



# CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

79 Elm Street, Hartford, CT 06106-5127

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

## 2012 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

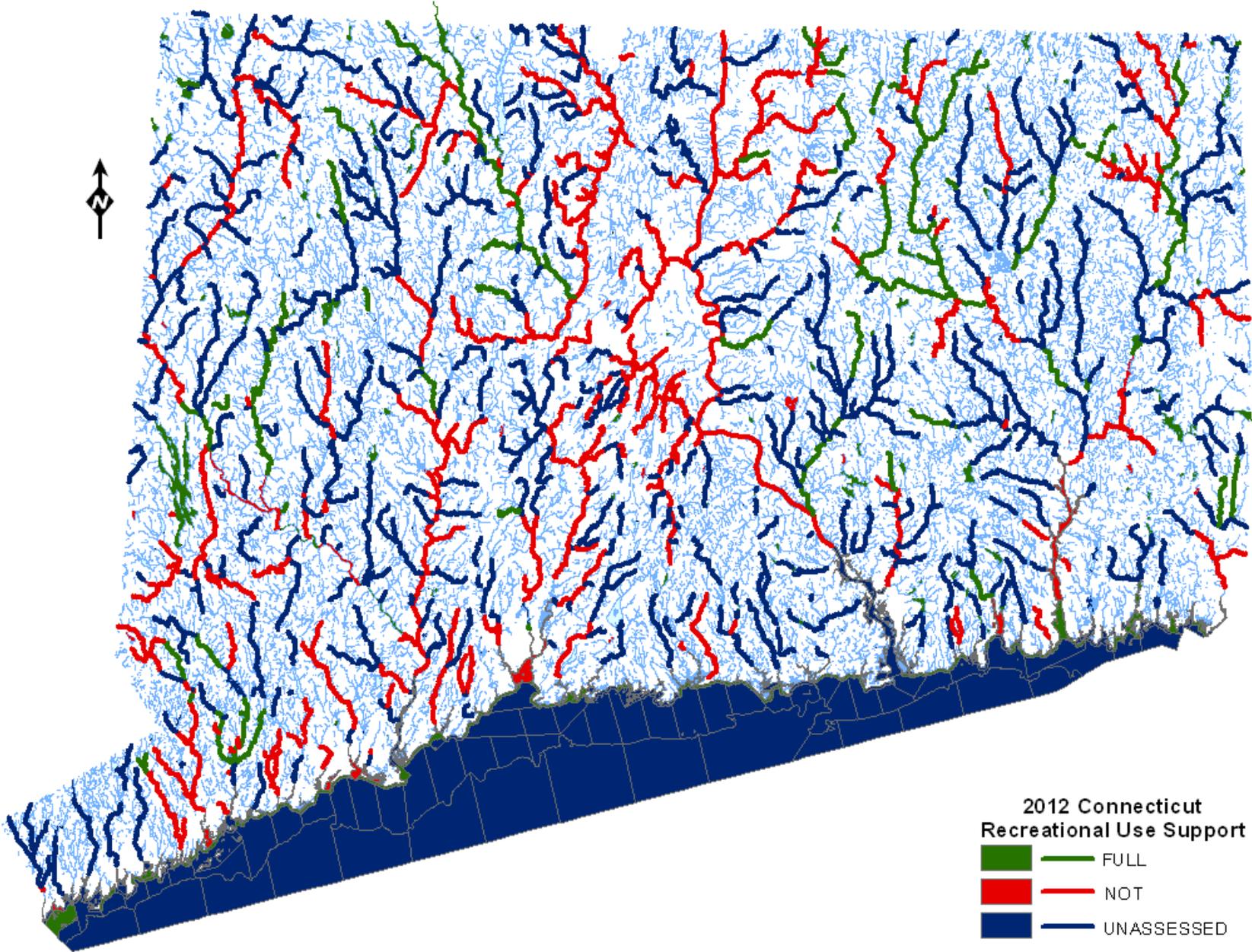
There are 5,830 river miles and 64,973 acres of lakes in the State, of which 2,539.14 river miles (872 assessment segments) and 30,437.36 acres of lakes (182 assessed segments) have been tracked for designated uses. Along the coast, there are 611.89 square miles of estuarine waters (210 assessed segments) 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 91 assessed segments of rivers (172.2 miles) were added.

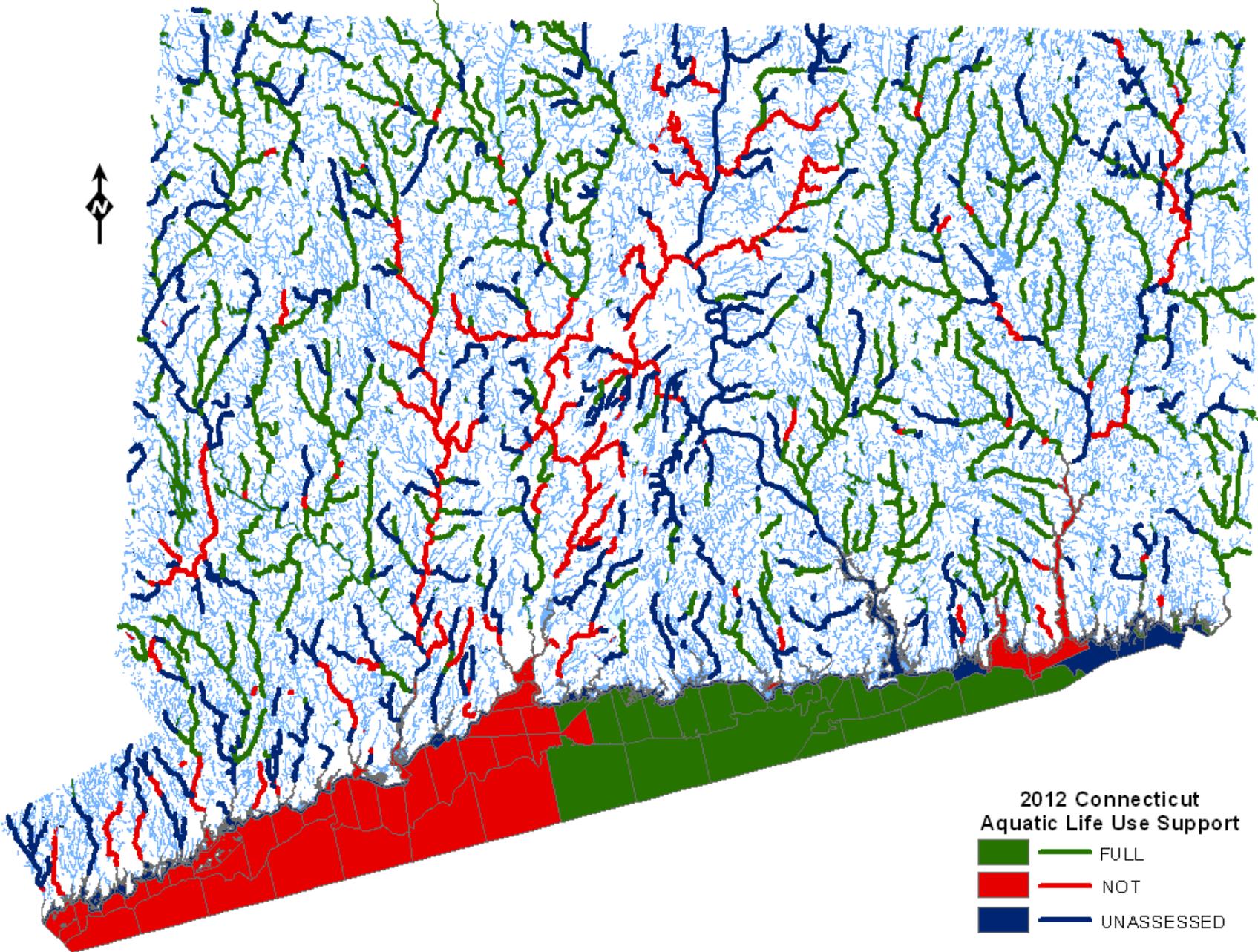
### Designated Uses

 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 flora and fauna.

<i>Aquatic Life Use</i>	Fully Supporting	Not Supporting	Not Assessed	Insufficient Information
Rivers (miles)	1197.8	446.45	703.85	191.04
Lakes (acres)	29,022.33	1,158.90	256.23	--
Estuaries (sq.miles)	236.61	314.46	58.78	2.03

 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





<i>Fish Consumption Use*</i>	Fully Supporting	Not Supporting	Not Assessed
Rivers (miles)	2,406.99	130.21	1.94
Lakes (acres)	26,656.50	3,779.59	1.37
Estuaries (sq.miles)	603.26	8.63	--

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.

\*Refer to CT DEEP Angler's Guide for more information about fish consumption advisories, online at [www.ct.gov/deep](http://www.ct.gov/deep)



The *Recreation Use* is supported when indicator bacteria concentrations are below the thresholds in the WQS 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)	313.01	850.04	1,277.65	98.44
Lakes (acres)	22,224.54	4,447.41	3,765.51	--
Estuaries (sq.miles)	28.55	13.04	569.22	1.08



The *Shellfish Harvesting Use* is supported when shellfish harvested from Approved Shellfish Areas (Class SA) are safe for consumption and shellfish harvested from 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.

<i>Shellfish Harvesting Use</i>	Fully Supporting	Not Supporting	Not Assessed
Class SA Estuaries (sq.miles)	47.54	198.4	0.45
Class SB Estuaries (sq.miles)	39.14	21.22	4.75

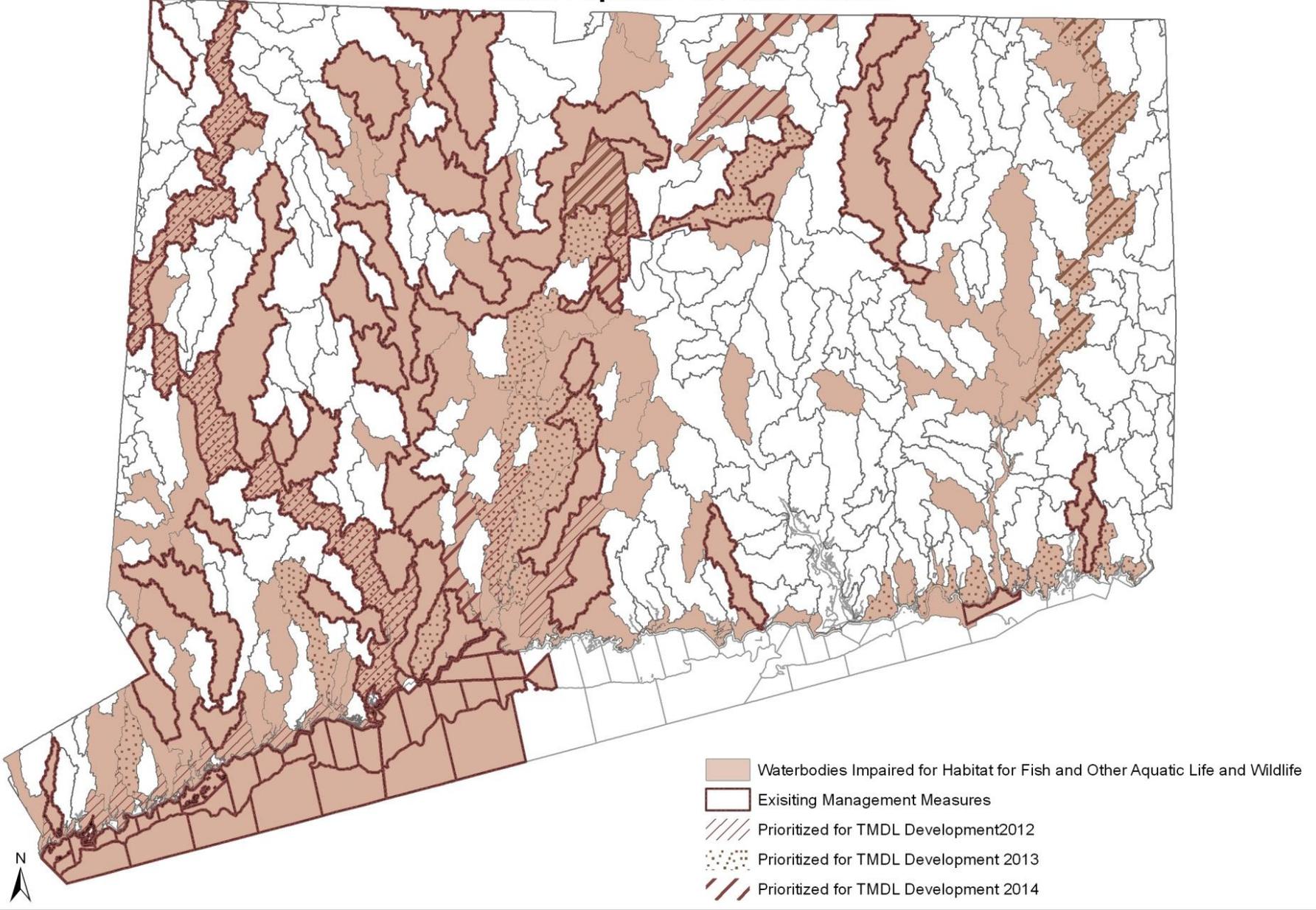
safe for consumption without depuration. The Department of Aquaculture shellfishing areas in approved Restricted are safe for

### Impaired Waters

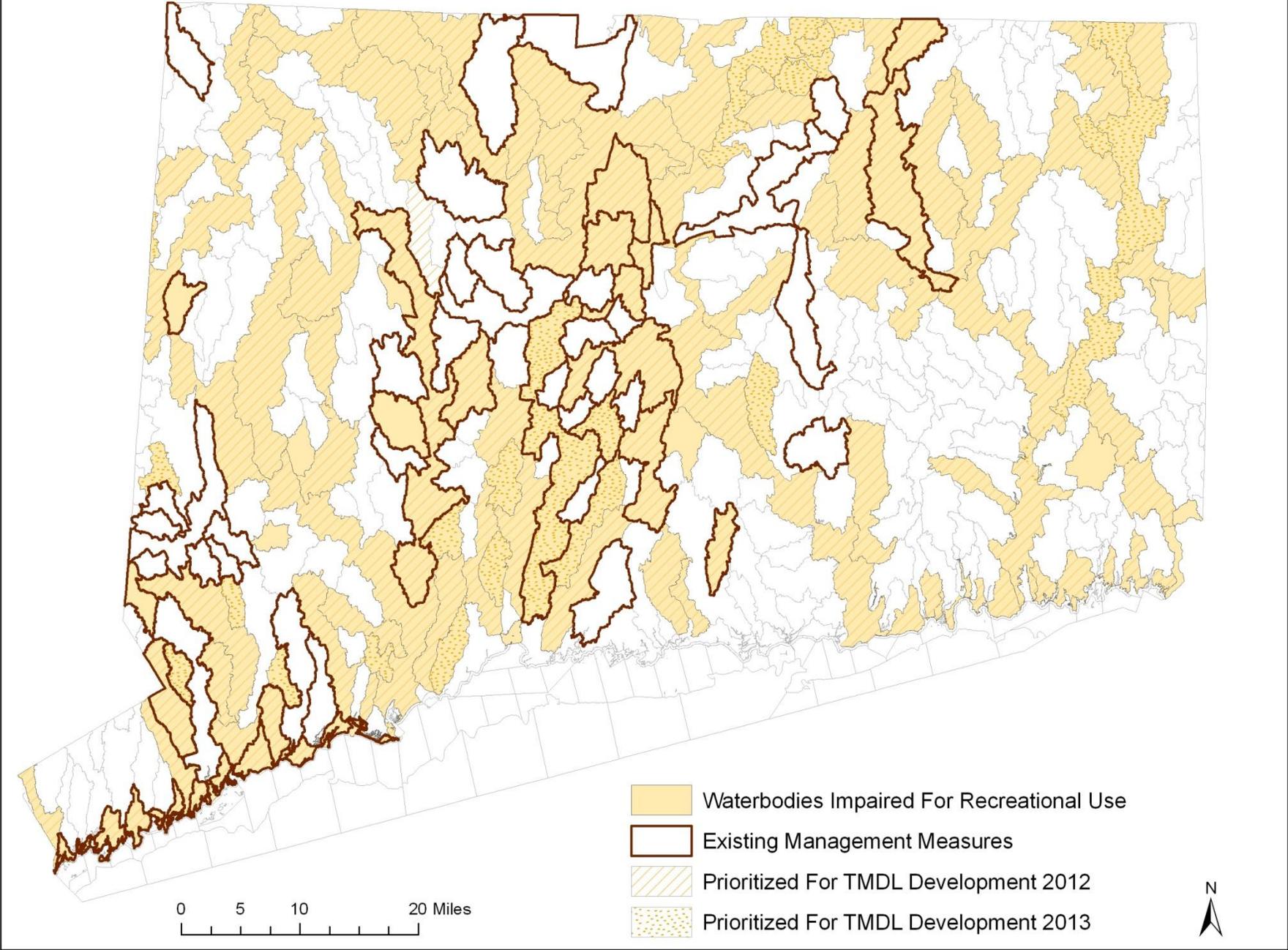
Based on the designated use assessments, a total of 462 assessed segments do not support one or more designated uses (total of 563 impaired uses). These assessed segments appear on Connecticut's Impaired Waters List (EPA Category 5) and those included within EPA Category 4 where a pollution control or management measure has been developed for the impairment.

Impaired EPA Category	<b>4a</b> = TMDL established	<b>4b</b> = Other pollution control requirements to be implemented	<b>4c</b> = Reduce nonpollutant impacts through management measures	<b>5</b> = TMDL is needed
Assessed Segments within each Category	151	13	51	462

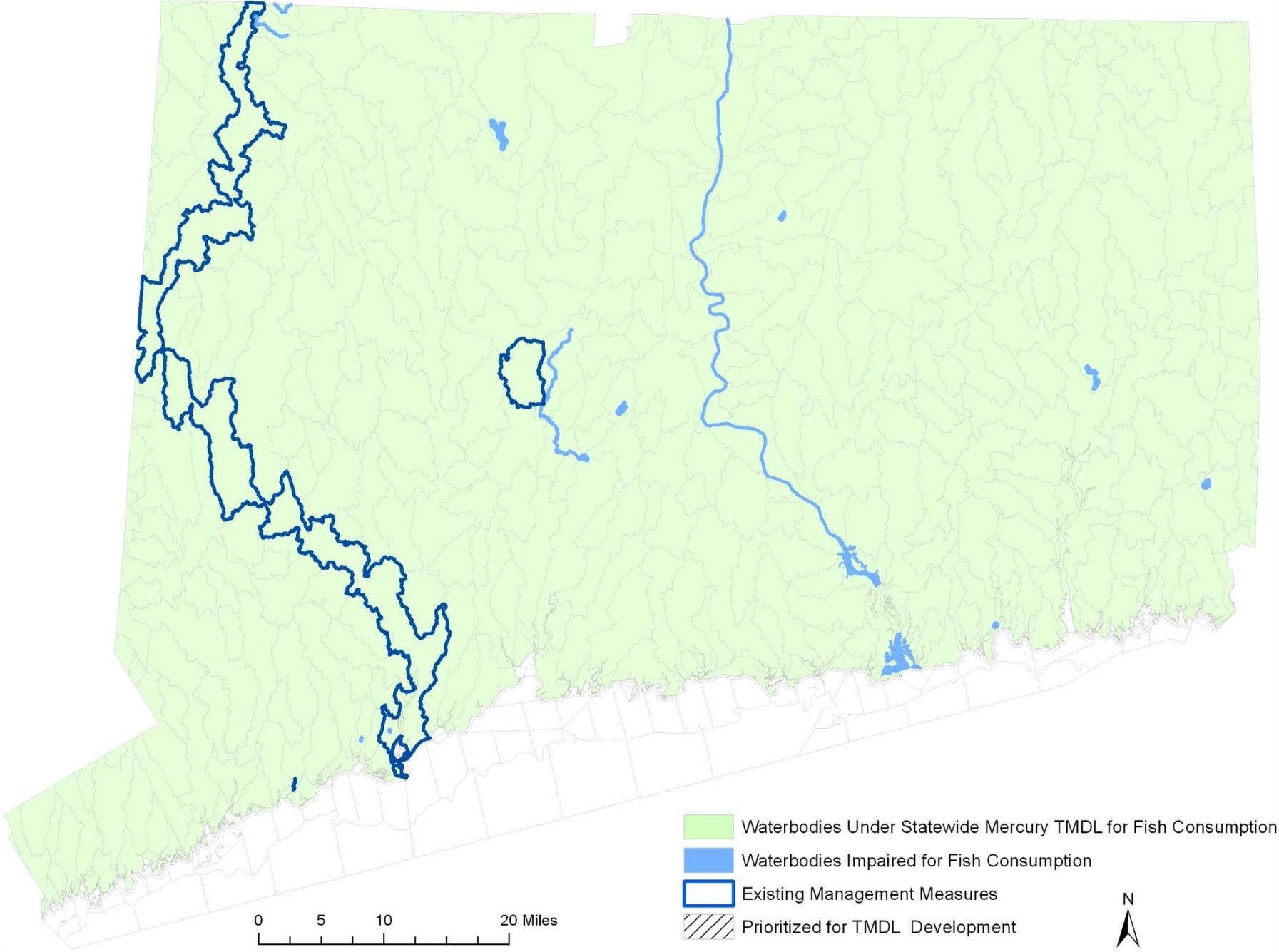
### Connecticut Impaired Waters, Implementation and Priorities for Habitat for Fish and Other Aquatic Life and Wildlife



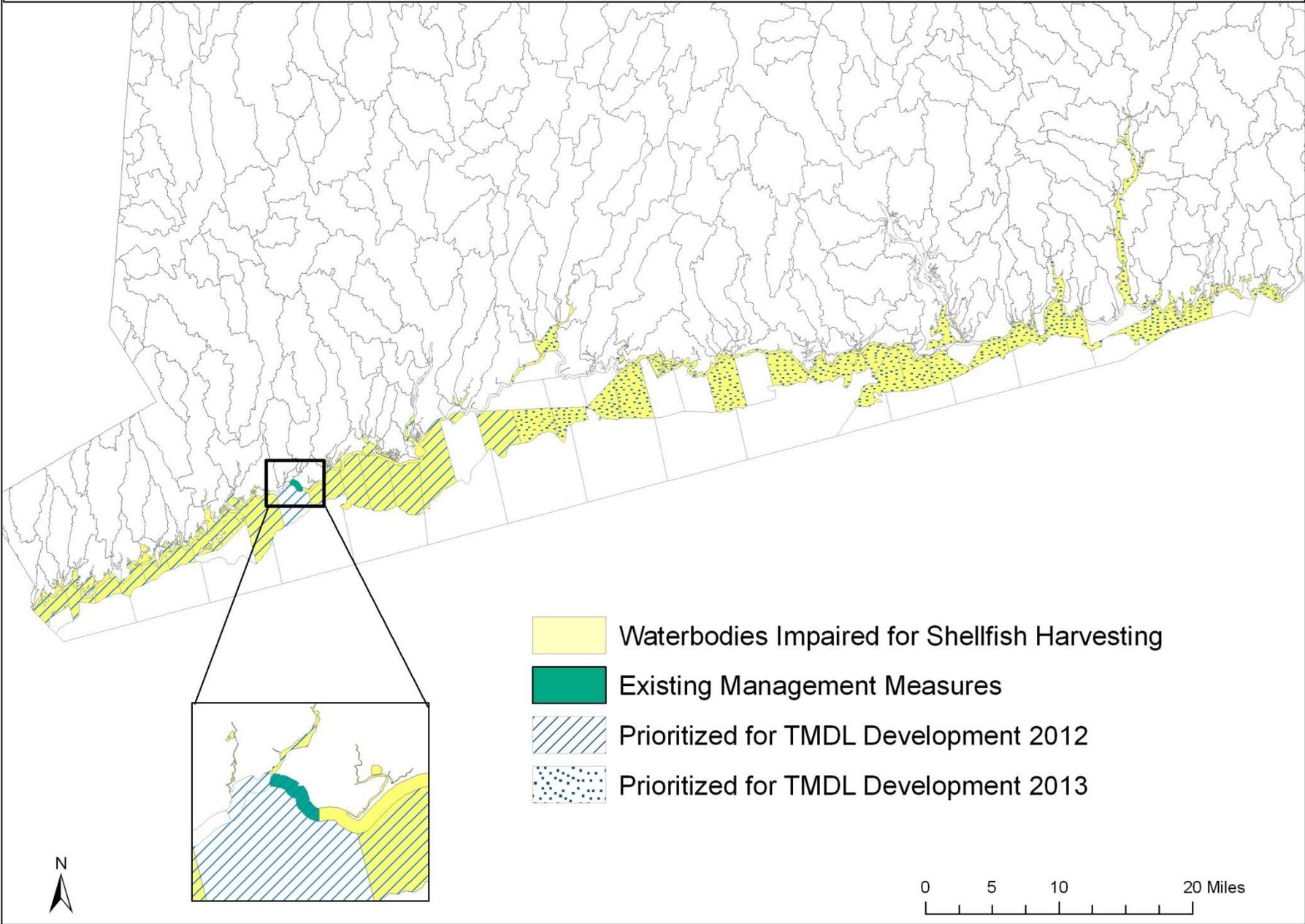
### Connecticut Impaired Waters, Implementation and Priorities for Recreational Use



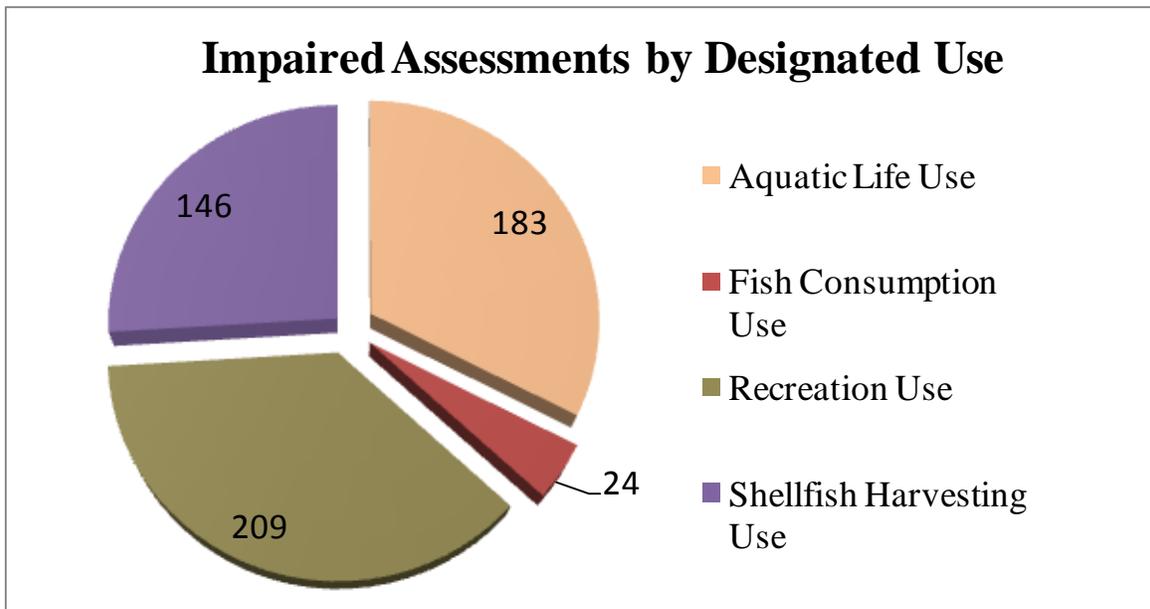
### Connecticut Impaired Waters, Implementation and Priorities for Fish Consumption



# Connecticut Impaired Waters, Implementation and Priorities for Shellfish Harvesting

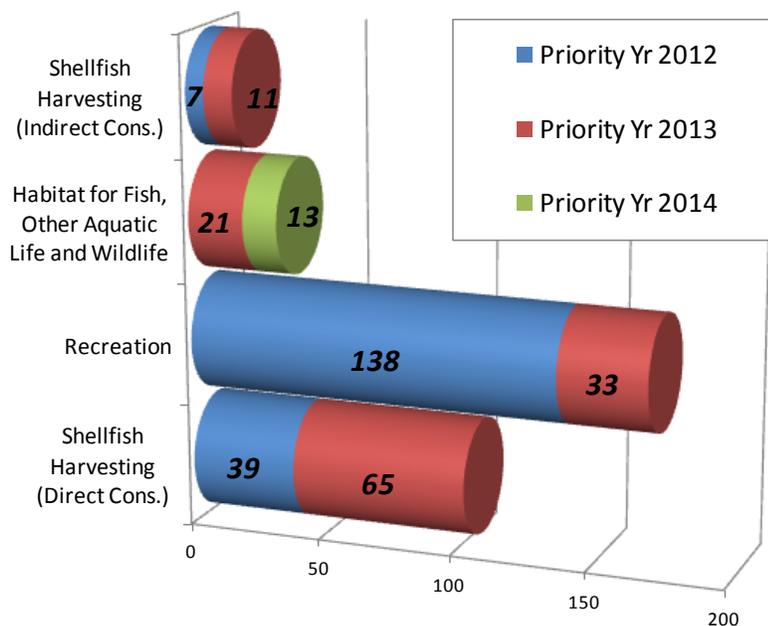


In the IWQR, 68 assessed segments were added to the Impaired Waters List primarily due to recreation impairments while 33 assessed segments were removed due to monitoring data indicating a supporting assessment or implemented management actions had improved water quality or there was a previously incorrect assessment of impairment.



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. CT DEEP has received EPA approval for TMDLs on 25 assessed segments during this report cycle. CT DEEP plans to develop TMDLs for an additional 327 assessed segments between the years 2012-2014.

### 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>.