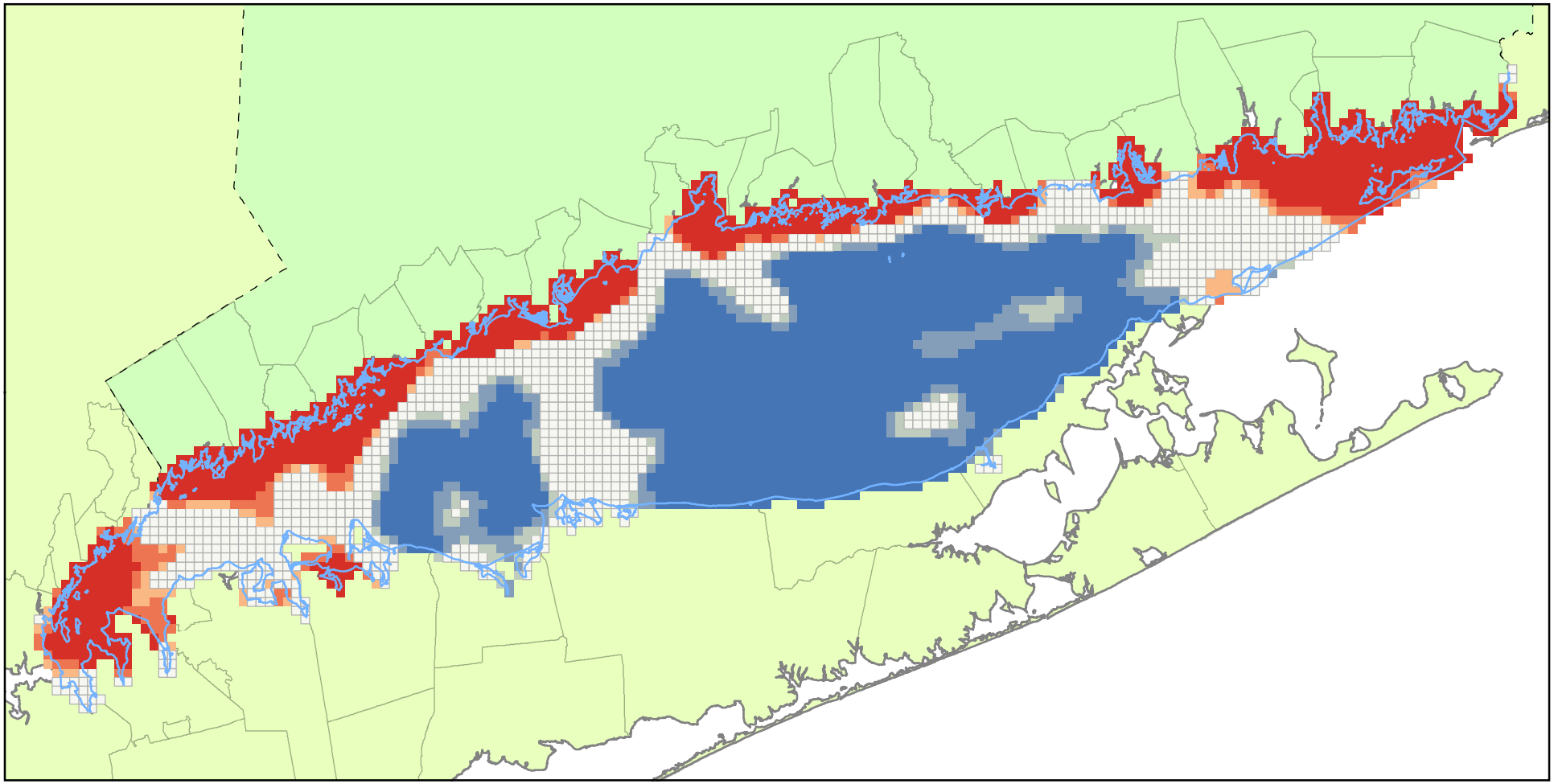
Designated Navigational Channels, Fairways, and Basins	• LIS ENC Fairways & Navigational Channels (poly) • Squid Dredge Footprint	Designated and maintained navigational channels as they appear on the NOAA-published charts and USACE management plans. Also includes authorized privately maintained navigational channels, fairways, and basins, excluding facilities for individual residential use.
Designated Anchorage Areas	• LIS ENC Anchorages (poly)	Anchorage areas as they appear on the NOAA charts, and are generally used by commercial vessels.
Security Zones and other Designated Areas	• LIS ENC Restricted Areas (poly)	Security zones and other operational zones, as designated by the Coast Guard or other appropriate authority.
Areas of Lightering Activity	• LIS ENC Lightering Zones (poly)	Areas designated by the Coast Guard for ship-to-ship transfer (lightering), and other areas regularly used for such transfers.
Vessel Traffic Areas	• 2016 AIS All Vessel Transit Counts	Areas of high traffic use by vessels with AIS transponders including but not limited to ferries and commercial ships. High traffic use is defined by areas that exceed the mean value of transit counts.
Dredged Material Disposal Areas (Active and Historic)	• LIS Disposal Sites (poly)	Material disposal sites as they appear on the NOAA charts, in the LIS DMMP, or designated by EPA. Includes areas currently and historically used. Also includes confined aquatic disposal (CAD) cells.
Cables, Pipelines, and Cable/Pipeline Areas	• LIS Submarine Cables (lines) • LIS Cable and Pipeline Areas (poly)	Submerged cable and pipeline infrastructure areas, including but not limited to those indicated on NOAA navigational charts.
Coastal Energy Generating and Transmission Facilities	• LIS Coastal Energy Facilities (pts)	Coastal energy generating and transmission facilities and associated infrastructure, including

		areas of Long Island Sound adjacent thereto.
Criteria	Supporting Data	Description
(6) Areas important to Fishing and Aquaculture		
Recreational Fishing	• LIS Popular Places to Fish (poly)	Areas significant for recreational fishing, as identified by DEEP Fisheries and the recreational fishing community of Long Island Sound.
Commercial Fishing	• 2000-2010 NOAA Vessel Trip Report Landings	Areas of substantial value to the commercial fishing community in Long Island Sound.
Charter and Party Boat Fishing	*No available data*	Areas of substantial value to the charter and party boat industry in Long Island Sound.
Recreational Shellfish Areas	• CT Recreational Shellfish Beds	Town and/or state managed recreational shellfishing areas.
Commercial Aquaculture Locations	• CTDABA Aquaculture Operations • CTDABA Seaweed Licenses • CTDABA Aquaculture Gear areas • CTDABA Town/State Shellfish Lease beds • NYDEC Aquaculture Sites	Shellfish leases, seaweed leases, gear areas, designated natural beds, and any other type of authorized aquaculture venture in CT and NY as applicable.

Significant Human Use Area Maps

Draft Significant Human Use Area Map: Concentrations of All Human Uses

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Concentrations of All Human Uses

- Cold Spot - 99% Confidence
- Cold Spot - 95% Confidence
- Cold Spot - 90% Confidence
- Neutral
- Hot Spot - 90% Confidence
- Hot Spot - 95% Confidence
- Hot Spot - 99% Confidence
- Blue Plan Planning Area

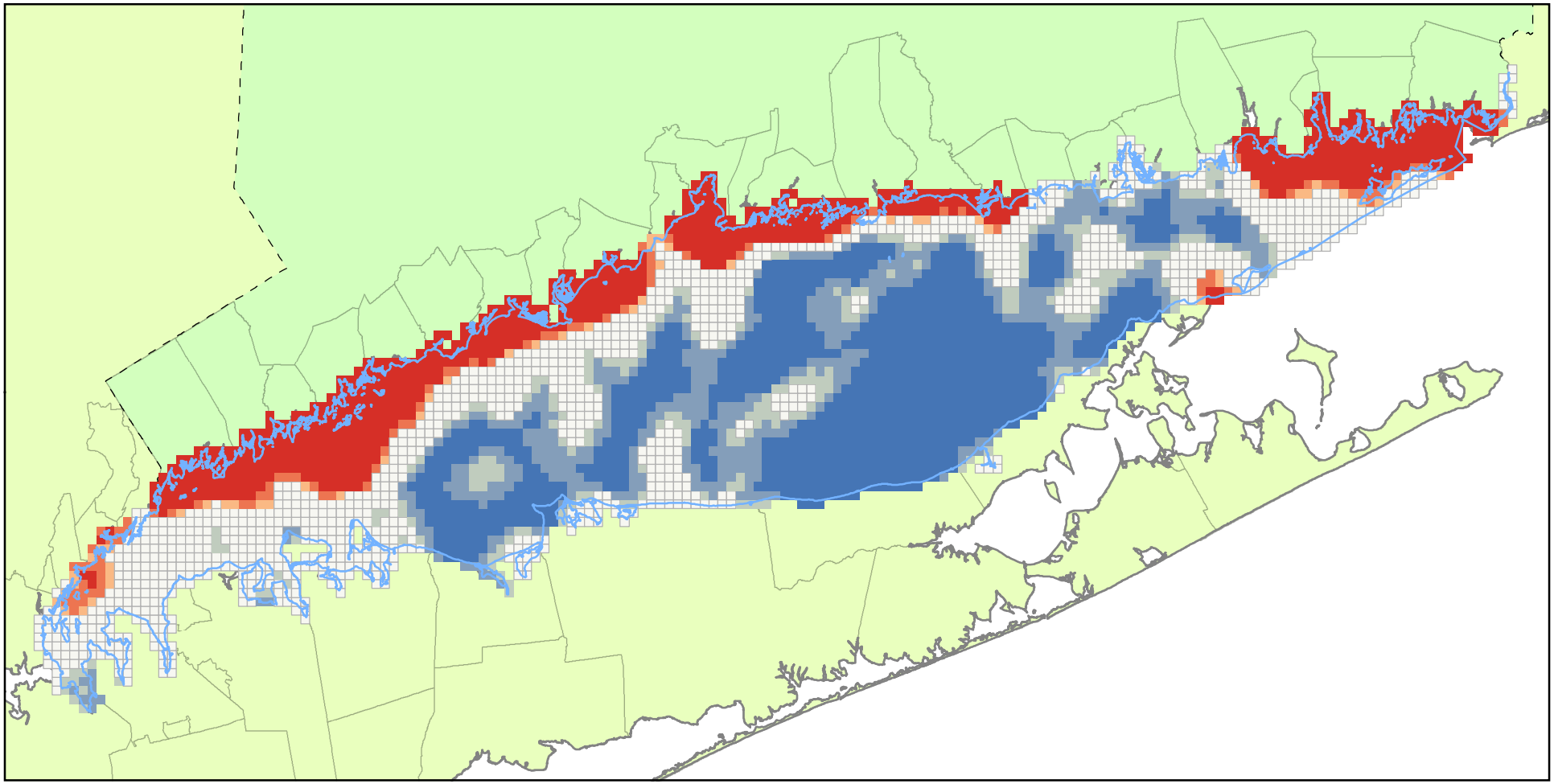
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/17/2019

Draft Significant Human Use Area Map: Concentrations of Bottom-land Use Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Concentrations of Bottom-land Use Areas

- Cold Spot - 99% Confidence
- Cold Spot - 95% Confidence
- Cold Spot - 90% Confidence
- Neutral
- Hot Spot - 90% Confidence
- Hot Spot - 95% Confidence
- Hot Spot - 99% Confidence
- Blue Plan Planning Area

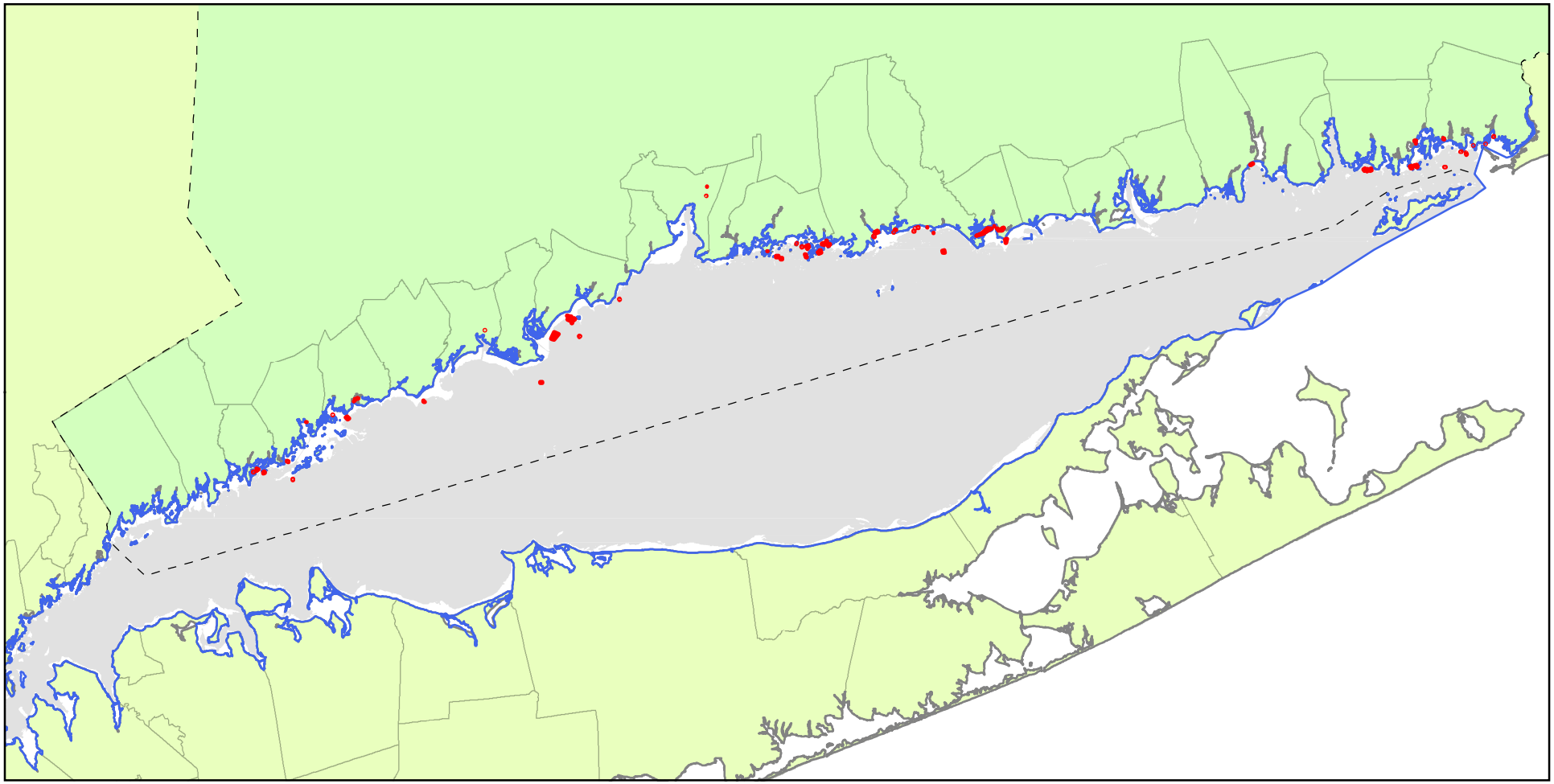
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/17/2019

Draft Significant Human Use Area Map: Aquaculture Gear Areas (CT)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Aquaculture Gear Areas (CT)

Blue Plan Planning Area

Blue Plan Policy Area

0 5 10 20 Miles

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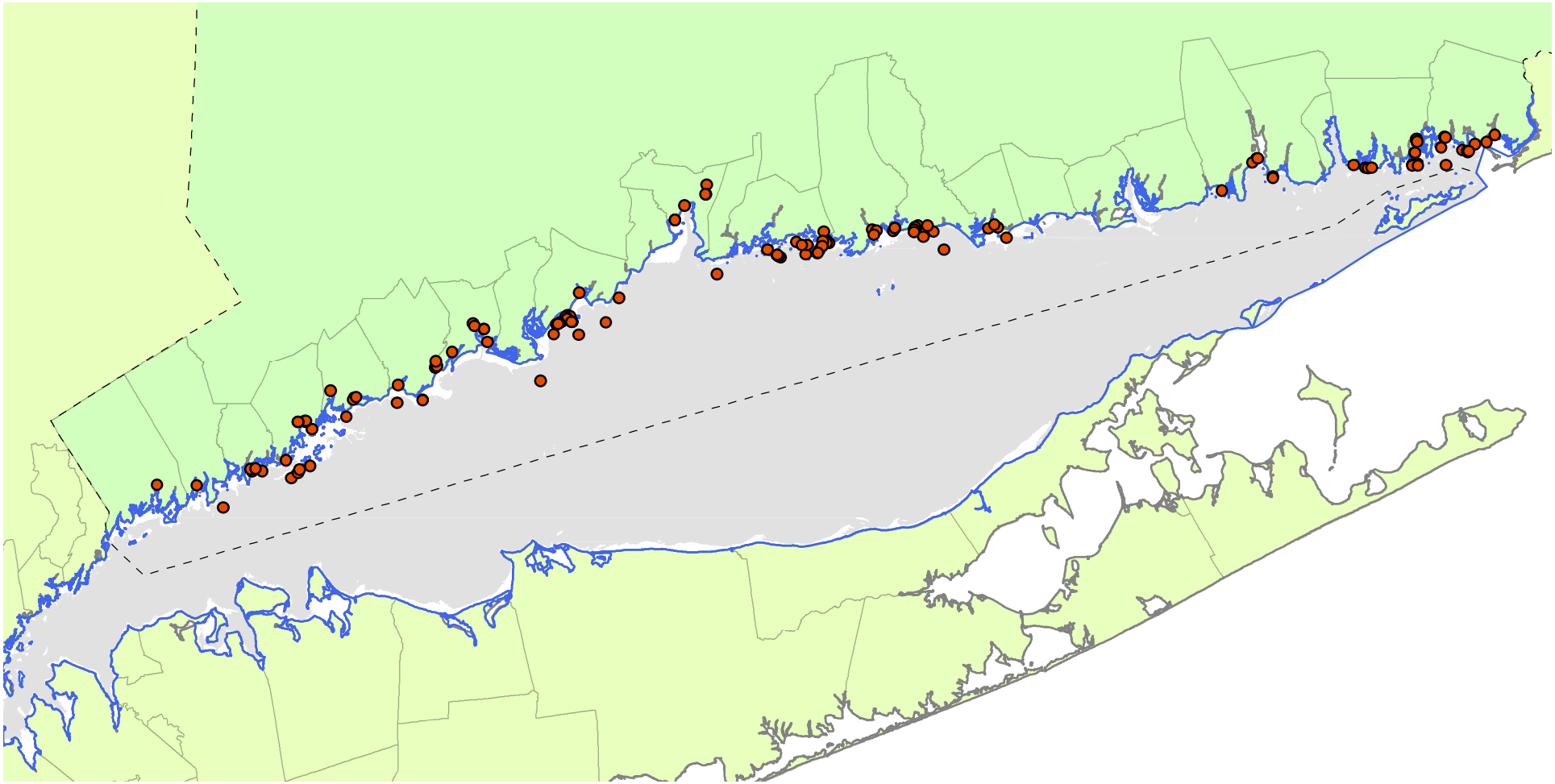
Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Aquaculture Operations (CT)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



- Aquaculture Operations (CT)
- Blue Plan Planning Area
- Blue Plan Policy Area

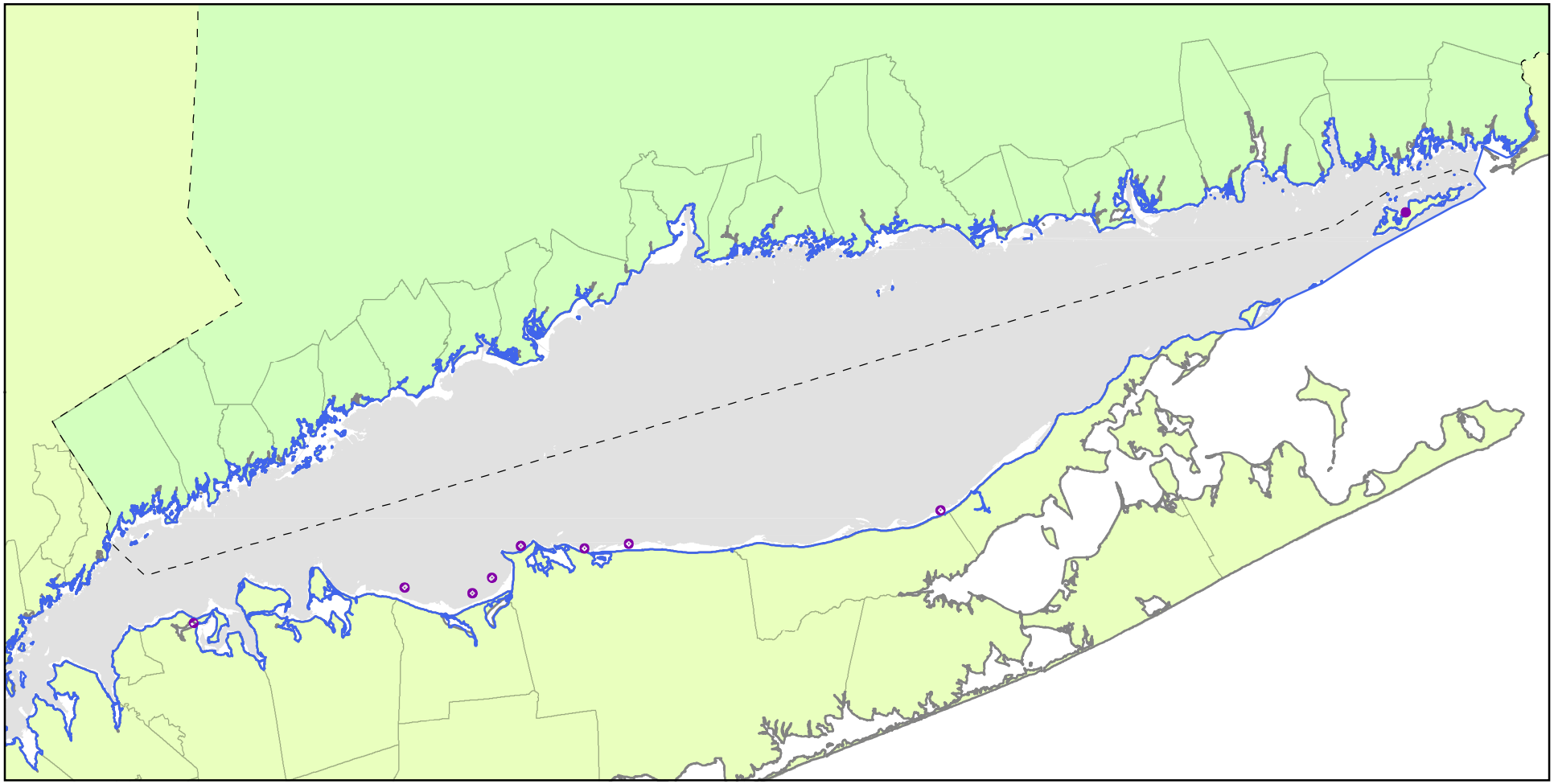
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Aquaculture Sites (NY)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Aquaculture Sites (NY)

Blue Plan Planning Area

Blue Plan Policy Area

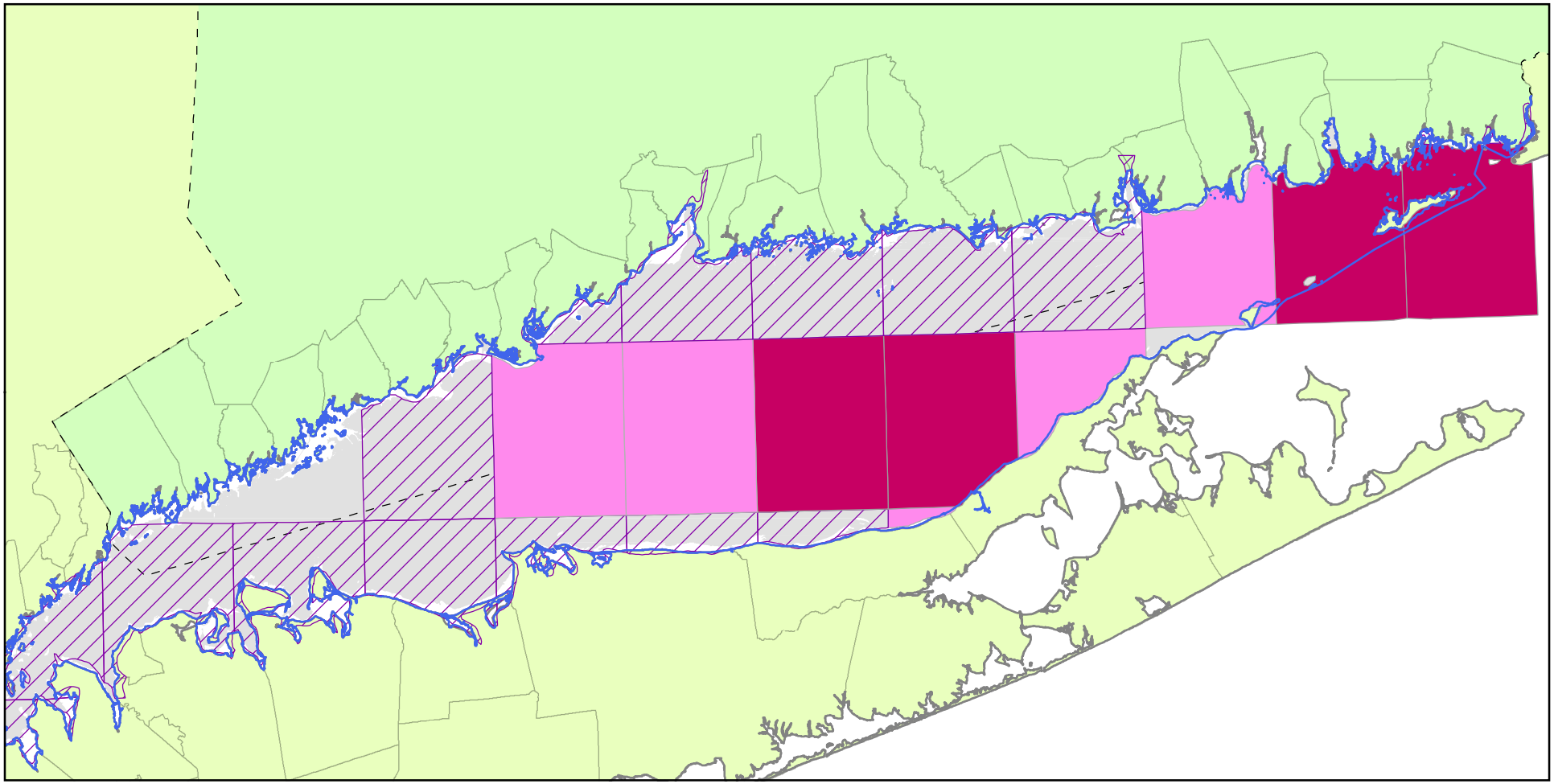
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: LIS Commercial Fishing Activity

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Blue Plan Planning Area
Blue Plan Policy Area

LIS Commercial Fishing Activity
Total_lbs
850 - 202543
202543 - 1511807
1511807 - 6019697

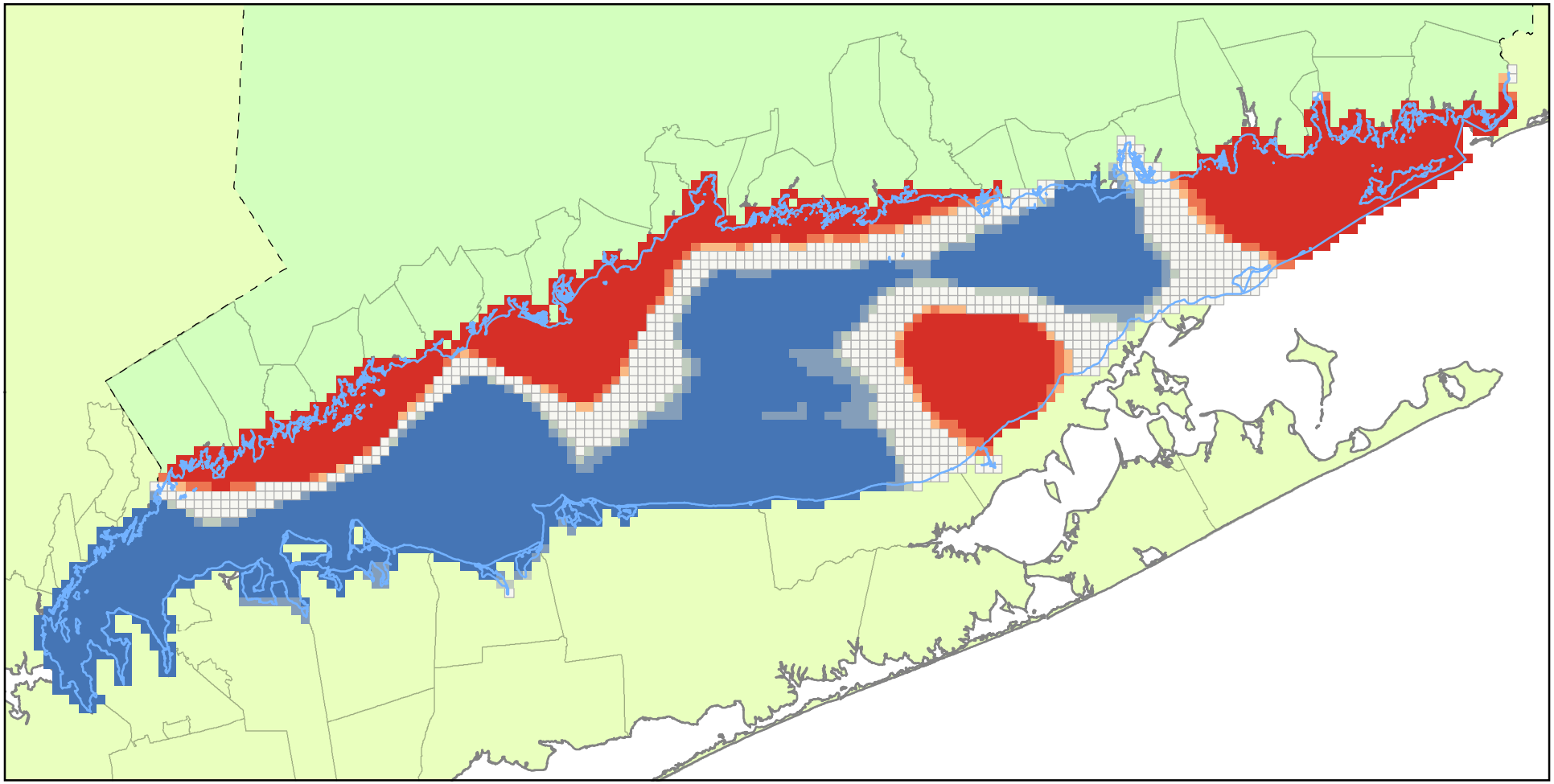
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Concentrations of Fishing/Shellfishing Uses

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Concentrations of Fishing/Shellfishing Uses

- Cold Spot - 99% Confidence
- Cold Spot - 95% Confidence
- Cold Spot - 90% Confidence
- Neutral
- Hot Spot - 90% Confidence
- Hot Spot - 95% Confidence
- Hot Spot - 99% Confidence
- Blue Plan Planning Area
- Blue Plan Policy Area

0 5 10 20 Miles

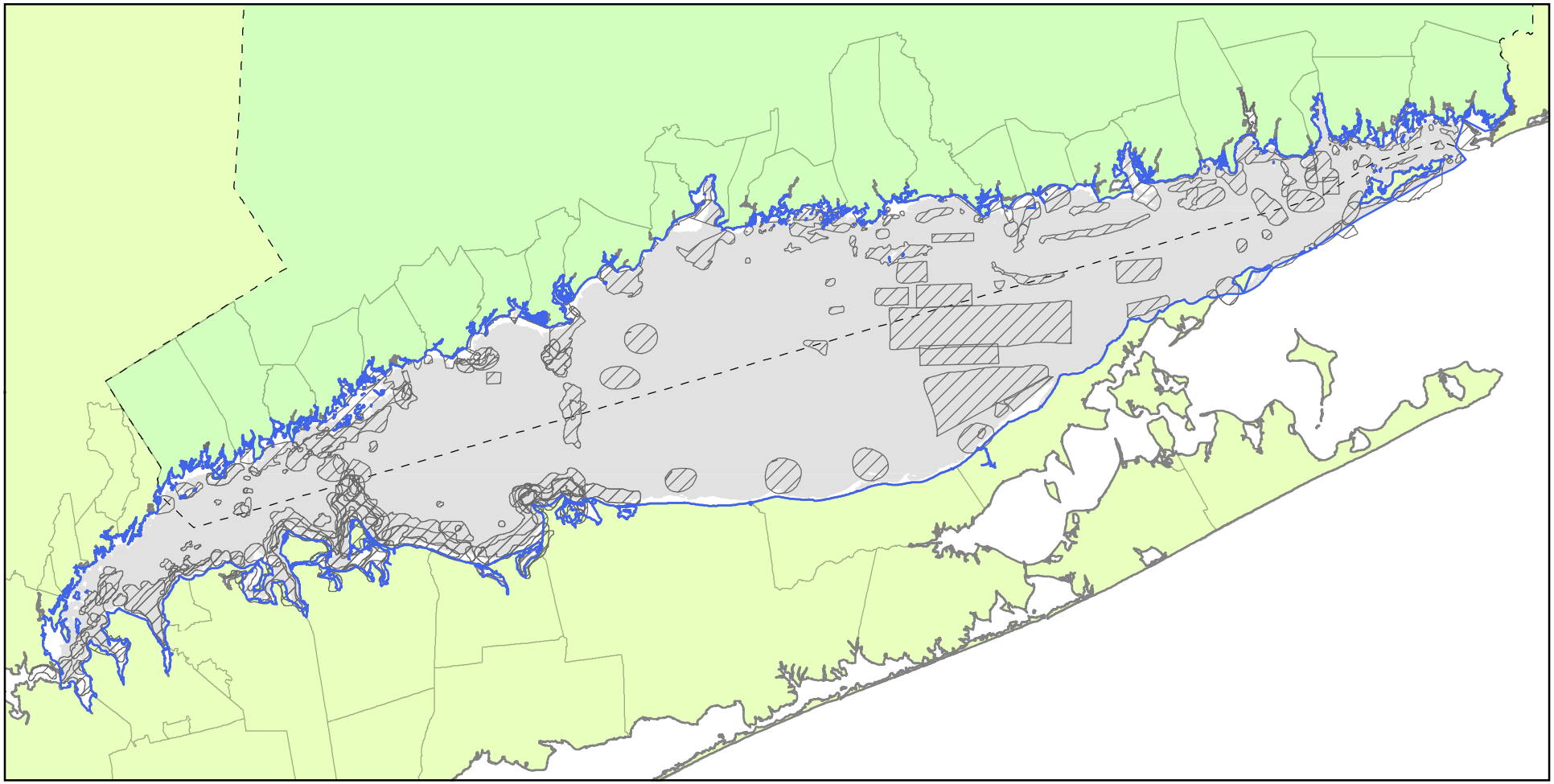
N

Map created by Connecticut Department of Energy & Environmental Protection: 1/17/2019

Draft Significant Human Use Area Map: Recreational Fishing Activity

LONG ISLAND SOUND BLUE PLAN

Sustainable Ecosystems - Compatible Uses



Blue Plan Planning Area

LIS Recreational Fishing Activity

Blue Plan Policy Area

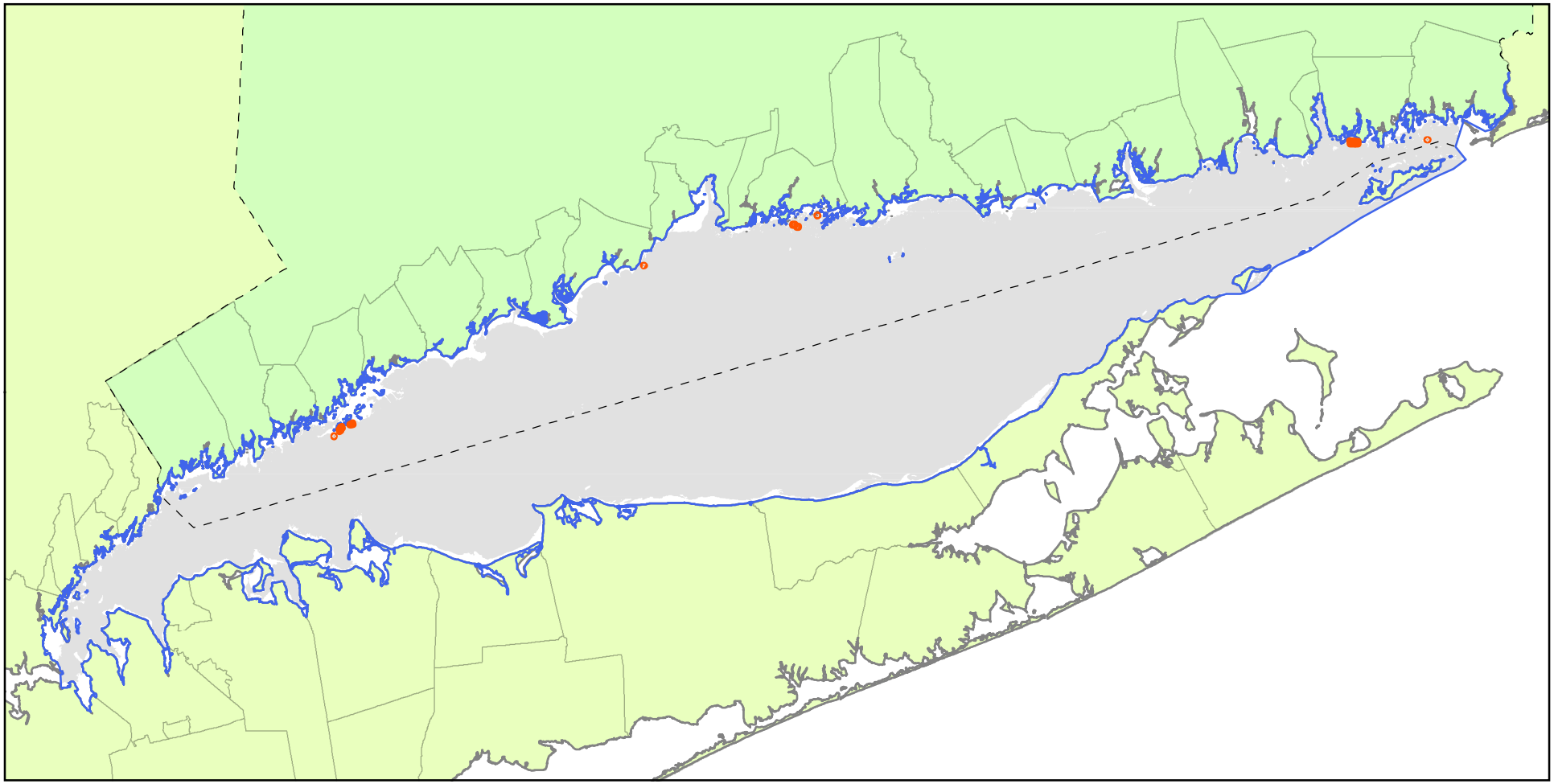
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Seaweed Licenses (CT)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



CT Seaweed Licenses

Blue Plan Planning Area

Blue Plan Policy Area

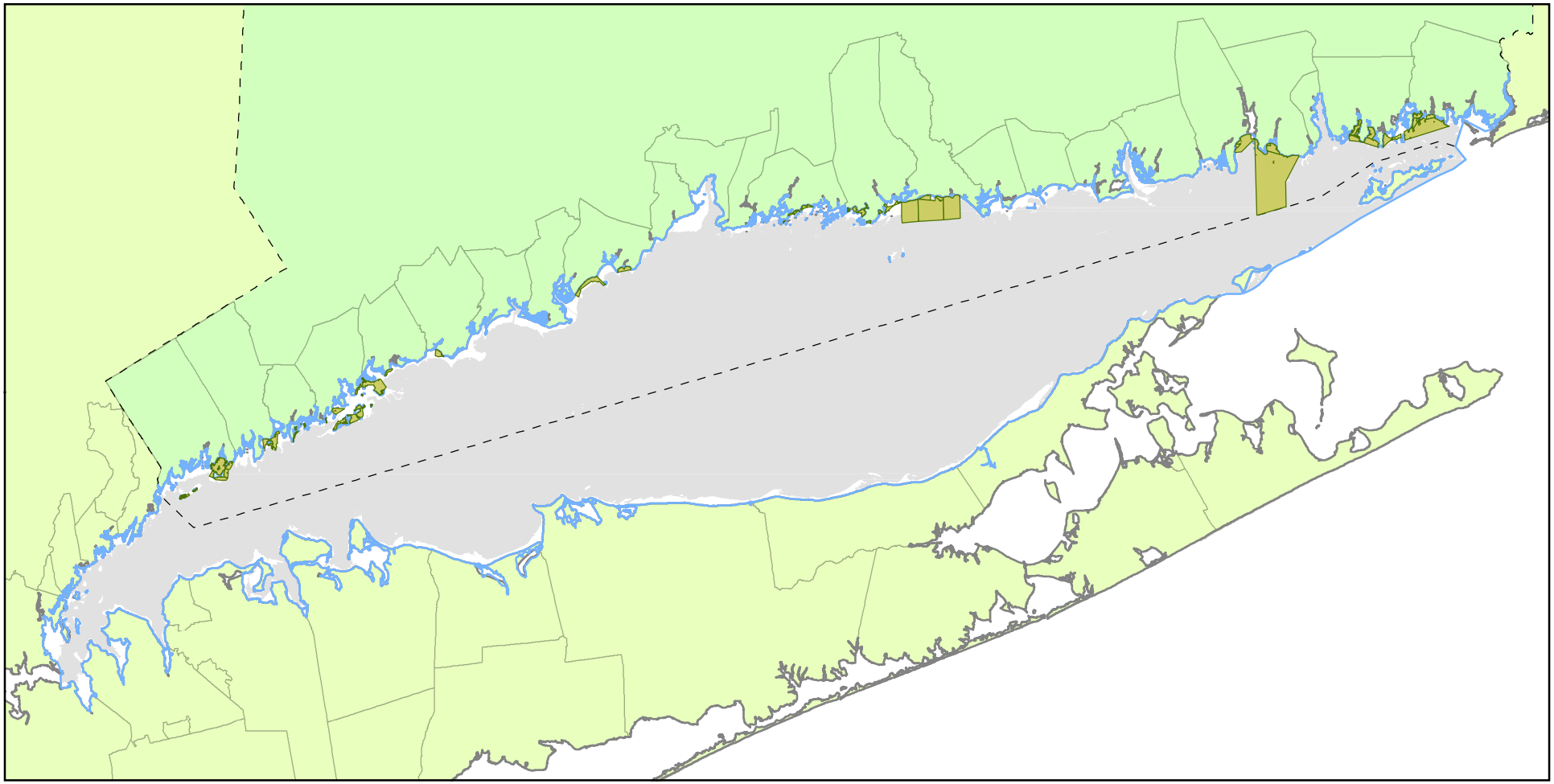
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Recreational Shellfish Beds (CT)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



CT Shellfish Beds (Recreational)

Blue Plan Planning Area

Blue Plan Policy Area

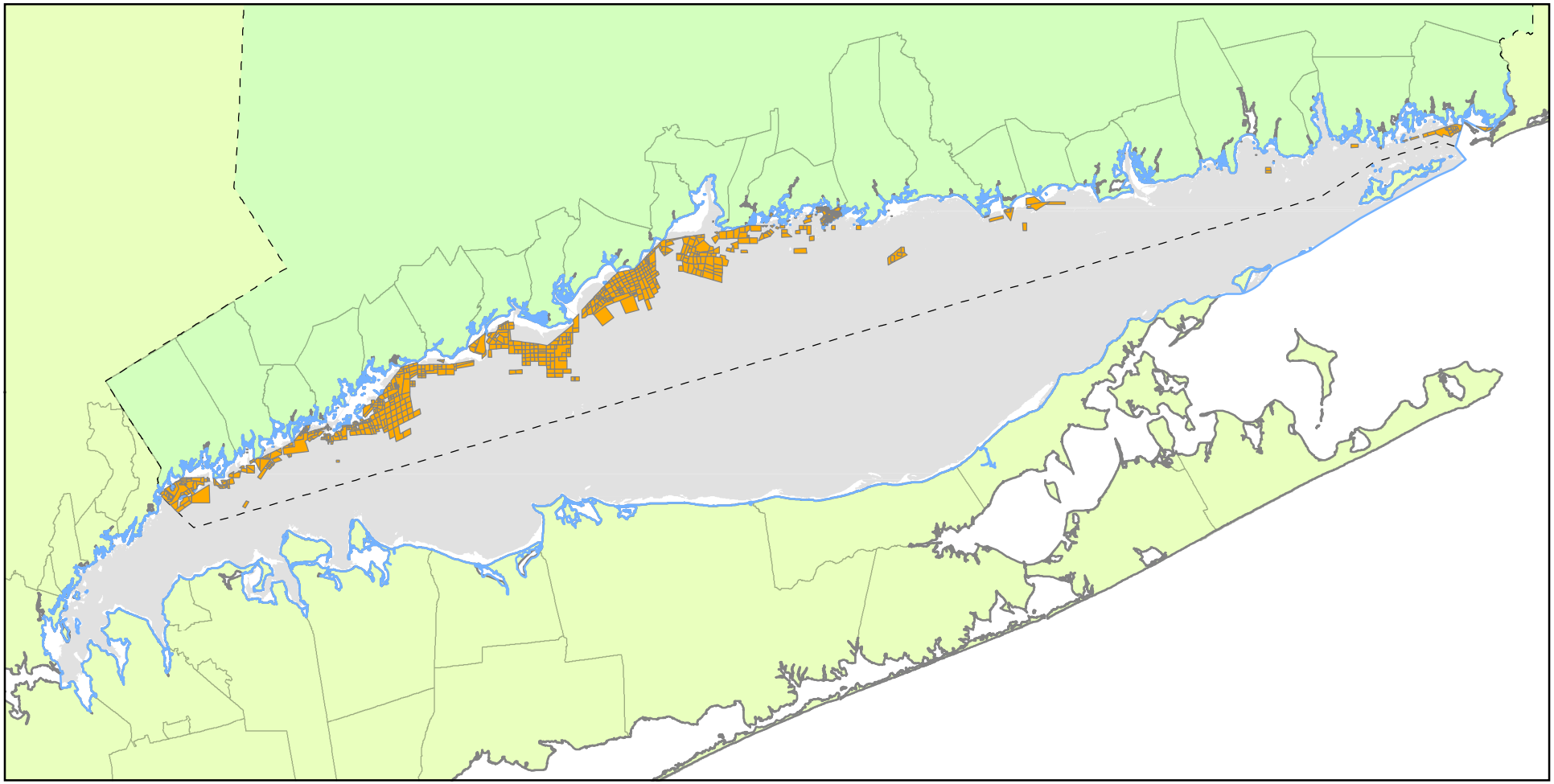
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: State Managed Shellfish Beds (CT)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



CT Shellfish Beds (State Managed)

Blue Plan Planning Area

Blue Plan Policy Area

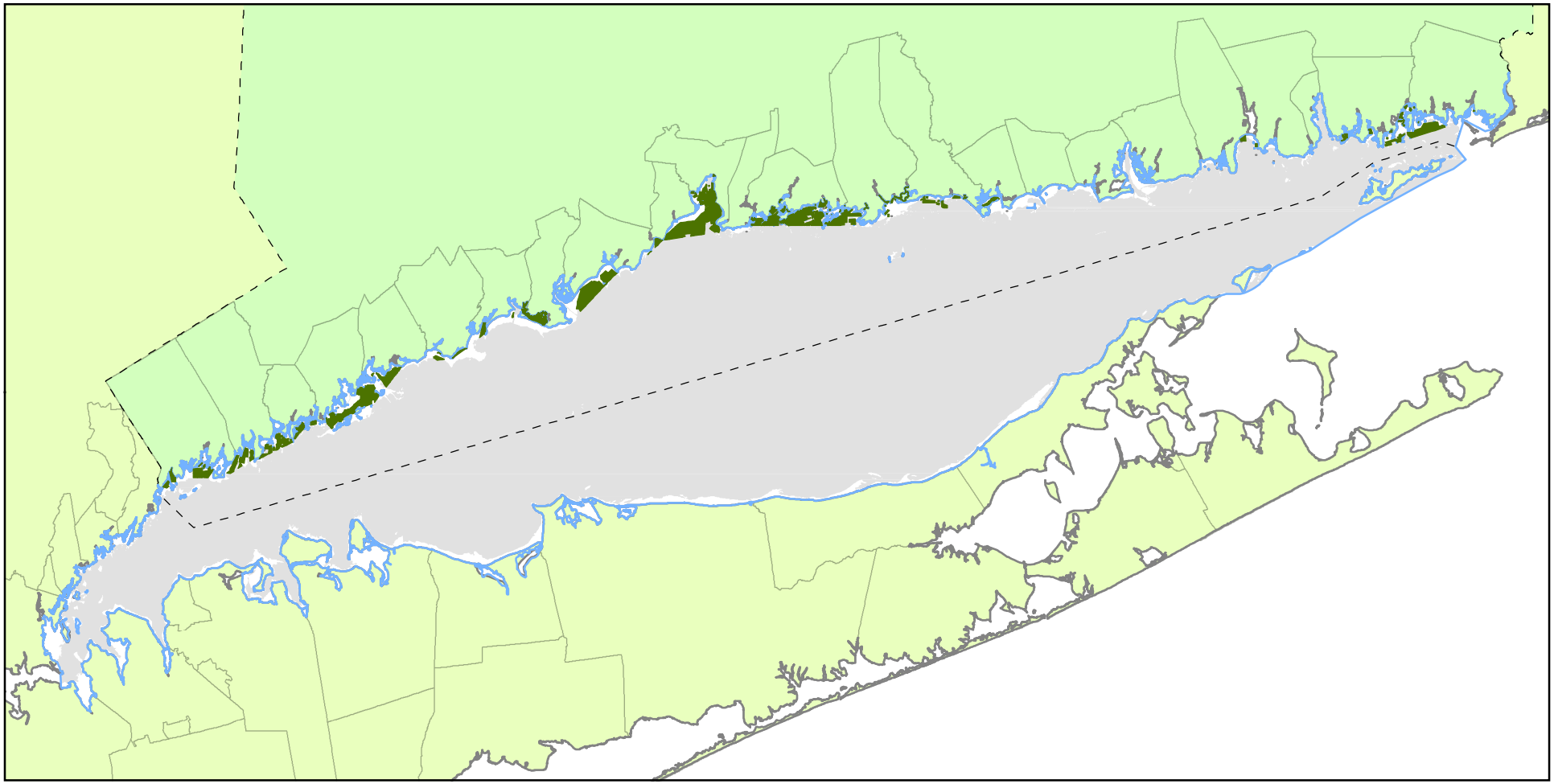
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Town Managed Shellfish Beds (CT)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



CT Shellfish Beds (Town Managed)

Blue Plan Planning Area

Blue Plan Policy Area

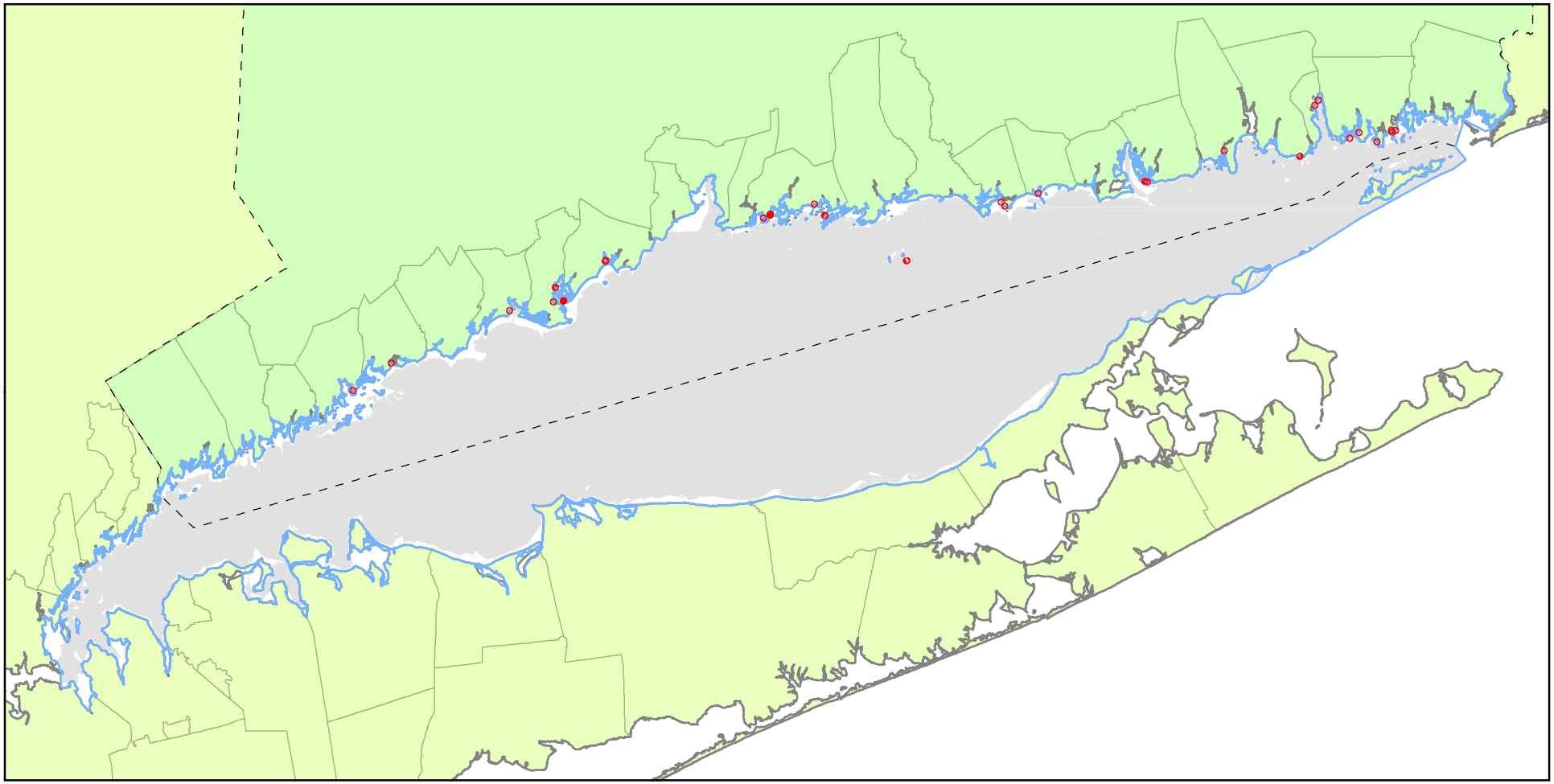
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Archaeological Sites (LIS)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Archaeological sites (LIS)

Blue Plan Planning Area

Blue Plan Policy Area

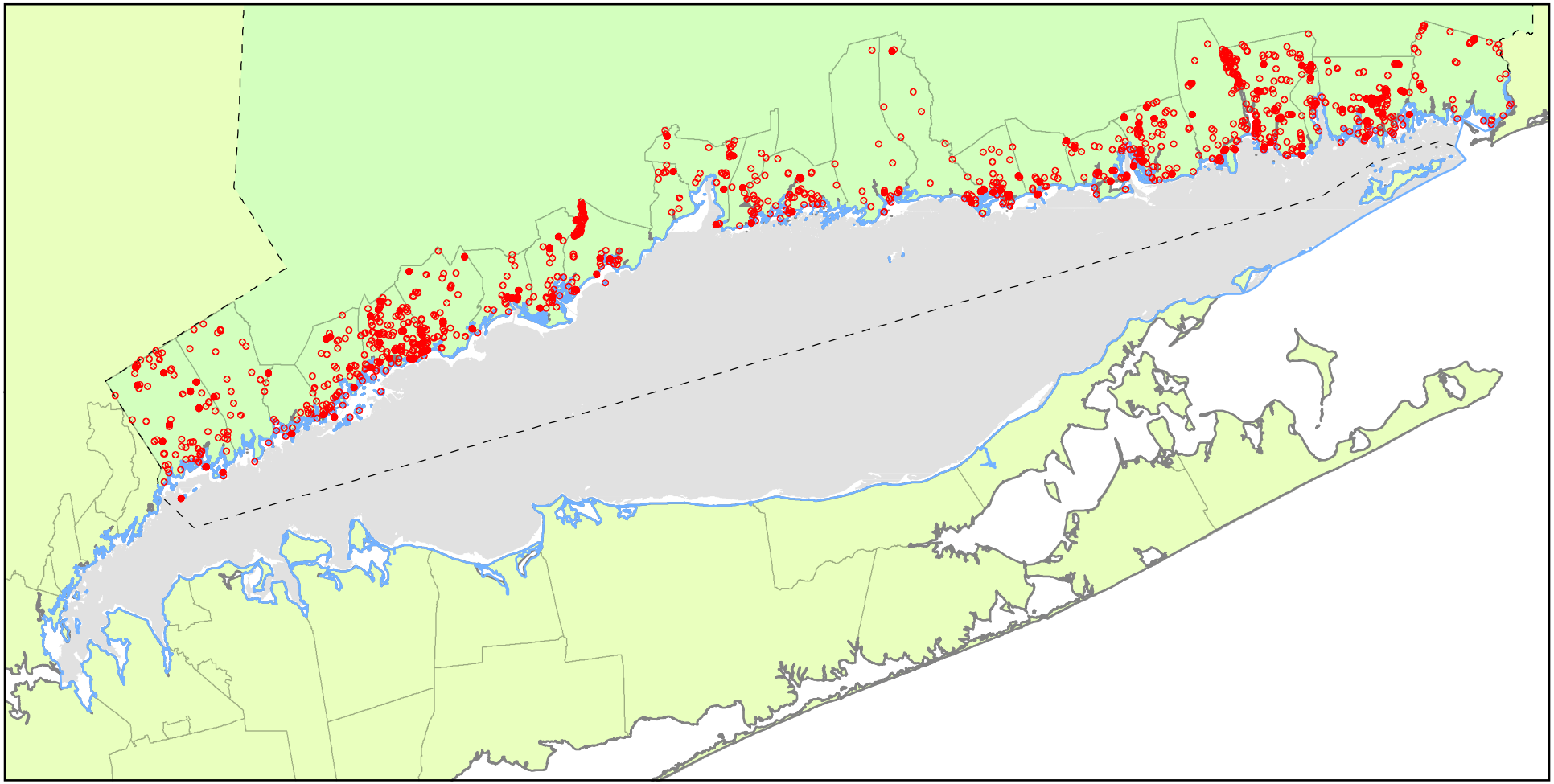
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Archaeological Sites (upland)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Archaeological sites (upland)

Blue Plan Planning Area

Blue Plan Policy Area

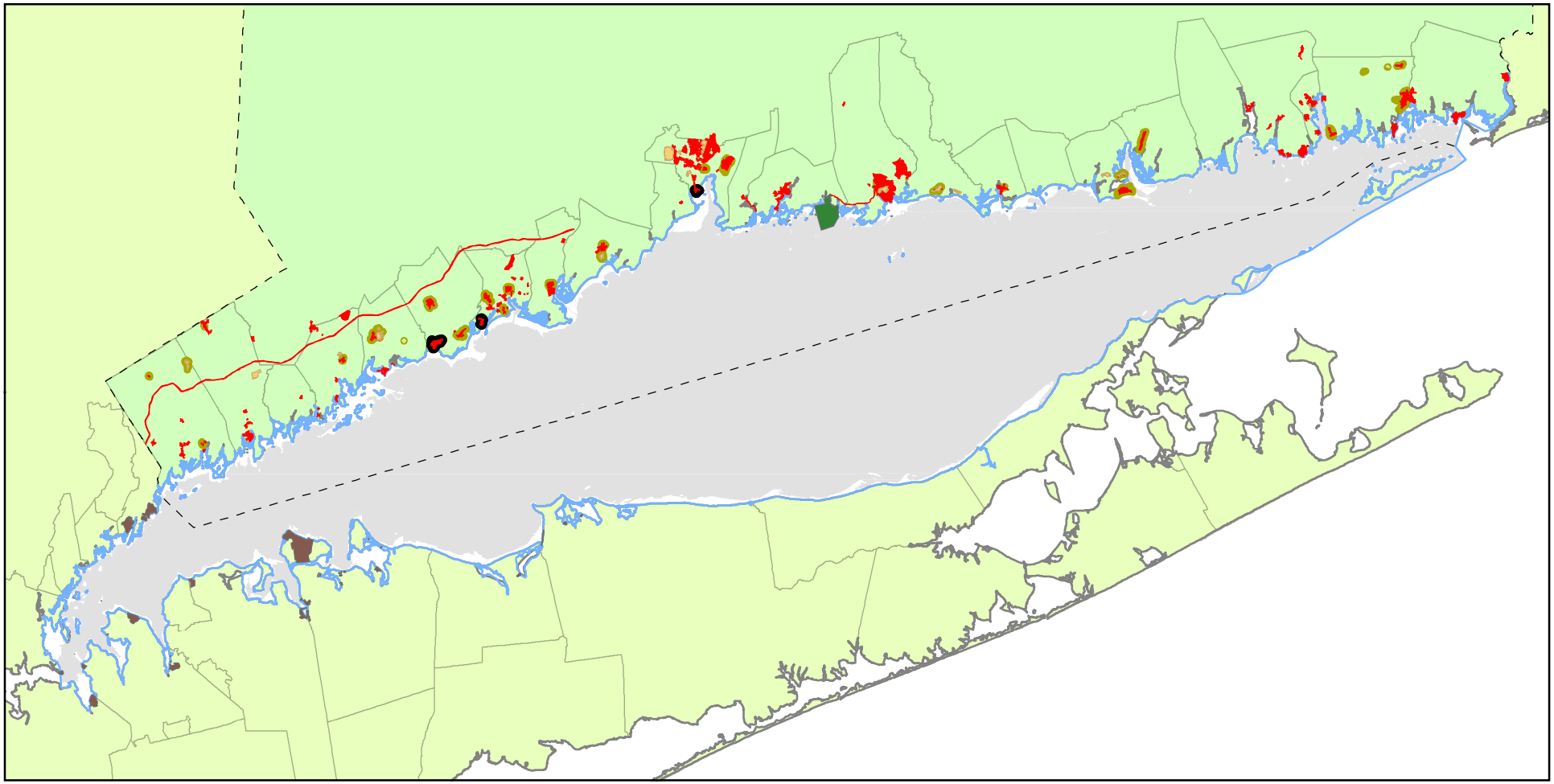
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Local, State, and National Historic Districts

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Historic Districts

- CT Local Districts (LIS)
- CT Local Districts (upland)
- CT National Register (LIS)
- CT National Register (upland)
- CT State Districts (upland)
- NY National Register (upland)
- Blue Plan Planning Area
- Blue Plan Policy Area

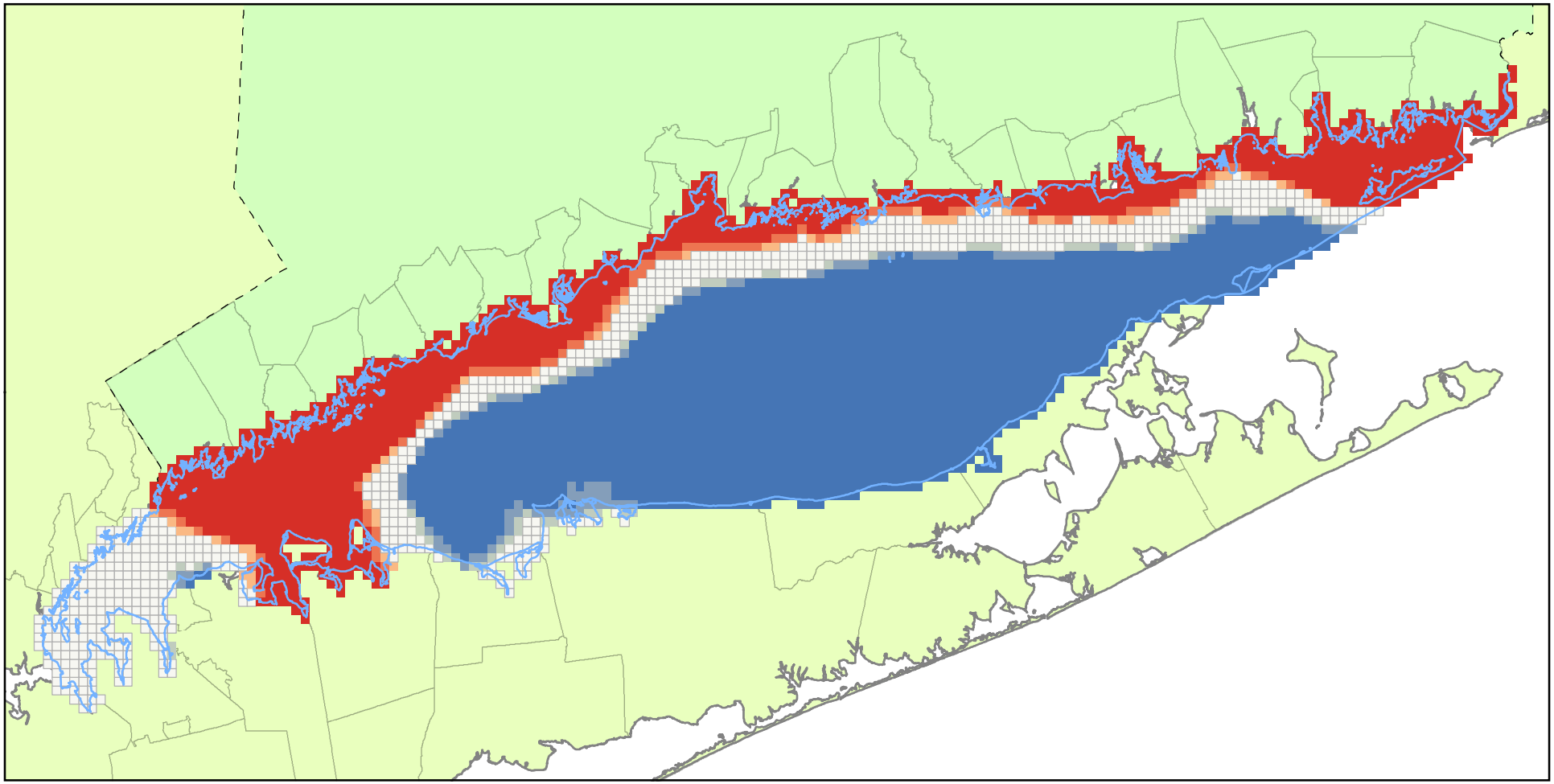
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Concentrations of Historic Cultural and Educational Uses

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Concentrations of Historic Cultural and Educational Uses

- Cold Spot - 99% Confidence
- Cold Spot - 95% Confidence
- Cold Spot - 90% Confidence
- Neutral
- Hot Spot - 90% Confidence
- Hot Spot - 95% Confidence
- Hot Spot - 99% Confidence
- Blue Plan Planning Area

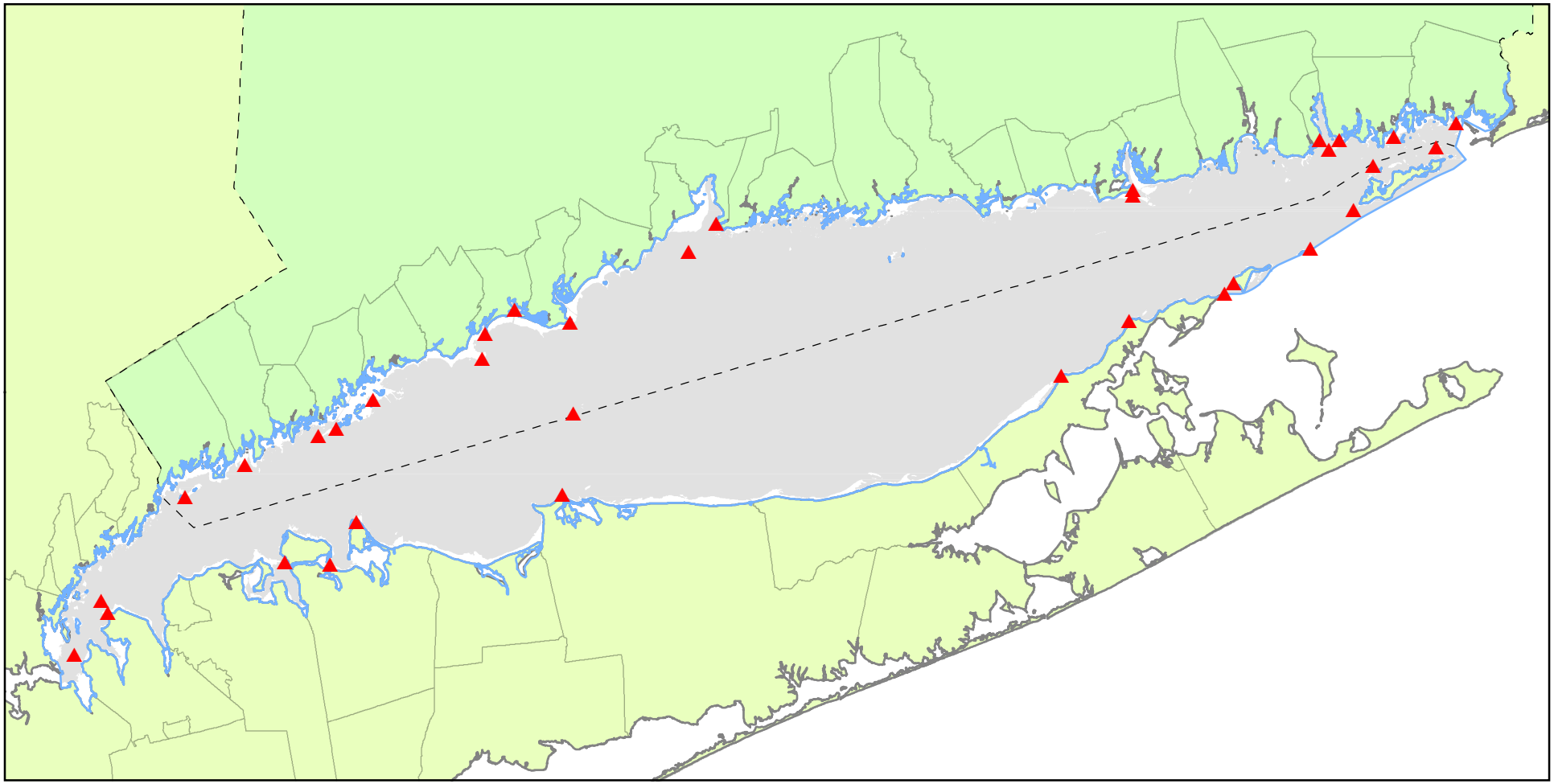
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/17/2019

Draft Significant Human Use Area Map: Lighthouses

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



▲ Lighthouses

Blue Plan Planning Area

Blue Plan Policy Area

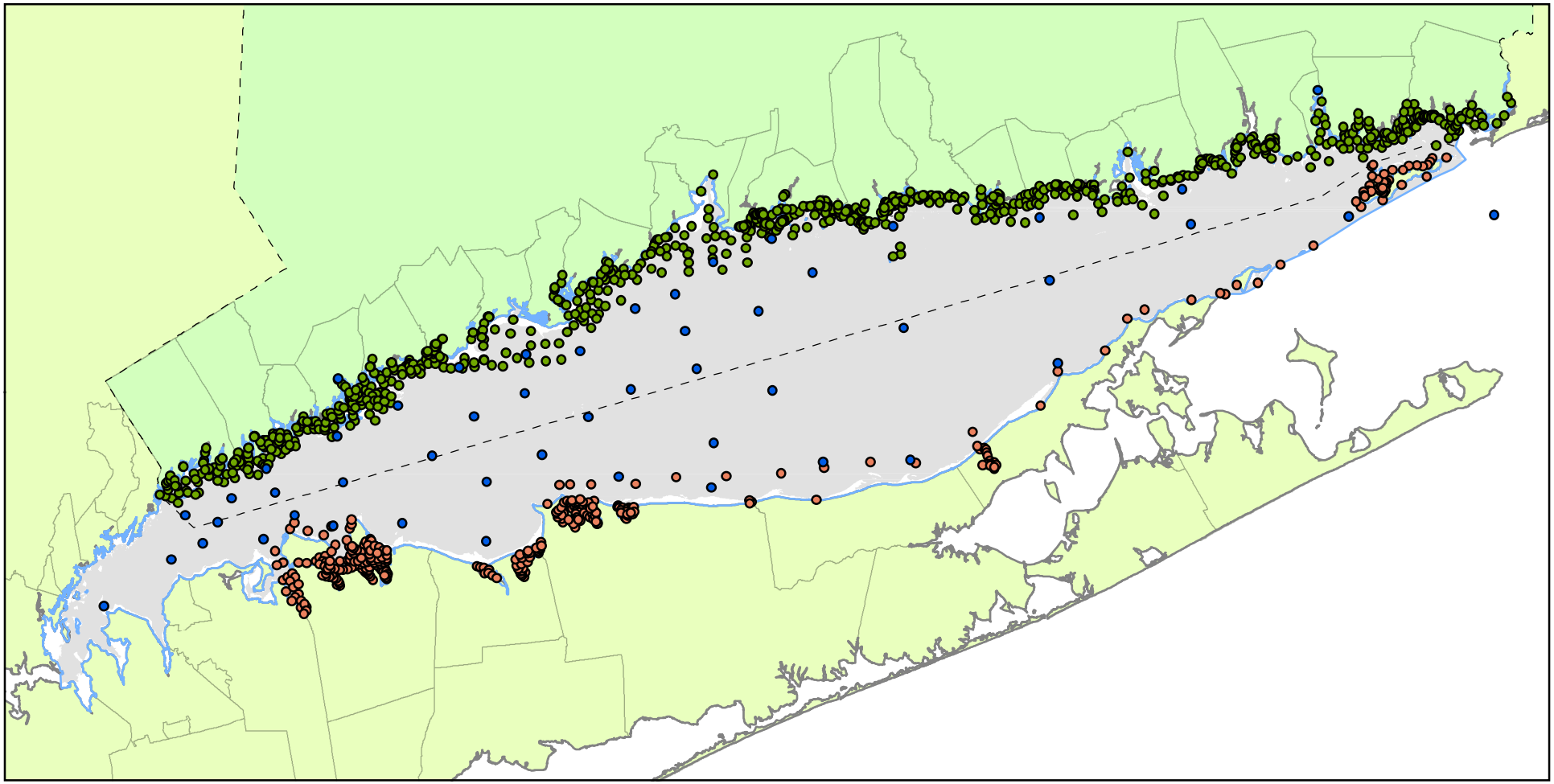
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: LIS Water Quality Sampling

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Blue Plan Planning Area

Blue Plan Policy Area

Water Quality Sampling

- CT Shellfish Sampling
- CT LIS Water Quality Cruises
- NY Shellfish Sampling

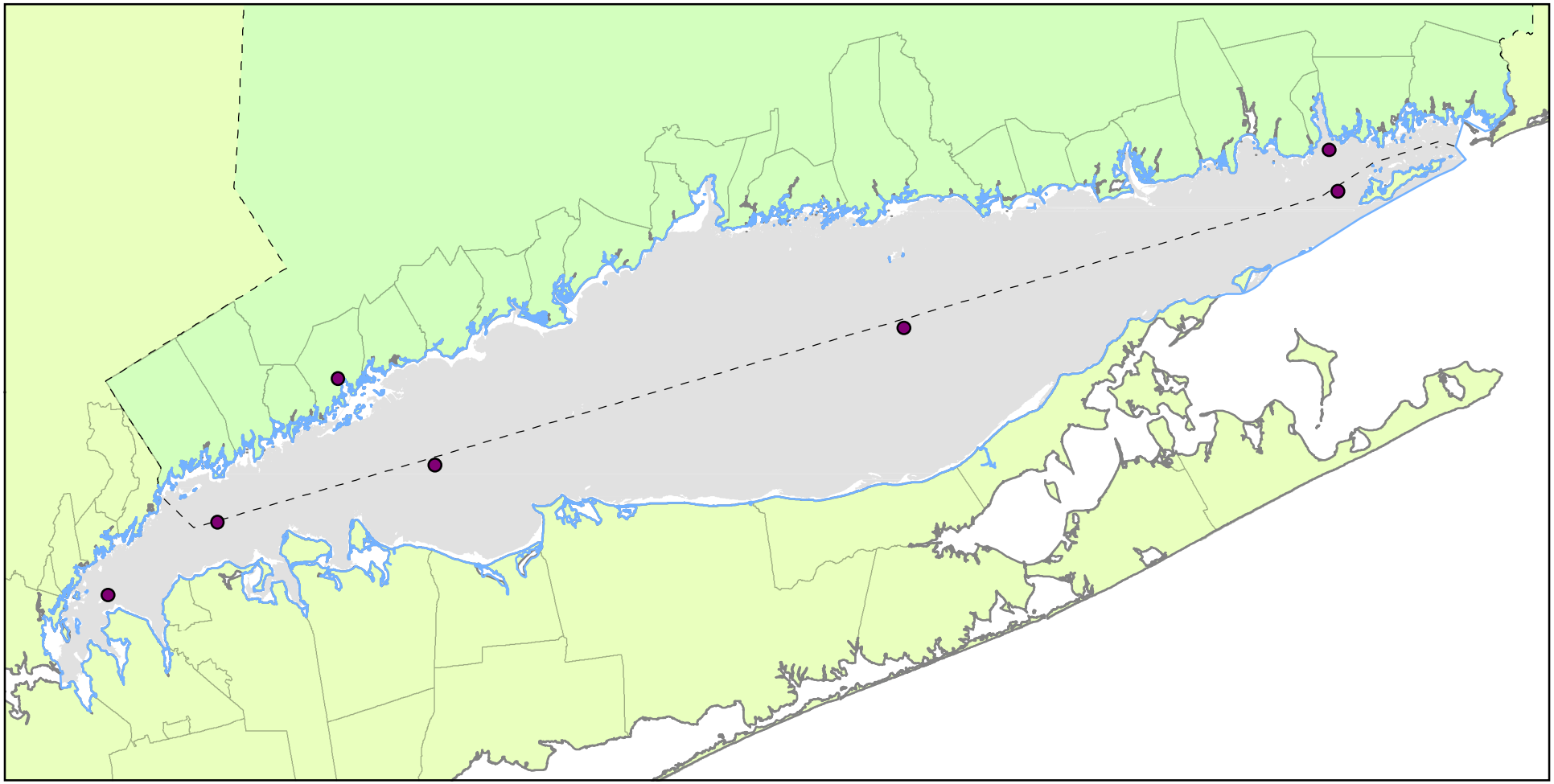
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: LIS Coastal Observation Sites (LISICOS)

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



- LIS Coastal Observation Sites
- Blue Plan Planning Area
- Blue Plan Policy Area

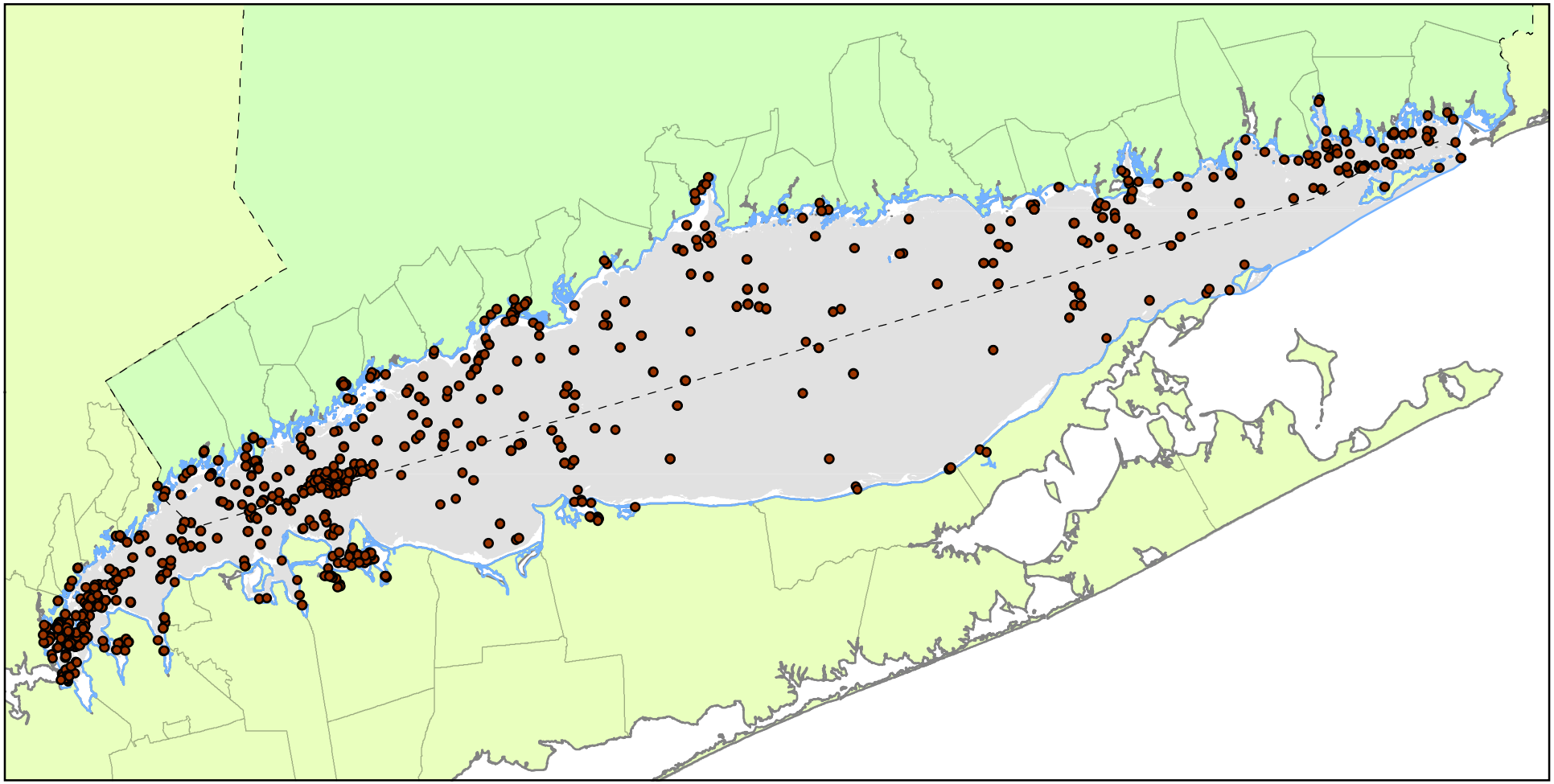
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Wrecks

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



- Wrecks
- Blue Plan Planning Area
- Blue Plan Policy Area

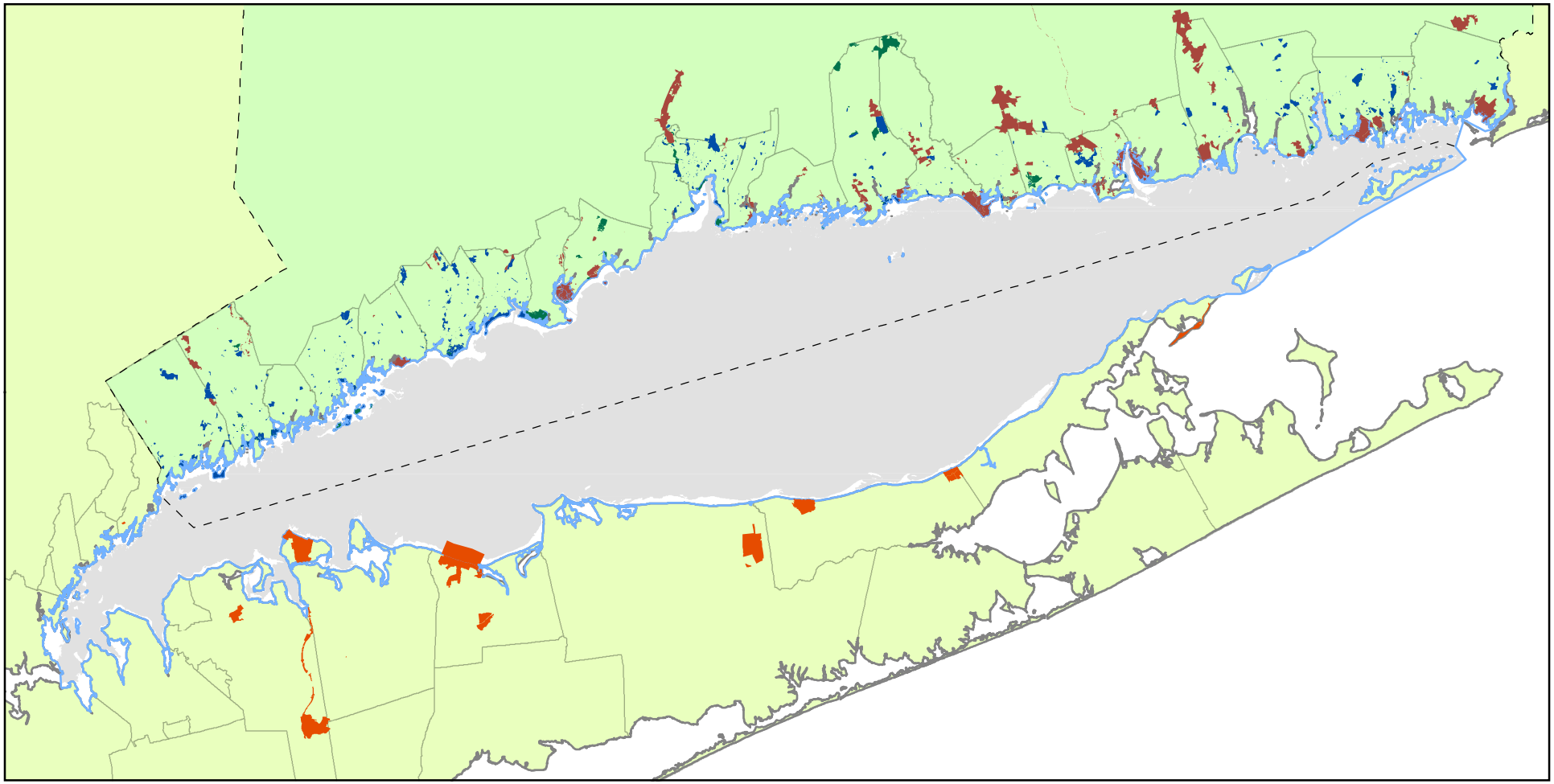
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Open Space & Public Lands

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Open Space / Public Lands

- CT DEEP Property
- CT Protected Open Space
- CT Public Municipal Open Space
- NY State Parks
- Blue Plan Planning Area
- Blue Plan Policy Area

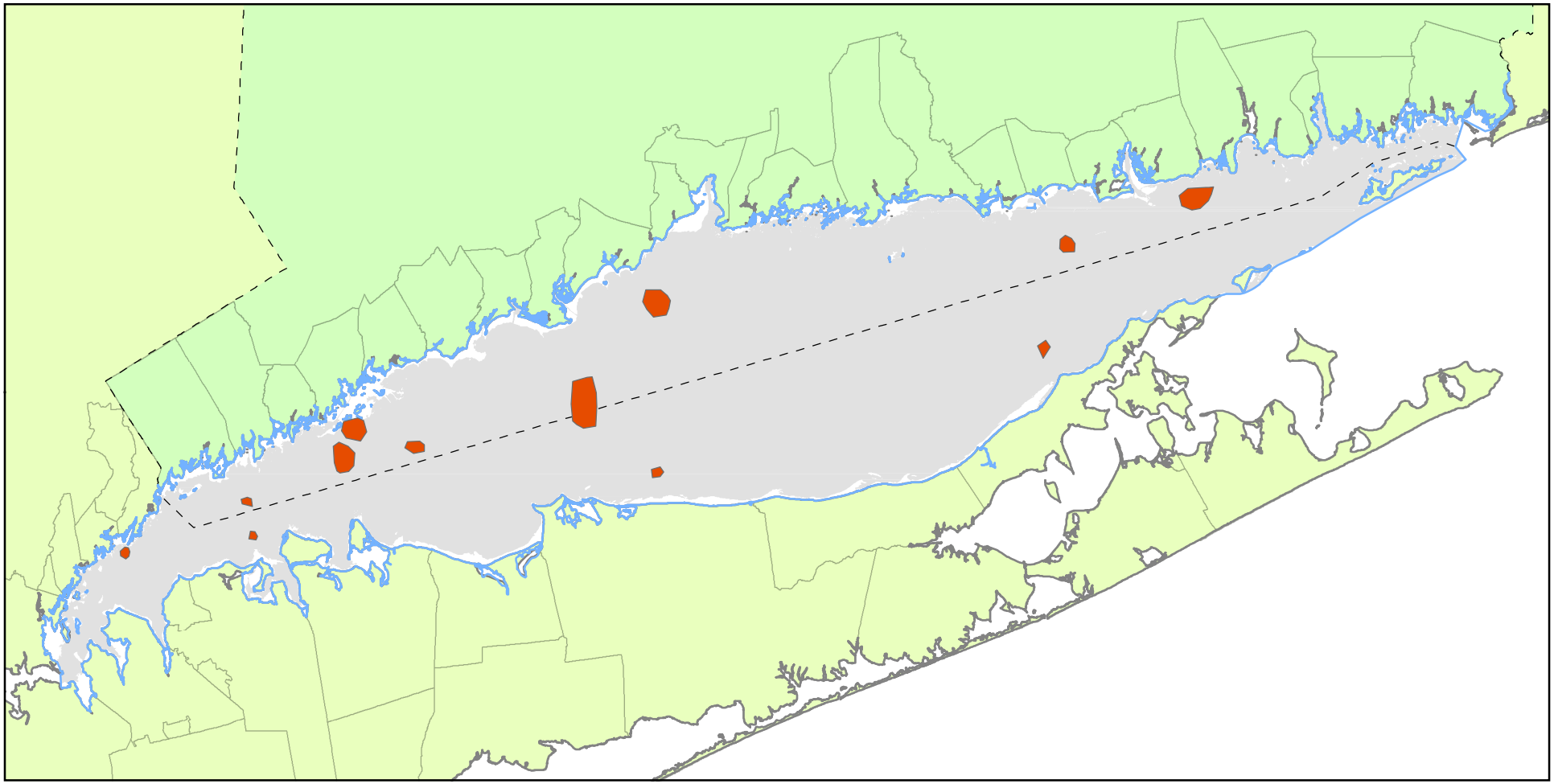
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Potential Submerged Holocence Sites

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Potential submerged Holocene sites

Blue Plan Planning Area

Blue Plan Policy Area

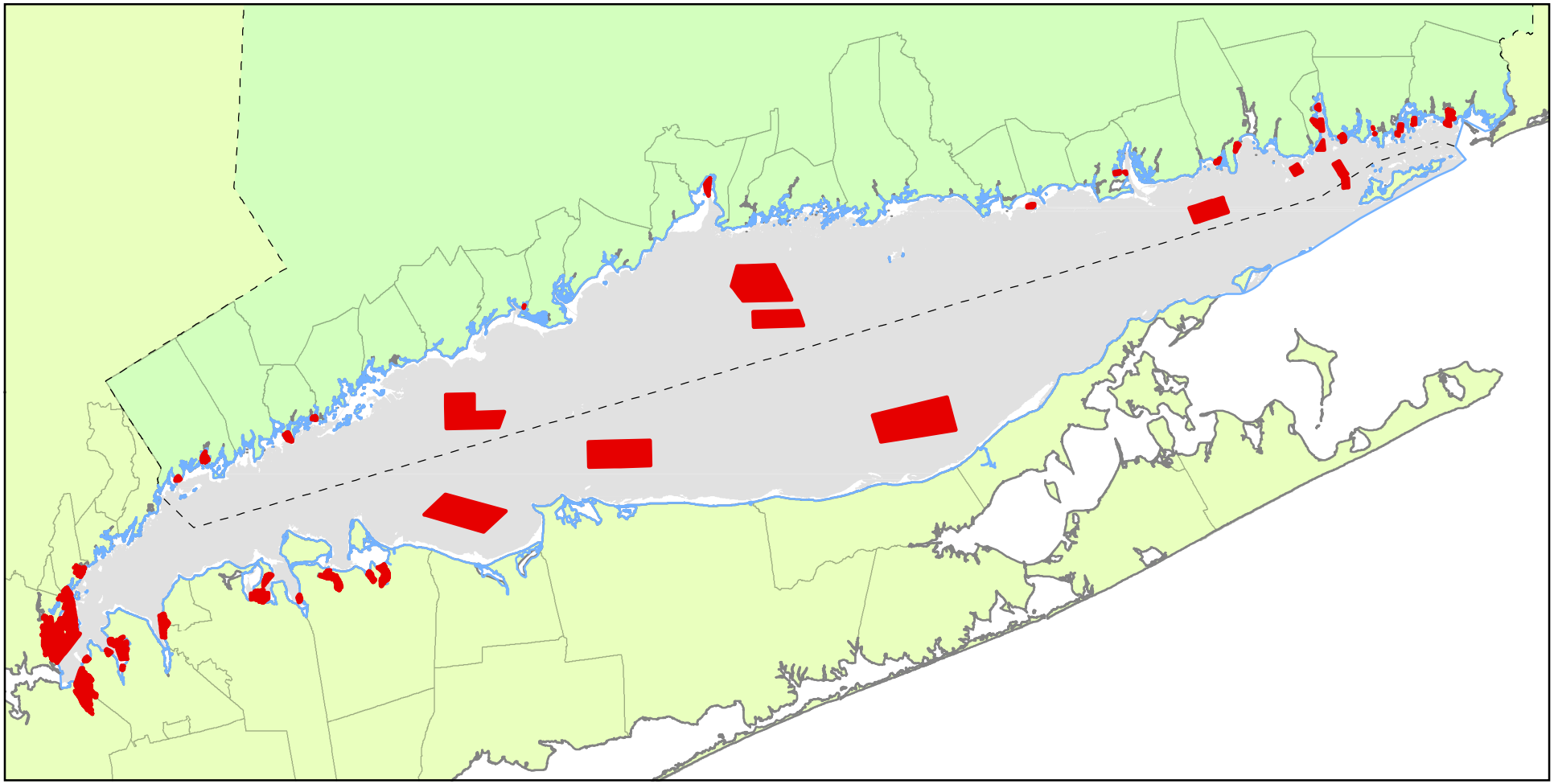
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/15/2019

Draft Significant Human Use Area Map: Anchorage Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Anchorage Areas

Blue Plan Planning Area

Blue Plan Policy Area

0 5 10 20 Miles

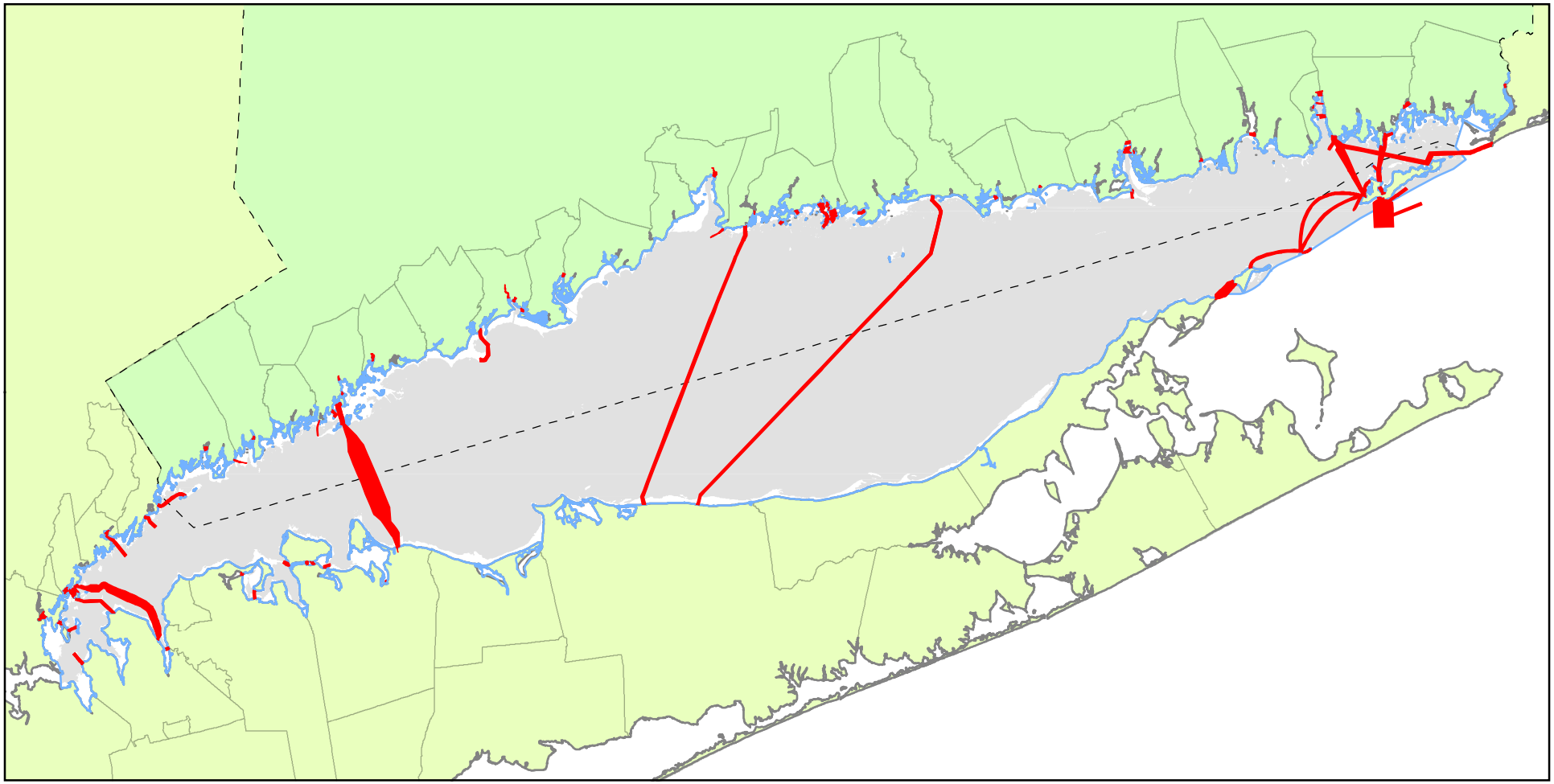
N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Cable and Pipeline Areas

LONG ISLAND SOUND BLUE PLAN

Sustainable Ecosystems - Compatible Uses



Cable And Pipeline Areas

Blue Plan Planning Area

Blue Plan Policy Area

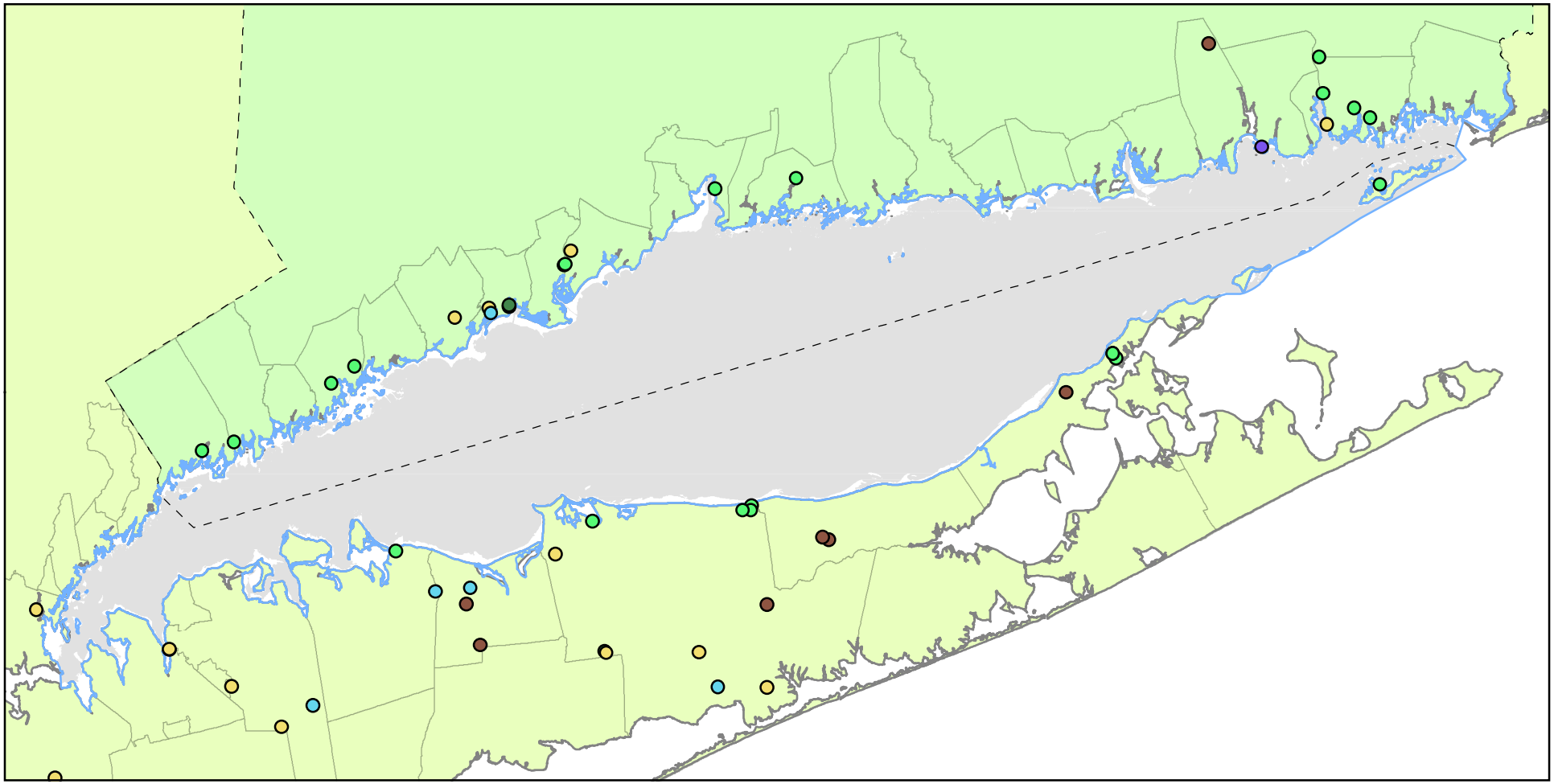
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Coastal Energy Facilities

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Coastal Energy Facilities

- Biomass
- Coal
- Gas
- Nuclear
- Oil
- Solar

Blue Plan Planning Area

Blue Plan Policy Area

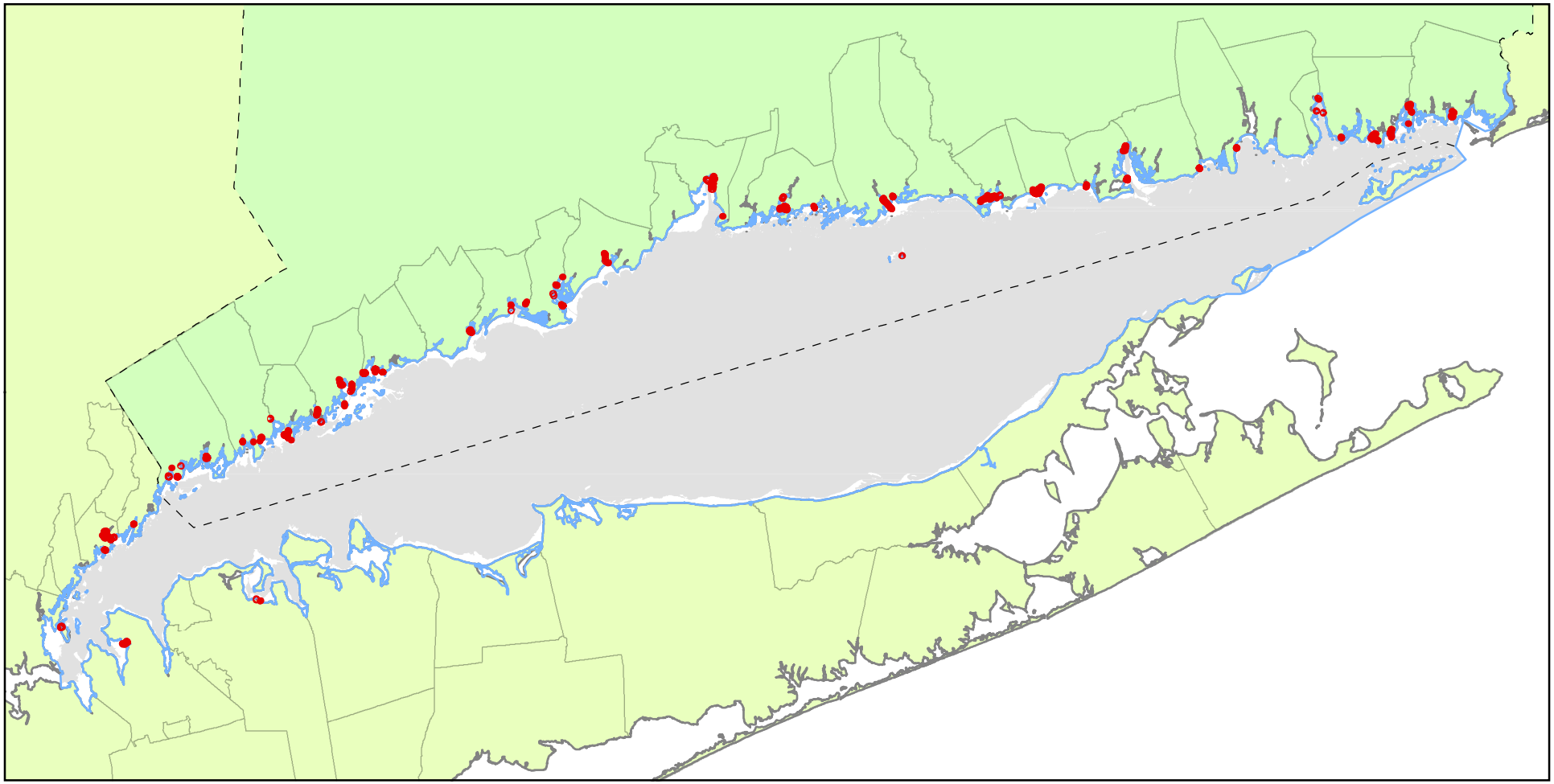
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Business and Commercial Dredging Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Business & Commercial Dredging Areas

Blue Plan Planning Area

Blue Plan Policy Area

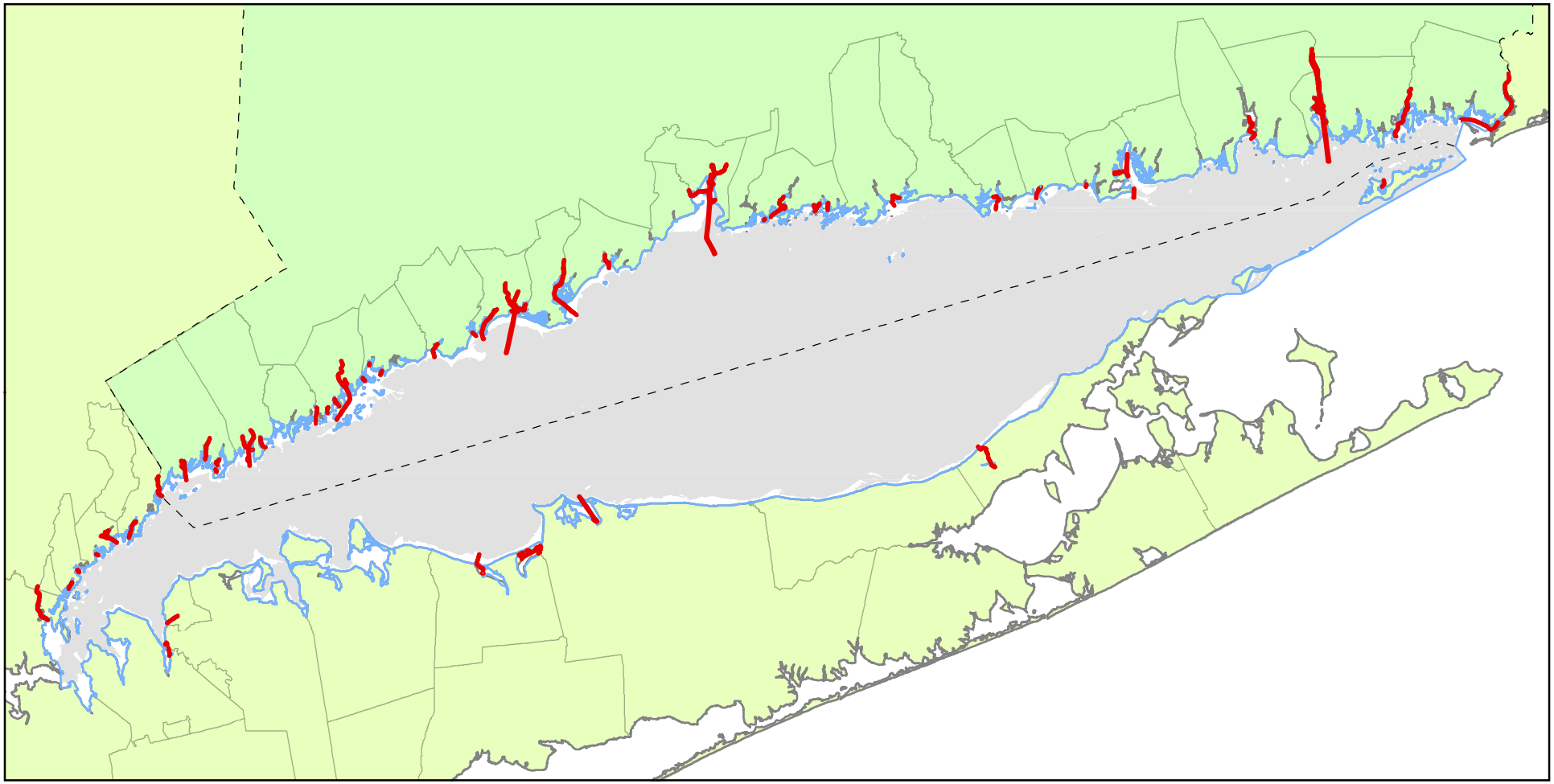
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Fairways & Navigation Channels

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Fairways and Navigation Channels

Blue Plan Planning Area

Blue Plan Policy Area

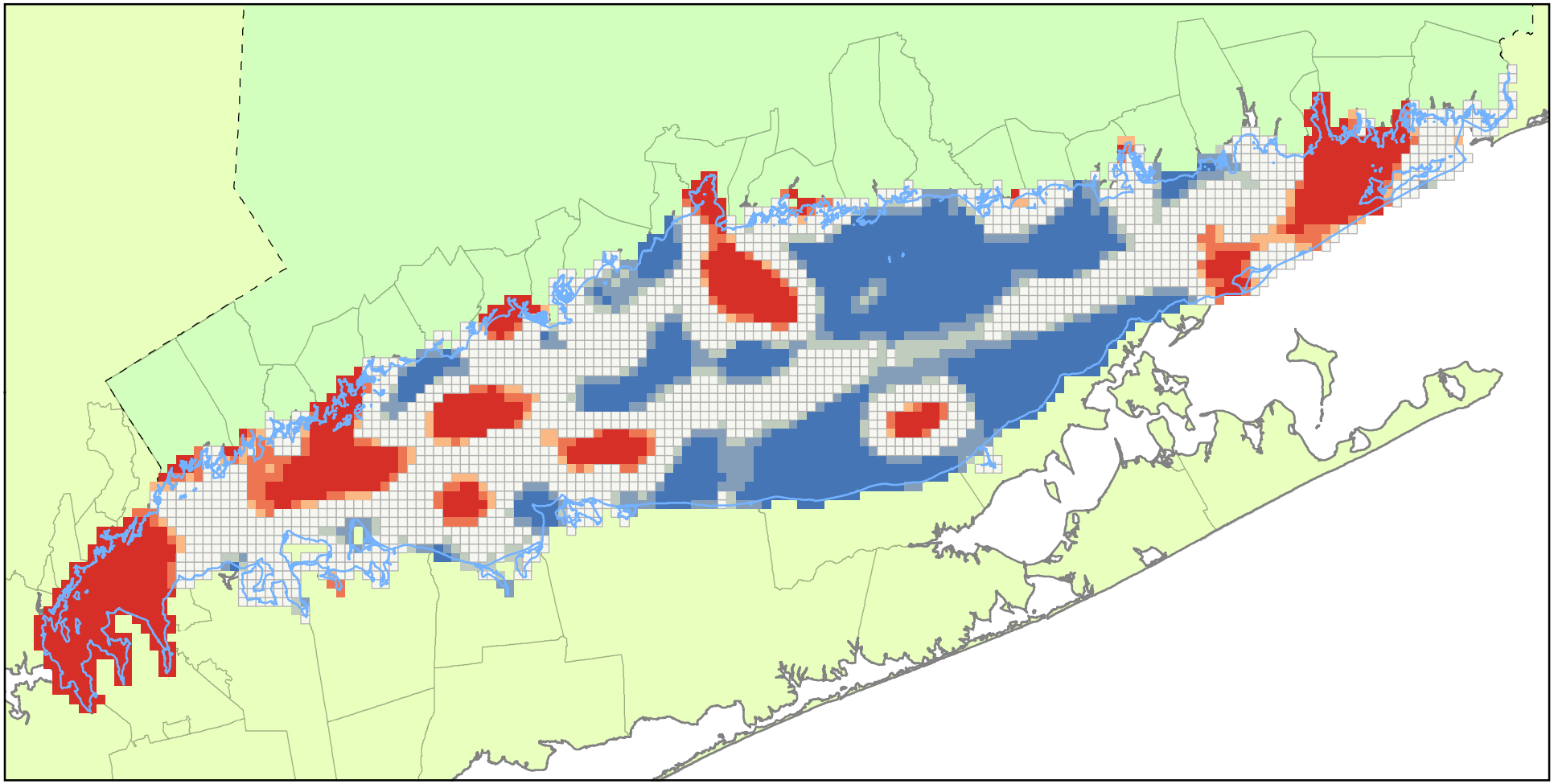
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Concentrations of Navigation, Transportation, etc., Uses

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Concentrations of Navigation, Transportation, etc., Uses

- Cold Spot - 99% Confidence
- Cold Spot - 95% Confidence
- Cold Spot - 90% Confidence
- Neutral
- Hot Spot - 90% Confidence
- Hot Spot - 95% Confidence
- Hot Spot - 99% Confidence
- Blue Plan Planning Area

0 5 10 20 Miles

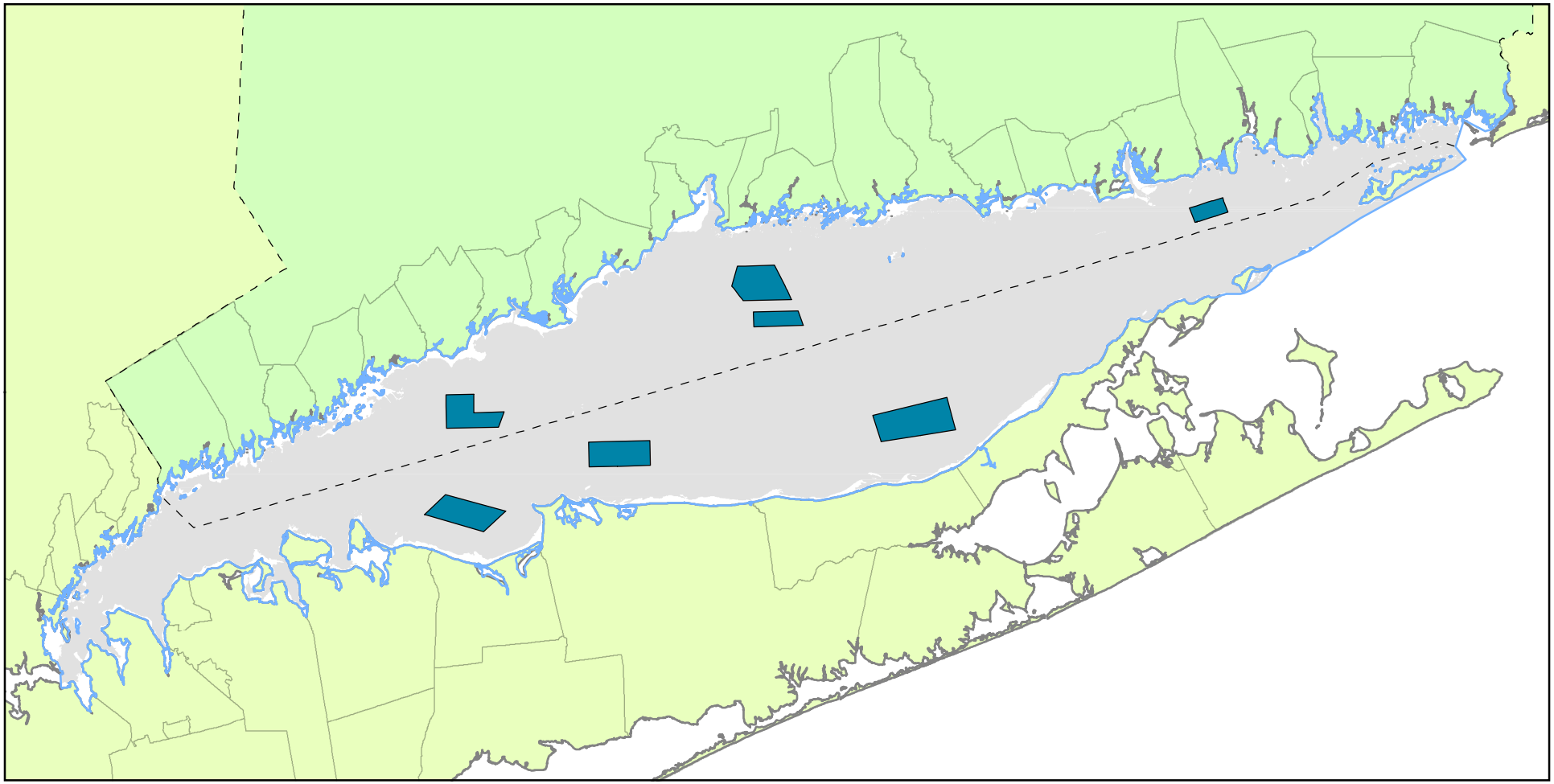
N

Map created by Connecticut Department of Energy & Environmental Protection: 1/17/2019

Draft Significant Human Use Area Map: Lightering Zones

LONG ISLAND SOUND BLUE PLAN

Sustainable Ecosystems - Compatible Uses



Lightering Zones

Blue Plan Planning Area

Blue Plan Policy Area

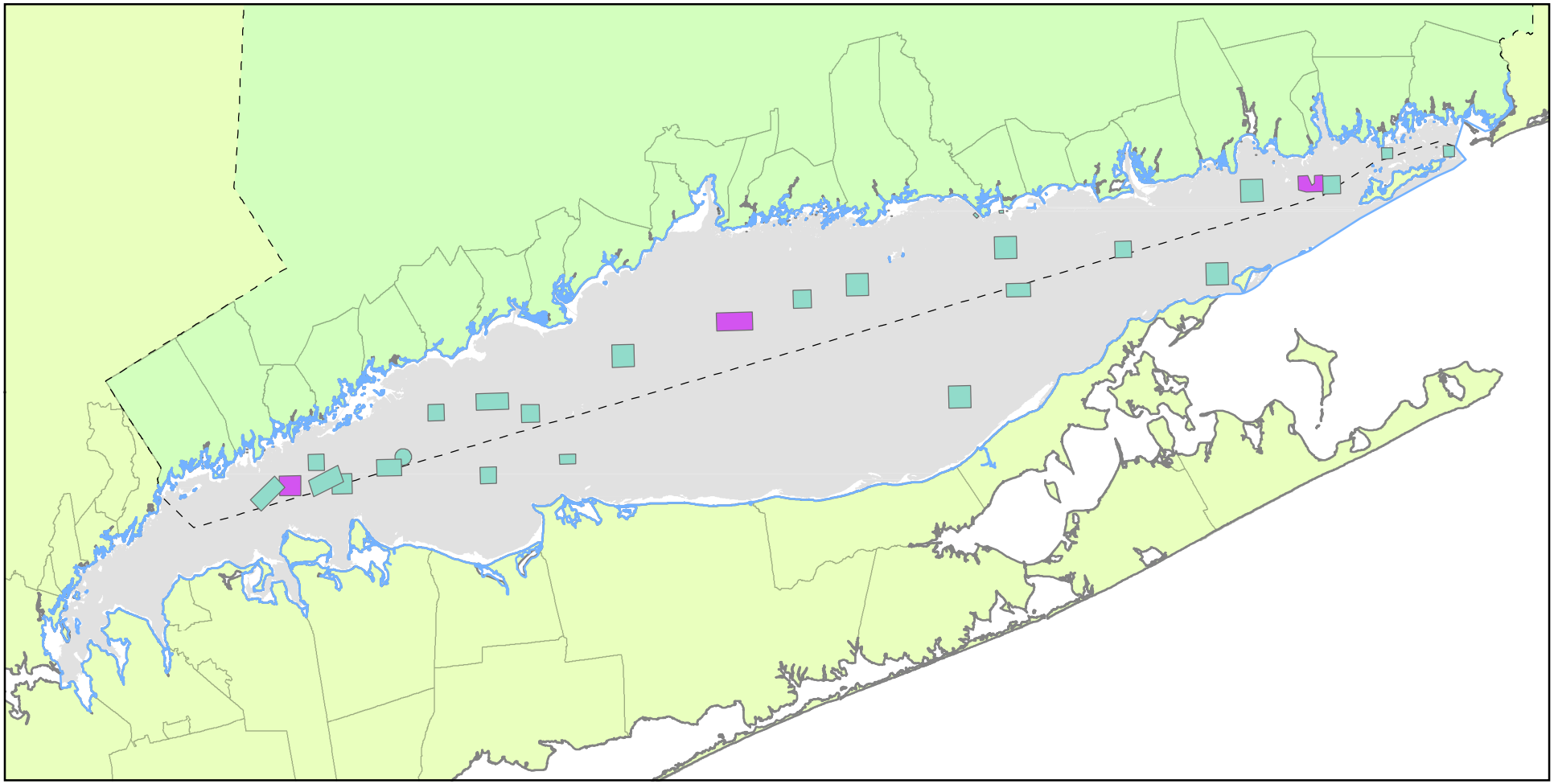
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Open Water Disposal Sites

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Open Water Disposal Sites

- Active
- Inactive

- Blue Plan Planning Area
- Blue Plan Policy Area

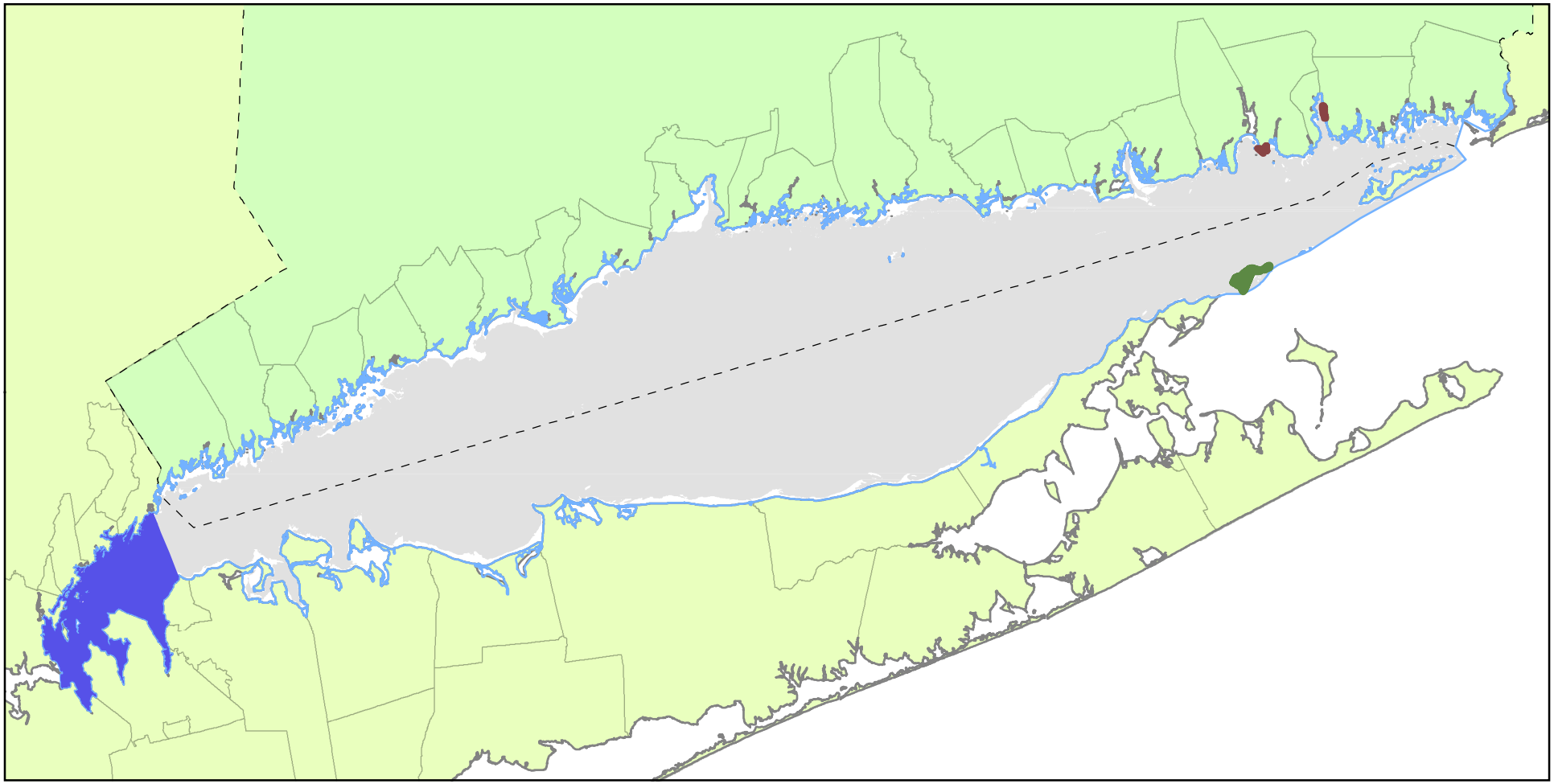
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Restricted Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Restricted Areas

- Plum Island - closed to the public.
- Security zone, 33 CFR 165.154: Navigation regulations.
- Security zone, 33 CFR 165.169: Navigation regulations.

- Blue Plan Planning Area
- Blue Plan Policy Area

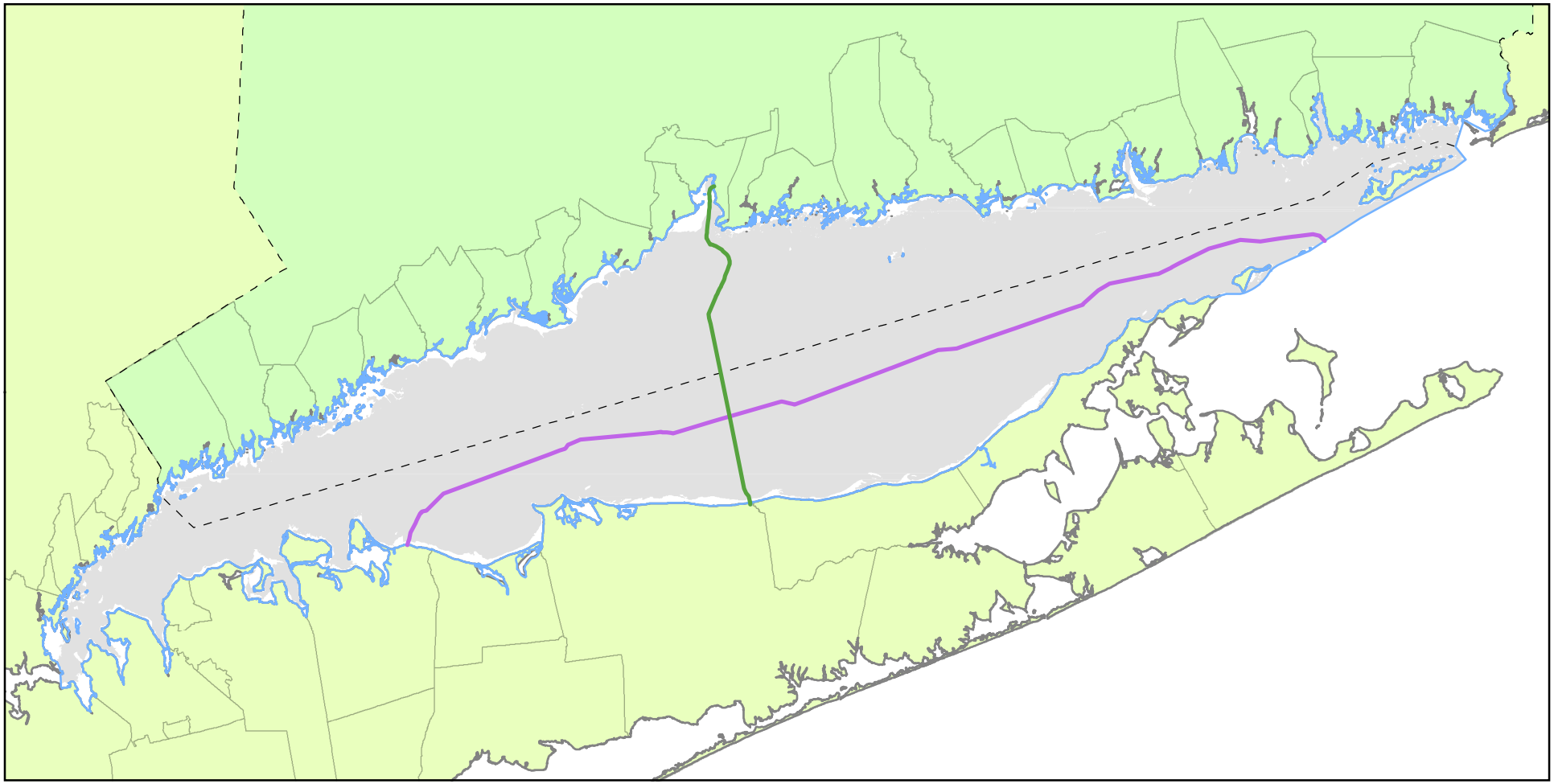
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Underwater Cables

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Underwater Cables

power line

telephone

Blue Plan Planning Area

Blue Plan Policy Area

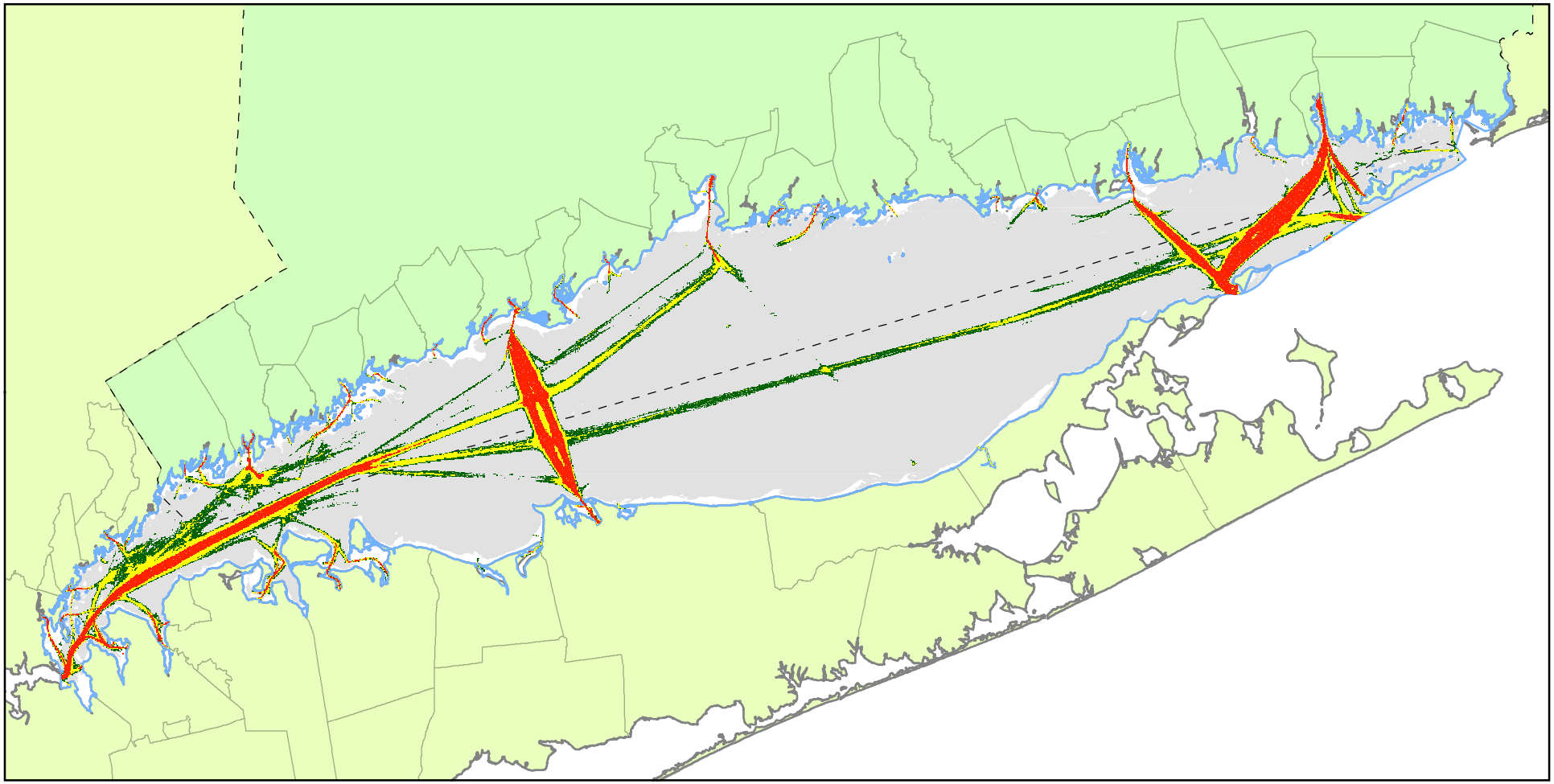
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Vessel Transit Lanes

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Vessel Count

- 86 - 115
- 116 - 238
- 239 - 12366

- Blue Plan Planning Area
- Blue Plan Policy Area

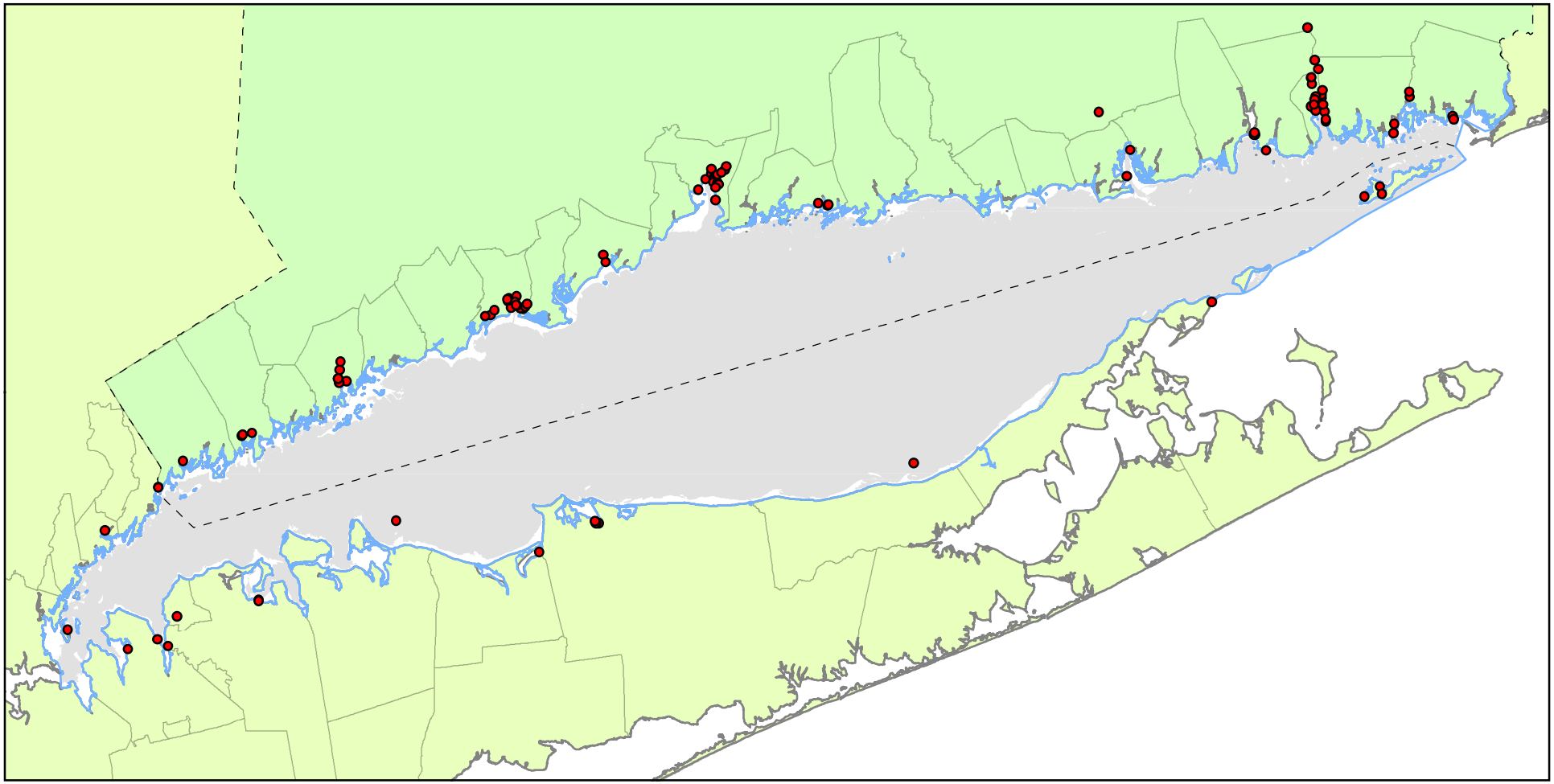
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Working Waterfronts

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



- Working Waterfronts
- Blue Plan Planning Area
- Blue Plan Policy Area

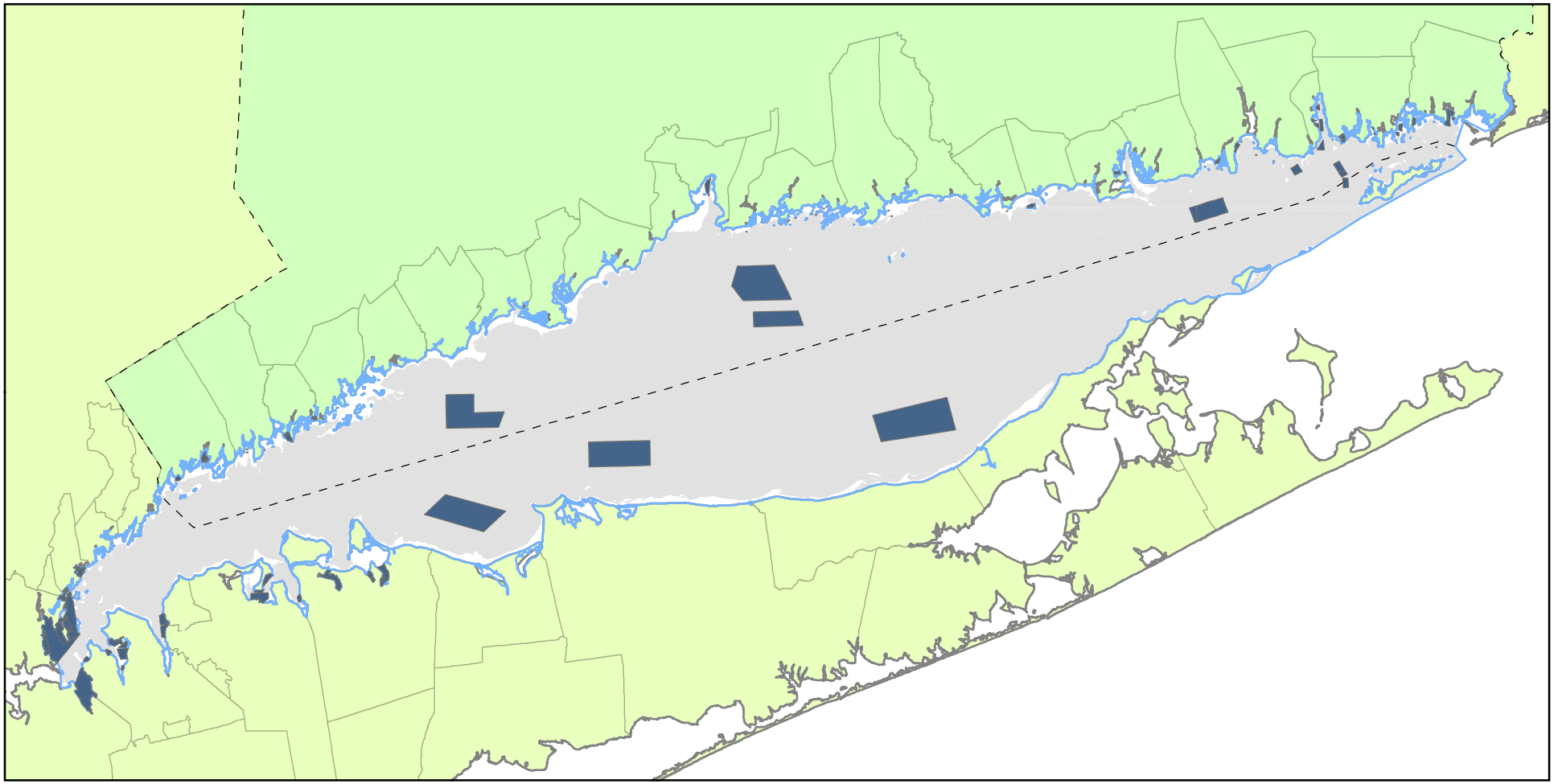
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Anchorage Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Anchorage Areas

Blue Plan Planning Area

Blue Plan Policy Area

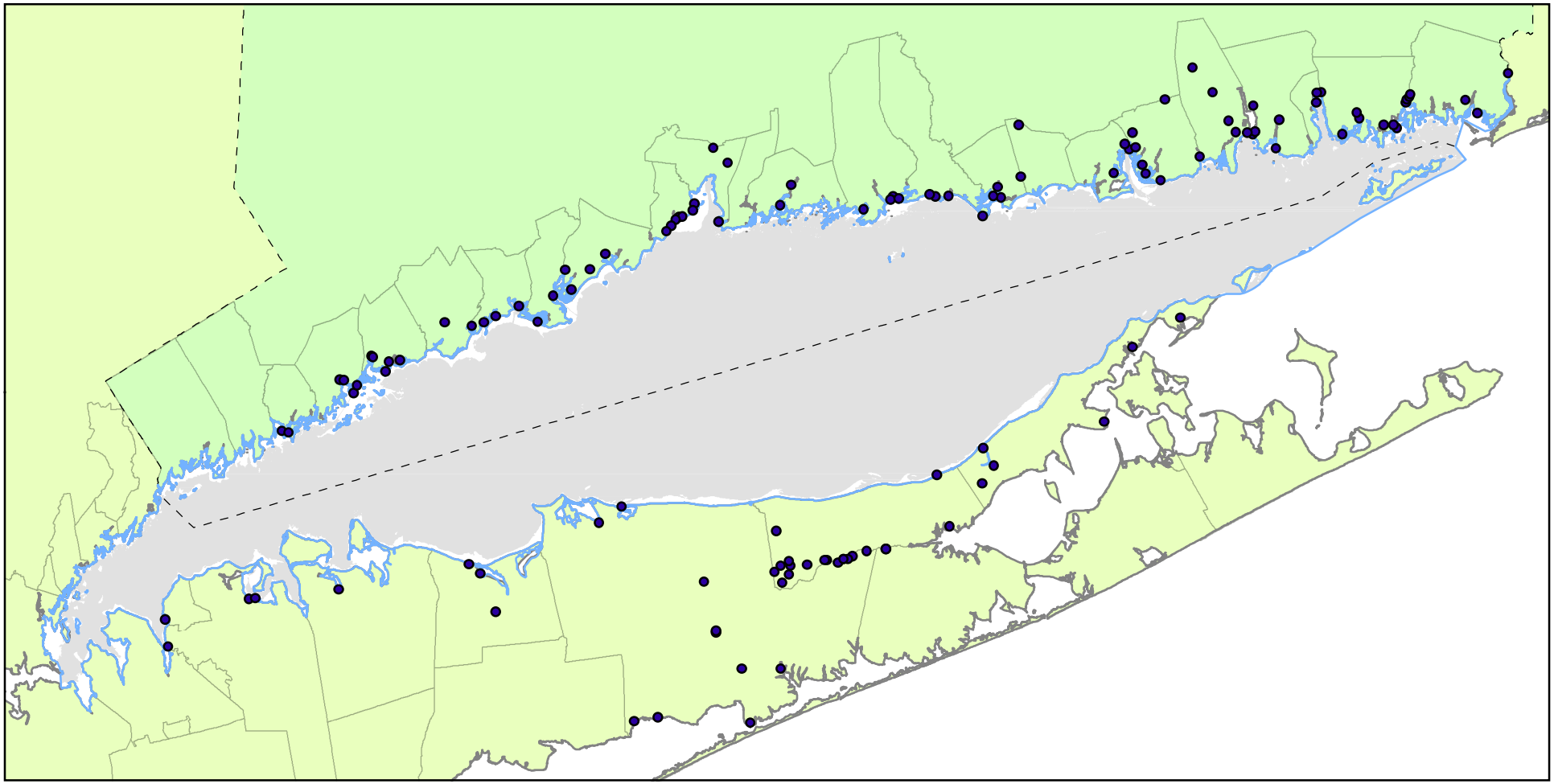
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Boat Launches

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



- Boat Launches
- Blue Plan Planning Area
- Blue Plan Policy Area

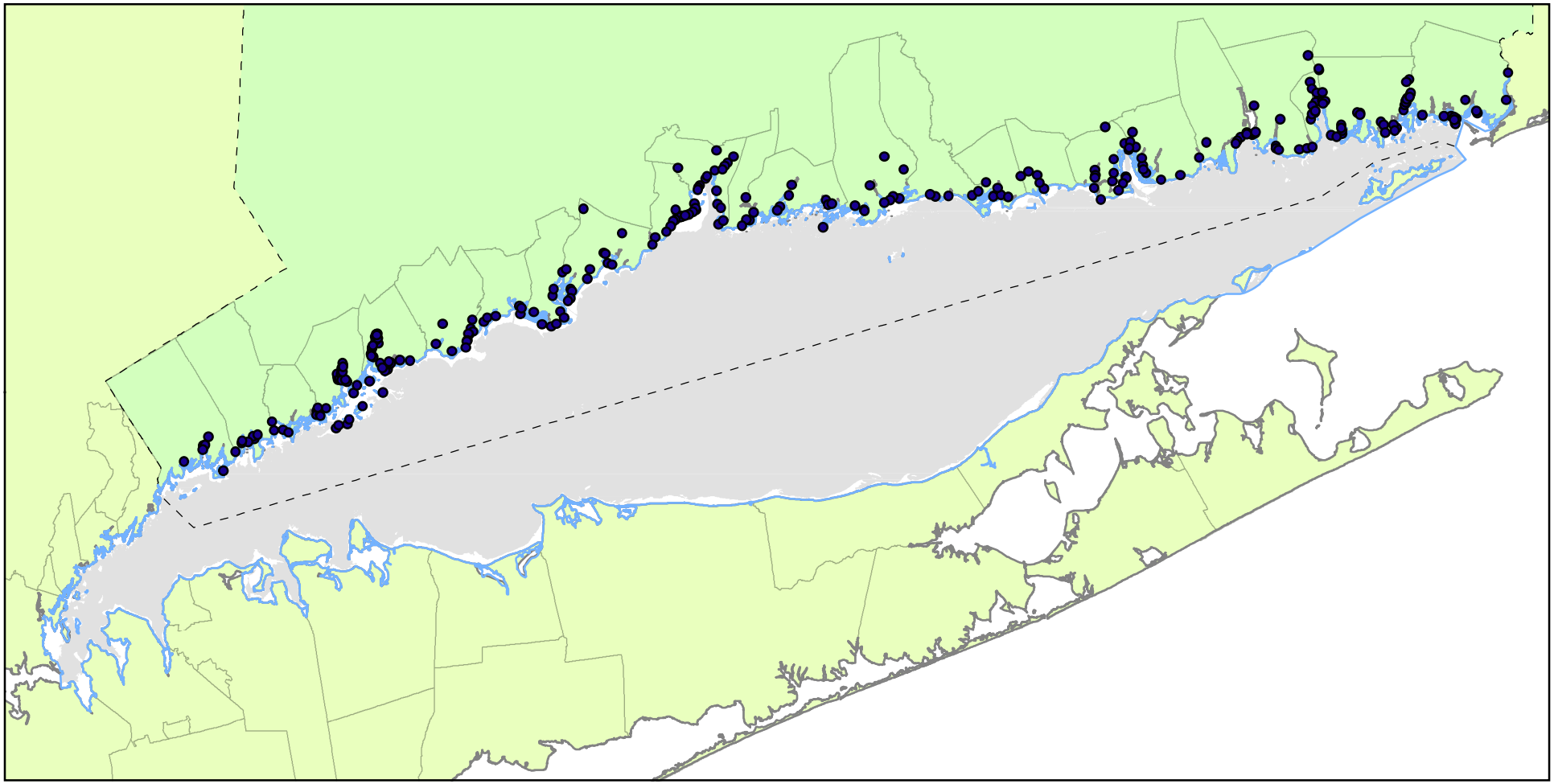
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Coastal Access Sites

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



- Coastal Access Sites
- Blue Plan Planning Area
- Blue Plan Policy Area

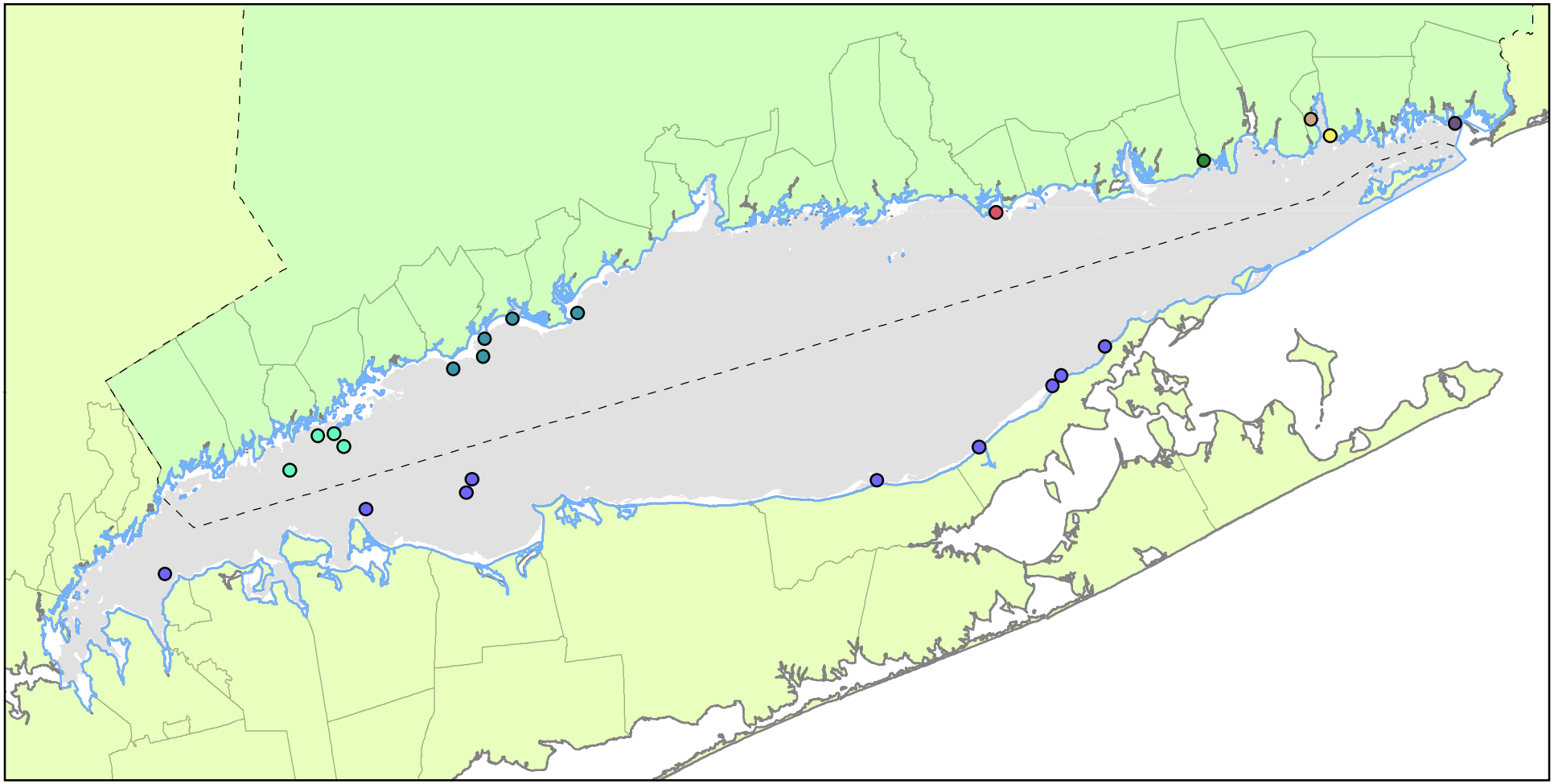
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Dive Locations

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Dive Locations
- unknown
- Charter Dive, Class Dive
- Club Dive
- Diving
- Scuba
- Shore Dive
- Shore Dive, Club Dive
- Shore Dive, Club Dive, Class dive
- Shore Dive, Club Dive, Classes

Blue Plan Planning Area
Blue Plan Policy Area

0 5 10 20 Miles

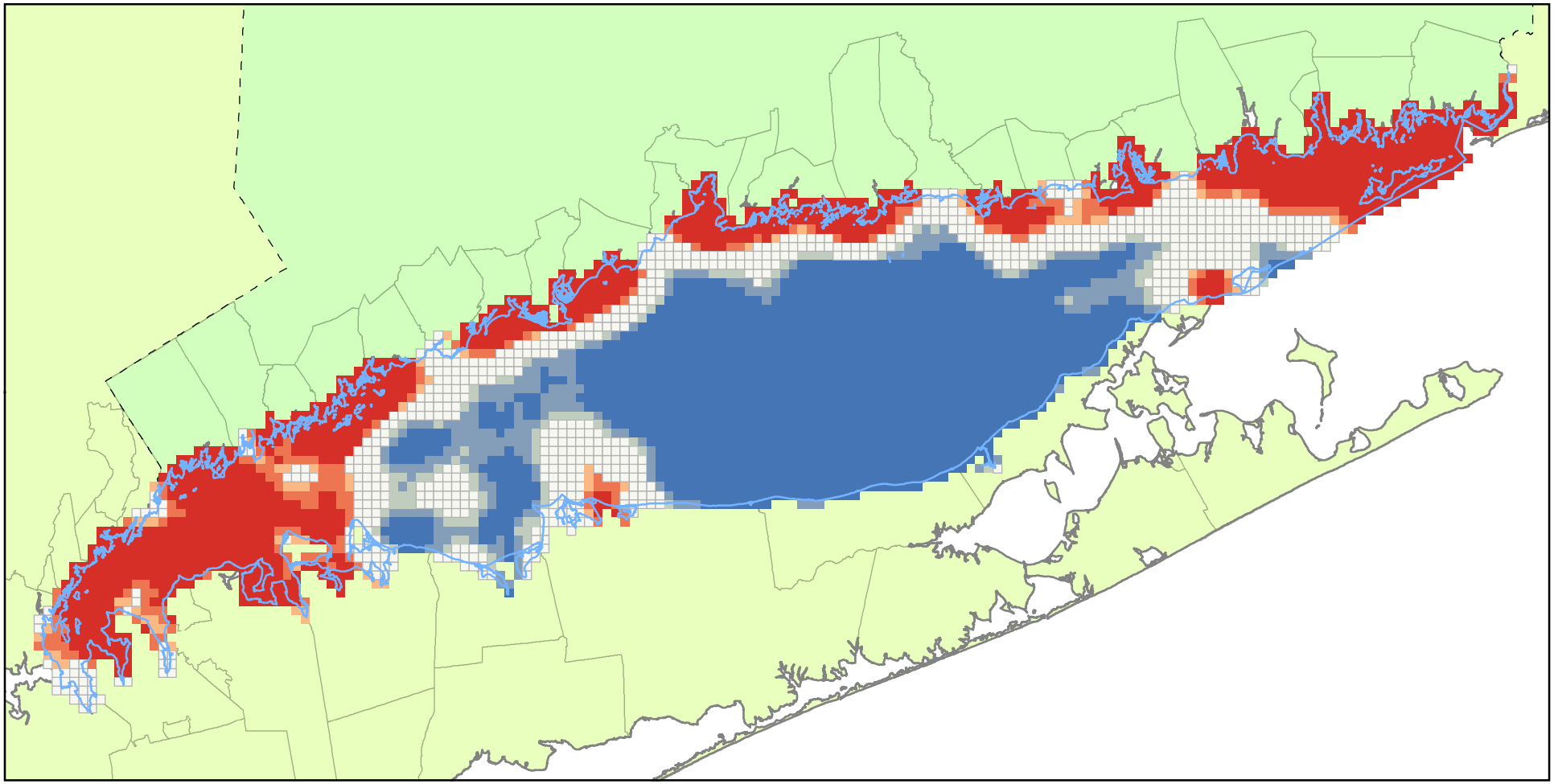
N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Concentrations of Recreational Uses

LONG ISLAND SOUND BLUE PLAN

Sustainable Ecosystems - Compatible Uses



Concentrations of Recreational Uses

- Cold Spot - 99% Confidence
- Cold Spot - 95% Confidence
- Cold Spot - 90% Confidence
- Neutral
- Hot Spot - 90% Confidence
- Hot Spot - 95% Confidence
- Hot Spot - 99% Confidence
- Blue Plan Planning Area

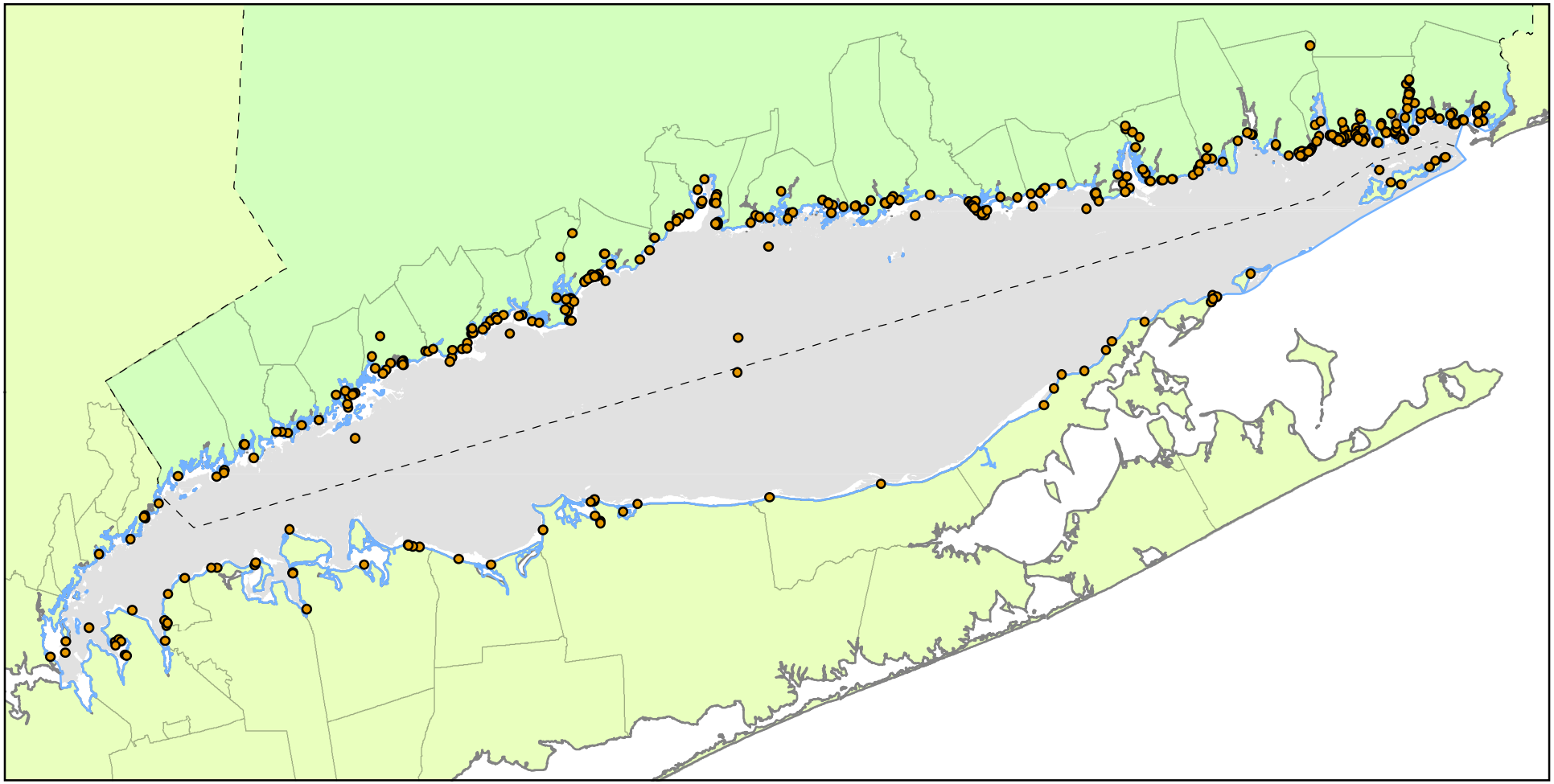
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/17/2019

Draft Significant Human Use Area Map: Individual Ocean Uses

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



- Individual Ocean Uses
- Blue Plan Planning Area
- Blue Plan Policy Area

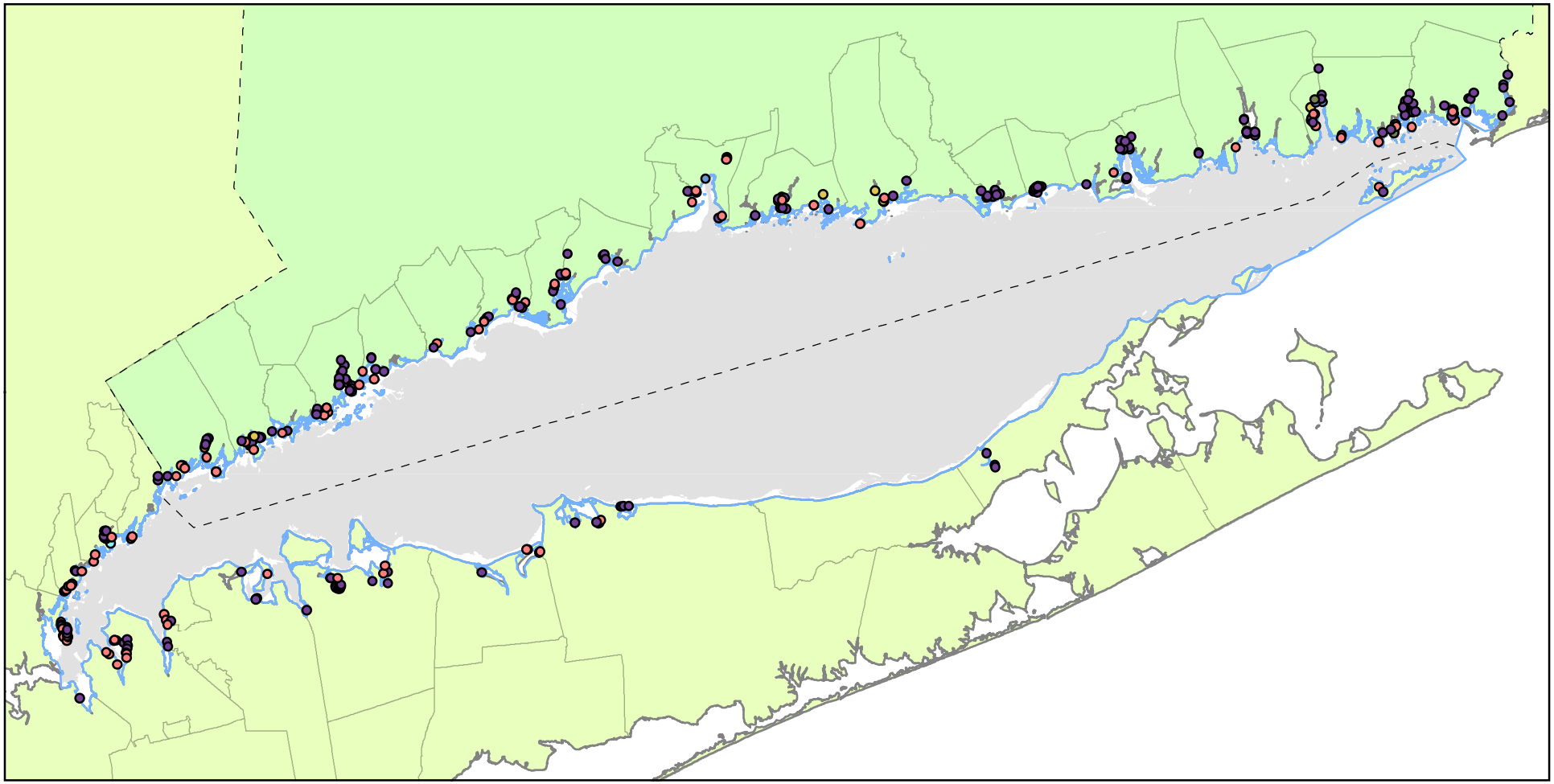
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Marinas, Yacht Clubs, Etc.

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Marinas and Yacht Clubs

- Marina
- Yacht Club
- Boat Yard
- Ship Yard
- Public Pier
- Beach Club
- Boat sales

- Blue Plan Planning Area
- Blue Plan Policy Area

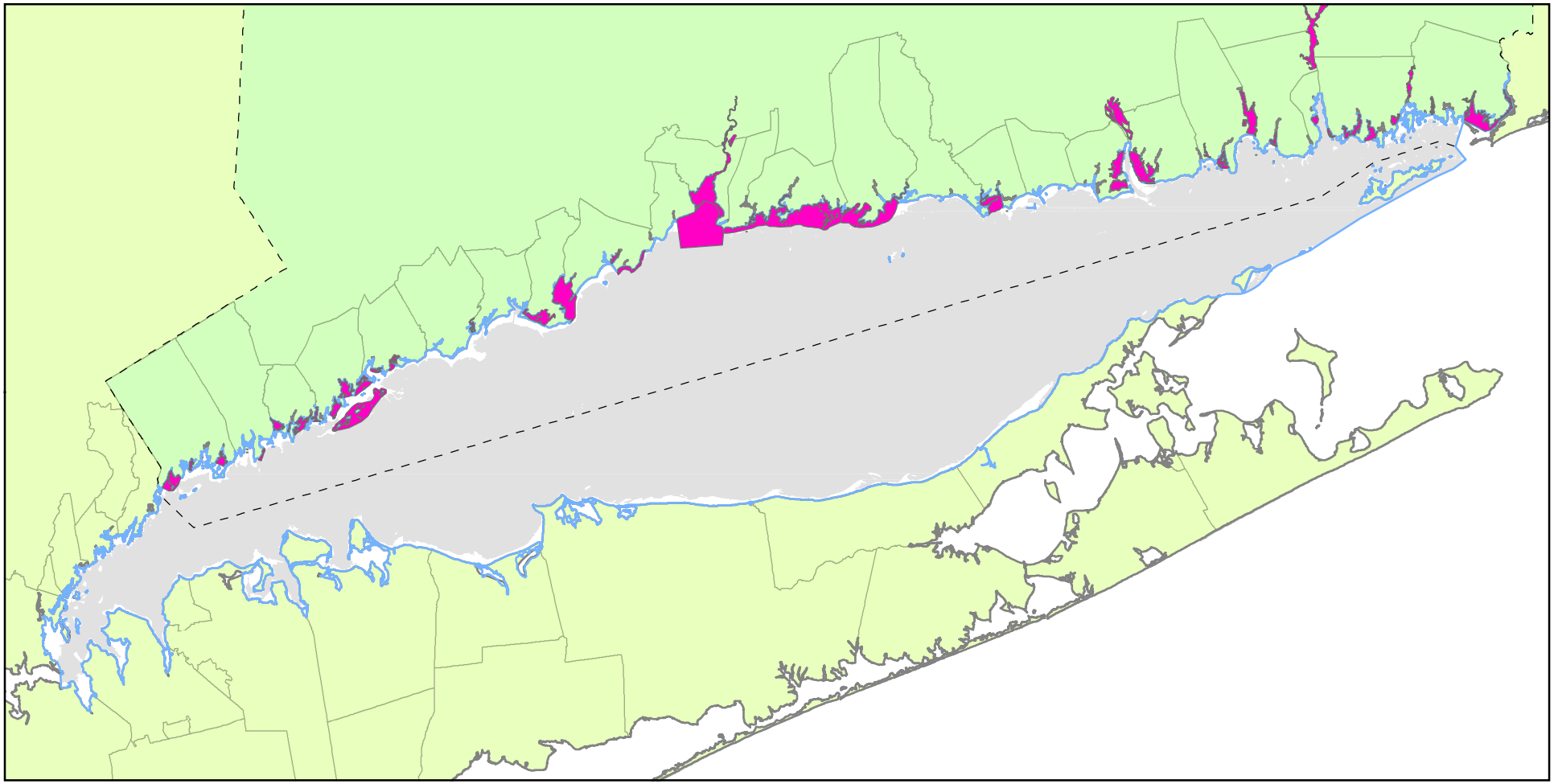
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Migratory Waterfowl Concentration Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Migratory Waterfowl Concentration Areas

Blue Plan Planning Area

Blue Plan Policy Area

0 5 10 20 Miles

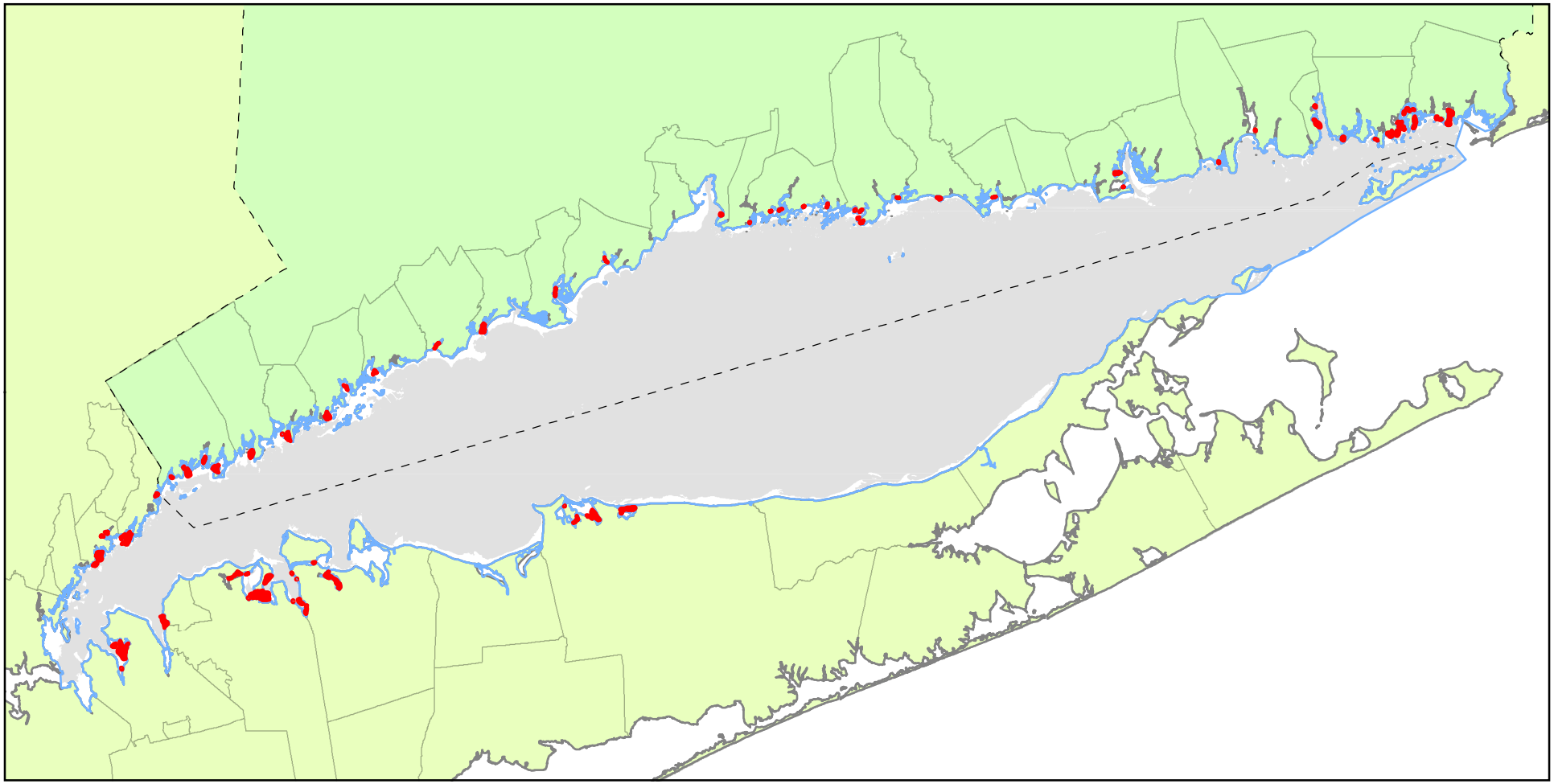
N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Mooring Fields

LONG ISLAND SOUND BLUE PLAN

Sustainable Ecosystems - Compatible Uses



Mooring Fields

Blue Plan Planning Area

Blue Plan Policy Area

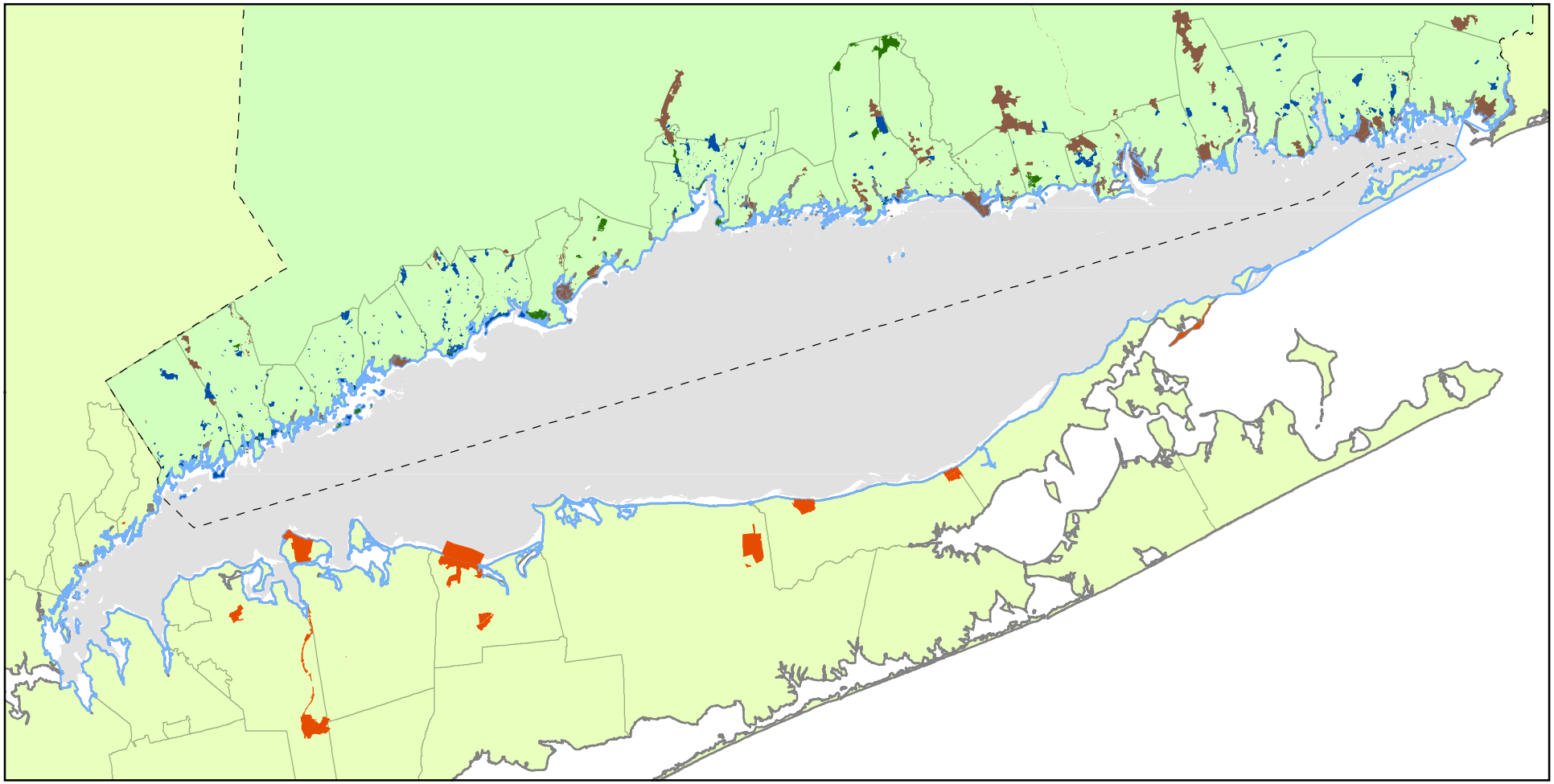
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Open Space & Public Lands

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Open Space / Public Lands

- CT DEEP Property
- CT Protected Open Space
- CT Public Municipal Open Space
- NY State Parks
- Blue Plan Planning Area
- Blue Plan Policy Area

0 5 10 20 Miles

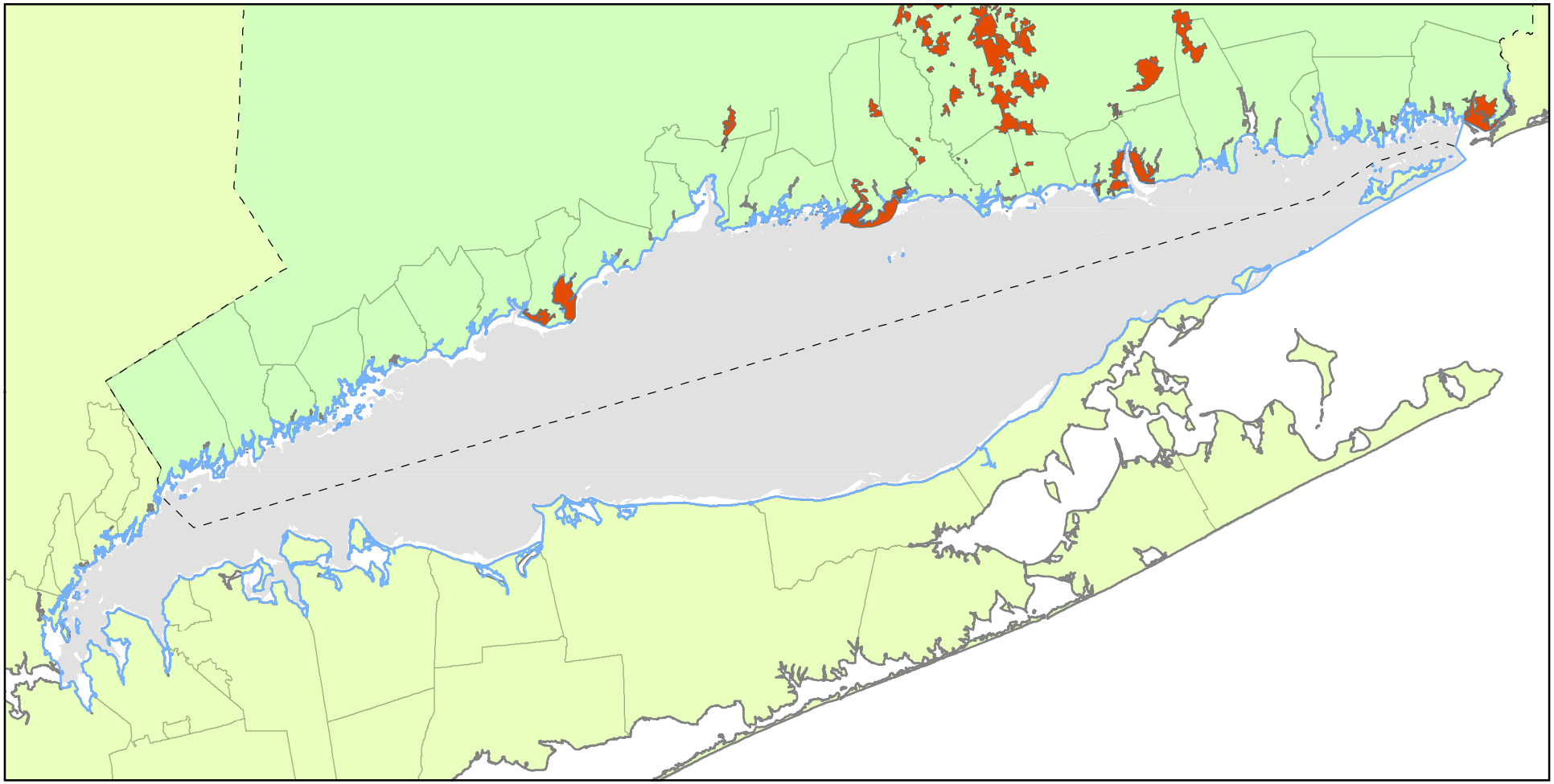
N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Potential Waterfowl Hunting Areas

LONG ISLAND SOUND BLUE PLAN

Sustainable Ecosystems - Compatible Uses



Potential Waterfowl Hunting Areas

Blue Plan Planning Area

Blue Plan Policy Area

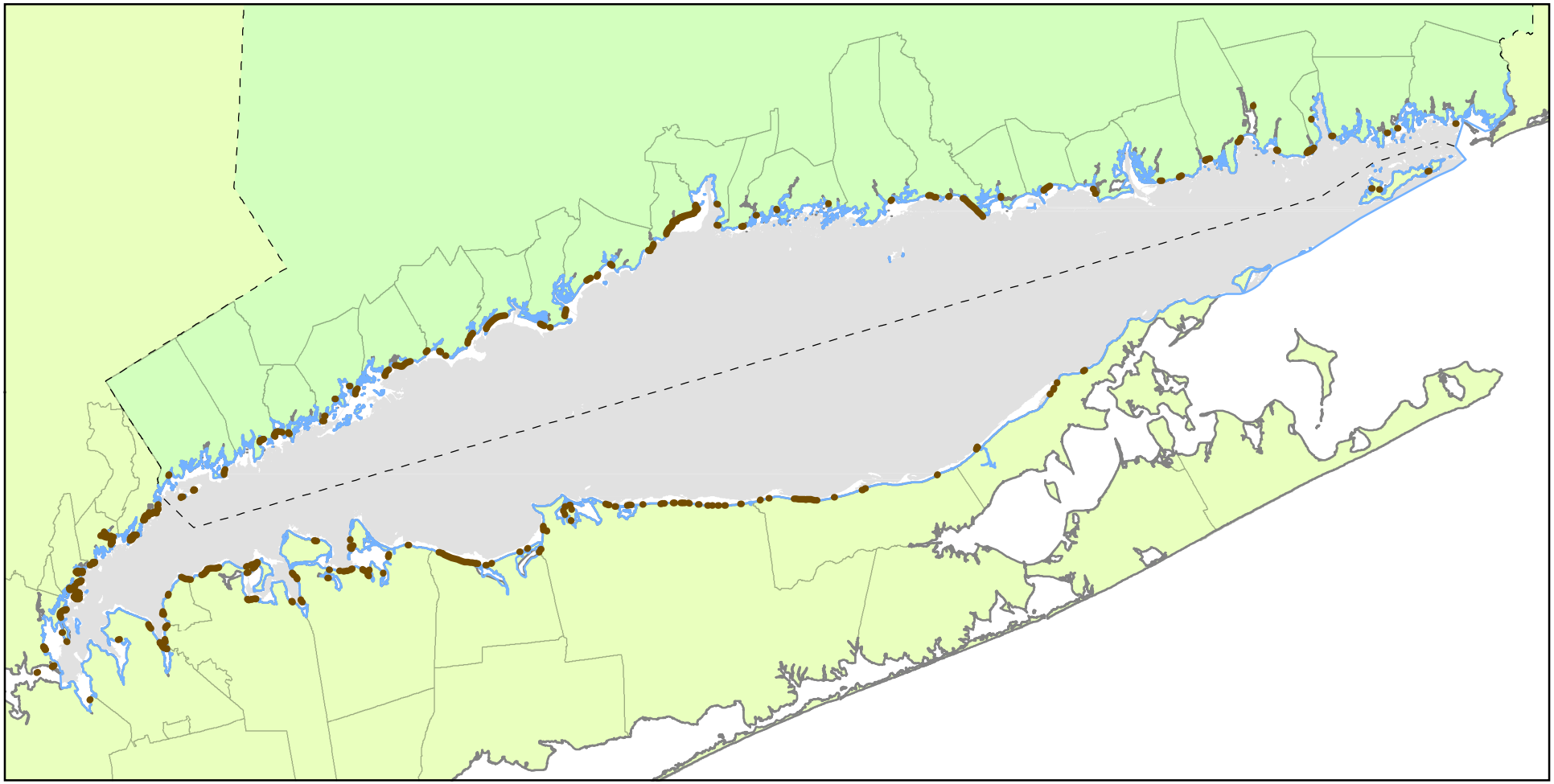
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Public Access Beaches

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Public Access Beaches

Blue Plan Planning Area

Blue Plan Policy Area

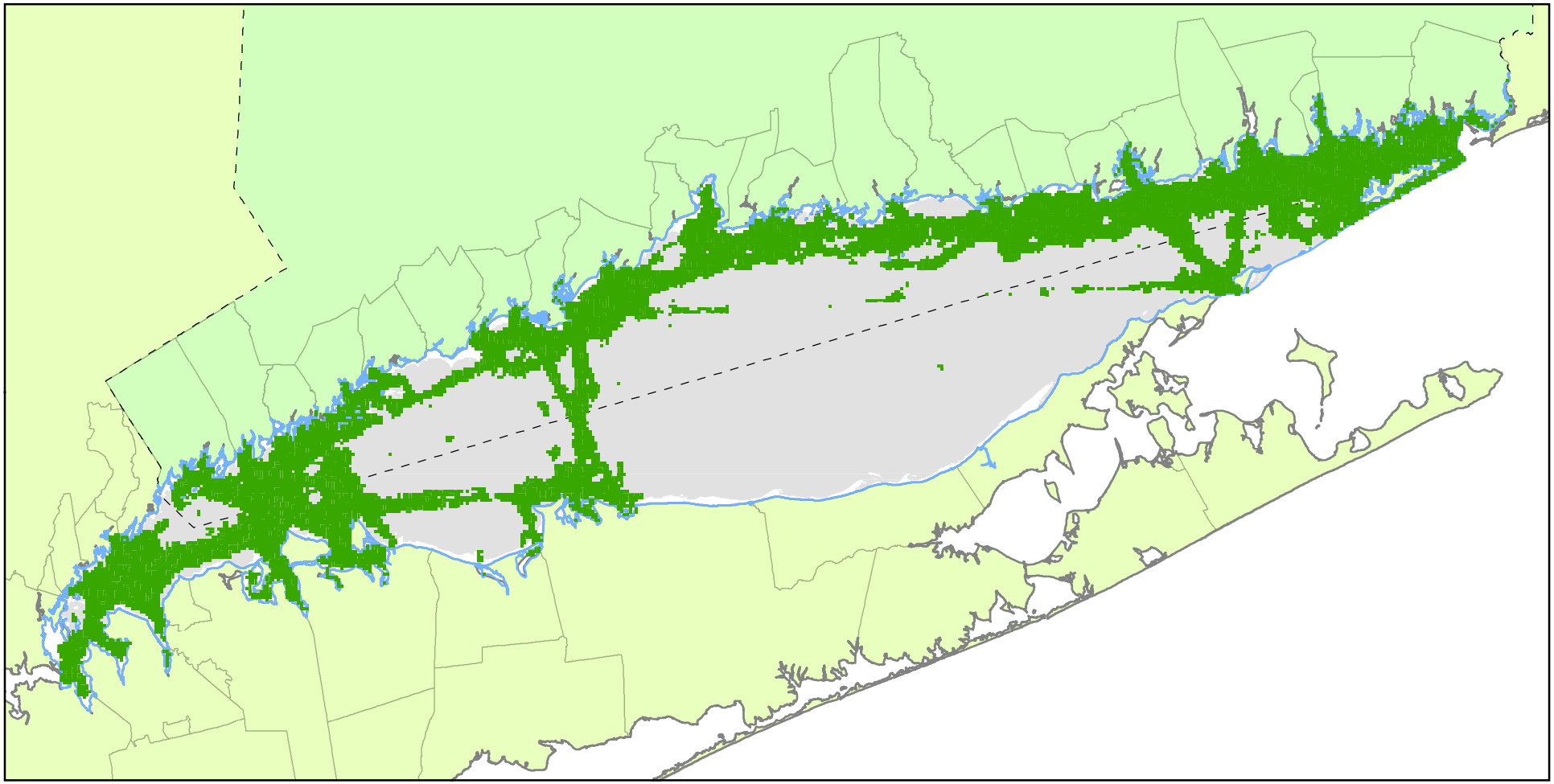
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Areas of High Density Recreational Boating

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



High Recreational Boater Density

Blue Plan Planning Area

Blue Plan Policy Area

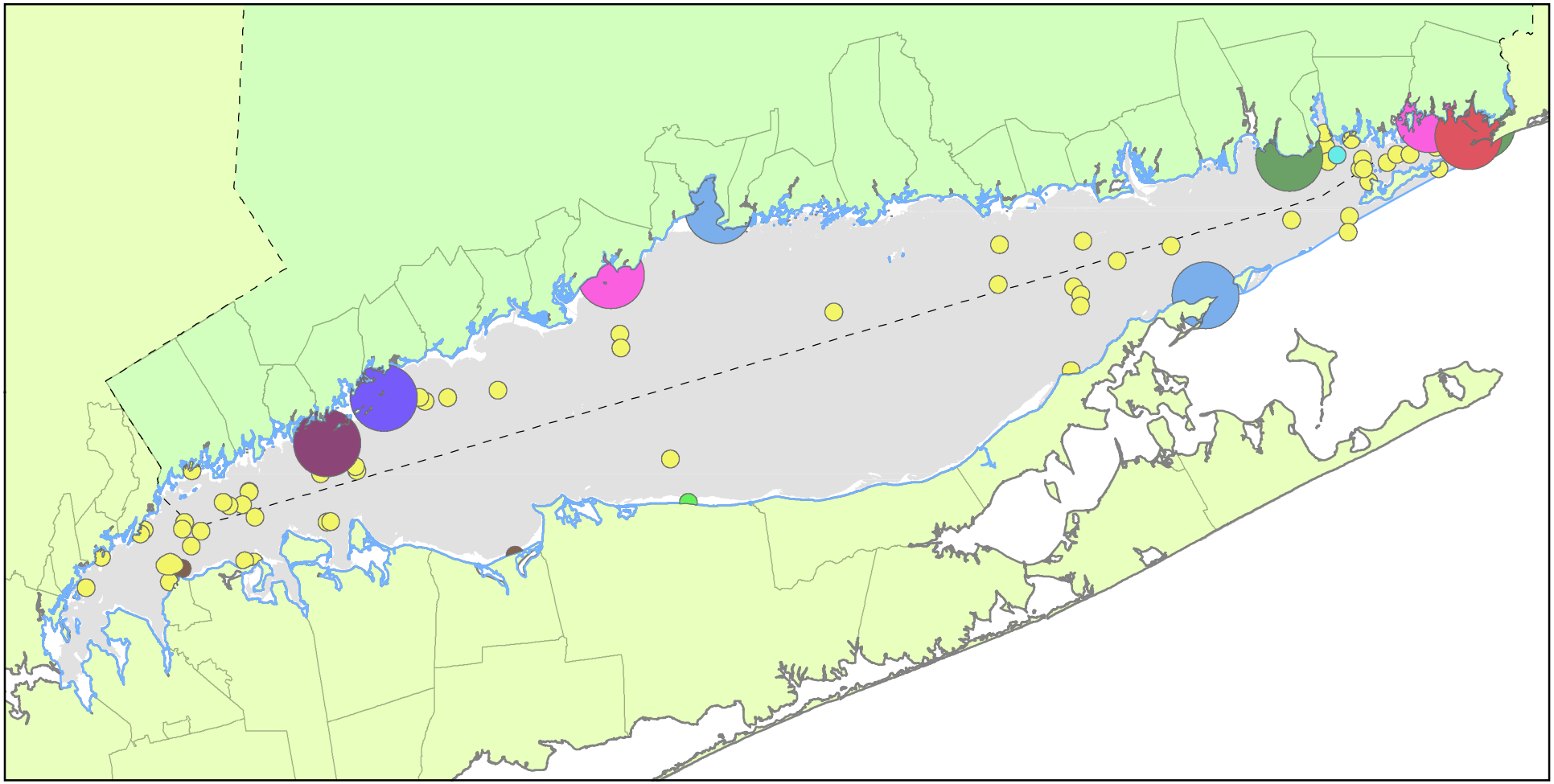
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Recreational SCUBA Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Recreational SCUBA Areas
- Artificial Reef
- Beach
- Habitats
- Habitats; Man-made features
- Habitats; Man-made features; Wildlife
- Lighthouse
- Man-made features; Wildlife
- Wildlife
- Wreck
- Wreck; Habitats; Man-made feature; Wildlife

- Blue Plan Planning Area
- Blue Plan Policy Area

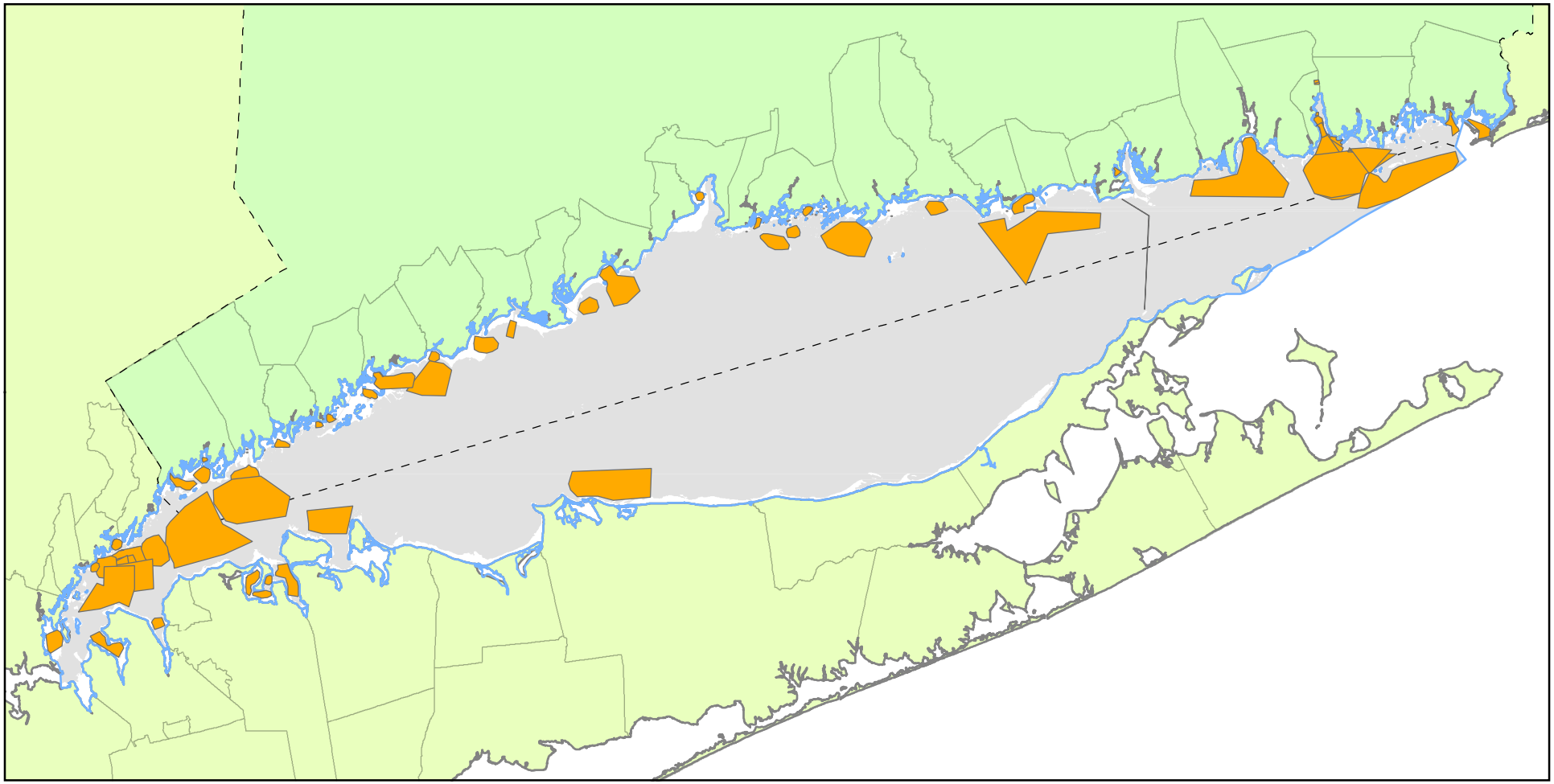
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Sailing Race Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Sailing Race Areas

Blue Plan Planning Area

Blue Plan Policy Area

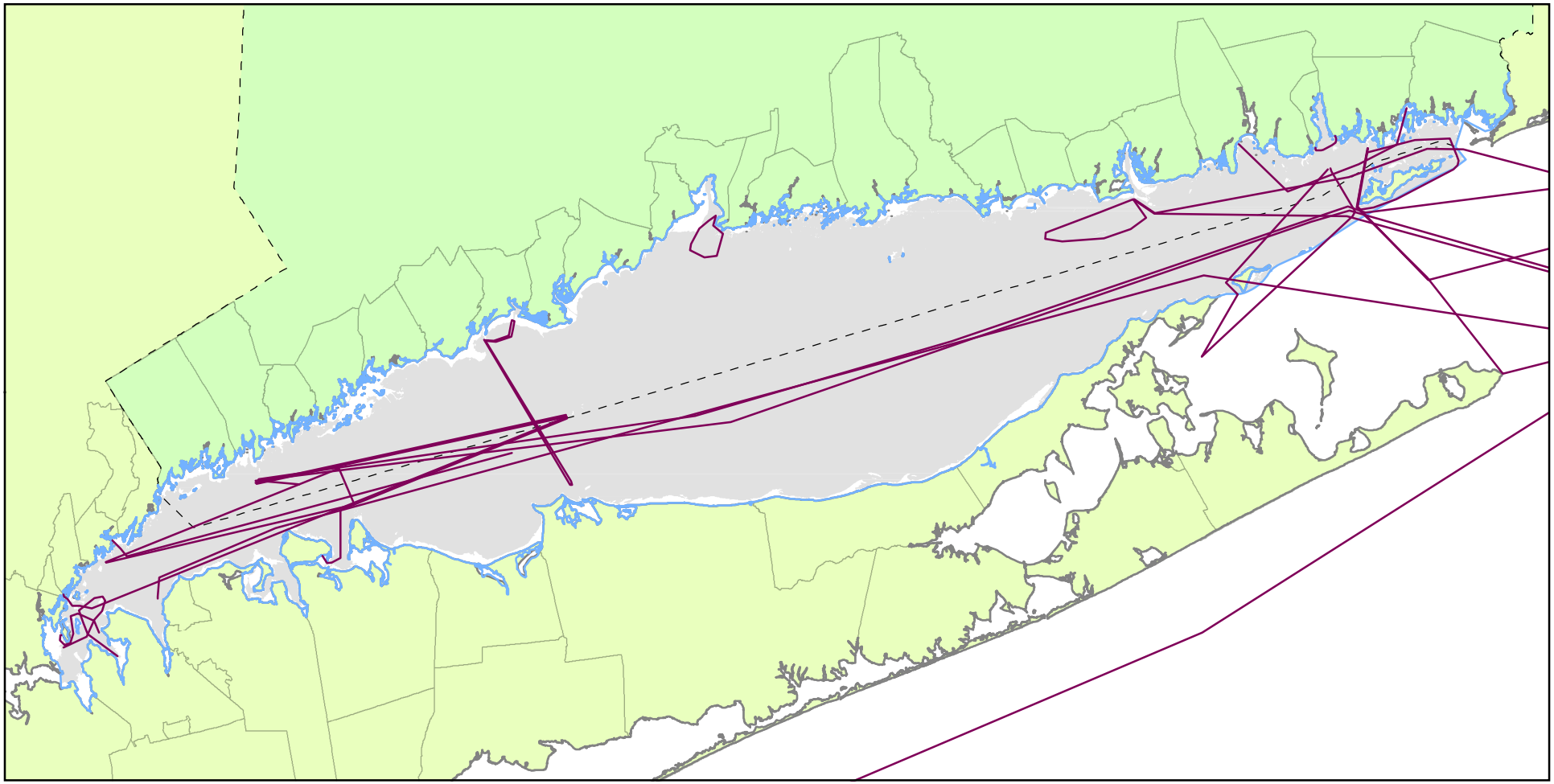
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Sailing Race Routes

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Sailing Race Routes

Blue Plan Planning Area

Blue Plan Policy Area

0 5 10 20 Miles

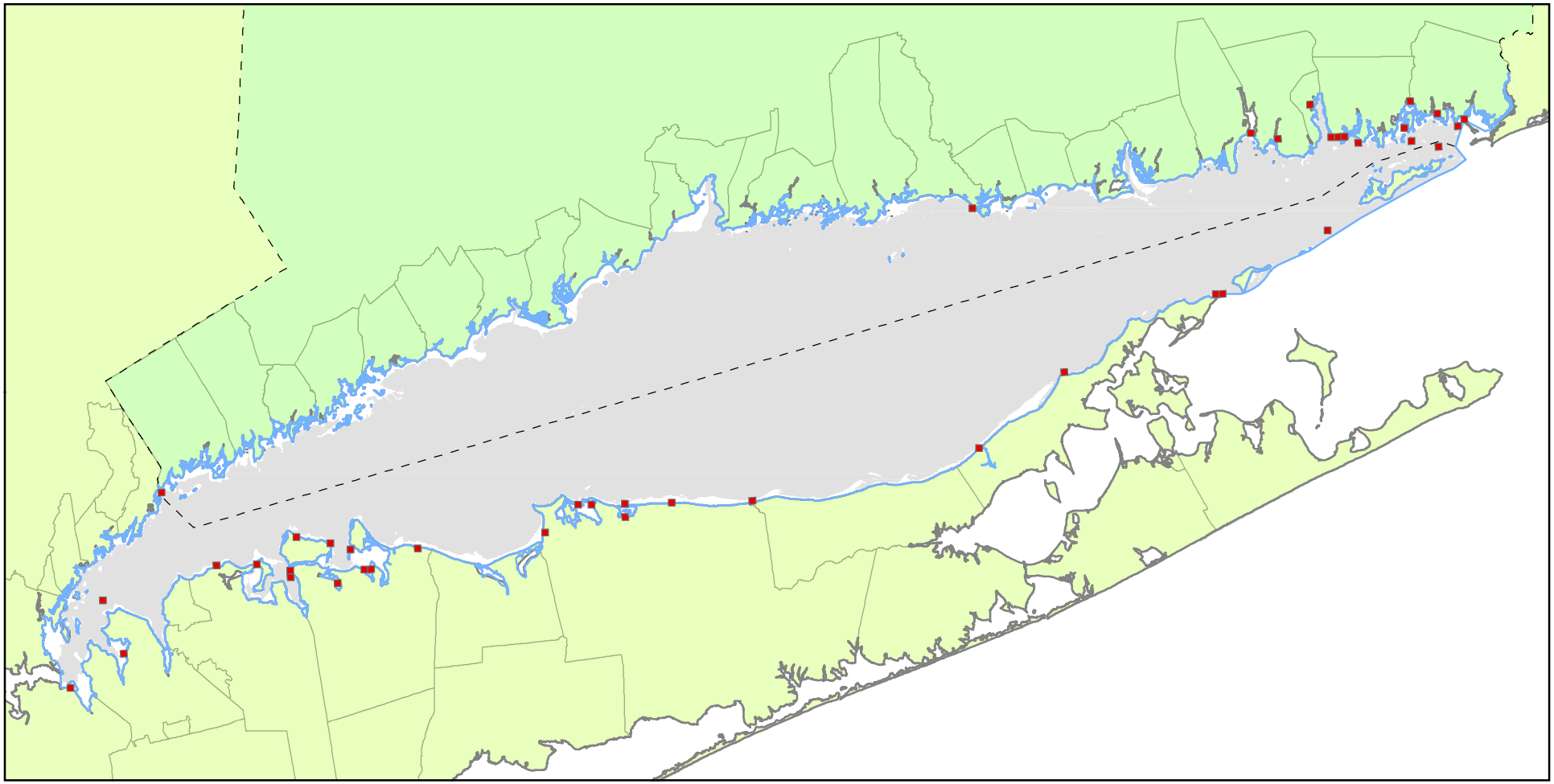
N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Underwater SCUBA/Snorkeling Areas

LONG ISLAND SOUND BLUE PLAN

Sustainable Ecosystems - Compatible Uses



Underwater SCUBA/Snorkeling Areas

Blue Plan Planning Area

Blue Plan Policy Area

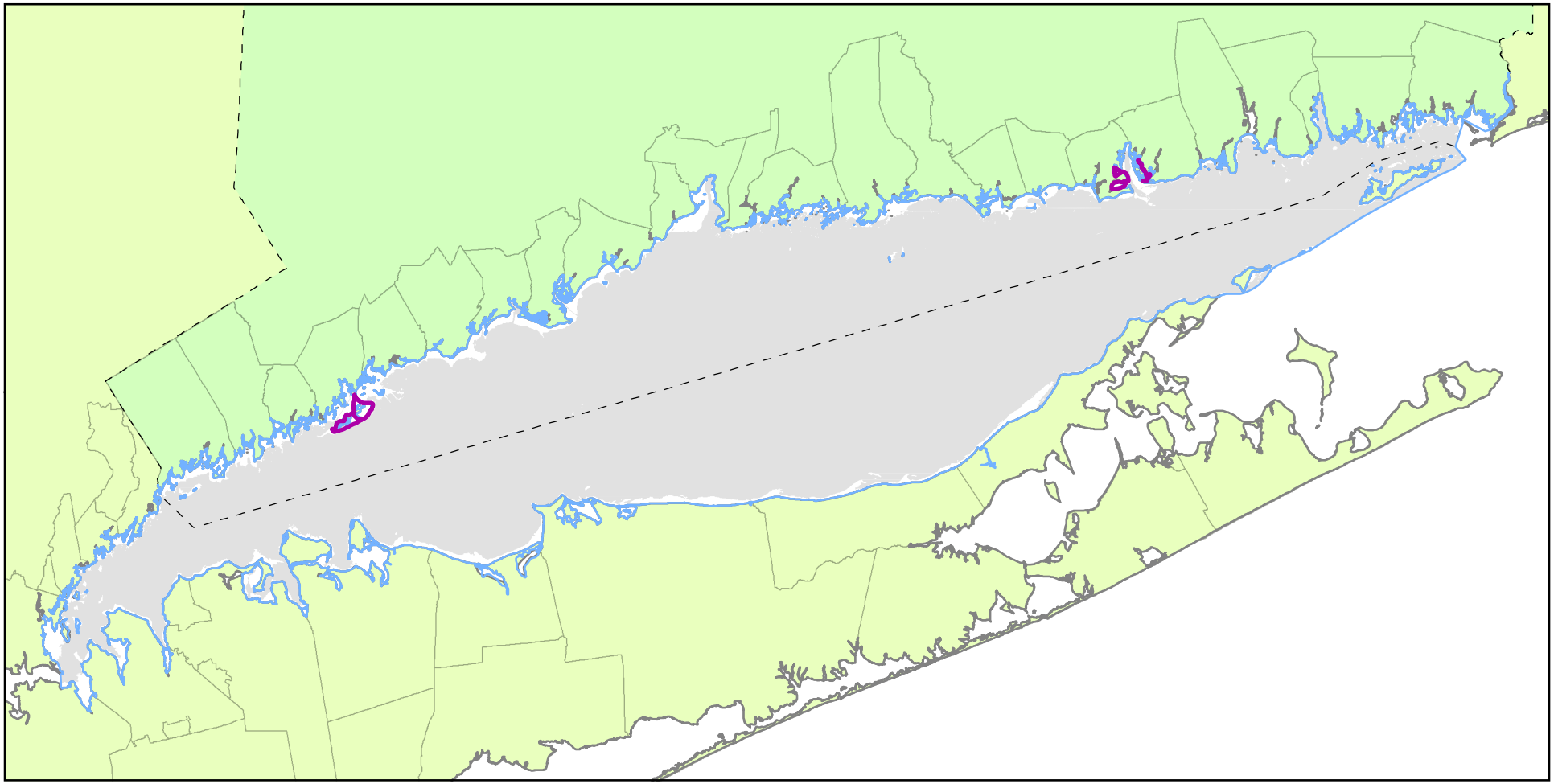
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Water Trails

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Water Trails

Blue Plan Planning Area

Blue Plan Policy Area

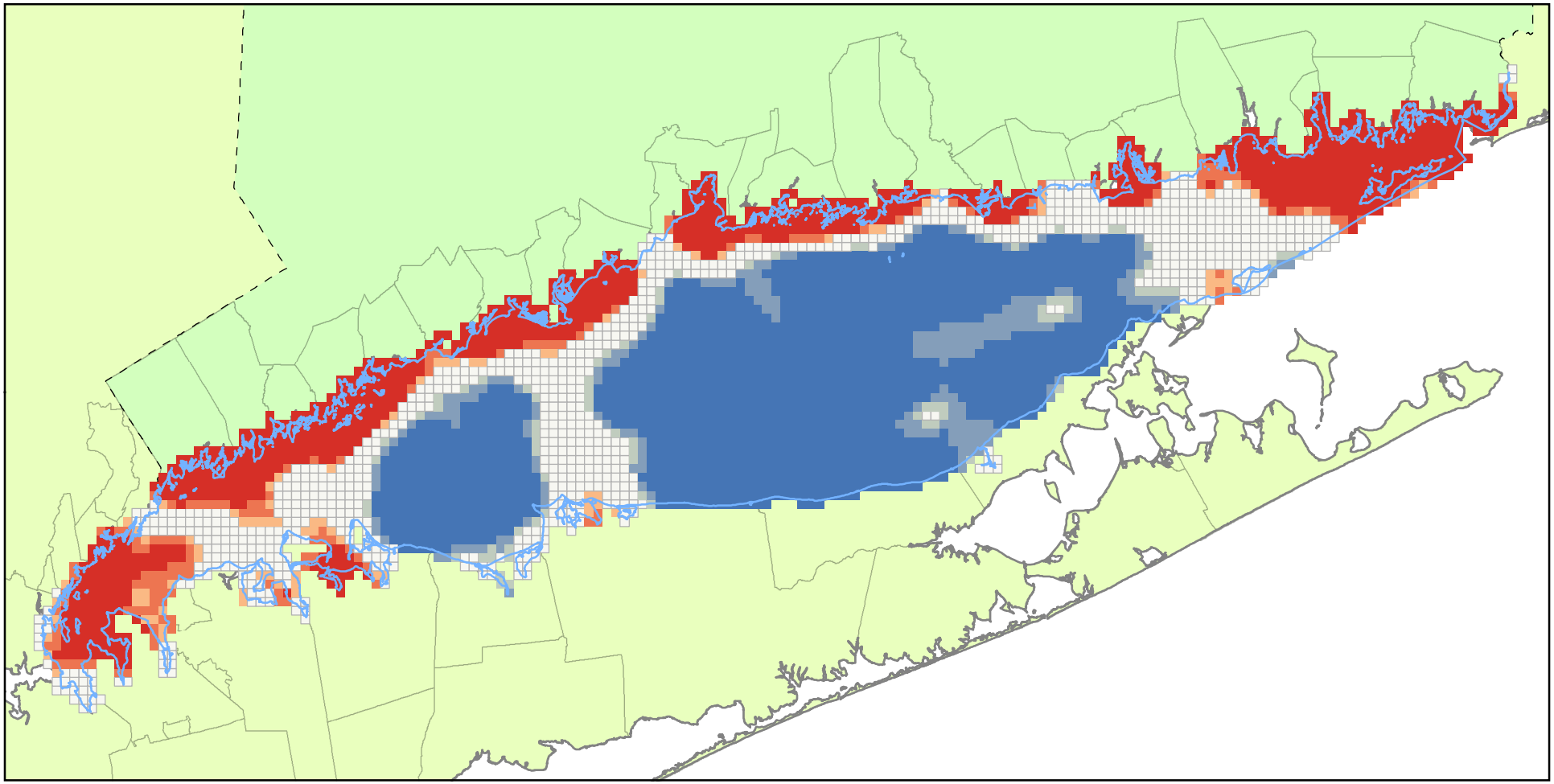
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/16/2019

Draft Significant Human Use Area Map: Concentrations of Surface Use Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Concentrations of Surface Use Areas

- Cold Spot - 99% Confidence
- Cold Spot - 95% Confidence
- Cold Spot - 90% Confidence
- Neutral
- Hot Spot - 90% Confidence
- Hot Spot - 95% Confidence
- Hot Spot - 99% Confidence
- Blue Plan Planning Area

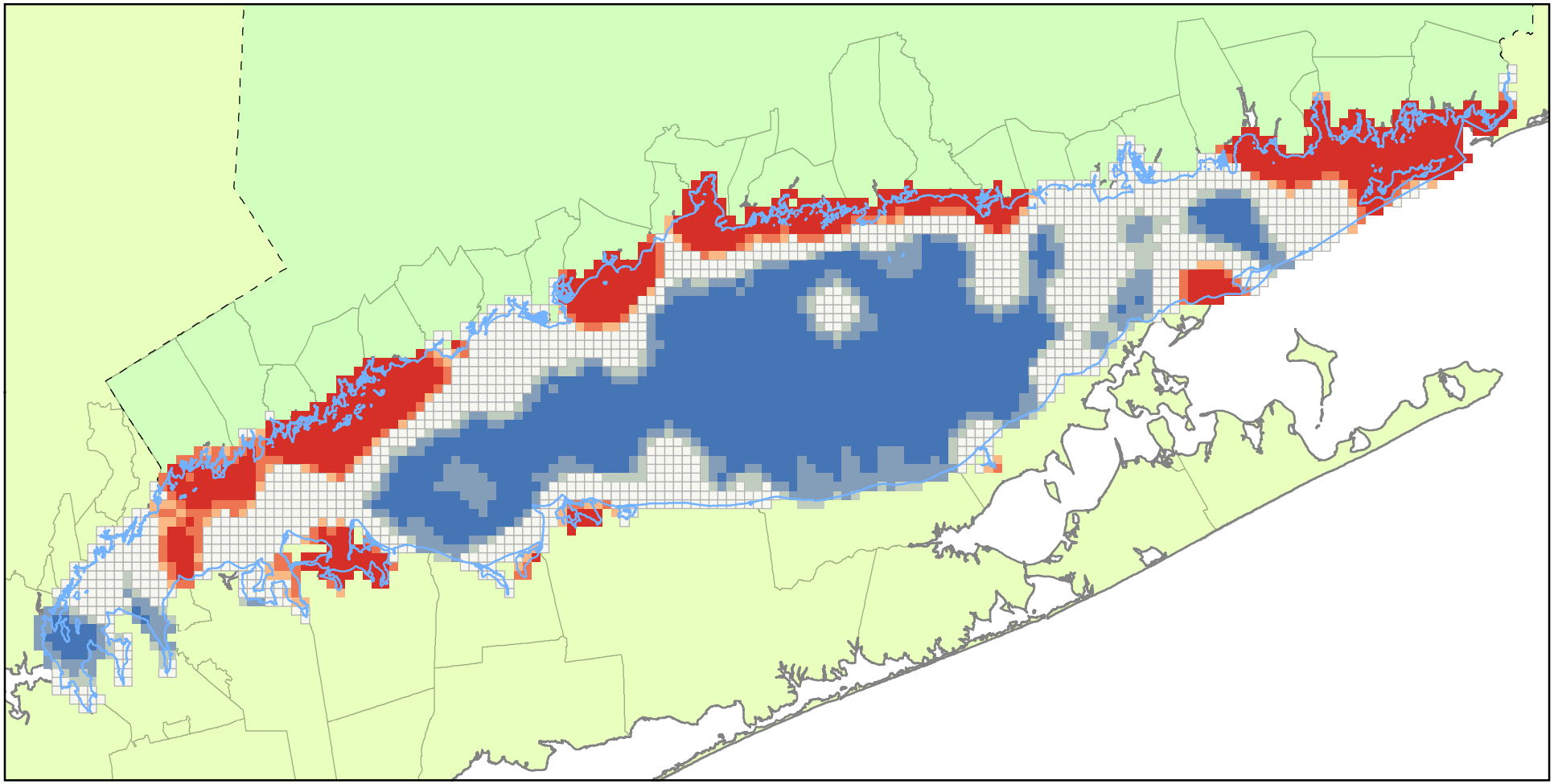
0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/17/2019

Draft Significant Human Use Area Map: Concentrations of Water Column Use Areas

LONG ISLAND SOUND BLUE PLAN
Sustainable Ecosystems - Compatible Uses



Concentrations of Water Column Use Areas

- Cold Spot - 99% Confidence
- Cold Spot - 95% Confidence
- Cold Spot - 90% Confidence
- Neutral
- Hot Spot - 90% Confidence
- Hot Spot - 95% Confidence
- Hot Spot - 99% Confidence
- Blue Plan Planning Area

0 5 10 20 Miles

N

Map created by Connecticut Department of Energy & Environmental Protection: 1/17/2019