

STATE OF NEW HAMPSHIRE

**Impairments Added to Categories  
4A, 4B, or 4C  
of the 2018 305(b) Report**

August 8, 2019



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# **Impairments Added to Categories 4A, 4B, or 4C of the 2018 305(b) Report**

*STATE OF NEW HAMPSHIRE  
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29 HAZEN DRIVE  
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**August 8, 2019**

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## Introduction

In accordance with Section 303(d) of the federal Clean Water Act, States must prepare a list of impaired waters that require a Total Maximum Daily Load study every two years (i.e., the 303(d) List). The last approved 303(d) List was prepared by the New Hampshire Department of Environmental Services (NHDES) in 2012. The State’s final 2014 and 2016 Section 303(d) Lists of impaired waters were submitted to the US Environmental Protection Agency (USEPA) on March 27, 2017, and November 30, 2017, respectively. The USEPA issued partial approvals of the 2014 and 2016 Lists on March 16, 2018, and June 22, 2018, respectively. The 2014 partial approval covered all fresh waters and some estuarine waters, with the exception of Little Bay, the Bellamy River, the Cocheco River, the Upper Piscataqua River, Portsmouth Harbor, Little Harbor/Back Channel, Great Bay and Upper Portsmouth Harbor. The partial approval of the 2016 List had deferment of nearly the same list of waterbodies with one exception. The Cocheco River was included in the approved portion of the 2016 303(d) List. Due to the complexity of the assessment issues involved, the USEPA deferred action on the State’s list with respect to the aforementioned waterbodies until a later date when its review has been completed. Downloadable copies of the past lists as well as the draft 303(d) 2018 list are available on the NHDES website for review (<http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>). This document provides a list of all surface waters and parameter combinations that were removed from categories 4A, 4B, or 4C impairments on the 2018 305(b) and the reasons why they were removed.

Assessment outcomes cover a spectrum from very good to very bad coded as an alpha numeric scale that provides additional distinctions in cases where an impairment exists. In each of the new impairments detailed within this document the 2016 and 2018 assessment status is highlighted applying the categories in the table below.

	<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
<b>CATEGORY</b>	<b>Description</b>						
Category 2	Meets standards						2-M or 2-OBS
Category 3	Insufficient Information						
Category 4	Does not Meet Standards;						
4A	4A-P	4A-M or 4A-T					
4B	4B-P	4B-M or 4B-T					
4C	4C-P	4C-M					
Category 5	5-P	5-M or 5-T					

## Non-Native Aquatic Plants for Aquatic Life Integrity

Exotic macrophytes are non-native, fast growing aquatic plants, which can quickly dominate and choke out native aquatic plant growth in the surface water. Examples of exotic macrophytes include variable milfoil (*Myriophyllum heterophyllum*), Eurasian milfoil (*Myriophyllum spicatum*), fanwort (*Cabomba caroliniana*) and water chestnut (*Trapa natans*). Such infestations are in violation of Env-Wq 1703.19, which states that surface waters shall support and maintain a balanced, integrated and adaptive community of organisms having a species composition, diversity and functional organization comparable to that of similar natural habitats of a region.

Assessment Category 4C represents cases where a waterbody is impaired or threatened for one or more designated uses but does not require the development of a TMDL because the impairment is not caused by a pollutant.

### CHANCE POND BROOK (NHIMP700010804-08)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary	2016	2018
			Town Listed First		
CHANCE POND BROOK	NHIMP700010804-08	Non-Native Aquatic Plants	FRANKLIN	n/a	4C-M

Variable milfoil was documented in Chance Pond Brook in 2017. Herbicide treatment was performed in 2018 and post treatment monitoring showed the herbicide treatment was 100% effective in the year of its treatment for controlling milfoil. Monitoring will continue for the next few years in order to verify that the variable milfoil has been eradicated. Chance Pond Brook (NHIMP700010804-08) has been placed in category 4C-M for non-native aquatic plants for the aquatic life integrity designated use.

## WWTFs Currently in 'Significant Non-Compliance' for Aquatic Life Integrity

Assessment Category 4B is reserved for cases where a waterbody is impaired or threatened for one or more designated uses but does not require the development of a TMDL because other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future.

### AMMONOOSUC RIVER (NHRIV801030403-03)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary	2016	2018
			Town Listed First		
AMMONOOSUC RIVER	NHRIV801030403-03	BOD, Biochemical oxygen demand	BETHLEHEM	3-ND	4B-T

The Bethlehem WWTF was in violation of its NPDES permit (General Permit issued 7/6/11, reissued under individual permit effective September 13, 2018) in October 2017 and January thru March 2018 for effluent BOD monthly average concentration limit violations. The facility had been in "significant non-compliance" for exceeding its effluent BOD monthly average concentration limits for at least four months during two consecutive quarter review periods. This appears to have been an isolated incident with only one quarter in SNC.

### JOHNS RIVER - CHASE BROOK (NHRIV801030102-08)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary	2016	2018
			Town Listed First		
JOHNS RIVER - CHASE BROOK	NHRIV801030102-08	BOD, Biochemical oxygen demand	DALTON, WHITEFIELD	3-ND	4B-T

The Whitefield WWTF was in violation of its NPDES permit (effective December 1, 2014) in November/December 2017 and January thru April 2018 for effluent BOD monthly average concentration limit violations. The facility has

intermittently been in “significant non-compliance” for exceeding its effluent BOD monthly average concentration limits in excess of 40% for at least two months during two consecutive quarter review periods and/or in any excess for at least four months during two consecutive quarter review periods. EPA issued Whitefield AOC CWA-AO-R01-FY16-11 on May 25, 2016, to address its NPDES permit violations. Whitefield continues to evaluate its current WWTF in order to upgrade its WWTF as necessary to achieve full compliance with its NPDES permit limits.

**MERRIMACK RIVER (NHRIV700060803-14-02)**

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary	2016	2018
			Town Listed First		
MERRIMACK RIVER	NHRIV700060803-14-02	PHOSPHORUS (TOTAL)	MANCHESTER, BEDFORD	3-PAS	4B-T

The Manchester WWTF was in violation of its NPDES permit (effective 2/11/2015) in April, May, July and September 2017 for the effluent phosphorus monthly average loading limit. The facility had been in “significant non-compliance” for exceeding its effluent total phosphorus monthly average loading limit for at least four months during two consecutive quarter review periods. One quarter was in SNC for the timeframe of November 2016 to August 2018.

**SOUHEGAN RIVER (NHRIV700060906-16)**

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary	2016	2018
			Town Listed First		
SOUHEGAN RIVER	NHRIV700060906-16	AMMONIA (TOTAL)	AMHERST, MILFORD	3-ND	4B-T

The Milford WWTF was in violation of its NPDES permit (effective March 24, 2000) in September and October 2017 for effluent ammonia nitrogen as nitrogen monthly average concentration limit violations. The facility was in “significant non-compliance” for exceeding its effluent ammonia nitrogen as nitrogen monthly average concentration limits in excess of 40% for at least two months during two consecutive quarter review periods.

**TIDE MILL CREEK (NHEST600031004-03-03)**

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary	2016	2018
			Town Listed First		
TIDE MILL CREEK	NHEST600031004-03-03	Chlorine, Residual (Chlorine Demand)	HAMPTON	3-ND	4B-T

The Hampton WWTF was in violation of its NPDES permit (effective 8/28/2007) in November 2017 and January 2018 for the effluent total residual chlorine (TRC) monthly average and daily maximum concentration limits. The facility had been in “significant non-compliance” for exceeding its effluent TRC monthly average and daily maximum concentration limit in excess of 20% for at least two months during two consecutive quarter review periods. This appears to have been an isolated incident with only one quarter in SNC.