



CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

79 Elm Street, Hartford, CT 06106-5127

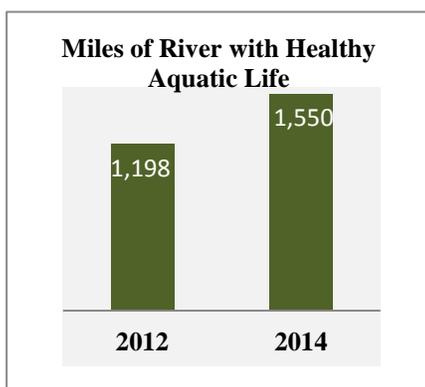
<http://www.ct.gov/deep/iwqr>

2014 INTEGRATED WATER QUALITY REPORT

The Connecticut Integrated Water Quality Report (IWQR) was prepared by the Department of Energy and Environmental Protection (CT DEEP) pursuant to Sections 305(b) and 303(d) of the federal Clean Water Act (CWA). Section 305(b) requires each State to monitor, assess and report on the quality of its waters every two years. Water quality is assessed in terms of designated uses established by the Connecticut Water Quality Standards (WQS) that include aquatic life support, fish consumption, recreation, and shellfish harvesting. Monitoring and assessment data indicate the attainment of designated uses when consistent with appropriate WQS. If data are not consistent, the waterbody is identified as impaired for a particular designated use. Section 303(d) requires each State to compile an Impaired Waters List identifying those waters not meeting WQS and to assign a priority for each impaired waterbody for development of Total Maximum Daily Load (TMDL) analysis or other management action. The Impaired Waters List includes any waterbodies that are not supporting one or more designated uses. The IWQR is submitted to the United States Environmental Protection Agency (EPA) for review and approval of the Impaired Waters List.

Water Quality Monitoring

There are 5,830 river miles and 64,973 acres of lakes in the State, of which 2,838.12 river miles (990 assessment segments) and 30,437.46 acres of lakes (182 assessed segments) have been tracked for designated uses. Along the coast, there are 611.89 square miles of estuarine waters (210 assessed segments) in the State which have been tracked for designated uses. The number of estuarine and lake assessed segments remains unchanged in this report cycle while 118 assessed segments of rivers (298.98 miles) were added.



In the 2012 IWQR, 1,198 miles of assessed river met chemical and biological criteria to fully support aquatic life use. In this 2014 IWQR 1,550 miles of assessed river meet chemical and biological criteria to fully support aquatic life use, showing an increase of 352 miles of healthy waters assessed in Connecticut.

Designated Uses



The *Aquatic Life Use* (i.e. Habitat for Fish and Aquatic Life) assessment is supported when habitat and water quality are suitable for maintaining a native, naturally diverse community of aquatic plants and animals.

<i>Aquatic Life Use</i>	Fully Supporting	Not Supporting	Not Assessed	Insufficient Information
Rivers (Miles)	1549.54	435.94	552.91	299.73
Lakes (Acres)	26523.93	1158.90	2754.63	0
Estuaries (SQ. Miles)	237.22	314.46	59.13	1.08



The *Fish Consumption Use* assessment is determined by consumption advisories issued by the Connecticut Department of Public Health (CT DPH) and published in the CT DEEP Angler's Guide. Unless a site-specific advisory has been issued, the designated use is considered supported. Advisories may be issued for a site-specific concern or to address large areas of impact. There are statewide fish advisories for all freshwaters due to mercury contamination and for all estuarine waters due to Polychlorinated Biphenyl (PCB) contamination.

<i>Fish Consumption Use*</i>	Fully Supporting	Not Supporting	Not Assessed
Rivers (Miles)	2705.97	130.21	1.94
Lakes (Acres)	26797.08	3639.01	1.37
Estuaries (SQ. Miles)	603.26	8.63	0

*Refer to CT DEEP Angler's Guide for more information about fish consumption advisories, online at www.ct.gov/deep



The *Recreation Use* is supported when indicator bacteria concentrations are below the thresholds in the CALM for any water-related activity during which there is contact with the water and/or there exists a risk of water ingestion.

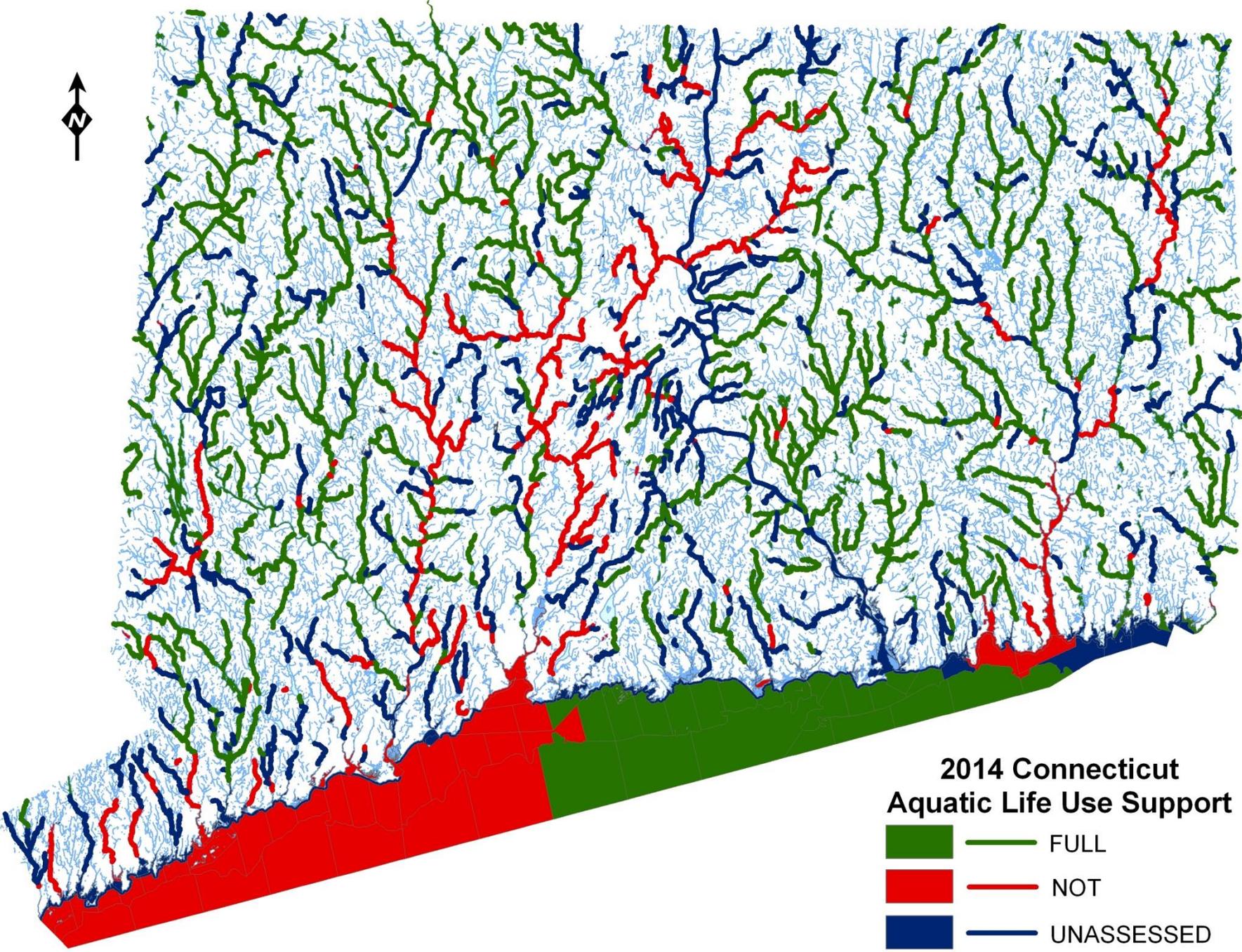
<i>Recreation Use</i>	Fully Supporting	Not Supporting	Not Assessed	Insufficient Information
Rivers (Miles)	357.47	826.75	1570.07	83.83
Lakes (Acres)	18897.39	4442.11	7097.96	0
Estuaries (SQ. Miles)	28.89	13.11	569.89	0

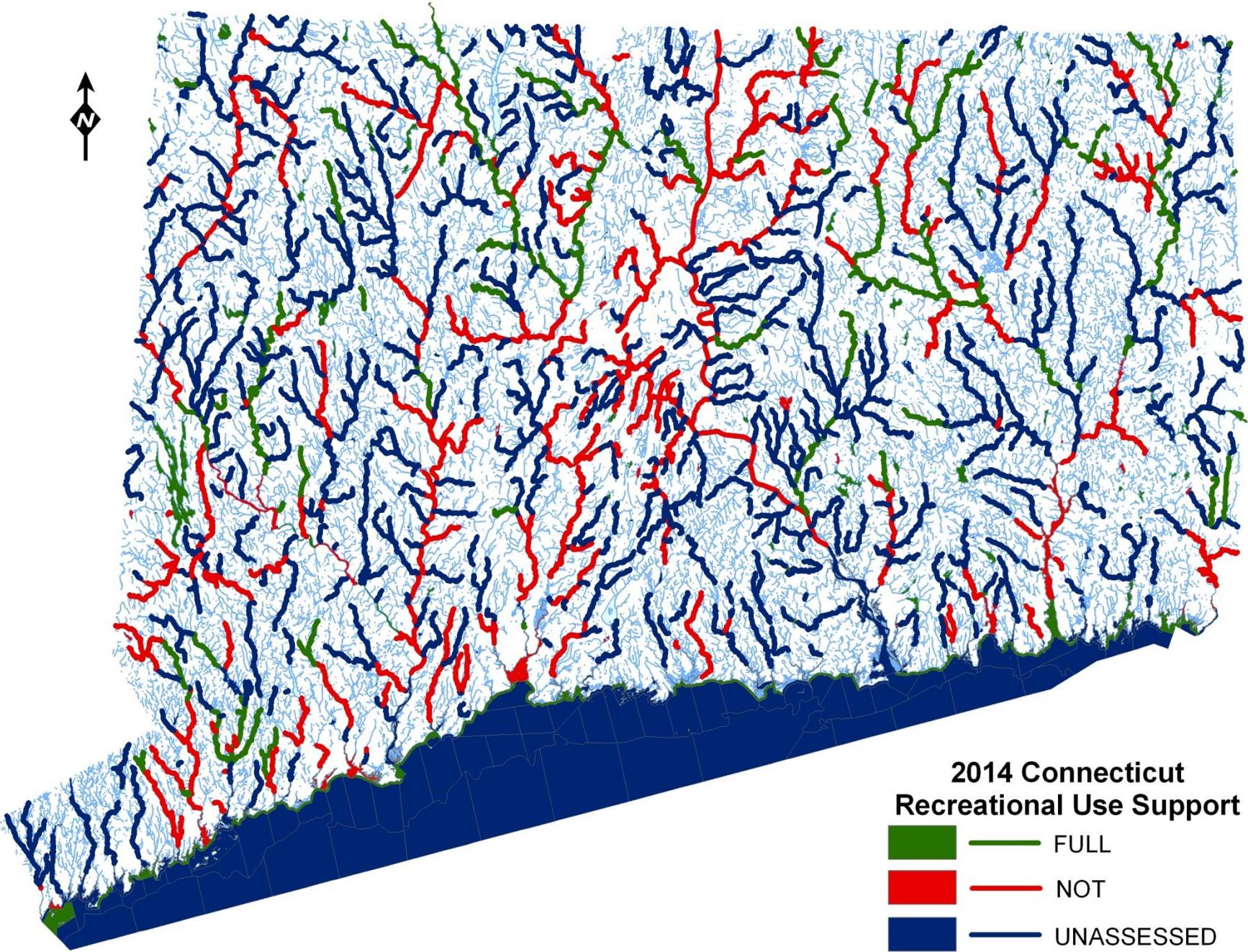
<i>Shellfish Harvesting Use</i>	Fully Supporting	Not Supporting	Not Assessed
Class SA Estuaries (Miles)	39.19	206.62	0.58
Class SB Estuaries (Miles)	38.69	20.43	5.99

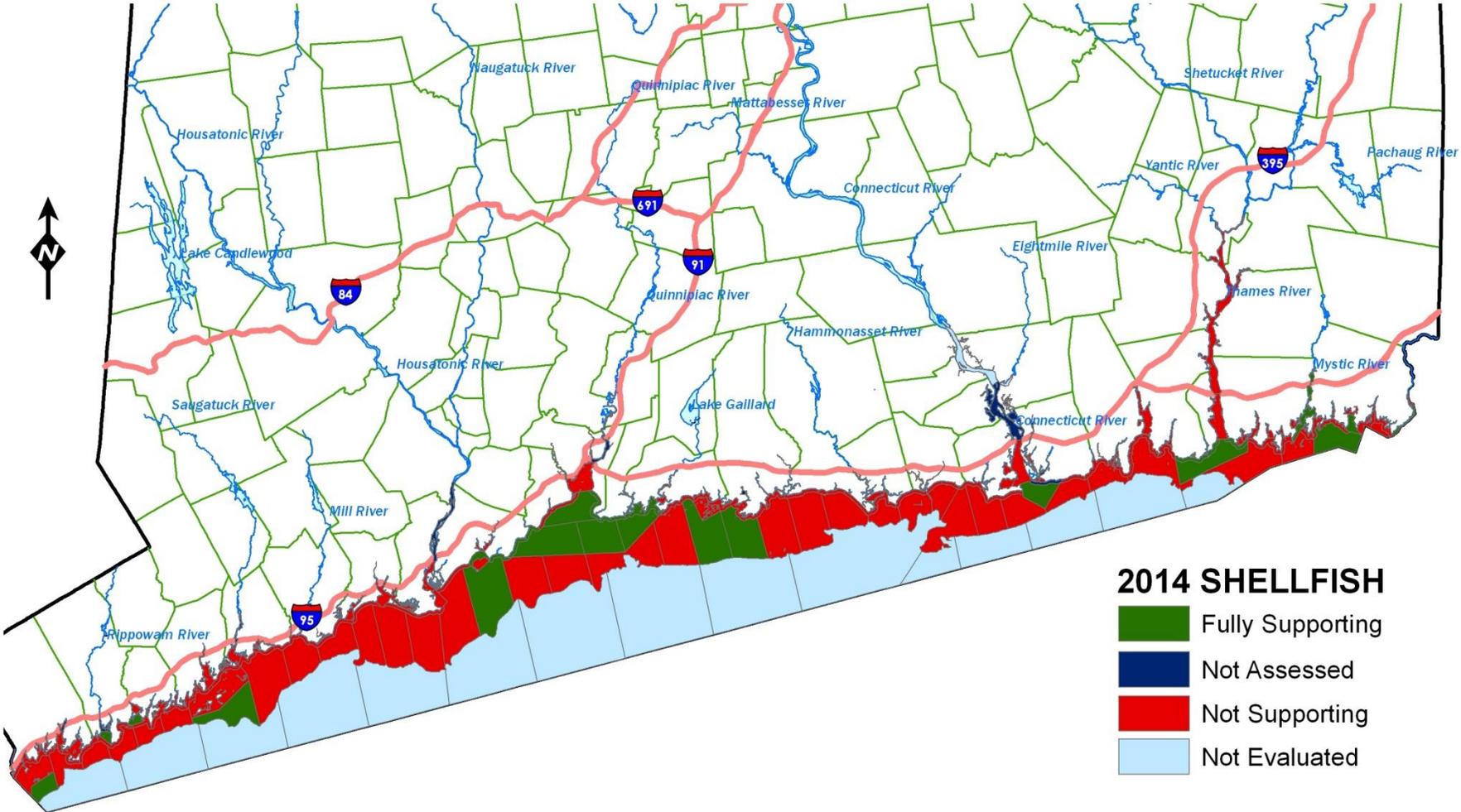


The *Shellfish Harvesting Use* is supported when shellfish harvested from Approved Shellfish Areas (Class SA) are safe for consumption without depuration and shellfish harvested from approved Restricted Shellfish Areas (Class SB) are safe for consumption with depuration. The Department of Agriculture Bureau

of Aquaculture classifies and evaluates shellfishing areas in the State.







Impaired Waters

Based on the designated use assessments, a total of 546 assessed segments do not support one or more designated uses. These assessed segments appear on both the Connecticut’s Impaired Waters List (EPA Category 5) and those included within EPA Category 4 where a pollution control or management measure has been developed for the impairment.

<i>Impaired EPA Category</i>	4a = TMDL Established	4b = Other pollution control requirements to be implemented	4c = Reduce nonpollutant impacts through management	5 = TMDL is Needed
Assessed Segments within each Category	253	13	66	285

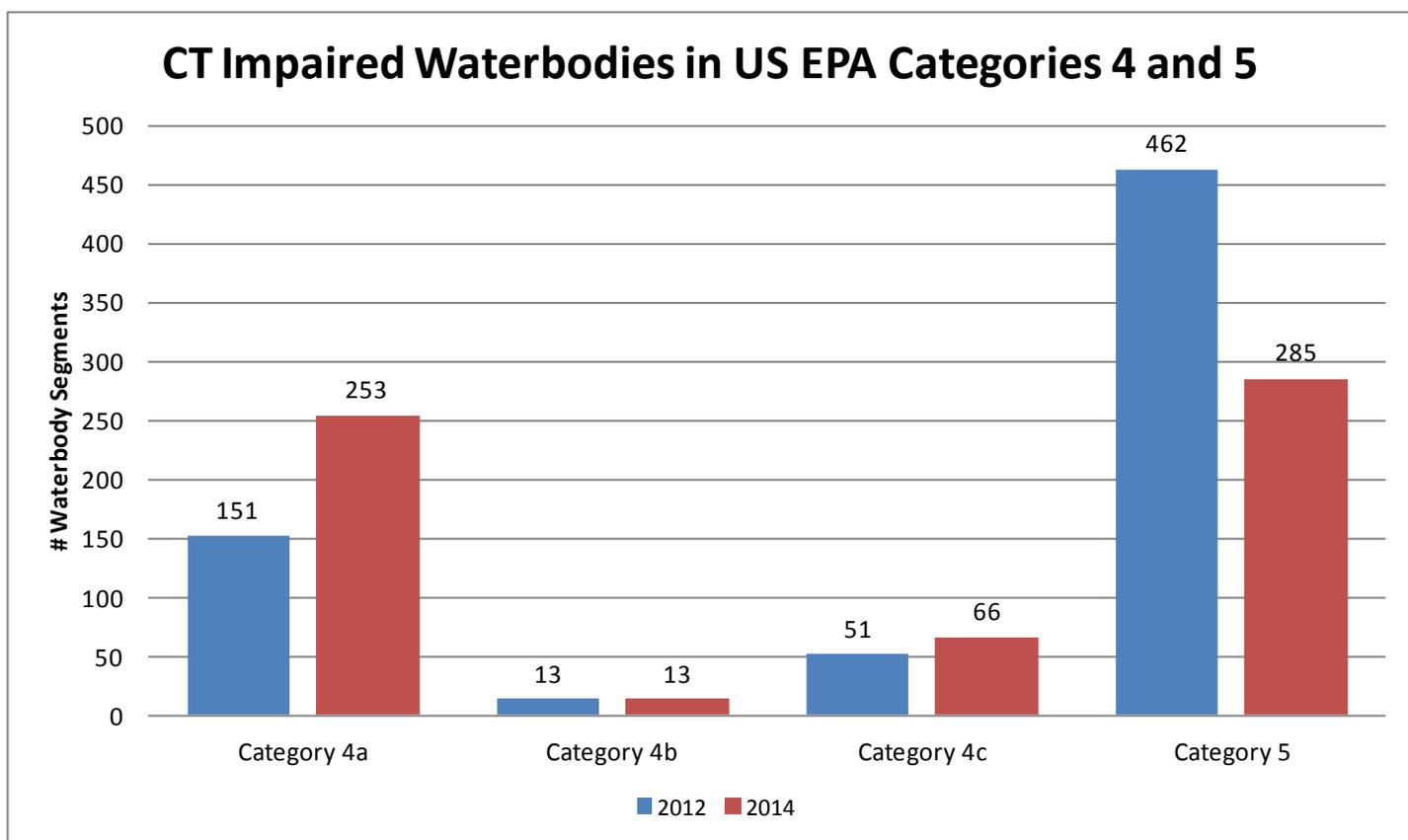
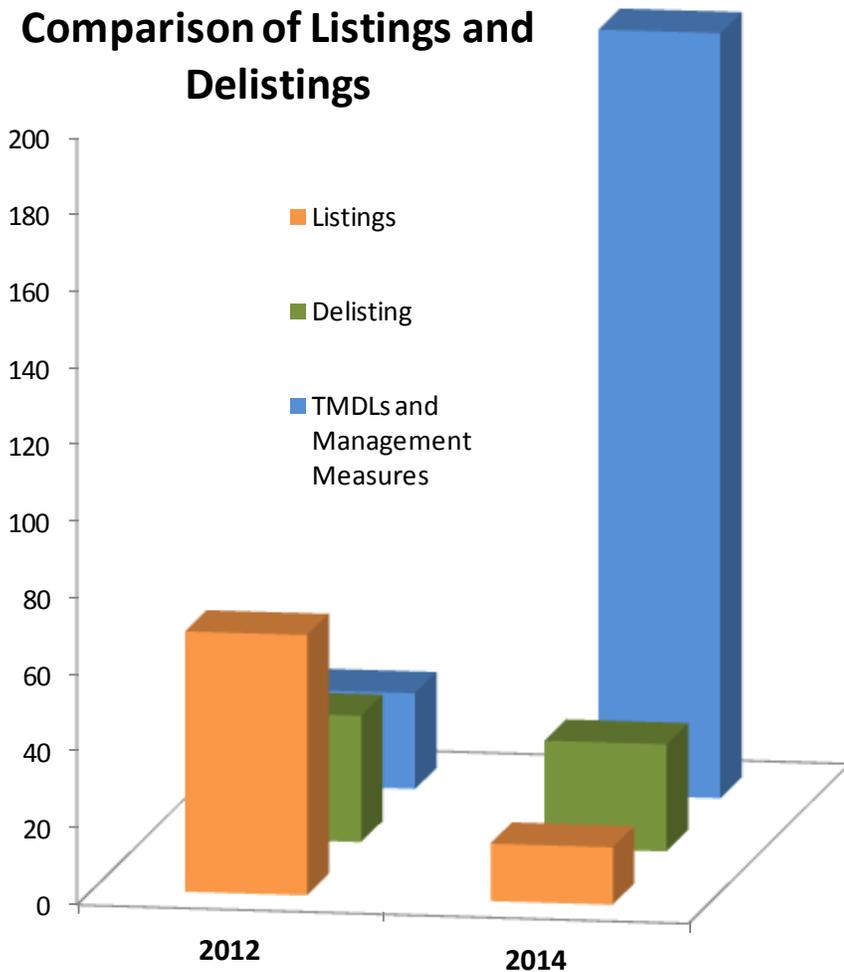


Figure: Summary of 2012 and 2014 Impaired Waterbody Segments in US EPA Category 4 and 5

Comparison of Listings and Delistings



For this report cycle, 15 assessed segments were added to the Impaired Waters List primarily due to recreation impairments. Removing impaired waters from the List often begins with a Total Maximum Daily Load (TMDL) analysis which is a management plan to identify necessary water quality improvements. A total of 217 assessed segments were delisted due to completion of EPA approved TMDLs. An additional 28 assessed segments were delisted because the assessments of new data indicated that the designated uses were fully supporting.

Designated Used Impairments: TMDL Needed (# Waterbody Segments)

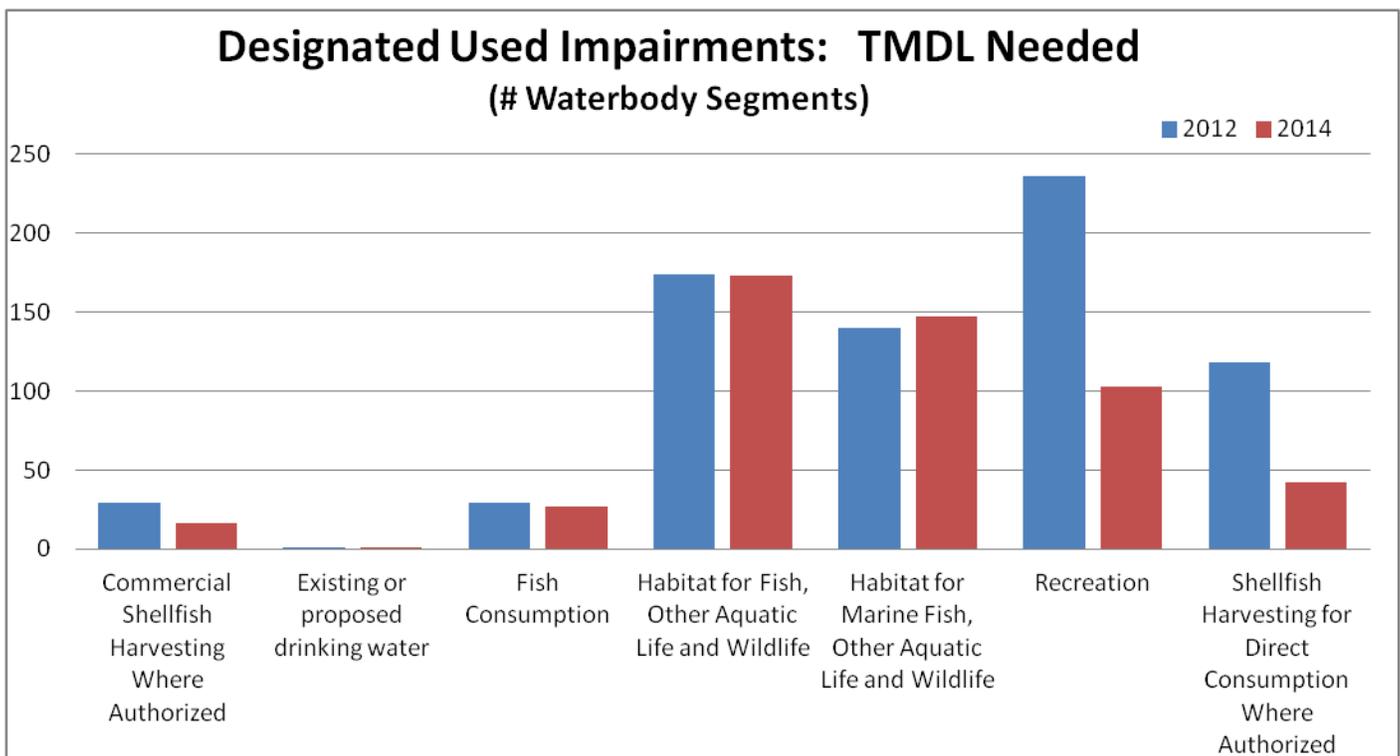


Figure: Summary of 2012 and 2014 Impaired Segments by designated use for Category 5 Waterbodies.

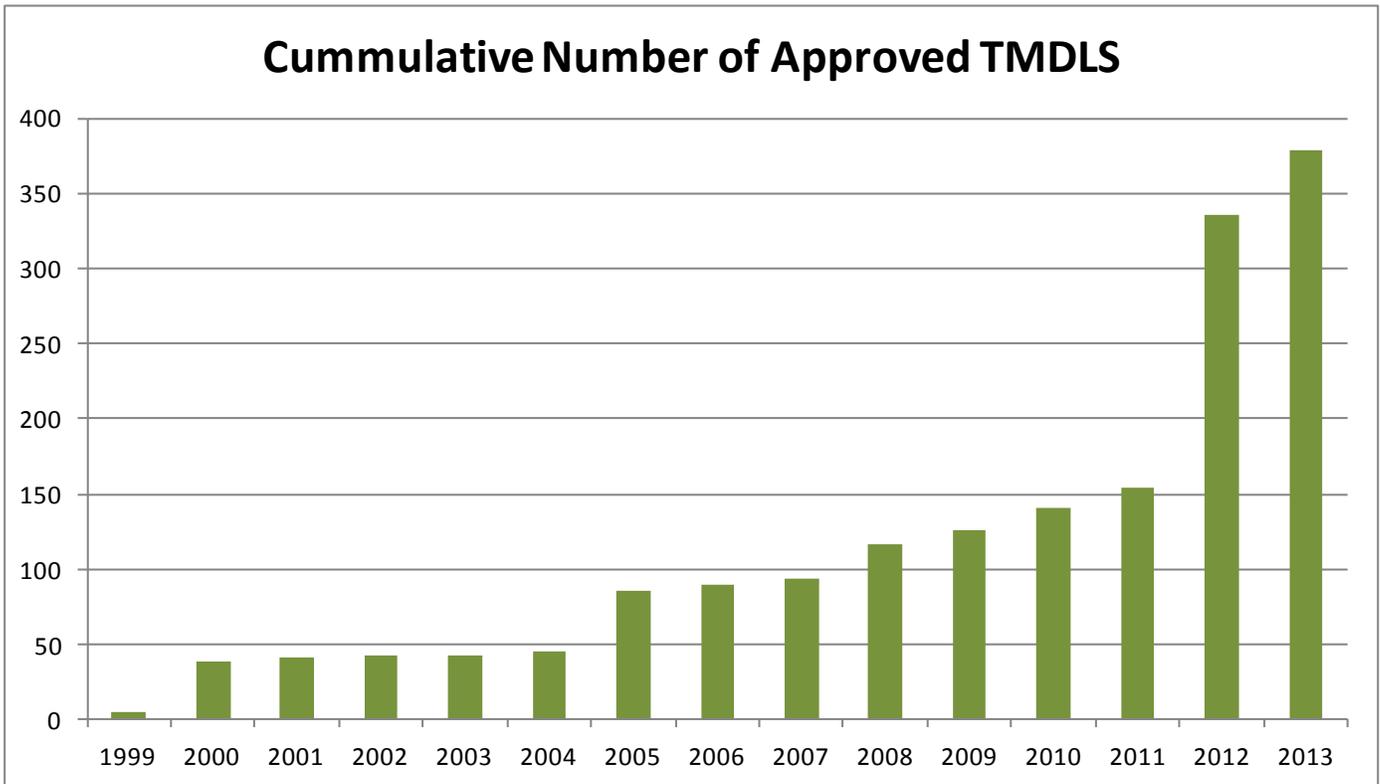


Figure: The total number of TMDLs in CT that have been developed by DEEP and approved by EPA.

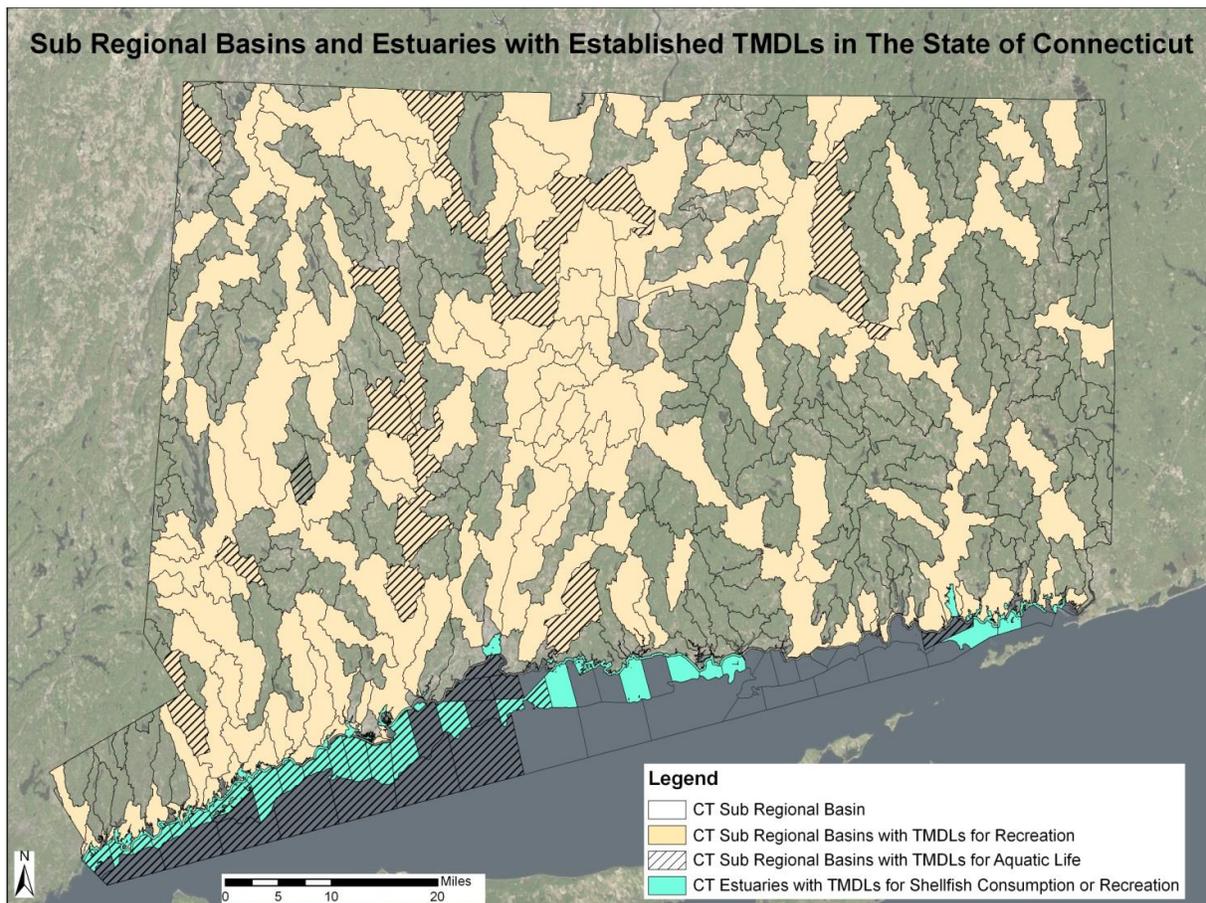
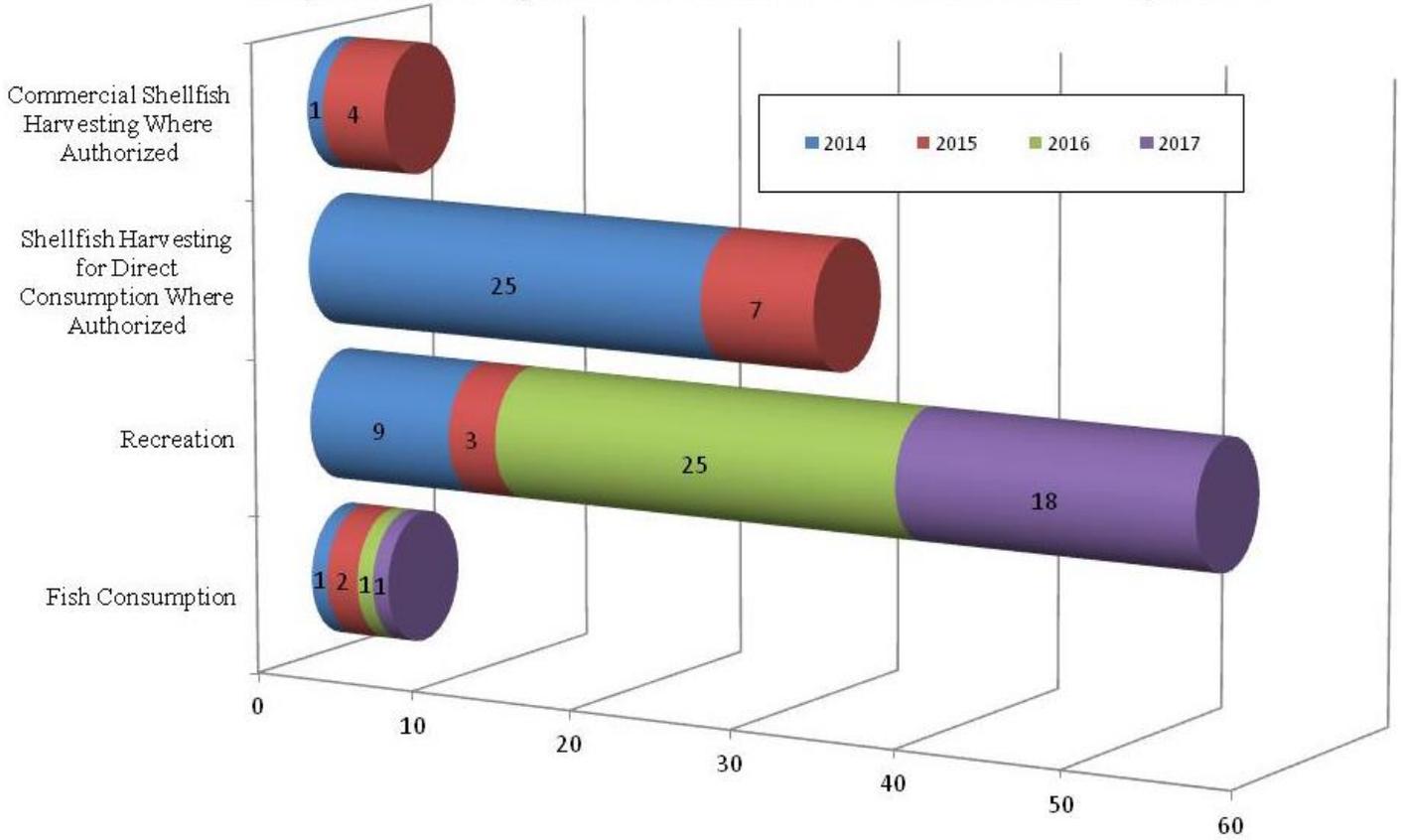


Figure 3-5 Subregional Basins and Estuaries with Established TMDLs in Connecticut

Impaired Segments Planned for TMDL Development



For additional information, please see the full IWQR on the CT DEEP website at <http://www.ct.gov/dep/iwqr>.