

## New Hampshire's Designated River Report Cards built from the 2010, 305(b)/303(d)

***Each Designated Report Card covers the main stem assessment units for a designated river. Each Designated Report Card has two components;***

1. REPORT CARD - A one page card that summarizes the overall use support for Aquatic Life, Primary Contact (i.e. Swimming), and Secondary Contact (i.e. Boating) Designated Uses on every Assessment Unit ID (AUID) along a designated river.
2. ASSESSMENT DETAILS - Anywhere from one to 70 pages with the detailed assessment information for each and every AUID in the Report Card.

### ***How are the Surface Water Quality Assessment determinations made?***

All readily available data with reliable Quality Assurance/Quality Control is used in the biennial surface water quality assessments. For a full understanding of how the Surface Water Quality Standards (Env-Wq 1700) are translated into surface water quality assessments we urge the reader to review the 2010 Consolidated Assessment and Listing Methodology (CALM) at <http://des.nh.gov/organization/divisions/water/wmb/swqa/2010/index.htm>

### ***Where can I find more advanced resources?***

Additional resources including GIS shapefiles and KML files for Google Earth users of all AUIDs <http://des.nh.gov/organization/divisions/water/wmb/swqa/2010/index.htm>

### ***How are assessments coded in the report card?***

Assessment outcomes are displayed on a color scale as well as an alpha numeric scale that provides additional distinctions for the designated use and Parameter level assessments as outlined in the table below.

		Severe	Poor	Likely Bad	No Data	Likely Good	Marginal	Good
		Not Supporting, Severe	Not Supporting, Marginal	Insufficient Information – Potentially Not Supporting	No Data	Insufficient Information – Potentially Full Supporting	Full Support, Marginal	Full Support, Good
CATEGORY	Description							
*Category 2	Meets standards						2-M or 2-OBS	2-G
Category 3	Insufficient Information			3-PNS	3-ND	3-PAS		
Category 4	Does not Meet Standards;							
4A	TMDL^ Completed	4A-P	4A-M or 4A-T					
4B	Other enforceable measure will correct the issue.	4B-P	4B-M or 4B-T					
4C	Non-pollutant (i.e. exotic weeds)	4C-P	4C-M					
Category 5	TMDL^ Needed	5-P	5-M or 5-T					

\* “Category 1” only exists at the Assessment Unit Level.

^ TMDL stands for Total Maximum Daily Load studies (<http://des.nh.gov/organization/divisions/water/wmb/tmdl/index.htm>)

**DESIGNATED RIVER 305(b) ASSESSMENT SUMMARY REPORT:**

**LOWER MERRIMACK RIVER**

**Assessment Cycle 2010**

Good	Full Support Good
Marginal	Full Support Marginal
Likely Good	Insufficient Information – Potentially Full Support
No Data	No Data
Likely Bad	Insufficient Information – Potentially Not Support
Poor	Not Support Marginal
Severe	Not Support Severe



ASSESSMENT UNIT ID	ASSESSMENT UNIT NAME	AQUATIC LIFE	SWIMMING	BOATING	FISH CONSUMP.
NHRIV700060804-11	MERRIMACK RIVER	5-P	5-P	2-G	4A-M
NHRIV700061002-13	MERRIMACK RIVER	3-PAS	5-P	3-PAS	4A-M
NHRIV700061002-14	MERRIMACK RIVER	5-M	5-P	2-M	4A-M
NHRIV700061206-24	MERRIMACK RIVER	5-M	5-P	5-P	4A-M

Assessment Unit ID NHRIV700060804-11  
 Assessment Unit Name MERRIMACK RIVER  
 Primary Town MERRIMACK

Size 7.2440 MILES

Beach N

2010, 305(b)/303(d) - All Reviewed  
 Parameters by Assessment Unit

Assessment Unit Category\*~ 5-P

Designated Use Description	*Desig. Use Category	Desig. Use Threat	Parameter Name	Parameter Threatened (Y/N)	Parameter Category*	TMDL Schedule	Expected To Attain Date	Source Name (Impairments only)
Aquatic Life	5-P		ALUMINUM	N	3-PAS			
			COPPER	N	3-PNS			
			Dissolved oxygen saturation		3-ND			
			LEAD	N	3-PAS			
			NICKEL	N	3-PAS			
			Other flow regime alterations		3-PAS			
			Oxygen, Dissolved	N	5-P	2019		Source Unknown
			ZINC	N	3-PNS			
Drinking Water After Adequate Treatment	2-G		COPPER	N	3-PAS			
			ESCHERICHIA COLI	N	3-PNS			
			NICKEL	N	3-PAS			
			ZINC	N	3-PAS			
Fish Consumption	4A-M		COPPER	N	3-PAS			
			Mercury	N	4A-M	2017		Atmospheric Deposition - Toxics
			NICKEL	N	3-PAS			
			ZINC	N	3-PAS			
Primary Contact Recreation	5-P		Escherichia coli	N	5-P	2010		Combined Sewer Overflows
Secondary Contact Recreation	2-G		ESCHERICHIA COLI	N	2-G			
Wildlife	3-ND							

<b>Severe</b> Not Supporting, Severe	<b>Poor</b> Not Supporting, Marginal	<b>Likely Bad</b> Insufficient Information - Potentially Not Supporting	<b>No Data</b> No Data	<b>Likely Good</b> Insufficient Information - Potentially Full Supporting	<b>Marginal</b> Full Support, Marginal	<b>Good</b> Full Support, Good
---	---	--	---------------------------	--	---	-----------------------------------

\*DES Categories; 2-G = Supports Parameter well above criteria, 2-M = Supports Parameter marginally above criteria, 2-OBS = Exceeds WQ criteria but natural therefore not a WQ exceedence, 3-ND = Insufficient Information/No data, 3-PAS= Insufficient Information/Potentially Attaining Standard, 3-PNS= Insufficient Information/Potentially Not Attaining Standard, (4A=Impaired/TMDL Completed, 4B=Impaired/Other Measure will rectify Impairment, 4C=Impaired/Non-Pollutant, 5=Impaired/TMDL needed) M=Marginal Impairment, P=Severe Impairment, T=Threatened (<http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>)

Assessment Unit ID NHRIV700061002-13  
 Assessment Unit Name MERRIMACK RIVER  
 Primary Town MERRIMACK

Size 3.8900 MILES  
 Beach N

2010, 305(b)/303(d) - All Reviewed  
 Parameters by Assessment Unit

Assessment Unit Category\*~ 5-P

Designated Use Description	*Desig. Use Category	Desig. Use Threat	Parameter Name	Parameter Threatened (Y/N)	Parameter Category*	TMDL Schedule	Expected To Attain Date	Source Name (Impairments only)
Aquatic Life	3-PAS		ALKALINITY, CARBONATE AS CaCO3	N	3-PAS			
			AMMONIA (UN-IONIZED)	N	3-PAS			
			CHLORIDE	N	3-PAS			
			Dissolved oxygen saturation		3-ND			
			IRON	N	3-PAS			
			OXYGEN, DISSOLVED	N	3-PAS			
			Other flow regime alterations		3-PAS			
			pH		3-ND			
Drinking Water After Adequate Treatment	2-G		ESCHERICHIA COLI	N	3-PNS			
			IRON	N	3-PNS			
			MANGANESE	N	3-PNS			
Fish Consumption	4A-M		MANGANESE	N	3-PAS			
			Mercury	N	4A-M	2017		Atmospheric Deposition - Toxics
Primary Contact Recreation	5-P		Escherichia coli	N	5-P	2010		Combined Sewer Overflows
Secondary Contact Recreation	3-PAS		ESCHERICHIA COLI	N	3-PAS			
Wildlife	3-ND							

<b>Severe</b> Not Supporting, Severe	<b>Poor</b> Not Supporting, Marginal	<b>Likely Bad</b> Insufficient Information - Potentially Not Supporting	<b>No Data</b> No Data	<b>Likely Good</b> Insufficient Information - Potentially Full Supporting	<b>Marginal</b> Full Support, Marginal	<b>Good</b> Full Support, Good
---	---	--	---------------------------	--	---	-----------------------------------

\*DES Categories; 2-G = Supports Parameter well above criteria, 2-M = Supports Parameter marginally above criteria, 2-OBS = Exceeds WQ criteria but natural therefore not a WQ exceedence, 3-ND = Insufficient Information/No data, 3-PAS= Insufficient Information/Potentially Attaining Standard, 3-PNS= Insufficient Information/Potentially Not Attaining Standard, (4A=Impaired/TMDL Completed, 4B=Impaired/Other Measure will rectify Impairment, 4C=Impaired/Non-Pollutant, 5=Impaired/TMDL needed) M=Marginal Impairment, P=Severe Impairment, T=Threatened (<http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>)

Assessment Unit ID NHRIV700061002-14  
 Assessment Unit Name MERRIMACK RIVER  
 Primary Town NASHUA

Size 4.1370 MILES

Beach N

2010, 305(b)/303(d) - All Reviewed  
 Parameters by Assessment Unit

Assessment Unit Category\*~ 5-P

Designated Use Description	*Desig. Use Category	Desig. Use Threat	Parameter Name	Parameter Threatened (Y/N)	Parameter Category*	TMDL Schedule	Expected To Attain Date	Source Name (Impairments only)
Aquatic Life	5-M		ALUMINUM	N	3-PNS			
			CHLORIDE	N	3-PAS			
			COPPER	N	3-PNS			
			Dissolved oxygen saturation		3-ND			
			LEAD	N	3-PAS			
			NICKEL	N	3-PAS			
			OXYGEN, DISSOLVED	N	3-PAS			
			Other flow regime alterations		3-PAS			
			PH	N	5-M	2023		Source Unknown
Drinking Water After Adequate Treatment	2-G		COPPER	N	3-PAS			
			ESCHERICHIA COLI	N	3-PNS			
			NICKEL	N	3-PAS			
			ZINC	N	3-PAS			
Fish Consumption	4A-M		COPPER	N	3-PAS			
			Mercury	N	4A-M	2017		Atmospheric Deposition - Toxics
			NICKEL	N	3-PAS			
			ZINC	N	3-PAS			
Primary Contact Recreation	5-P		CHLOROPHYLL-A	N	3-PAS			
			Creosote	N	5-M	2019		Rcra Hazardous Waste Sites Contaminated Groundwater
			Escherichia coli	N	5-P	2010		Source Unknown
Secondary Contact Recreation	2-M		ESCHERICHIA COLI	N	2-M			
Wildlife	3-ND							

<b>Severe</b> Not Supporting, Severe	<b>Poor</b> Not Supporting, Marginal	<b>Likely Bad</b> Insufficient Information - Potentially Not Supporting	<b>No Data</b> No Data	<b>Likely Good</b> Insufficient Information - Potentially Full Supporting	<b>Marginal</b> Full Support, Marginal	<b>Good</b> Full Support, Good
---	---	--	---------------------------	--	---	-----------------------------------

\*DES Categories; 2-G = Supports Parameter well above criteria, 2-M = Supports Parameter marginally above criteria, 2-OBS = Exceeds WQ criteria but natural therefore not a WQ exceedence, 3-ND = Insufficient Information/No data, 3-PAS= Insufficient Information/Potentially Attaining Standard, 3-PNS= Insufficient Information/Potentially Not Attaining Standard, (4A=Impaired/TMDL Completed, 4B=Impaired/Other Measure will rectify Impairment, 4C=Impaired/Non-Pollutant, 5=Impaired/TMDL needed) M=Marginal Impairment, P=Severe Impairment, T=Threatened (<http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>)

Assessment Unit ID NHRIV700061206-24

Size 4.3210 MILES

2010, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

Assessment Unit Name MERRIMACK RIVER

Beach N

Primary Town NASHUA

Assessment Unit Category\*~ 5-P

Designated Use Description	*Desig. Use Category	Desig. Use Threat	Parameter Name	Parameter Threatened (Y/N)	Parameter Category*	TMDL Schedule	Expected To Attain Date	Source Name (Impairments only)
Aquatic Life	5-M		ALKALINITY, CARBONATE AS CaCO3	N	3-PAS			
			AMMONIA (UN-IONIZED)	N	2-G			
			Aluminum	N	5-M	2019		Source Unknown
			CADMIUM	N	3-PNS			
			CHLORIDE	N	3-PAS			
			COPPER	N	3-PAS			
			DISSOLVED OXYGEN SATURATION	N	2-G			
			LEAD	N	3-PNS			
			NICKEL	N	3-PNS			
			OXYGEN, DISSOLVED	N	3-PAS			
			Other flow regime alterations		3-PAS			
			ZINC	N	2-M			
pH	N	5-M	2016		Source Unknown			
Drinking Water After Adequate Treatment	2-G		COPPER	N	3-PAS			
			ESCHERICHIA COLI	N	3-PNS			
			NICKEL	N	3-PAS			
			POTASSIUM	N	3-PAS			
			SULFATES	N	3-PAS			
			ZINC	N	3-PAS			
Fish Consumption	4A-M		COPPER	N	3-PAS			
			Mercury	N	4A-M	2017		Atmospheric Deposition - Toxics
			NICKEL	N	3-PAS			
			ZINC	N	3-PAS			
Primary Contact Recreation	5-P		Chlorophyll-a	N	5-M	2019		Source Unknown
			Escherichia coli	N	5-P	2010		Combined Sewer Overflows
Secondary Contact Recreation	5-P		Escherichia coli	N	5-P	2010		Source Unknown
Wildlife	3-ND							

<b>Severe</b> Not Supporting, Severe	<b>Poor</b> Not Supporting, Marginal	<b>Likely Bad</b> Insufficient Information - Potentially Not Supporting	<b>No Data</b> No Data	<b>Likely Good</b> Insufficient Information - Potentially Full Supporting	<b>Marginal</b> Full Support, Marginal	<b>Good</b> Full Support, Good
---	---	--	---------------------------	--	---	-----------------------------------

\*DES Categories; 2-G = Supports Parameter well above criteria, 2-M = Supports Parameter marginally above criteria, 2-OBS = Exceeds WQ criteria but natural therefore not a WQ exceedence, 3-ND = Insufficient Information/No data, 3-PAS= Insufficient Information/Potentially Attaining Standard, 3-PNS= Insufficient Information/Potentially Not Attaining Standard, (4A=Impaired/TMDL Completed, 4B=Impaired/Other Measure will rectify Impairment, 4C=Impaired/Non-Pollutant, 5=Impaired/TMDL needed) M=Marginal Impairment, P=Severe Impairment, T=Threatened (<http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>)