

Long Island Sound Blue Plan – Potential Data Products Review

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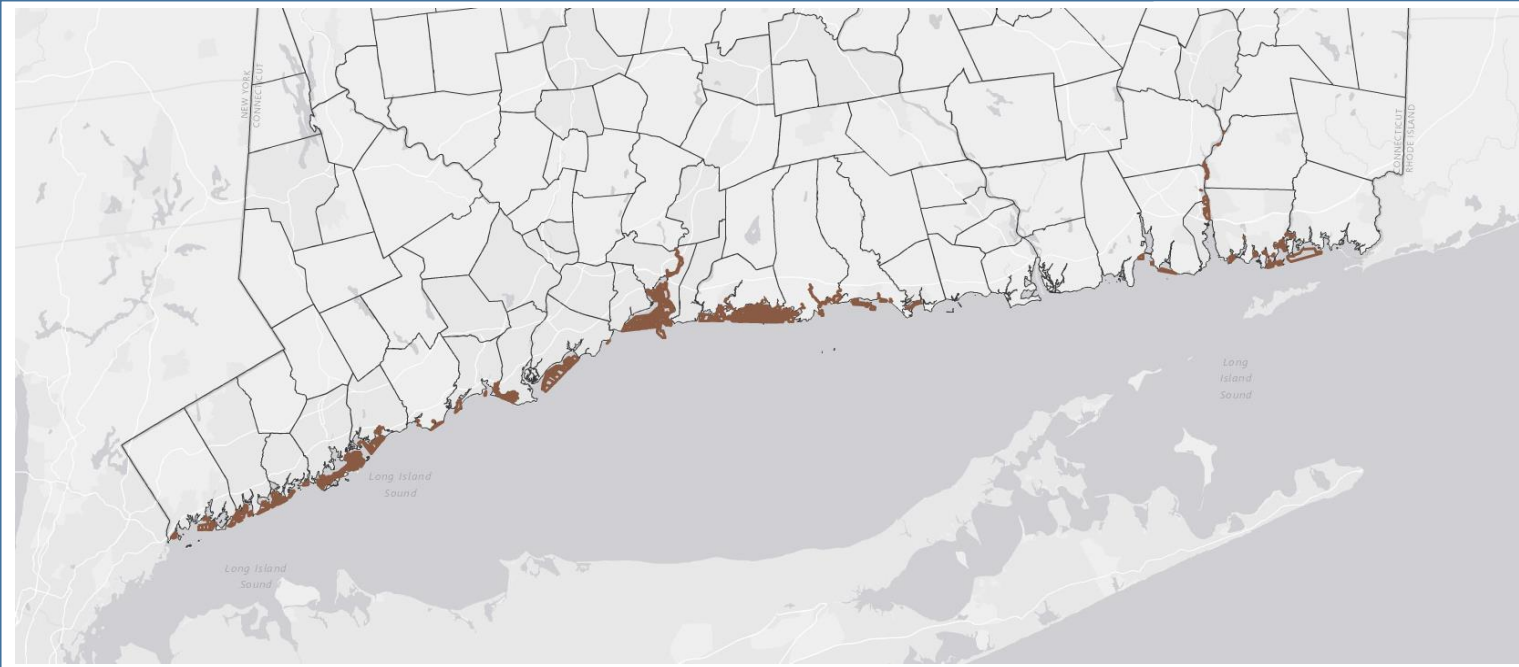
Aquaculture

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Commercial Shellfish Beds - Municipal

CT Aquaculture Mapping Atlas

Source: Connecticut Department of Agriculture Bureau of Aquaculture



Commercial Shellfish Beds (Municipal Waters) - 2014



Commercial Shellfish Beds - Municipal

Blue Plan Sector(s): Fish & Shellfish Resources > Aquaculture > Shellfish

Summary Description: In Connecticut, shellfish are defined as oysters, clams, mussels and scallops; either shucked or in the shell, fresh or frozen, whole or in part. Scallops are excluded from this definition when the final product is the shucked adductor muscle only. Lobsters, crabs, snails and finfish are not included in this definition. In the early 2000's, the National Oceanic and Atmospheric Administration (NOAA), the Connecticut Department of Environmental Protection (CTDEP) and the Connecticut Department of Agriculture Bureau of Aquaculture (DA/BA) partnered to develop shellfish mapping data to help support various programmatic needs. Various source material – historic and recent maps, reports, coordinate values, etc., contributed to the effort. While attempts were made to create accurate representations, errors in source materials and conflicts between source data occurred; in these case corrective assumptions were made based on best professional judgment.

In 1881 a line was established, referred to as the Commissioners line, that divides the waters of the state into a northern and southern section. All beds south of this line are State beds and most beds north of this line are town beds. DA/BA still controls all the licensing and regulations north and south of this line, for example DA/BA determines when an area will be closed to shellfishing due to a change in water quality and what licenses are need to do certain work. All the Beds under state jurisdiction were mapped using longitude/latitude data from a DA/BA access database. These coordinates were taken from converted sextant angles.

Town beds are simply leased, owned or managed through the local shellfish commission. Towns may require additional local permits to work in waters under local jurisdiction. The beds north of the line in Westport, Milford, West Haven, and New Haven are exceptions to this as they are under state control. The sources of data for the town managed beds layer were quite varied. The sources included longitude/latitude data and maps from DA/BA, maps and longitude/latitude provided by local shellfish commissions and longitude/latitude data and maps obtained from Tallmadge Brothers. Additionally a few towns provided maps of their beds in an electronic format such as CAD or shapefile.

This data is subject to change and the DA/BA may have more recent information for some areas.

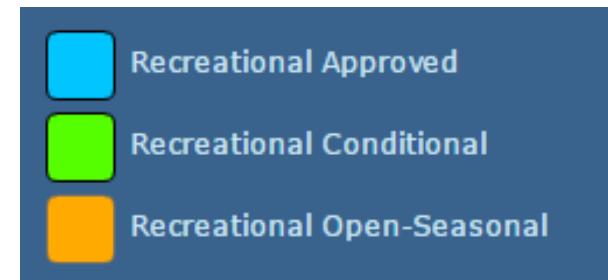
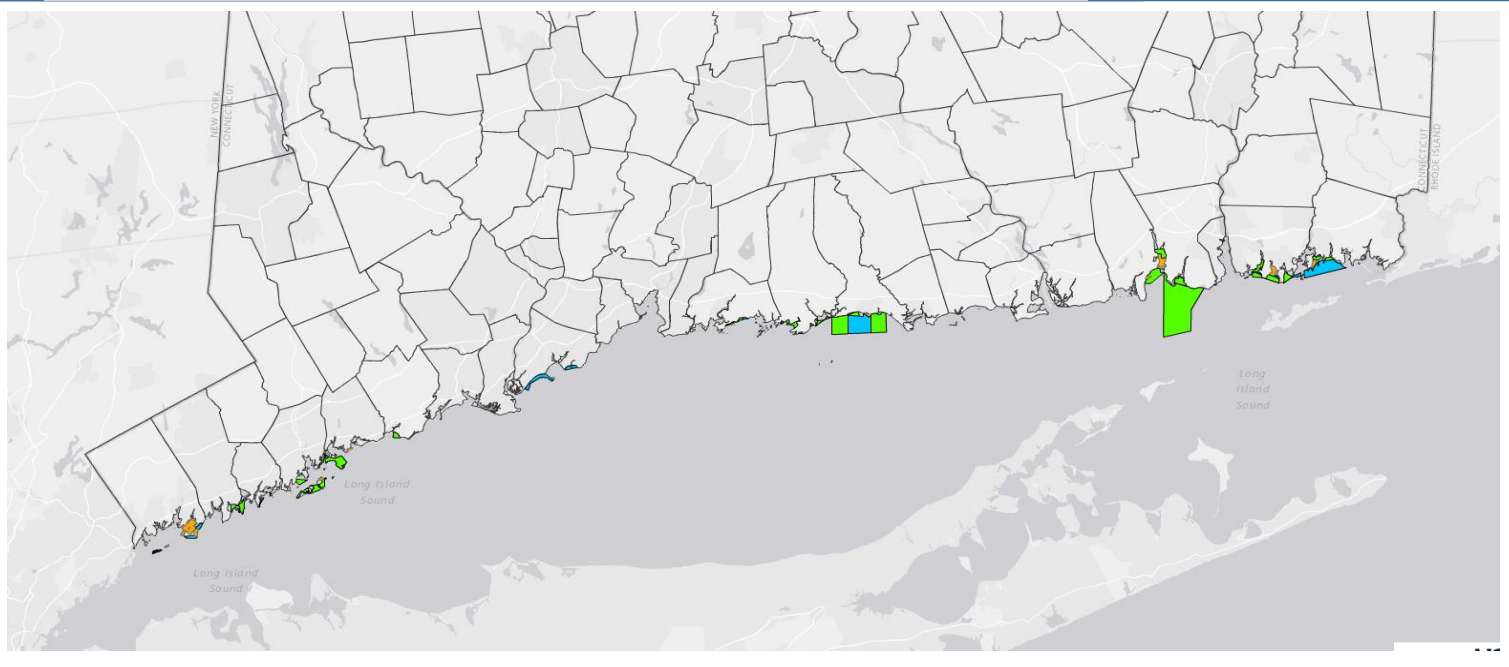
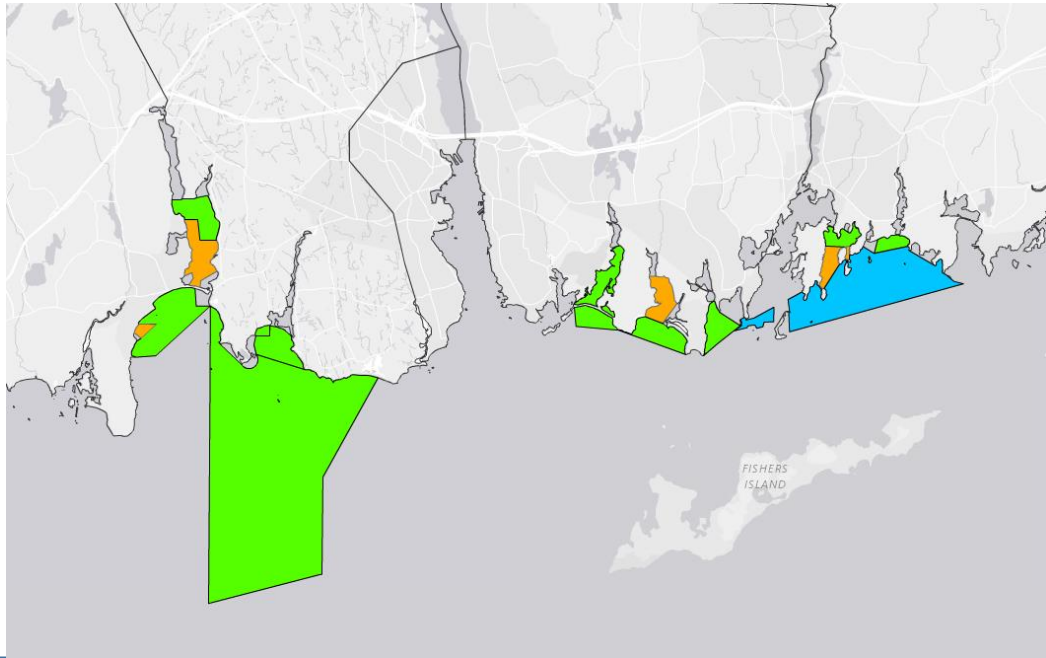
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(NOTE: viewer being redeployed as of Fall 2017; URL to metadata may change.)

Access Instructions: <https://clear3.uconn.edu/viewers/shellfish/> (NOTE: viewer being redeployed as of Fall 2017; URL to map may change.)

Commercial Shellfish Beds – Recreational

CT Aquaculture Mapping Atlas

Source: Connecticut Department of Agriculture Bureau of Aquaculture



Commercial Shellfish Beds – Recreational

Blue Plan Sector(s): Fish & Shellfish Resources > Aquaculture > Shellfish

Summary Description: In Connecticut, shellfish are defined as oysters, clams, mussels and scallops; either shucked or in the shell, fresh or frozen, whole or in part. Scallops are excluded from this definition when the final product is the shucked adductor muscle only. Lobsters, crabs, snails and finfish are not included in this definition. In the early 2000's, the National Oceanic and Atmospheric Administration (NOAA), the Connecticut Department of Environmental Protection (CTDEP) and the Connecticut Department of Agriculture Bureau of Aquaculture (DA/BA) partnered to develop shellfish mapping data to help support various programmatic needs. Various source material – historic and recent maps, reports, coordinate values, etc., contributed to the effort. While attempts were made to create accurate representations, errors in source materials and conflicts between source data occurred; in these case corrective assumptions were made based on best professional judgment.

Recreational beds are predominantly large areas delineated by water quality conditions of Acceptable and Conditional. This means that more often than not there is overlap between town natural beds and recreational beds. They share the same water classification and have to meet the same equipment restrictions. Many shellfish commission maps did not delineate private or leased beds. If a map was available for digitizing the resulting areas were kept as they were shown on the map and not made to fit any preexisting data. The sources for the recreational beds layer came from maps and information provided by local shellfish commissions. A few of these maps were in an electronic (digital) form. Some of the recreational beds were mapped using information from shellfish commission management plans provided by DA/BA. Harvesting in recreational beds is limited to "Approved" and "Conditionally Approved-Open" areas, excluding franchised or leased shellfish beds. Recreational harvesters should contact the local health department serving the town in which they wish to harvest to determine the current description of Approved or Conditionally Approved shellfishing areas, local laws that pertain to this activity and whether a local license is required. Recreational shellfishing in closed areas (Conditionally Approved-Closed, Restricted, and Prohibited areas) whether for bait or personal consumption is illegal. (A complete listing of regulations is available from DA/BA.)

This data is subject to change and the DA/BA may have more recent information for some areas.

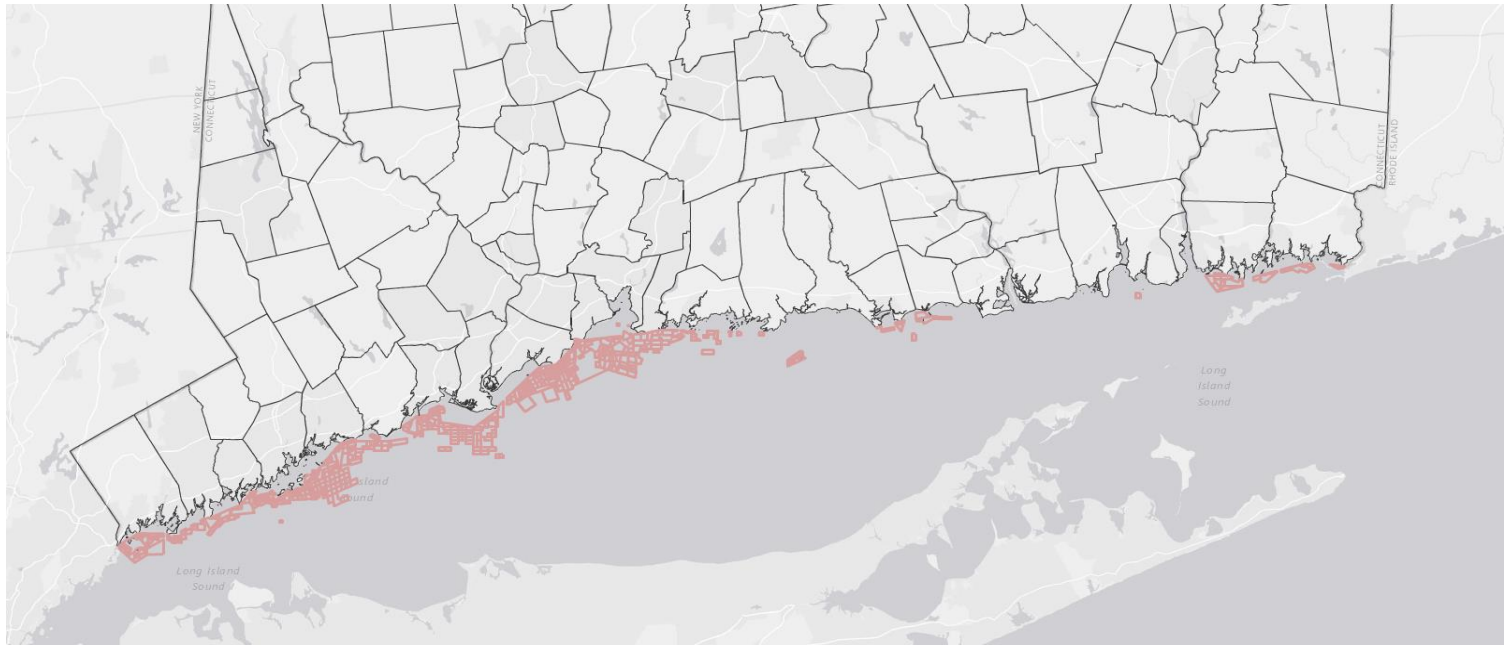
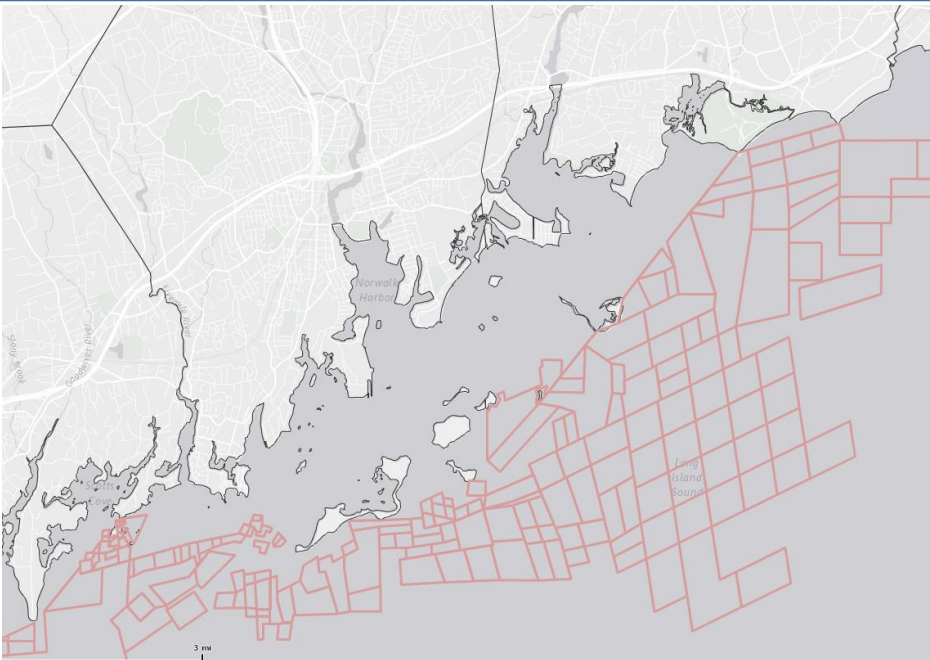
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Commercial Shellfish Beds - State

CT Aquaculture Mapping Atlas

Source: Connecticut Department of Agriculture Bureau of Aquaculture



Commercial Shellfish Beds (State Waters) - 2014



Commercial Shellfish Beds - State

Blue Plan Sector(s): Fish & Shellfish Resources > Aquaculture > Shellfish

Summary Description: In Connecticut, shellfish are defined as oysters, clams, mussels and scallops; either shucked or in the shell, fresh or frozen, whole or in part. Scallops are excluded from this definition when the final product is the shucked adductor muscle only. Lobsters, crabs, snails and finfish are not included in this definition. In the early 2000's, the National Oceanic and Atmospheric Administration (NOAA), the Connecticut Department of Environmental Protection (CTDEP) and the Connecticut Department of Agriculture Bureau of Aquaculture (DA/BA) partnered to develop shellfish mapping data to help support various programmatic needs. Various source material - historic and recent maps, reports, coordinate values, etc., contributed to the effort. While attempts were made to create accurate representations, errors in source materials and conflicts between source data occurred; in these case corrective assumptions were made based on best professional judgment.

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This data is subject to change and the DA/BA may have more recent information for some areas.

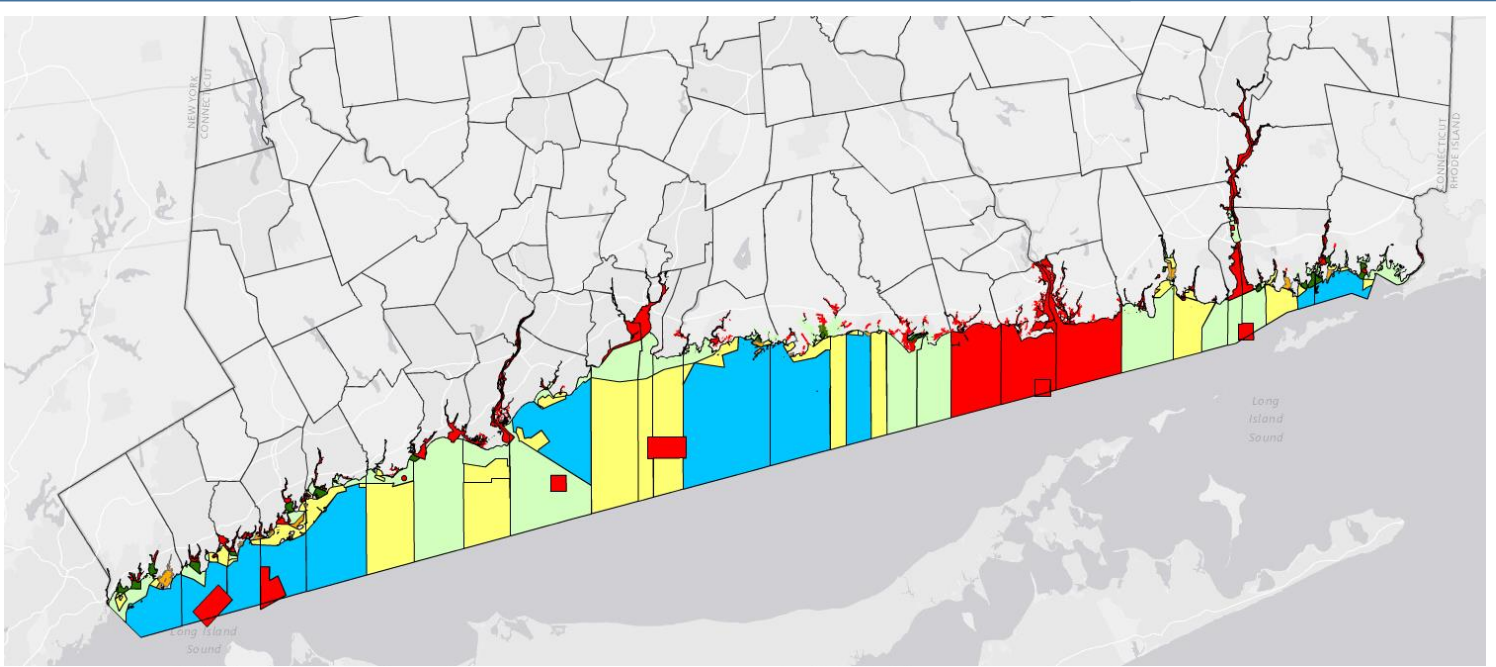
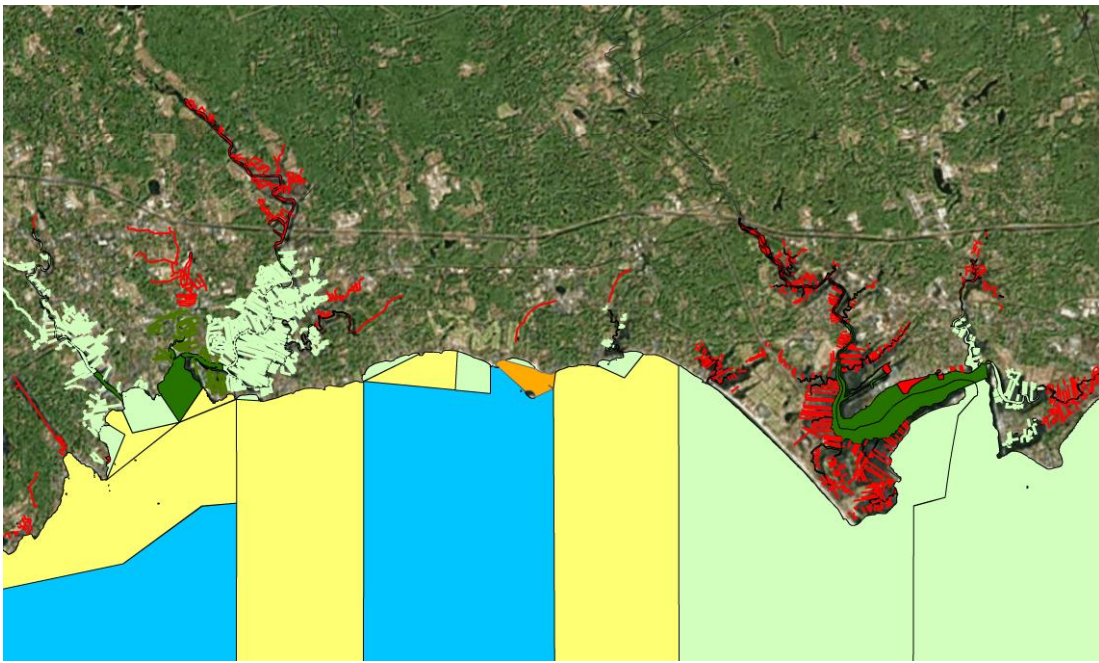
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Shellfish Classification Lines/Areas

CT Aquaculture Mapping Atlas

Source: Connecticut Department of Agriculture Bureau of Aquaculture



Shellfish Classification Lines

- Conditionally Approved
- Restricted-Relay
- Conditionally Restricted-Relay
- Prohibited

Shellfish Classification Areas

- Approved
- Conditionally Approved Seasonal
- Conditionally Approved
- Restricted
- Conditionally Restricted
- Prohibited

Shellfish Classification Lines/Areas

Blue Plan Sector(s): Fish & Shellfish Resources > Aquaculture > Shellfish

Summary Description: In Connecticut, shellfish are defined as oysters, clams, mussels and scallops; either shucked or in the shell, fresh or frozen, whole or in part. Scallops are excluded from this definition when the final product is the shucked adductor muscle only. Lobsters, crabs, snails and finfish are not included in this definition. In the early 2000's, the National Oceanic and Atmospheric Administration (NOAA), the Connecticut Department of Environmental Protection (CTDEP) and the Connecticut Department of Agriculture Bureau of Aquaculture (DA/BA) partnered to develop shellfish mapping data to help support various programmatic needs. Various source material – historic and recent maps, reports, coordinate values, etc., contributed to the effort. While attempts were made to create accurate representations, errors in source materials and conflicts between source data occurred; in these case corrective assumptions were made based on best professional judgment.

Connecticut Department of Agriculture Bureau of Aquaculture classifies all tidal waters of Long Island Sound located along the coast of Connecticut. All shellfish growing areas are classified in accordance with the NSSP-MO. These classifications, established to minimize health risks, may restrict the taking and use of shellfish from some areas. No fresh water areas are classified for the harvesting of shellfish. Any shellfish area, regardless of classification, may be temporarily closed to all activities when a potential public health emergency exists as a result of a storm event, flooding, sewage, chemical, or petroleum discharges, or a hazardous algal bloom. Classifications are briefly summarized below; lines classify small tidal streams/rivers, areas classify large expanses of tidal waters. See metadata for full descriptions:

APPROVED AREA: Is a classification used to identify a growing area that is safe for the direct marketing or consumption of shellfish

CONDITIONALLY APPROVED AREA: Is a classification used to identify a growing area that is safe for the direct, marketing or consumption of shellfish when the area is in the open status. The area must meet the criteria for Approved classification when the area is in the open status, and meets the criteria for the restricted classification in the closed status.

CONDITIONALLY APPROVED SEASONAL AREA: same as above, but may be closed under certain seasonal conditions.

CONDITIONALLY RESTRICTED: Is a classification used to identify a growing area where a sanitary survey has found that the area meets the criteria for Restricted classification when the area is in the open status and meets the criteria for Prohibited classification when the area is in the closed status. Shellfish may only be harvested from Conditionally Restricted areas by special license, and may not be directly harvested for market or consumption.

PROHIBITED: Is a classification used to identify a growing area where there has been no current sanitary survey or where a sanitary survey has found that the area is adjacent to a sewage treatment plant or other point source outfall with public health significance; pollution sources may unpredictably contaminate the growing area; the growing area is contaminated with fecal waste so that the shellfish may be vectors for disease microorganisms; and/or that the concentration of biotoxin is sufficient to cause a public health risk. Shellfish may not be harvested from Prohibited areas except for seed oystering or depletion of the areas.

Full Description: <https://services7.arcgis.com/9fAJJ91yoj2y4Yi/ArcGIS/rest/services/ConnecticutShellfishOnline/FeatureServer/9>, (NOTE: viewer being redeployed as of Fall 2017; URL to metadata may change.)

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Shellfish Jurisdiction Line

CT Aquaculture Mapping Atlas

Source: Connecticut Department of Agriculture Bureau of Aquaculture



Shellfish Area Jurisdiction Line



Shellfish Jurisdiction Line

Blue Plan Sector(s): Fish & Shellfish Resources > Aquaculture > Shellfish

Summary Description: In Connecticut, shellfish are defined as oysters, clams, mussels and scallops; either shucked or in the shell, fresh or frozen, whole or in part. Scallops are excluded from this definition when the final product is the shucked adductor muscle only. Lobsters, crabs, snails and finfish are not included in this definition. In the early 2000's, the National Oceanic and Atmospheric Administration (NOAA), the Connecticut Department of Environmental Protection (CTDEP) and the Connecticut Department of Agriculture Bureau of Aquaculture (DA/BA) partnered to develop shellfish mapping data to help support various programmatic needs. Various source material – historic and recent maps, reports, coordinate values, etc., contributed to the effort. While attempts were made to create accurate representations, errors in source materials and conflicts between source data occurred; in these case corrective assumptions were made based on best professional judgment.

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The data includes the north/south line along the coast, as well as town boundaries (coastal town boundaries extend waterward to the CT/NY State line to help demarcate bed limits between towns.)

Full Description:

<https://services7.arcgis.com/9fAJJI91yoj2y4Yi/ArcGIS/rest/services/ConnecticutShellfishOnline/FeatureServer/8>,
<https://services7.arcgis.com/9fAJJI91yoj2y4Yi/ArcGIS/rest/services/ConnecticutShellfishOnline/FeatureServer/4>

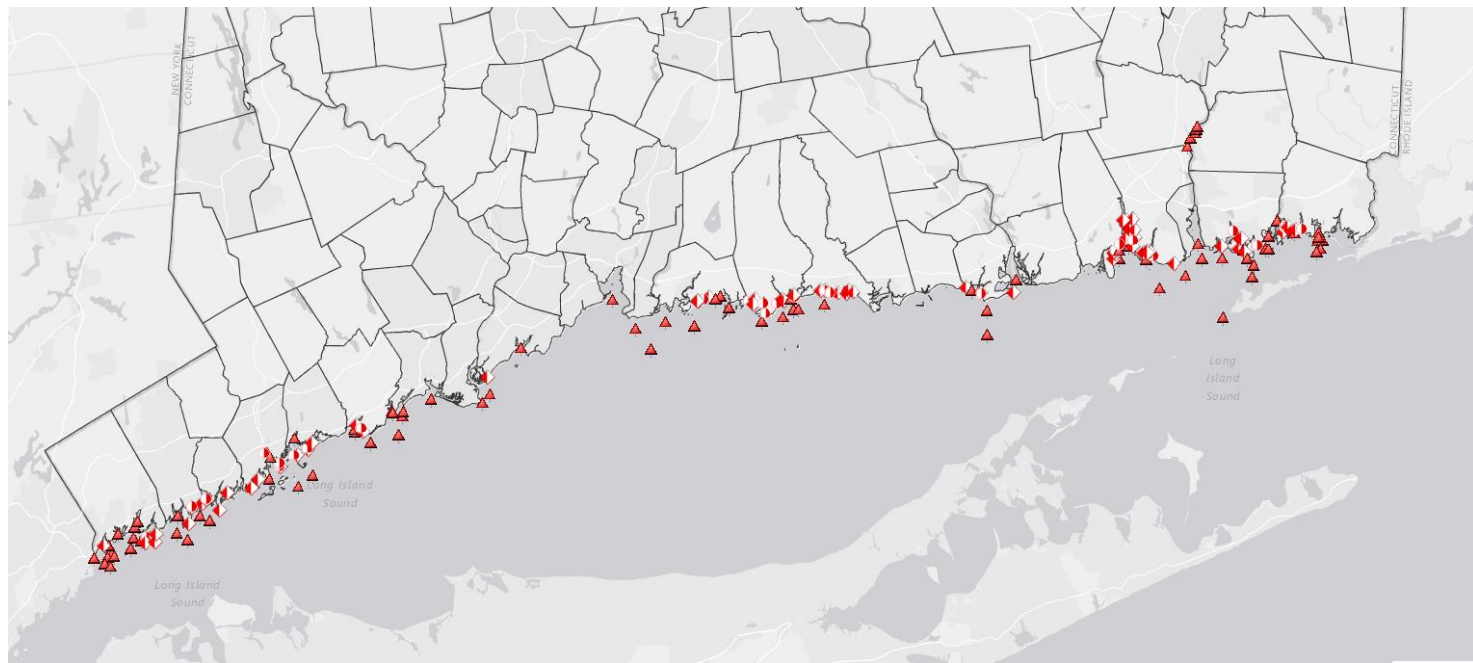
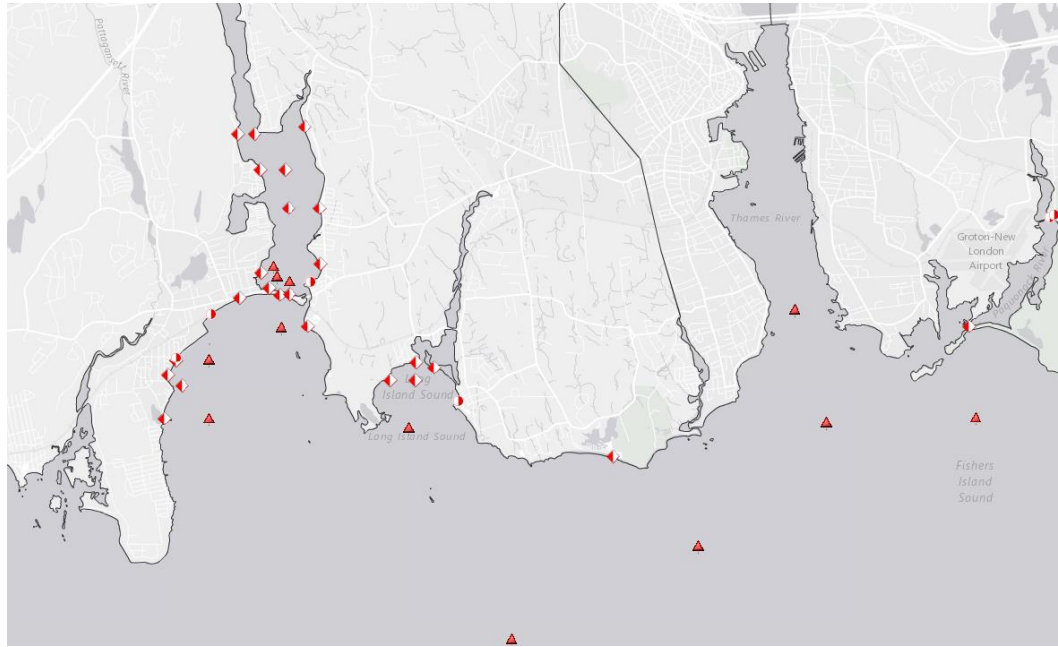
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Shellfish Area Markers

CT Aquaculture Mapping Atlas

Source: Connecticut Department of Agriculture Bureau of Aquaculture



-  Demarcation Sign
-  Status Signs: Open/Closed
-  Navigational Buoy

Shellfish Area Markers

Blue Plan Sector(s): Fish & Shellfish Resources > Aquaculture > Shellfish

Summary Description: The Connecticut Department of Environmental Protection cooperated with the Department of Agriculture, Bureau of Aquaculture (DA/DB) to publish Connecticut Shellfish Classification data. More recent information may be available from the Department of Agriculture since the time this information was originally published in 2006. For information or questions on shellfish area classifications contact the Connecticut Department of Agriculture, Bureau of Aquaculture (DA/BA). Mailing address: P.O. Box 97 /190 Rogers Avenue, Milford, CT, 06460, USA. Voice: 203-874-0696. Fax: 203-783-9976. E-mail/web: Kristin.DeRosia-Banick@ct.gov, <http://www.ct.gov/doag/cwp/view.asp?a=3768&q=451508&doagNav=1>.

Final authority for the classification of any shellfish area rests with the DA/BA.

This point feature layer depicts markers that are classified by DA/BA and that are located along the Connecticut shoreline. Marker types include demarcation signs, landmarks such as lighthouses, navigational aids such as buoys, and status signs. This datalayer is intended to be used for cartographic purposes in conjunction with Shellfish Area Classifications data that represent the classifications of shellfish growing waters for the State of Connecticut shoreline towns. This layer can be symbolized based on the marker type.

Full Description: Full metadata not available online as of Fall 2017. Summary description based on DEEP archive files from 2006. May be superseded by more current info.

Access Instructions: <https://clear3.uconn.edu/viewers/shellfish/> (NOTE: viewer being redeployed as of Fall 2017; URL to map may change.)

Aquaculture Sampling Stations

Blue Plan Sector(s): Fish & Shellfish Resources > Aquaculture > Shellfish

Summary Description: Connecticut Department of Agriculture Bureau of Aquaculture water quality monitoring station locations are used for the purpose of shellfish growing area classification. Connecticut Department of Agriculture Bureau of Aquaculture classifies all tidal waters of Long Island Sound located along the coast of Connecticut. All shellfish growing areas are classified in accordance with the NSSP-MO. These classifications, established to minimize health risks, may restrict the taking and use of shellfish from some areas. No fresh water areas are classified for the harvesting of shellfish. Any shellfish area, regardless of classification, may be temporarily closed to all activities when a potential public health emergency exists as a result of a storm event, flooding, sewage, chemical, or petroleum discharges, or a hazardous algal bloom. Classifications are briefly summarized below; see metadata for full descriptions:

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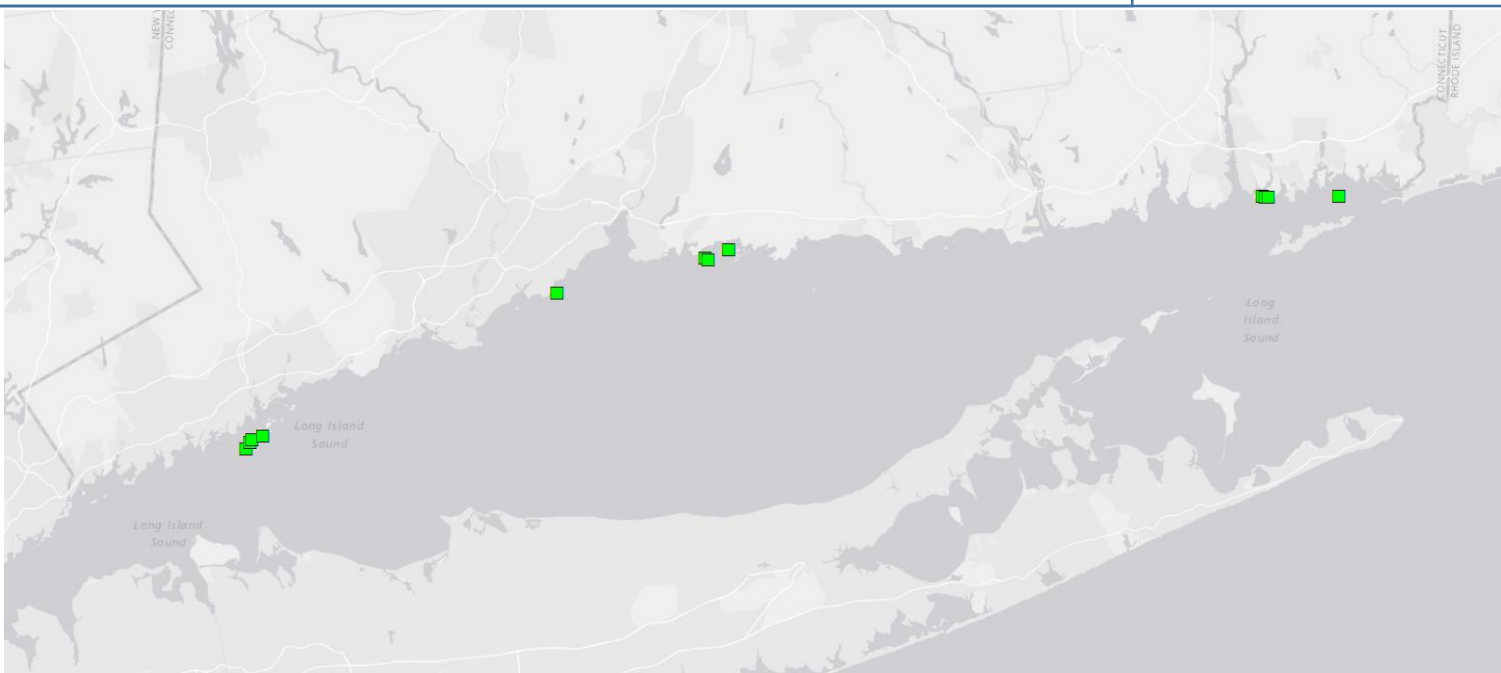
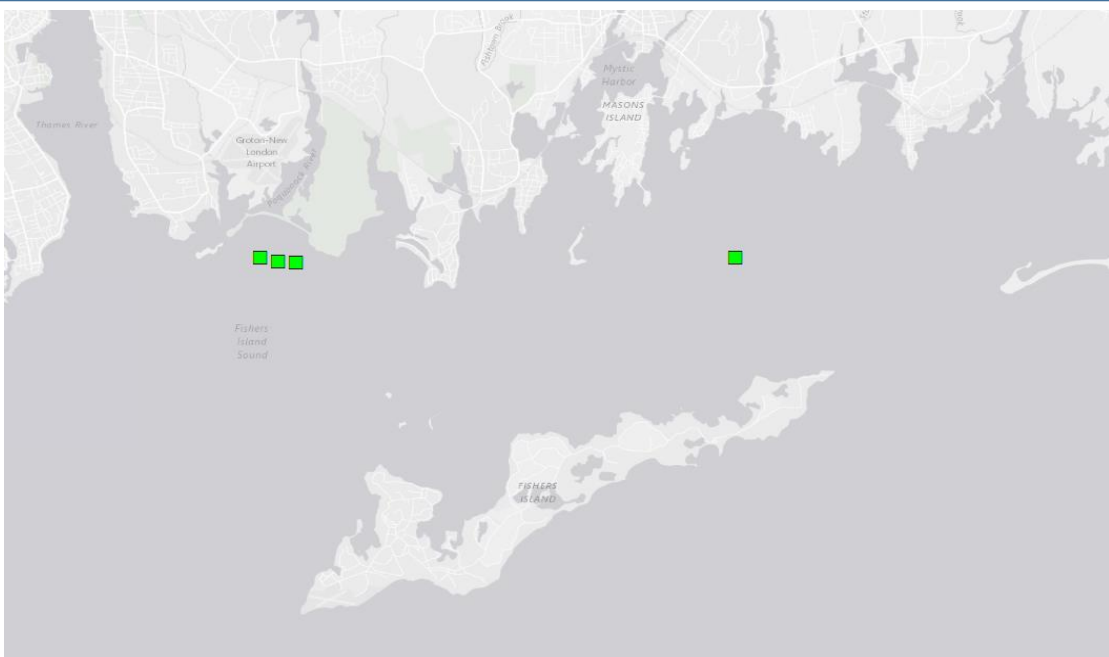
Full Description: <https://services7.arcgis.com/9fAJJI91yoj2y4Yi/ArcGIS/rest/services/ConnecticutShellfishOnline/FeatureServer/0> (NOTE: viewer being redeployed as of Fall 2017; URL to metadata may change.)

Access Instructions: <https://clear3.uconn.edu/viewers/shellfish/> (NOTE: viewer being redeployed as of Fall 2017; URL to map may change.)

CT Kelp Aquaculture – DEEP Permits

Source: CT DEEP Site Information Management System*

*not available online



- CT_Kelp_activities
- Type
- Long Line

CT Kelp Aquaculture – DEEP Permits

Blue Plan Sector(s): Fish & Shellfish Resources > Aquaculture > Seaweed/Kelp

Summary Description: A compilation of locations for kelp aquaculture activities authorized by CTDEEP, Land and Water Resources Division as of November 2017. Data taken from approved permit documents. Points were used to generally represent area-based locations. Corresponding shellfish lease bed area designations (state and municipal) are also included. Currently, data represents 12 distinct locations spanning 8 different authorizations. Locations are Sound-wide, with concentrations in Norwalk, Branford, and Groton/Stonington. All activities are long-line based of various lengths and groupings.

For more information, contact the CTDEEP Land and Water Resources Division

Full Description: n/a

Access Instructions: n/a – data not available via online platforms