

STATE OF NEW HAMPSHIRE

**2018 305(b) Category
4A, 4B, and 4C Impairments
Not Included in the 2020/2022 305(b) Report**

February 18, 2022



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**STATE OF NEW HAMPSHIRE
DEPARTMENT OF ENVIRONMENTAL SERVICES
29 HAZEN DRIVE
CONCORD, N.H. 03301**

**ROBERT R. SCOTT
Commissioner**

**MARK A. SANBORN
Assistant Commissioner**

**RENE PELLETIER
Water Division Director**

**Prepared by:
MATTHEW A. WOOD
Water Quality Assessment Program Coordinator**

February 18, 2022

New Hampshire Department of Environmental Services
PO Box 95, Concord, NH 03302-0095
www.des.nh.gov | (603) 271-3503

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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 2018.

Downloadable copies of the past lists as well as the 303(d) 2020/2022 list are available on the [NHDES website](#) for review. This document provides a list of all surface waters and parameter combinations that were removed from categories 4A, 4B, or 4C impairments on the 2020/2022 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 deimpairments detailed within this document the 2016 and 2018 assessment status is highlighted applying the categories in the table below.

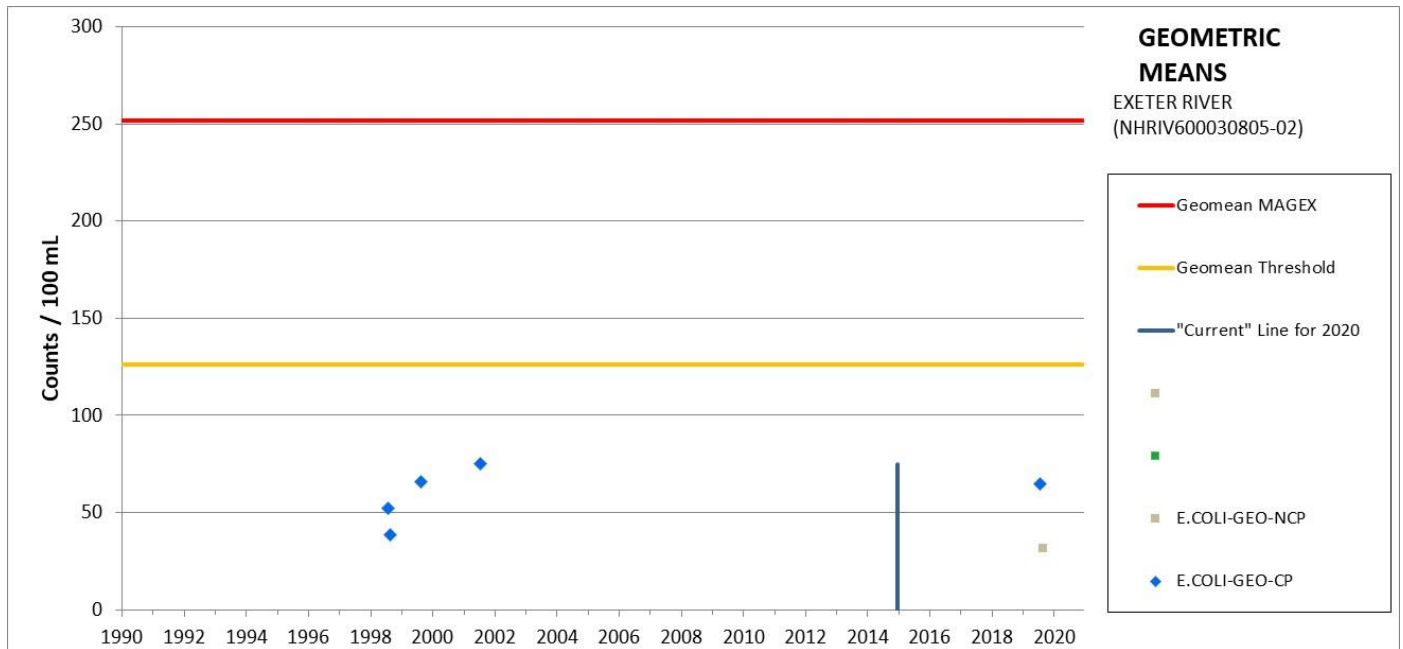
		Severe Not Supporting, Severe	Poor Not Supporting, Marginal	Likely Bad Insufficient Information – Potentially Not Supporting	No Data No Data	Likely Good Insufficient Information – Potentially Full Supporting	Marginal Full Support, Marginal	Good Full Support, Good
CATEGORY	Description							
Category 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					

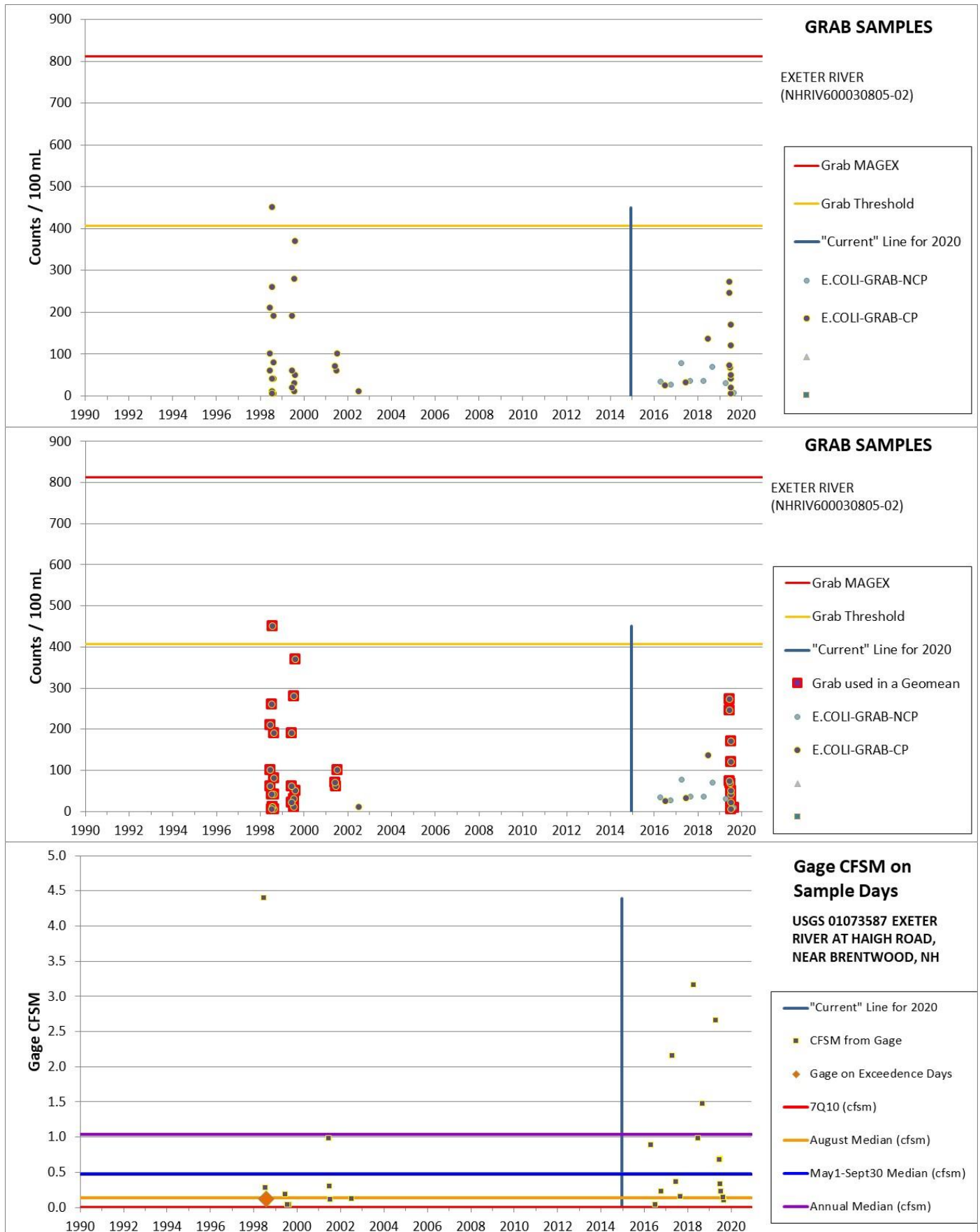
Bacteria for Primary Contact Recreation (i.e. swimming)

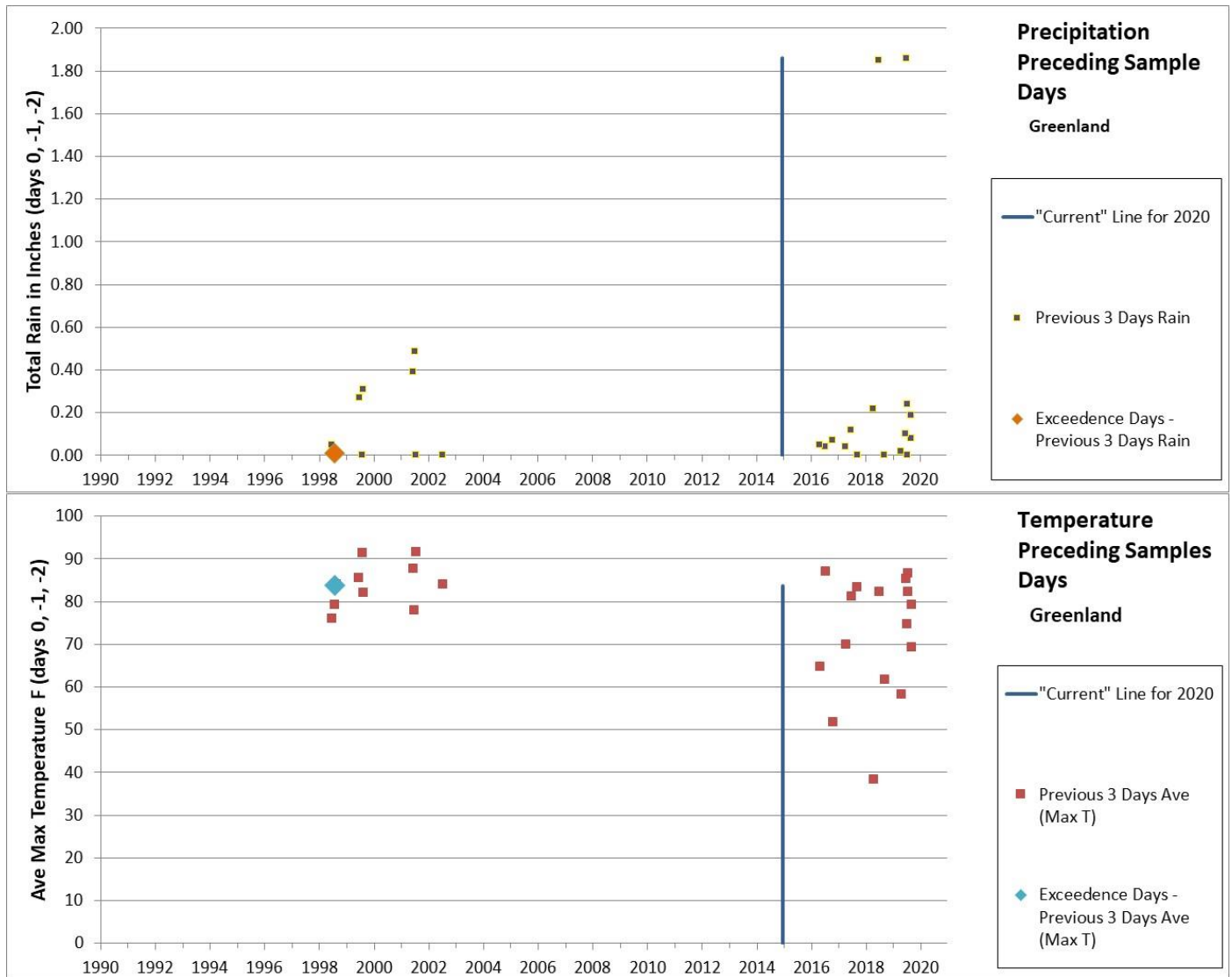
EXETER RIVER (NHRIV600030805-02)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
EXETER RIVER	NHRIV600030805-02	Escherichia coli	BRENTWOOD, EXETER	4A-P	2-G

The original impairment of the Exeter River (NHRIV600030805-02) was based off of the old CALM, which treated each station independently for the geometric mean calculation. The EXETER RIVER (NHRIV600030805-02) was impaired based upon three high geometric means from 12-EXT in 2001, even though 13-EXT and 15-EXT were reasonably clean. The current CALM methodology bundles all stations and grab samples for the geometric mean because the AUID is meant to bundle stations that are relatively homogenous. There were two geomeans included in the current assessment period (2015-2020) that were both below the geometric mean threshold (126 cts/100ml). One was in the critical period with the other in the non-critical period. All 21 grab samples, 13 of which were during the critical period, collected during the current assessment period were below the single sample threshold (406 cts/100 ml). Three of these samples below the threshold were collected at station 12-EXT and contributed to the geometric means. The EXETER RIVER (NHRIV600030805-02) has been moved from 4A-P to 2-G for Escherichia coli. for the primary contact recreation designated use based on the data collected in the current assessment period.



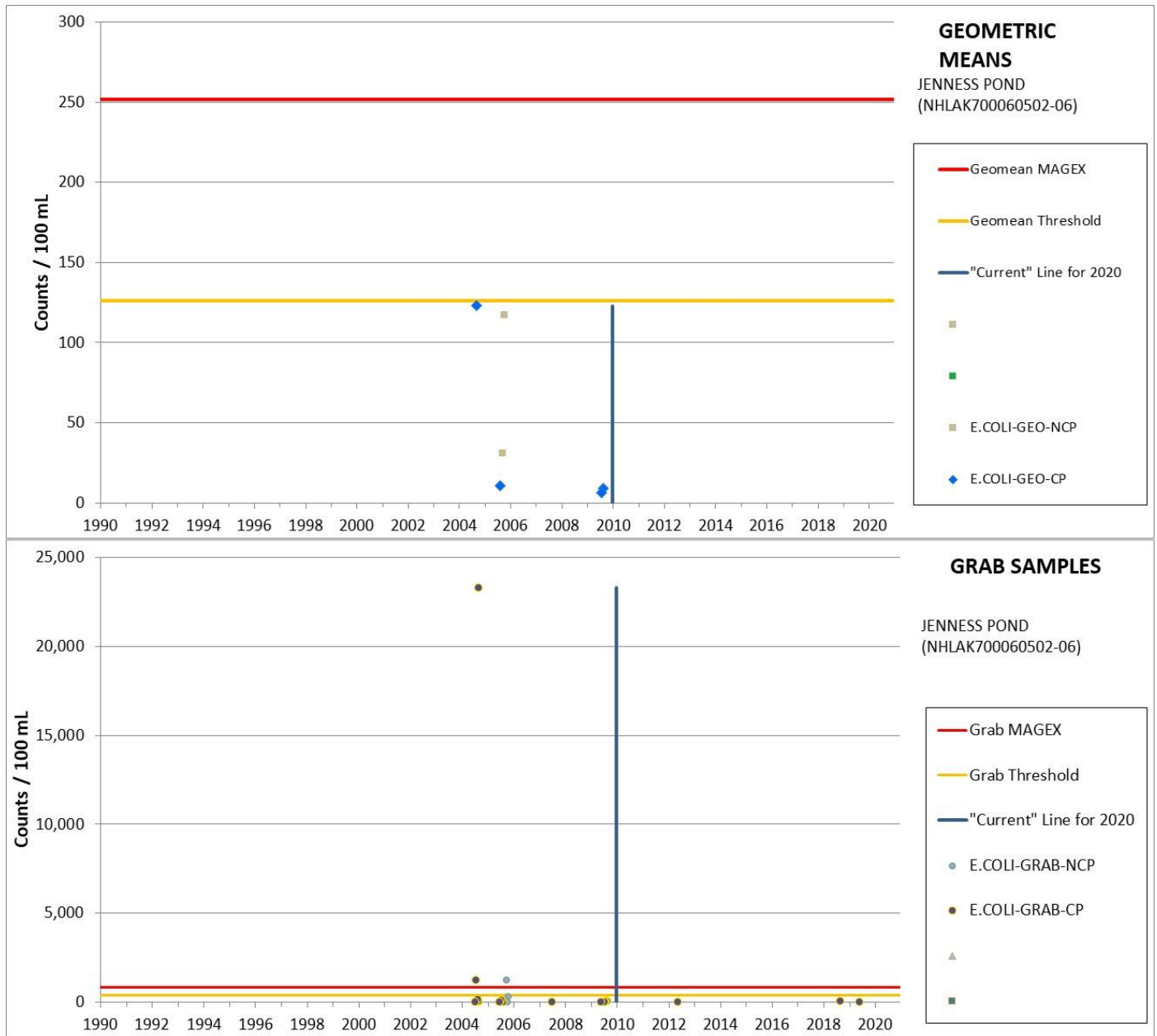


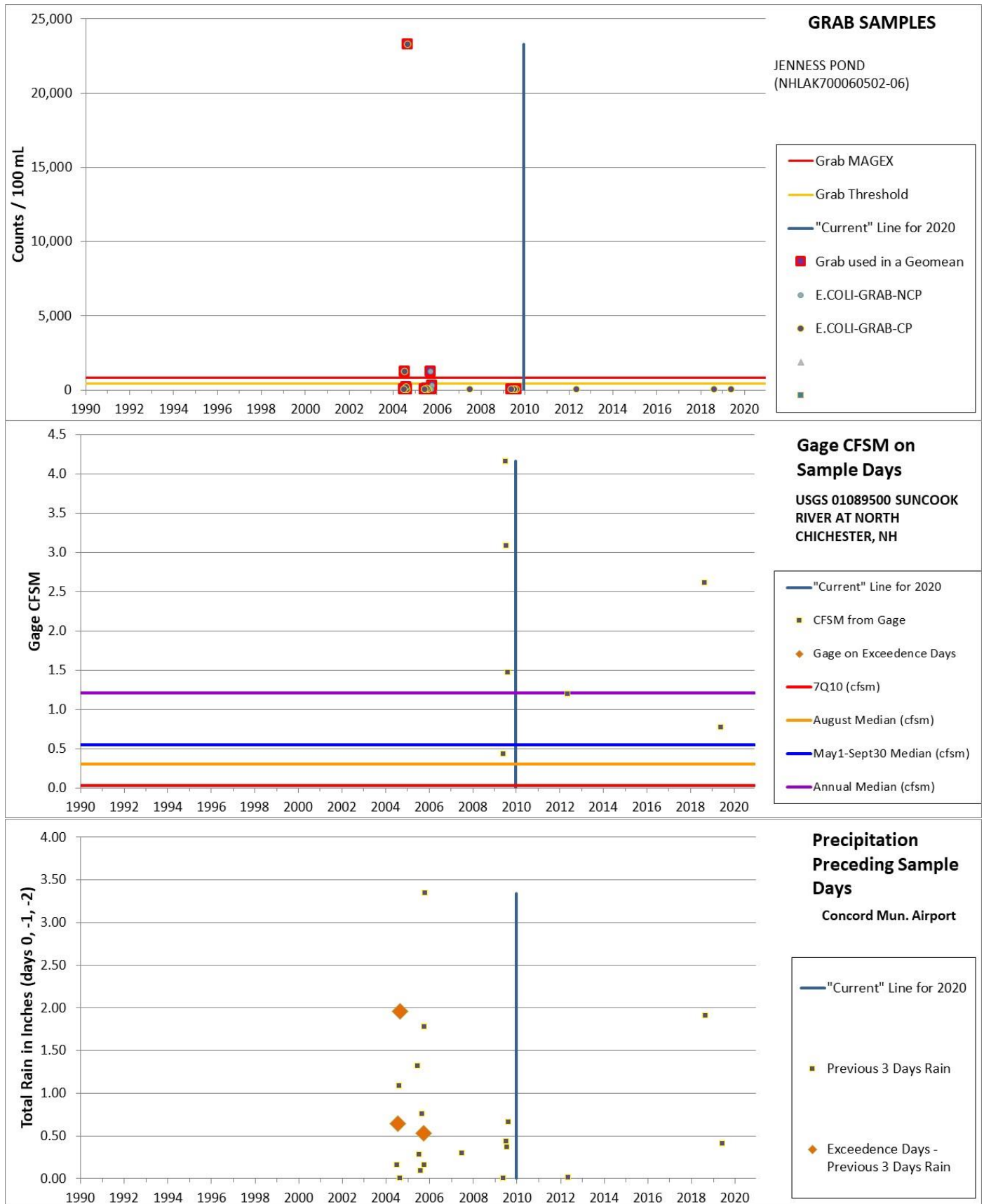


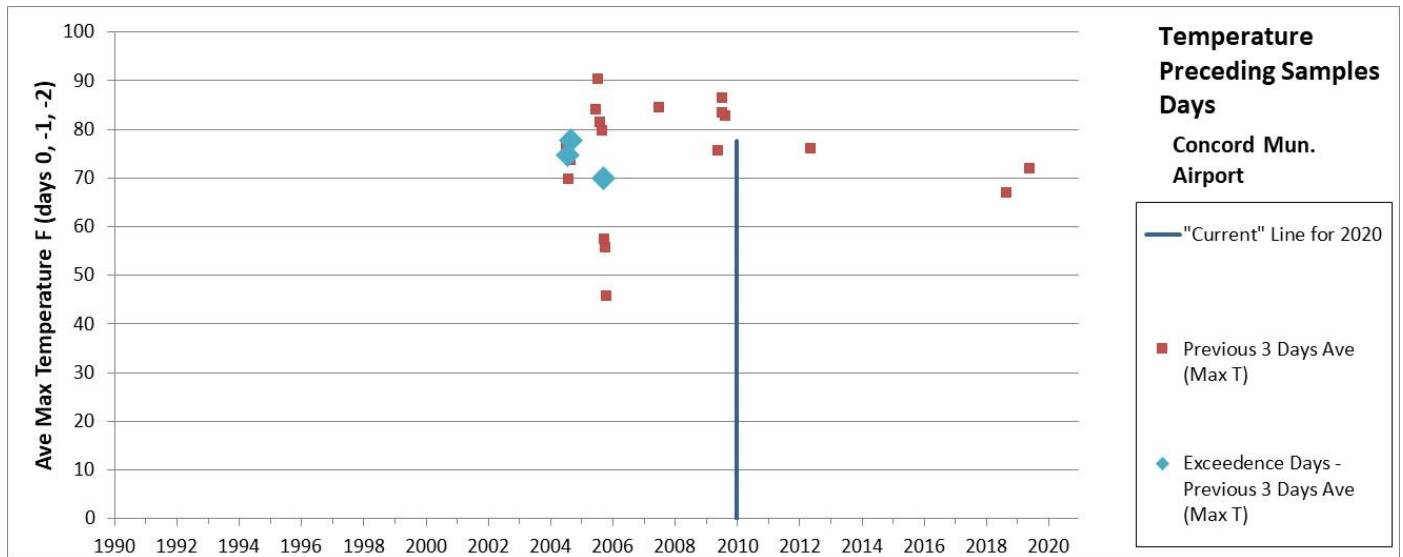
JENNESS POND (NHLAK700060502-06)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
JENNESS POND	NHLAK700060502-06	Escherichia coli	NORTHWOOD, PITTSFIELD	4A-P	2-M

There were no geometric means able to be calculated in the current assessment period, and there were no grab samples collected at stations 1272-PS004 and JENNORHF during the current assessment period that were above the single sample threshold (406 cts/100 ml). Jenness Pond was originally impairment based on elevated bacteria samples collected at station 1272-PS004 as part of a complaint investigation of a horse paddock situated along a tributary flowing into the pond. As part of the investigation NHDES staff targeted wet weather sampling, which resulted in samples with bacteria levels that exceeded the threshold (406 cts/100 ml) resulting in impairment during the 2006 cycle. Follow-up investigations conducted by NHDES staff in 2018 revealed that the horse paddock was no longer active and there were no horses present on the property. Samples collected in 2018 and 2019 under similar hydrological and meteorological conditions as those that resulted in the original impairment showed that bacteria concentrations never exceeded 30 cts/100 mL of E coli at site 1272-PS004. In response to the removal of the horse paddock and the low bacteria levels observed in recent years, Jenness Pond (NHLAK700060502-06) has been moved from 4A-P to 2-M for Escherichia coli for the primary contact recreation designated use based on the data collected in the current assessment period.



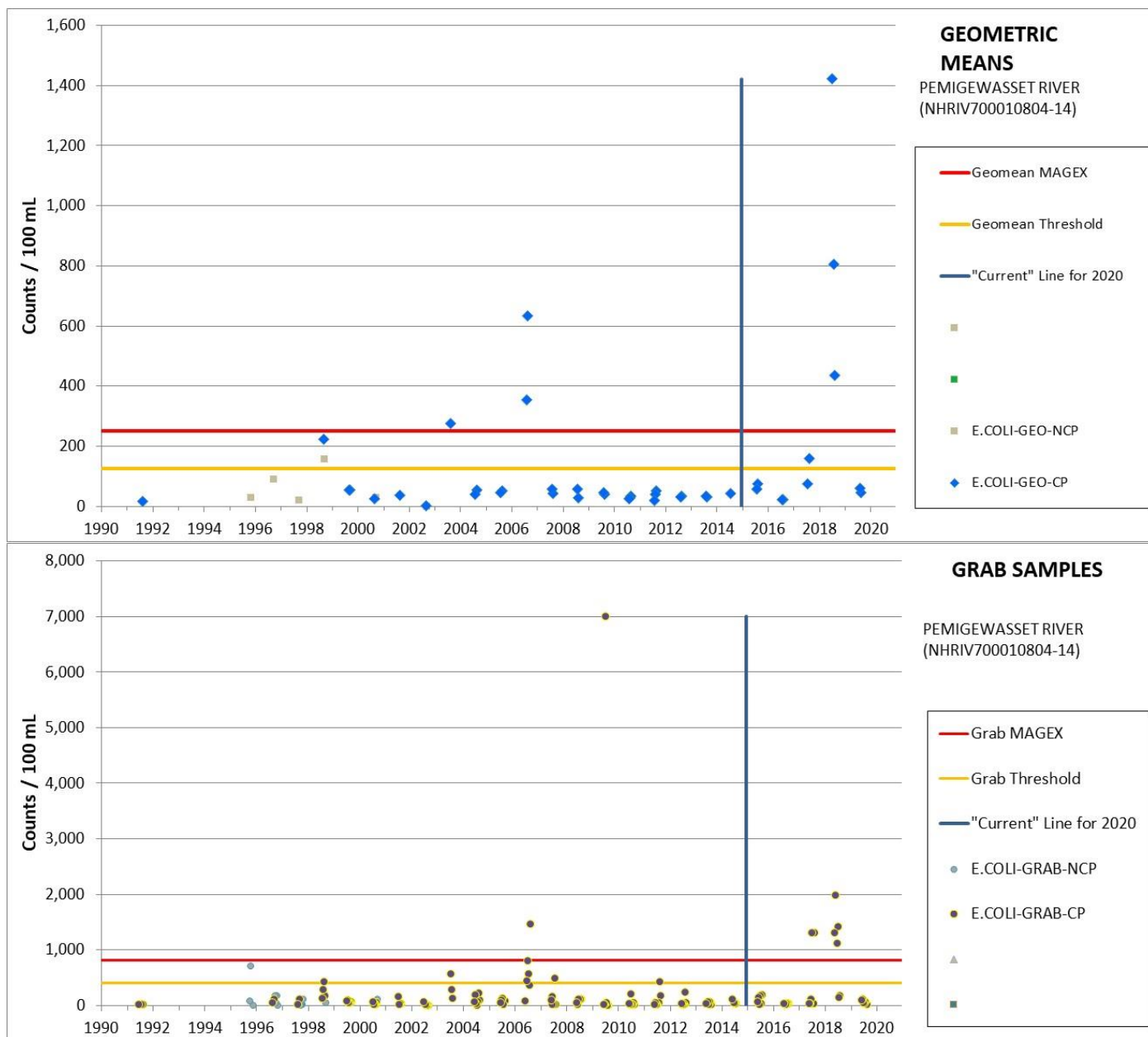


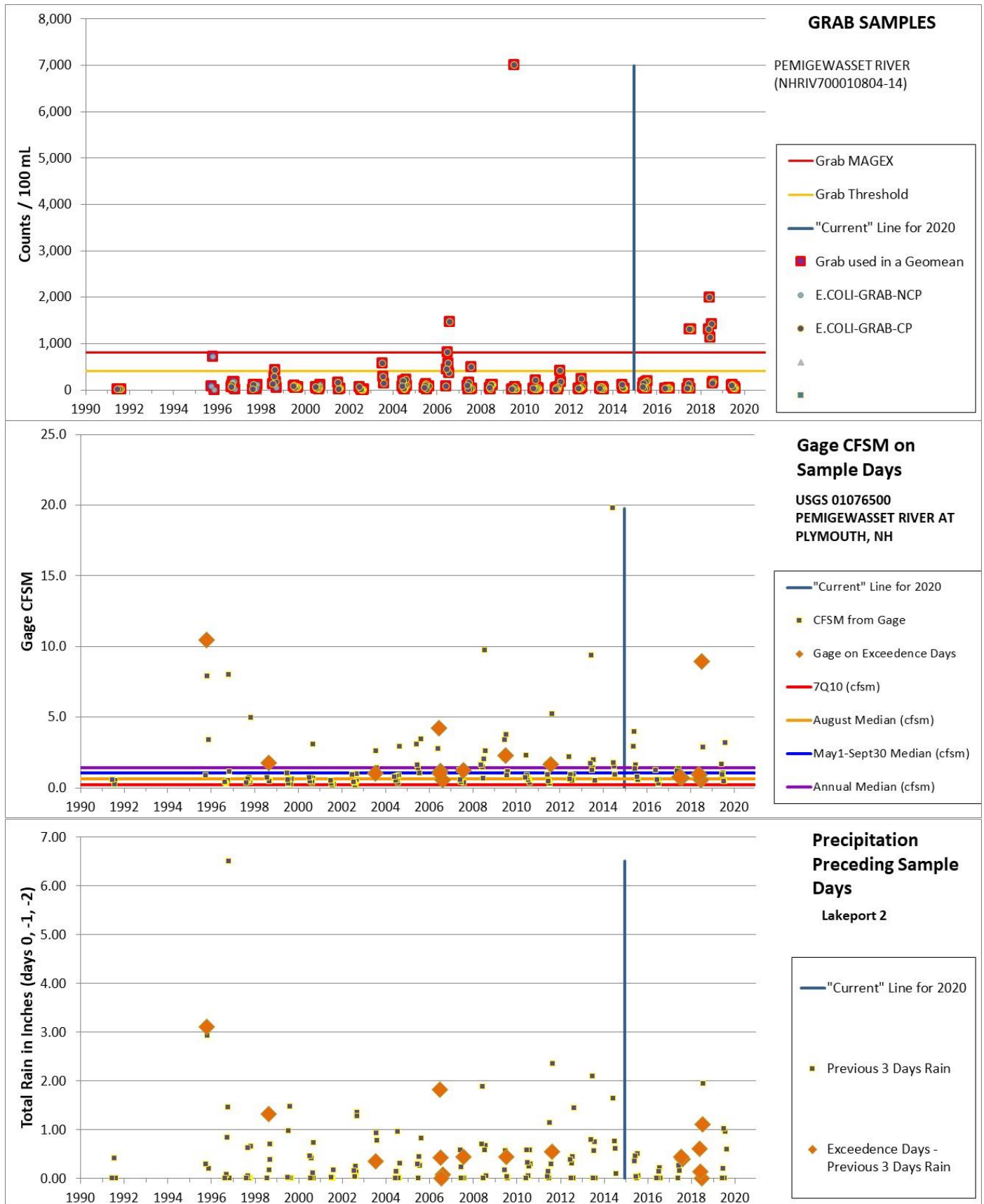


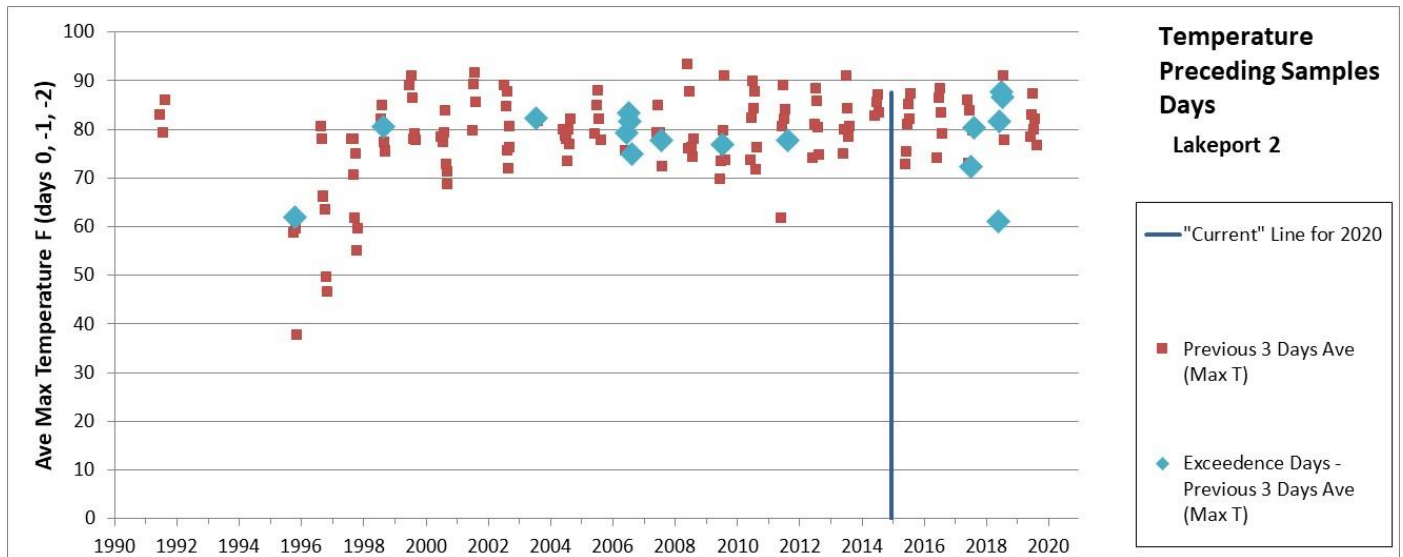
PEMIGEWASSET RIVER (NHRIV700010804-14)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
PEMIGEWASSET RIVER	NHRIV700010804-14	Escherichia coli	FRANKLIN	2-M	2-M

Four of 11 (36%) geomeans in the current assessment period (2015-2020) were above the geometric mean threshold (126 cts/100 ml), with three of those geomeans also above the geometric mean MAGEX threshold (252 cts/100 ml). Six of 29 (21%) grab samples collected at station UMMP-01 during the current assessment period were above the single sample threshold (406 cts/100 ml) and above the single sample MAGEX threshold (812 cts/100 ml). Normally this would have resulted in a new impairment to the Pemigewasset River during the 2020/2022 cycle. However, NHDES reached out to the Upper Merrimack River Local Advisory Committee (UMERLAC) during their evaluation period, as this was one of their Upper Merrimack Monitoring Program sampling locations, to see if they had noticed anything during their sampling efforts. The UMERLAC noted that they started noticing elevated bacteria levels in the second half of their 2017 sampling season, with concentrations of >1,299 cts/100 ml on 7/27/17 and 8/24/17. The UMERLAC continued to see high bacteria levels at the start of their 2018 sampling season, which prompted them to reach out to the City of Franklin. After investigations the City informed the UMERLAC that they had a clogged sewer line that was backing up into the storm drain system and discharging into the Pemigewasset River. The clog was removed and bacteria levels returned to normal levels in August of 2018 (133.4 cts/100 ml on 8/9/18 and 172.3 cts/100 ml on 8/23/18). NHDES would like to commend the UMERLAC for their diligence in identifying a potential problem impacting the river and actively seeking a remedy. Without the efforts of the UMERLAC the issue could have persisted and would have certainly resulted in an impairment to the primary contact recreation designated use of the Pemigewasset River. It is for these reasons that NHDES has included this write-up in their 2020/2022 deimpairment document as recognition of UMERLAC's proactive steps to keep waters from becoming impaired. Consequently, the Pemigewasset River (NHRIV700010804-14) was able to be kept as category 2-M for Escherichia coli. for the primary contact recreation designated use for the 2020/2022 assessment cycle based on the information and efforts provided by the Upper Merrimack River Local Advisory Committee.





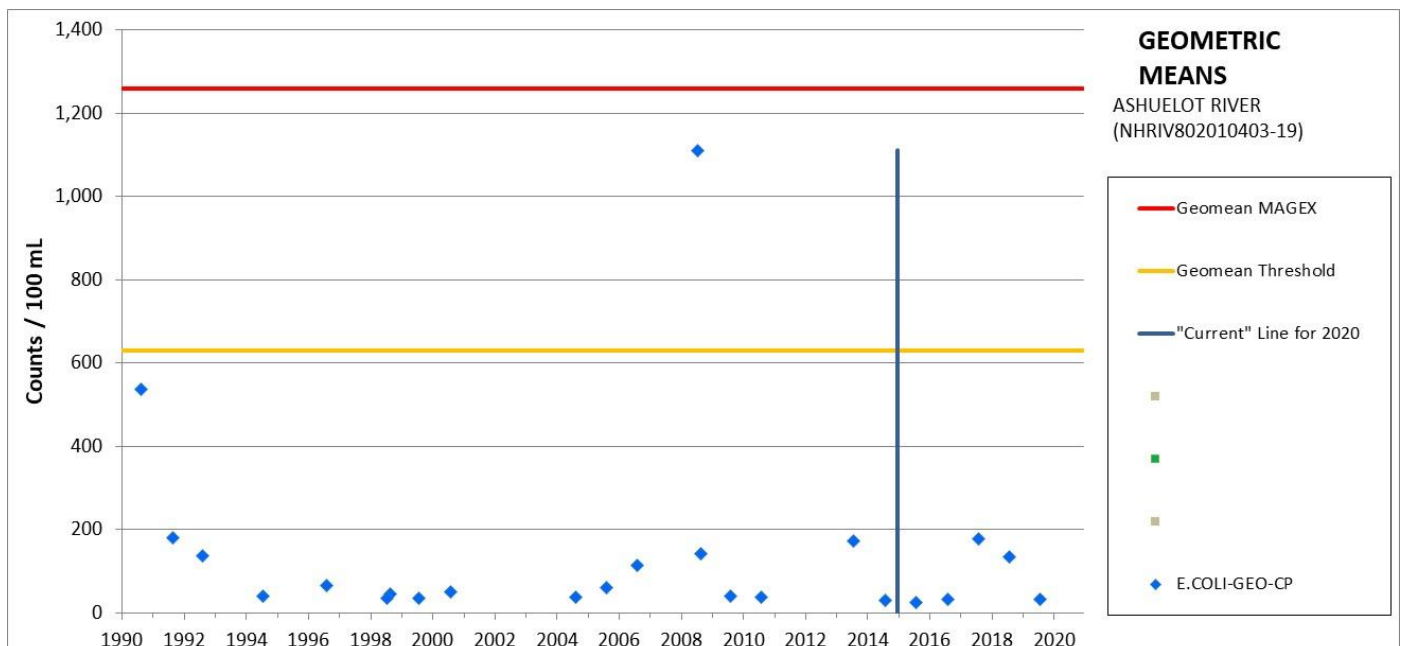


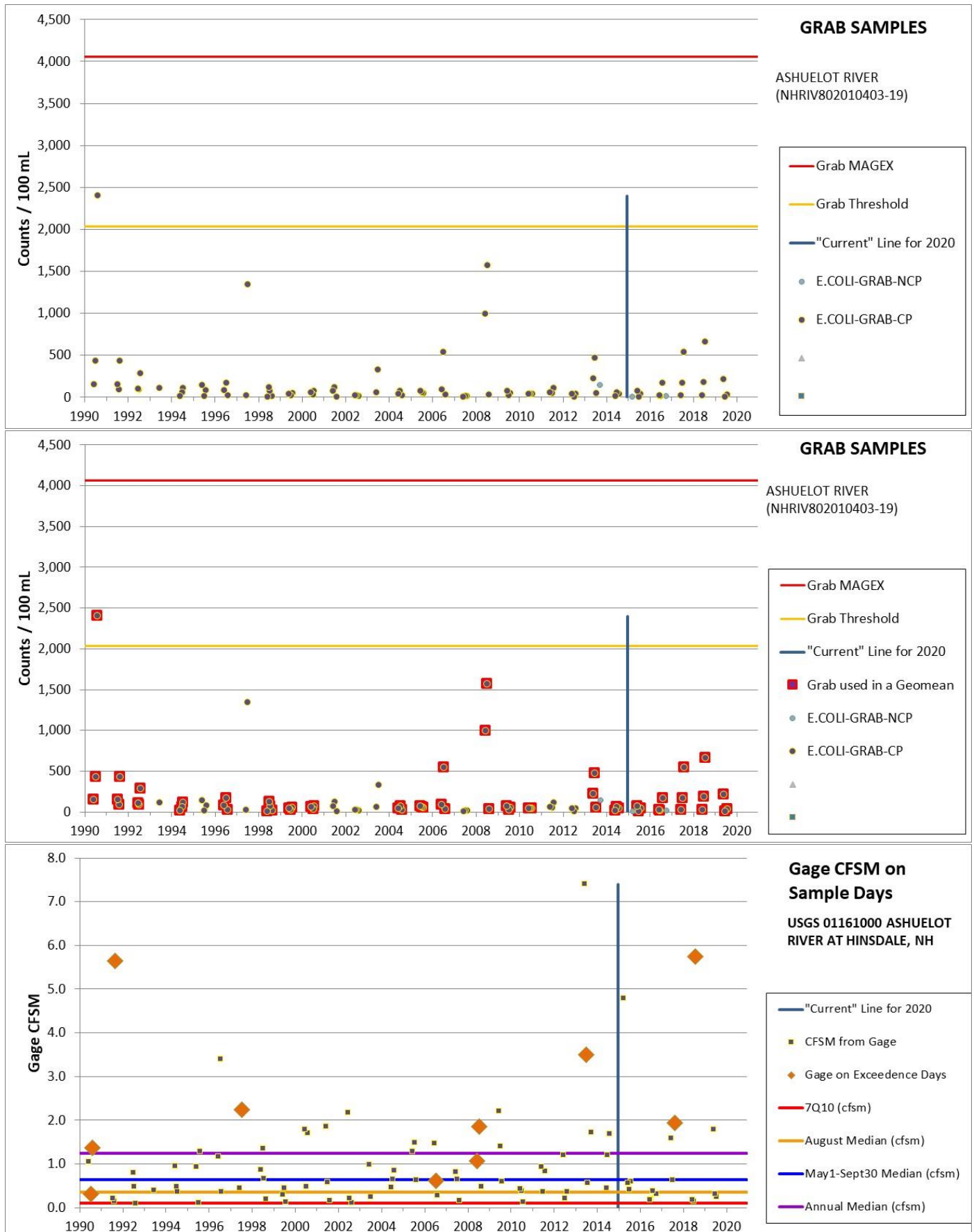
Bacteria for Secondary Contact Recreation (i.e. boating)

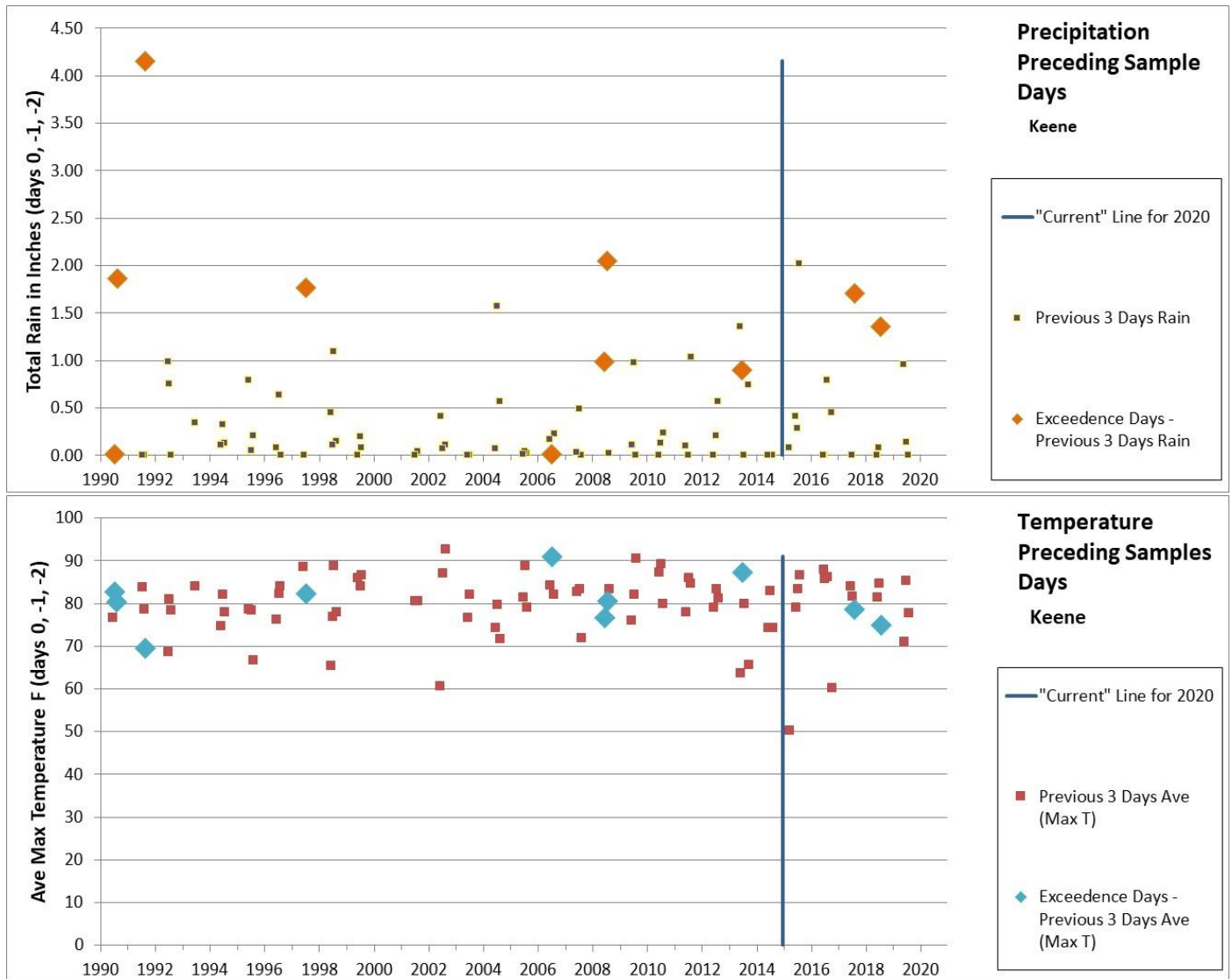
ASHUELOT RIVER (NHRIV802010403-19)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
ASHUELOT RIVER	NHRIV802010403-19	Escherichia coli	HINSDALE	4A-M	2-G

Zero of 5 geomeans in the current assessment period (2015-2020) were above the geometric mean threshold (630 cts/100 ml). Zero of the 17 grab samples collected at station 02-ASH during the current assessment period were above the single sample threshold (2,030 cts/100 ml). The samples collected in the current period were collected under similar meteorological and hydrological conditions as the historic samples that drove the initial impairment decision. Therefore, the Ashuelot River (NHRIV802010403-19) has been moved from 4A-M to 2-G for Escherichia coli for the secondary contact recreation designated use based on the data collected in the current assessment period.





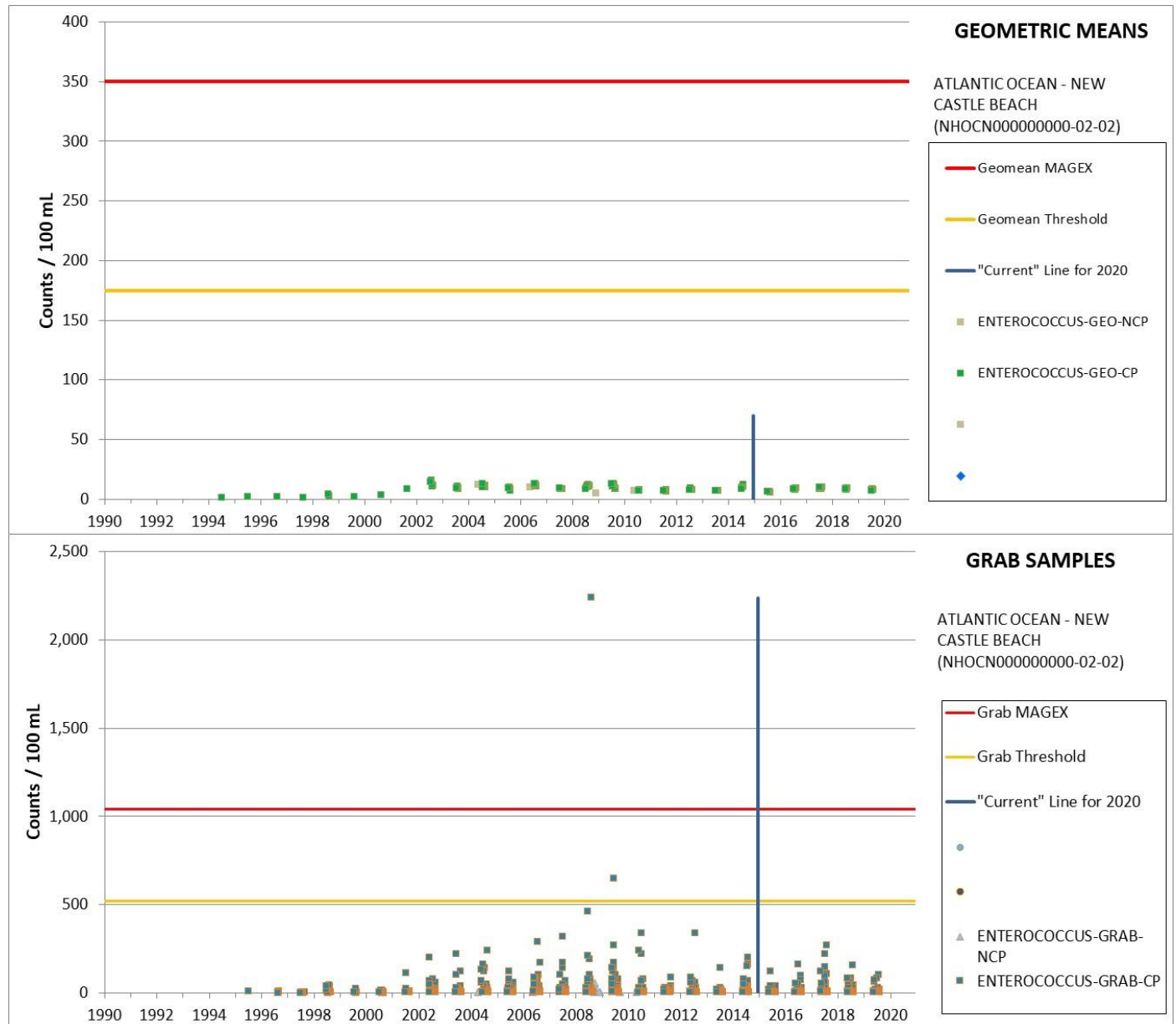


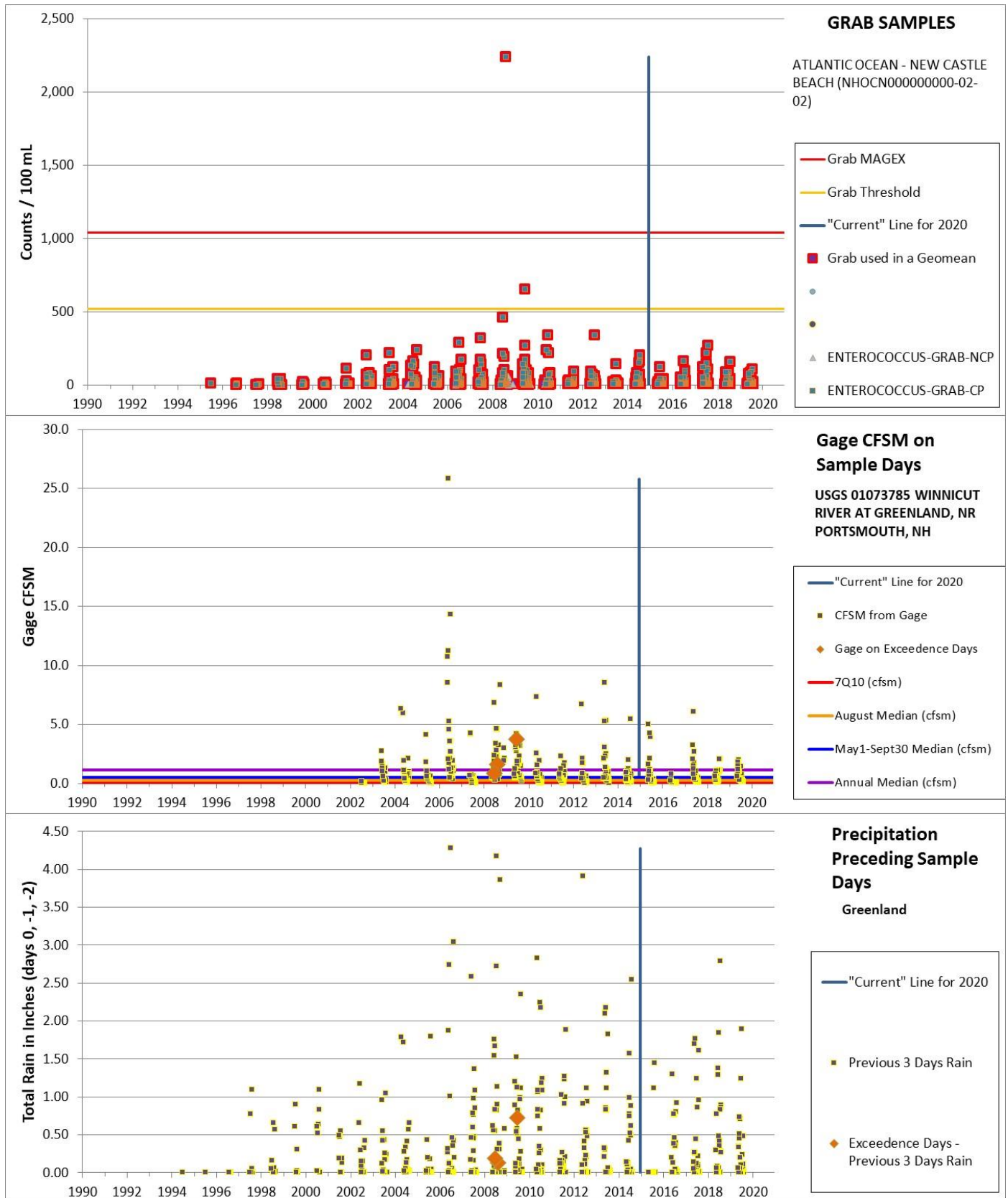
ATLANTIC OCEAN - NEW CASTLE BEACH (NHOCN000000000-02-02)

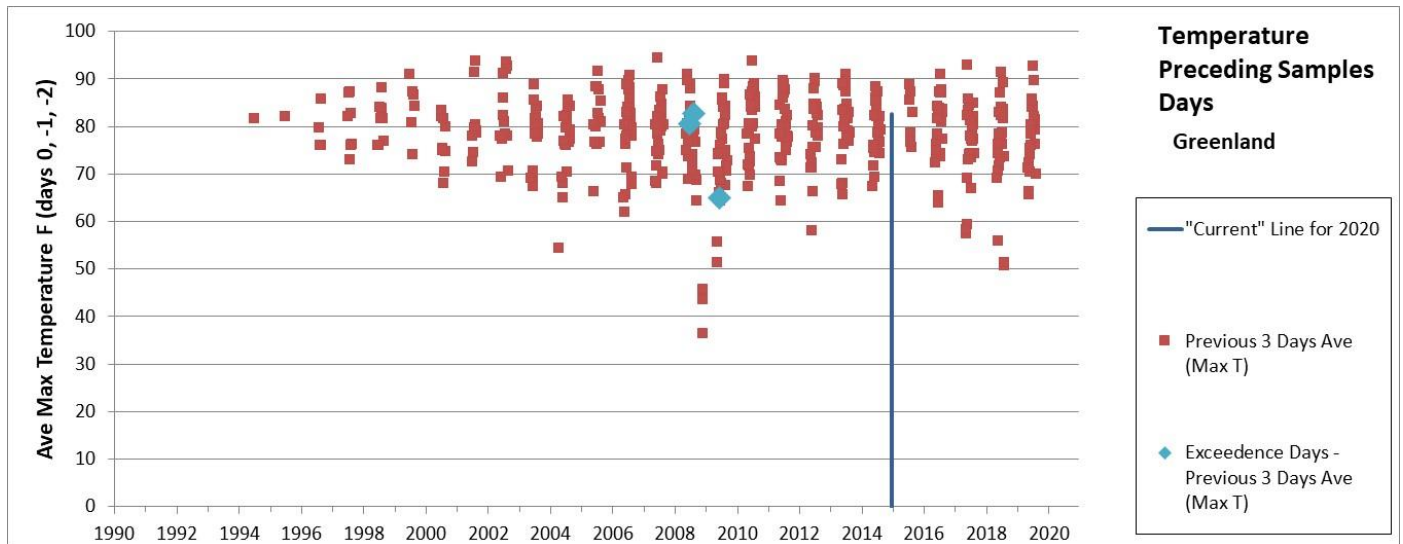
Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
ATLANTIC OCEAN - NEW CASTLE BEACH	NHOCN000000000-02-02	Enterococcus	NEW CASTLE	4A-M	2-M

There were no geomean exceedances in the current period (2015-2020) or the full record (1990-2020) for Atlantic Ocean - New Castle Beach (NHOCN000000000-02-02) for secondary contact recreation. Results for enterococci in recent years have been lower and no grab samples have exceeded the threshold for secondary contact. The historic non-supports, from 2008 and 2009, were taken following 3-day rainfall totals less than 0.75 inches and with average air temperatures between 65 and 80 degrees F. Newer data showing full support was taken during similar conditions and in greater numbers than the historical non-supports. The beach has had few intermittent exceedances for primary contact recreation as well, usually related to increased rain events. A population of geese has also been noted in the fields surrounding this beach during sampling events. Additionally, the Atlantic Ocean - New Castle Beach (NHOCN000000000-02-02) was originally impaired based upon high geometric means calculated from data collected in 2008 and 2009. The current CALM methodology used to calculate the geometric means has changed from that used to make the original impairment. The current CALM bundles all stations and grab samples to calculate the geometric mean because the AUID is meant to bundle stations that are relatively homogenous, which the previous CALM did not do. The Atlantic Ocean - New Castle

Beach (NHOCN000000000-02-02) has been moved from 4A-M to 2- M for secondary contact recreation based on data collected in the current assessment period.



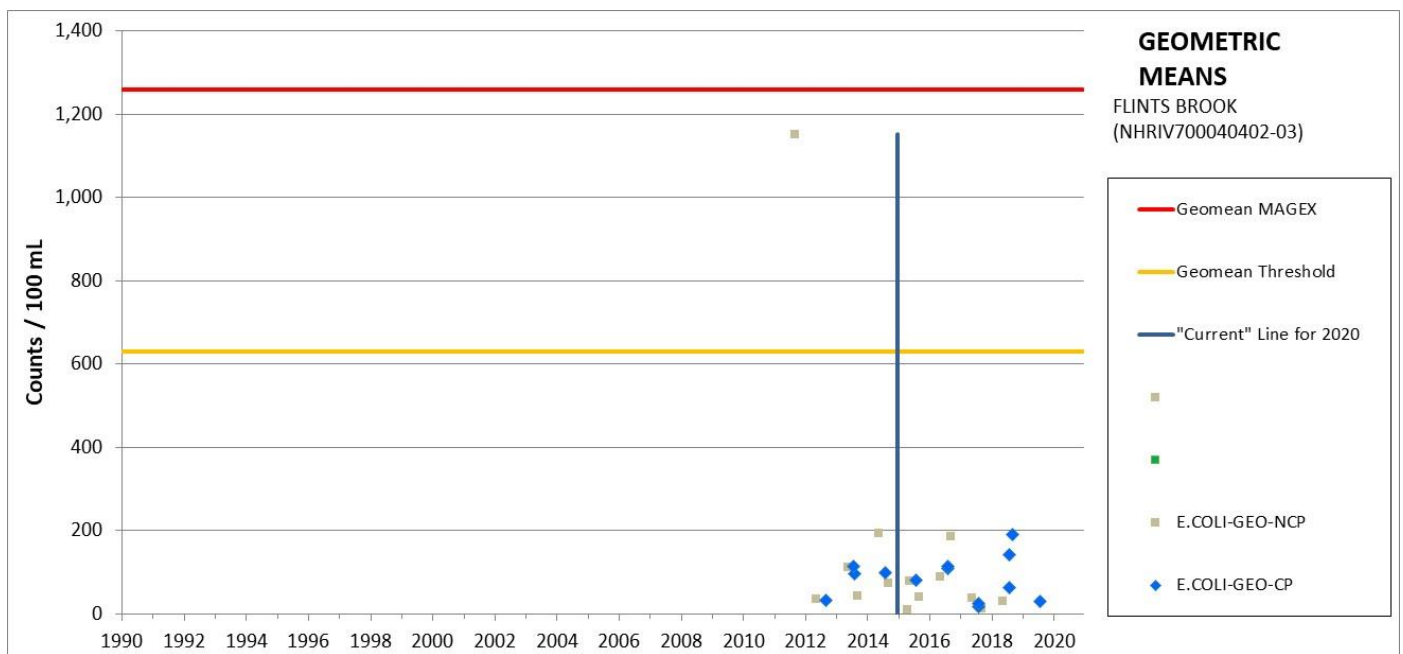


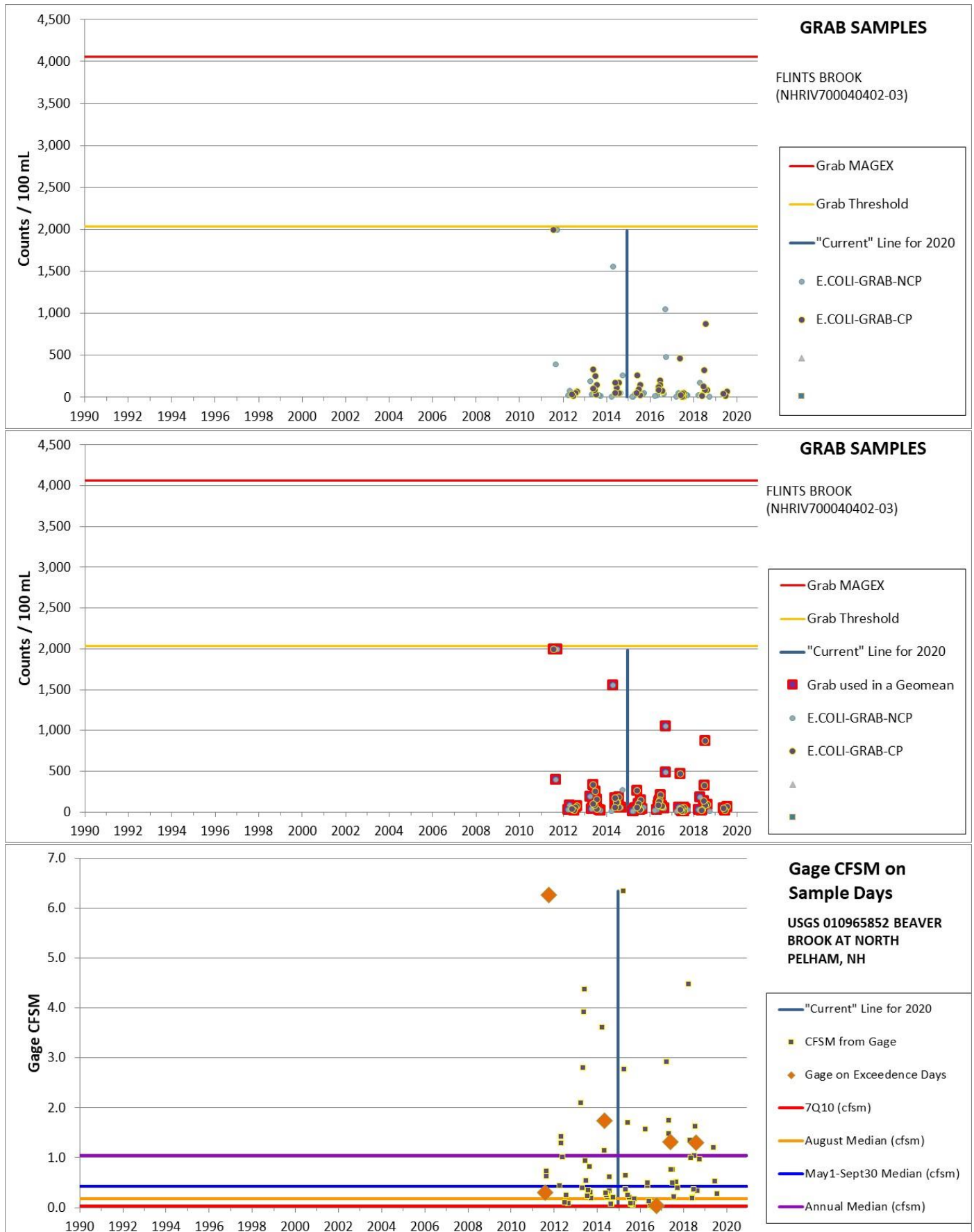


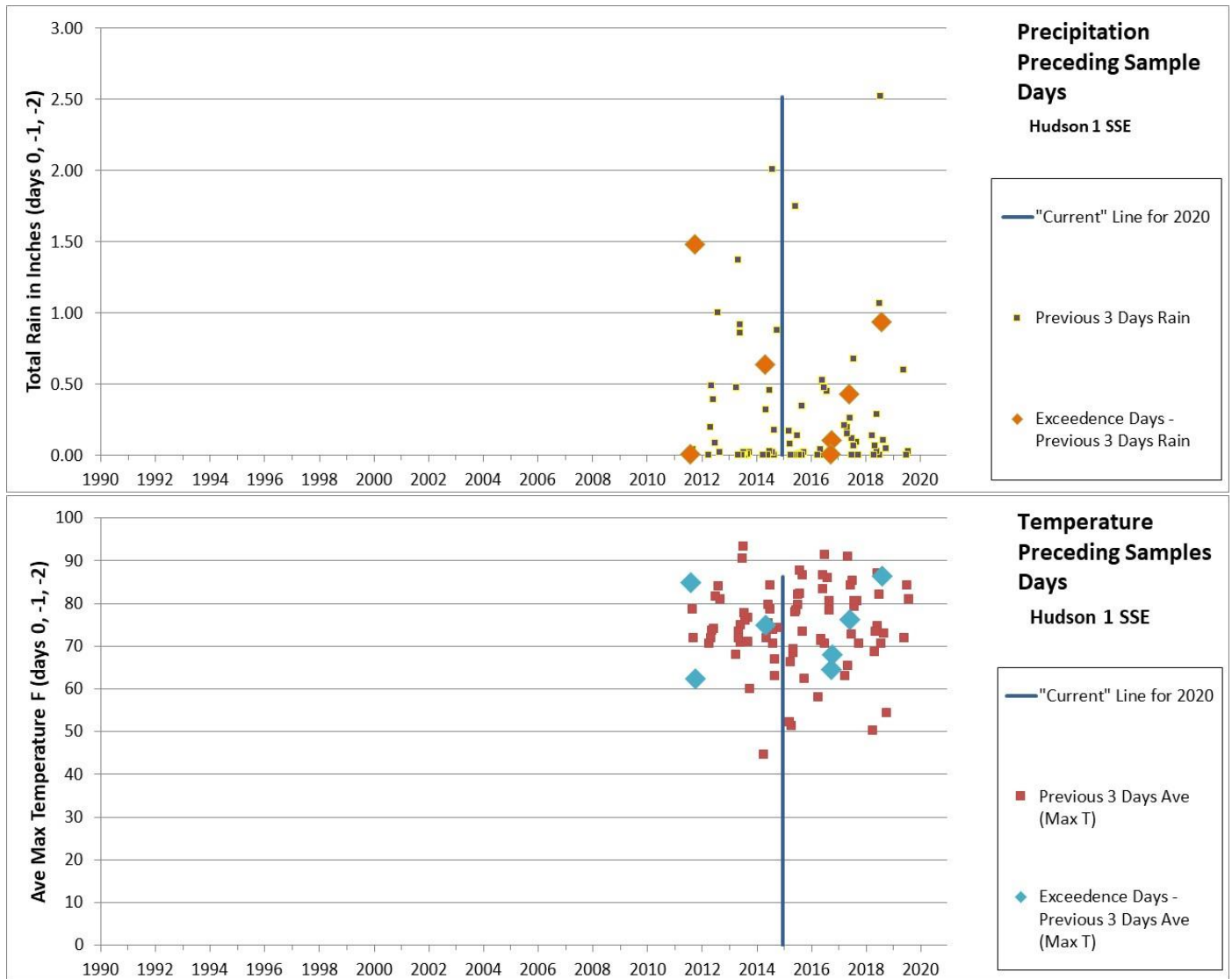
FLINTS BROOK (NHRIV700040402-03)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
FLINTS BROOK	NHRIV700040402-03	Escherichia coli	HOLLIS	4A-M	2-G

Zero of 17 geomeans in the current assessment period (2015-2020) were above the geometric mean threshold (630 cts/100 ml). Zero of the 45 grab samples collected at station 07-FLT during the current assessment period were above the single sample threshold (2,030 cts/100 ml). The samples collected in the current period were collected under similar meteorological and hydrological conditions as the historic samples that drove the initial impairment decision. Therefore, Flints Brook (NHRIV700040402-03) has been moved from 4A-M to 2-G for Escherichia coli for the secondary contact recreation designated use based on the data collected in the current assessment period.



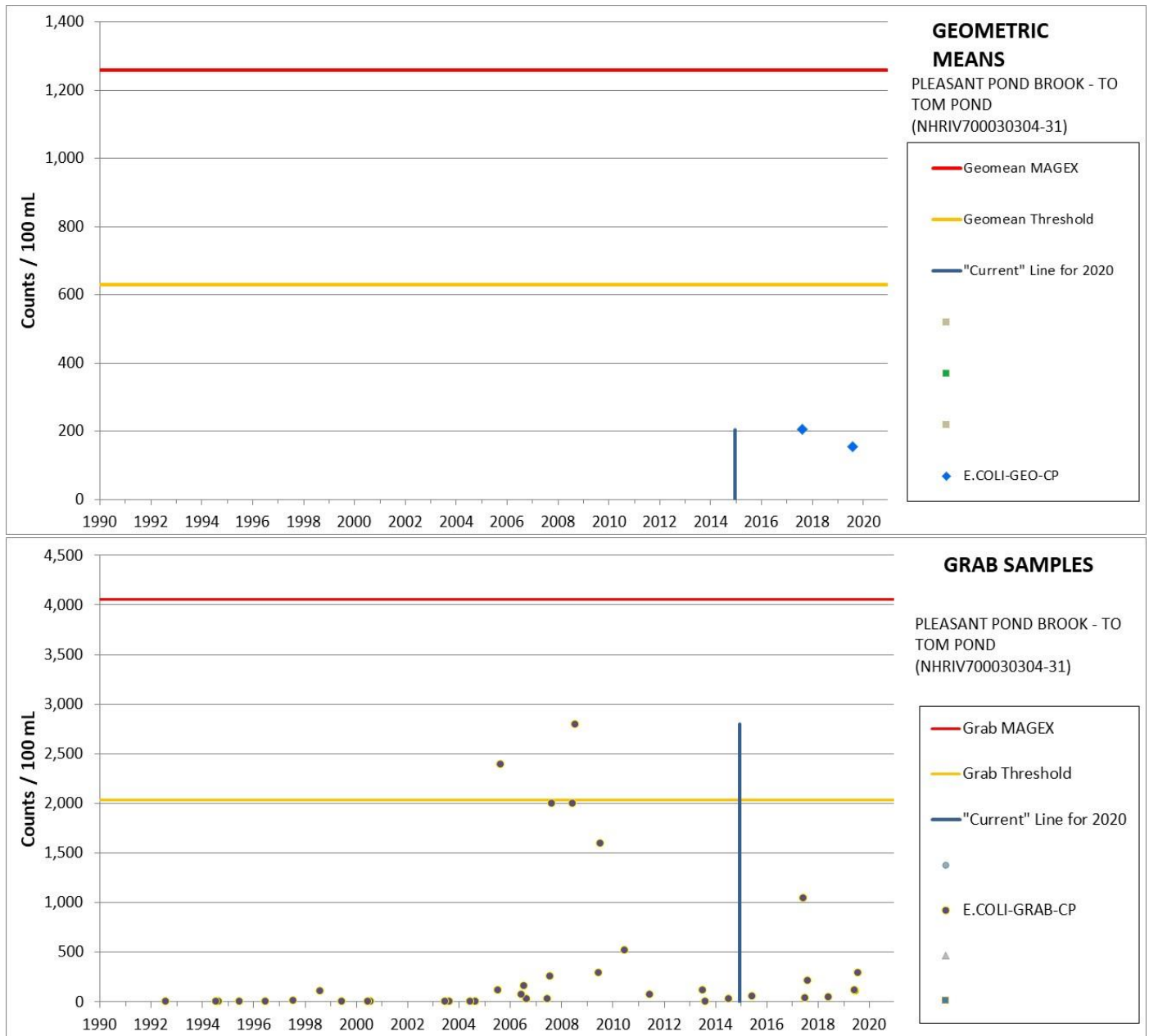


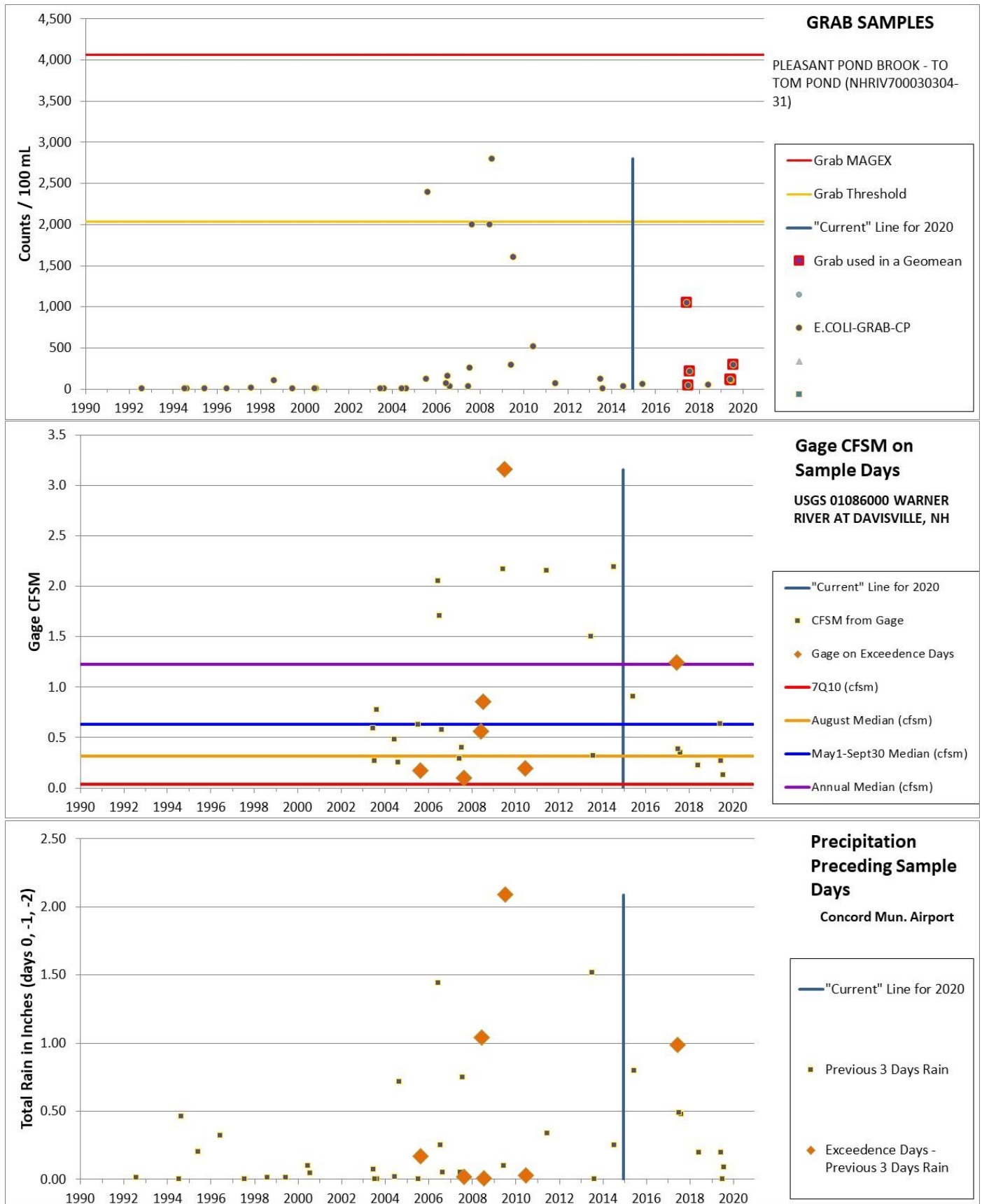


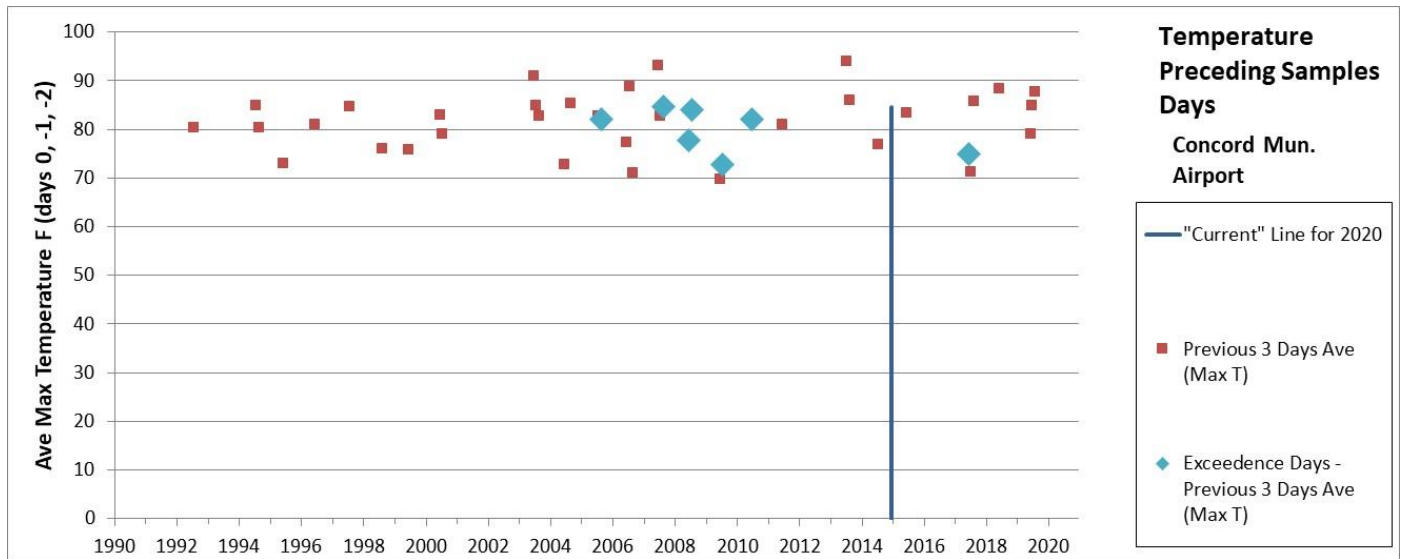
PLEASANT POND BROOK-TO TOM POND (NHRIV700030304-31)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
PLEASANT POND BROOK- TO TOM POND	NHRIV700030304-31	Escherichia coli	WARNER	4A-M	2-G

Zero of 2 geomeans in the current assessment period (2015-2020) were above the geometric mean threshold (630 cts/100 ml). Zero of the 8 grab samples collected at station TOMWRNI during the current assessment period were above the single sample threshold (2,030 cts/100 ml). The samples collected in the current period were collected under similar meteorological and hydrological conditions as the historic samples that drove the initial impairment decision. Therefore, Pleasant Pond Brook - to Tom Pond (NHRIV700030304-31) has been moved from 4A-M to 2-G for Escherichia coli for the secondary contact recreation designated use based on the data collected in the current assessment period.





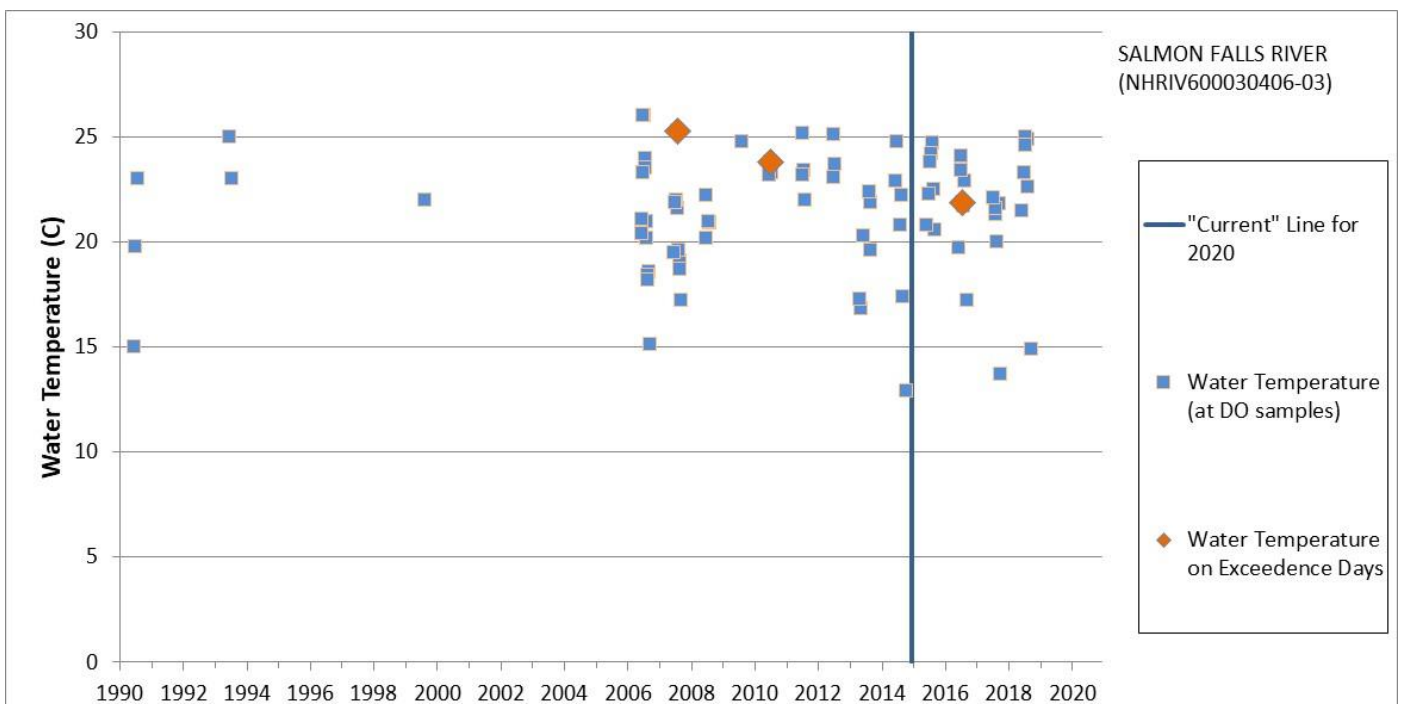
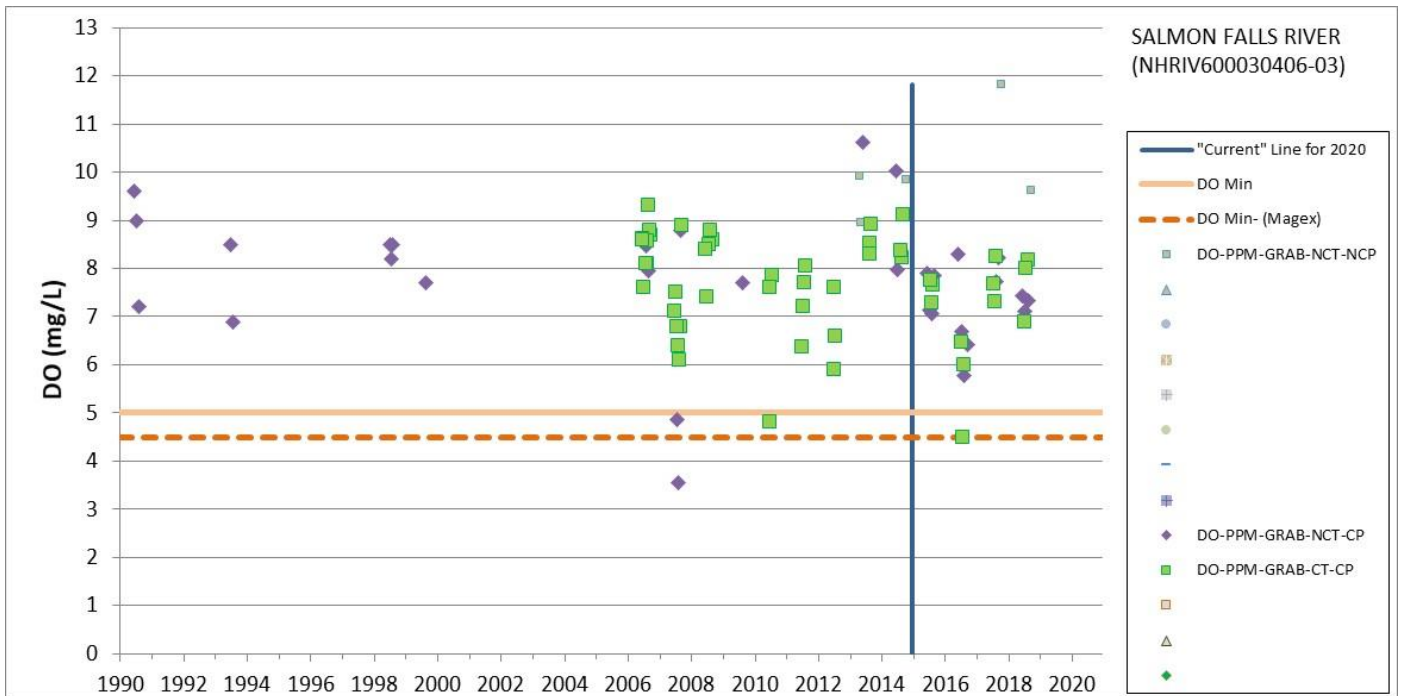


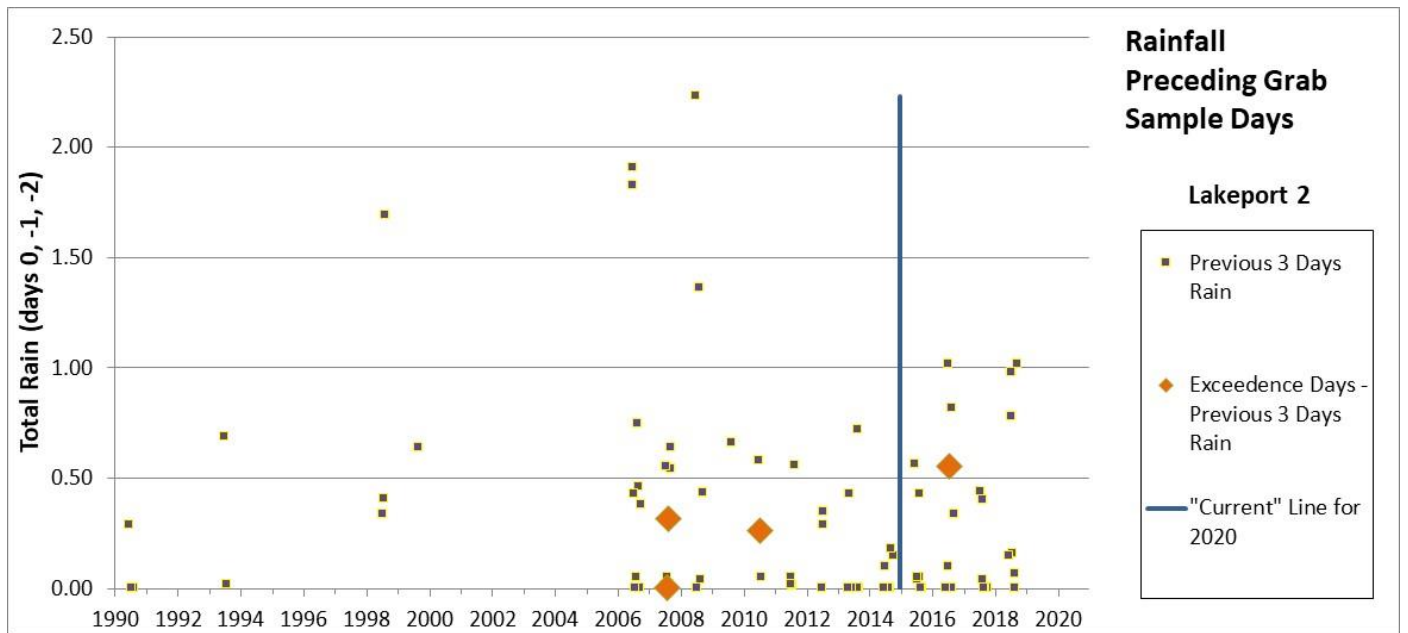
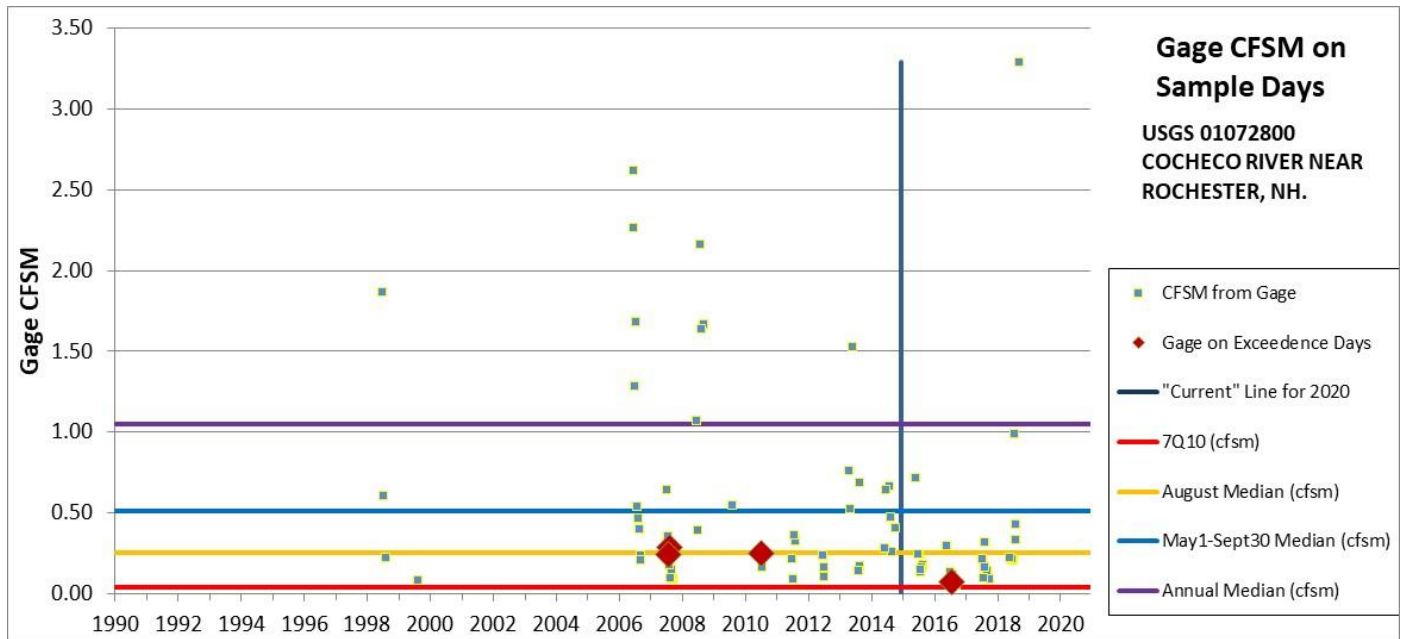
Dissolved Oxygen for Aquatic Life Integrity

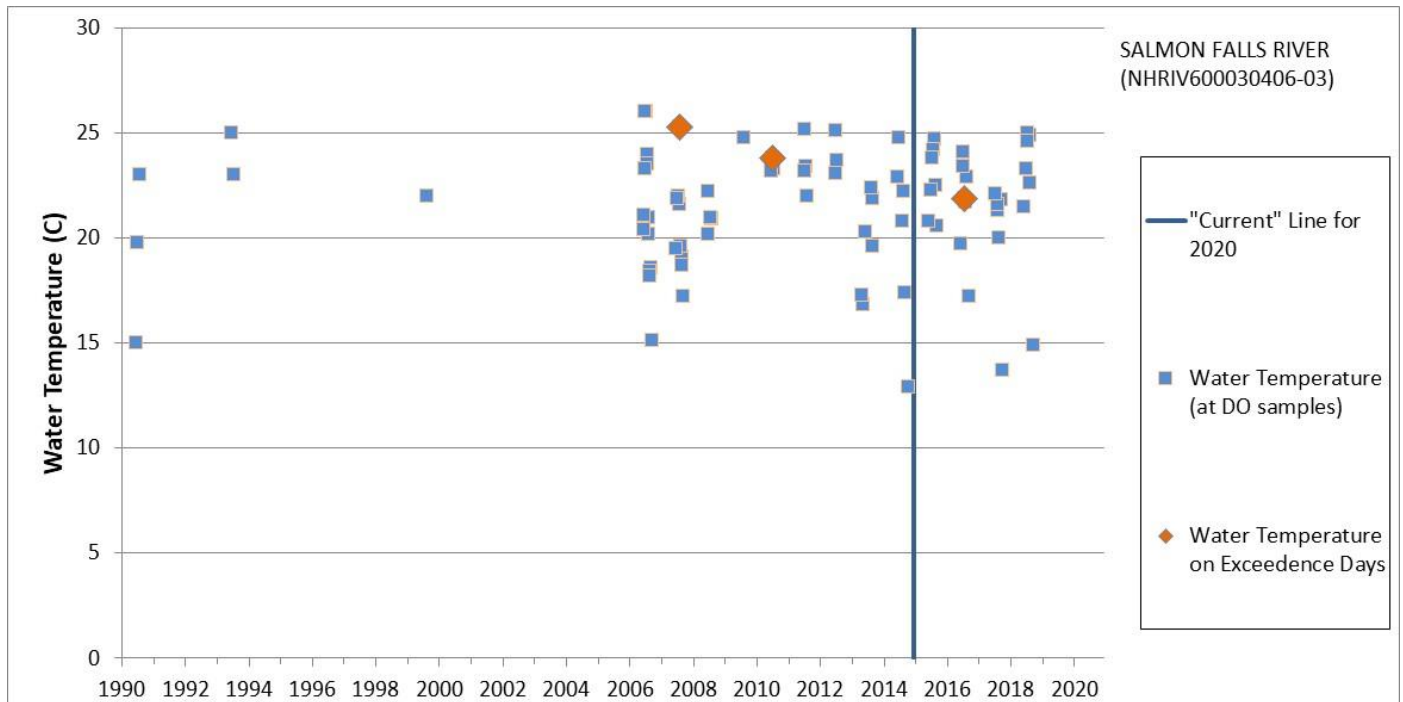
SALMON FALLS RIVER (NHRIV600030406-03)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
SALMON FALLS RIVER	NHRIV600030406-03	DISSOLVED OXYGEN (MG/L)	ROLLINSFORD, SOMERSWORTH	4A-P	2-M

The Salmon Fall River (NHRIV600030406-03) was originally listed at 4A-P during the 2008 assessment cycle using data collected at stations 08-SFR and SF-15. Since 1990, four of 87 (4.6%) grab samples collected at stations 08-SFR and SF-15 were below the dissolved oxygen threshold of 5 mg/L. The low dissolved oxygen samples were collected at flows ranging from 0.07-0.29 cfs on the Cocheco River gage (01072800), water temperatures ranging from 21.9-25.3 degrees C and three-day rainfall totals ranging from 0.00-0.55 inches. Two of the four samples were collected during the critical time and period while the other two were only collected during the critical period but not the critical time. In the current assessment period (2015-2020), only 1 of 27 (4%) grab samples collected at stations 08-SFR and SF-15 were below the dissolved oxygen threshold of 5 mg/L. The 27 dissolved oxygen samples were collected at a wide variety of flows ranging from 0.07-3.29 cfs on the Cocheco River gage (01072800), water temperatures ranging 13.7-25.0 degrees C, and three-day rainfall totals ranging from 0.00-1.02 inches. The current data was collected at the same stations and under similar hydrological and meteorological conditions as those that drove the initial impairment, which supports the delisting of the Salmon Falls River in the 2020/2022 cycle. The Salmon Fall River (NHRIV600030406-03) has been moved from 4A-P to 2-M for dissolved oxygen (mg/L) for the aquatic life integrity designated use based on data collected in the current assessment period.







Notes:

DO-PPM-GRAB-CT-CP = Grab samples of dissolved oxygen during the early morning hours of the summer critical period.

DO-PPM-GRAB-NCT-CP = Grab samples of dissolved oxygen not in the early morning hours of the summer critical period.

DO-PPM-GRAB-NCT-NCP = Grab samples of dissolved oxygen not in the early morning hours and outside the summer critical period.

"Current" Line for 2020 – Per the methodology outlined in the CALM, all data from this referenced data is considered "current" unless available older data is provided for context. See the 2020 CALM for addition details.

WWTFs No Longer 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.

One form of Category 4B is triggered when a wastewater treatment facility (WWTF) is currently in "significant non-compliance" of its NPDES permit (as defined by USEPA), or is on the "exceptions list" (i.e. facilities that are in significant non-compliance for two or more quarters), for one or more of its permitted water quality based pollutant effluent limits. Water quality based effluent limits are limits derived from modeling or dilution calculations to meet water quality standards.

AMMONOOSUC RIVER (NHRIV801030403-03)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
AMMONOOSUC RIVER	NHRIV801030403-03	BOD, Biochemical oxygen demand	BETHLEHEM	4B-T	3-PAS

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.

The 4B impairment of the Ammonoosuc River (NHRIV801030403-03) for the Aquatic Life Integrity designated use due to excess BOD has been removed. The Bethlehem WWTF is no longer in significant non-compliance, and the Ammonoosuc River has been placed in Category 3 (Insufficient Information).

BLOODS BROOK - UNNAMED BROOK (NHRIV801060301-05)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
BLOODS BROOK - UNNAMED BROOK	NHRIV801060301-05	COPPER	PLAINFIELD	4B-T	3-PAS

The Meriden Village Water District (MVWD) WWTF was in violation of its NPDES permit (effective September 1, 2014) in November/December 2016, January thru April, August and November 2017 and January and March 2018 for effluent copper monthly average concentration limit violations. The facility has intermittently been in "significant non-compliance" for exceeding its effluent copper monthly average concentration limits in excess of 20% 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. On July 21, 2017 MVWD was issued a 2-year temporary groundwater discharge permit to pilot test RIBs located at the same site as the WWTF. Additionally, EPA CWA-AOC-01-18-07 became effective as of 5/1/2018. Among the AOC milestones is the continuation of the groundwater feasibility study, identifying and removing I/I in the collection system and interim limits for phosphorus, ammonia nitrogen as N and copper. The permittee has had success in no NPDES discharge monitoring periods (9 out of 17 reviewed months) under NPDES and continues to work on I/I to accommodate GW discharge.

The 4B impairment of Bloods Brook (NHRIV801060301-05) for the Aquatic Life Integrity designated use due to excess copper has been removed. The Meriden Village Water District WWTF is no longer in significant non-compliance, and Bloods Brook has been placed in Category 3 (Insufficient Information).

BLOODS BROOK - UNNAMED BROOK (NHRIV801060301-05)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
BLOODS BROOK - UNNAMED BROOK	NHRIV801060301-05	PHOSPHORUS (TOTAL)	PLAINFIELD	4B-T	3-PAS

The Meriden Village Water District (MVWD) WWTF was in violation of its NPDES permit (effective September 1, 2014) in July thru October 2016, April thru October 2017 for effluent phosphorous monthly average load limit violations. The facility has intermittently been in "significant non-compliance" for exceeding its effluent phosphorous monthly average loading 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. On July 21, 2017 MVWD was issued a 2-year temporary groundwater discharge permit to pilot test RIBs located at the same site as the WWTF. Additionally, EPA CWA-AOC-01-18-07 became effective as of 5/1/2018. Among the AOC milestones is the continuation of the groundwater feasibility study, identifying and removing I/I in the collection system and interim limits for phosphorus, ammonia nitrogen as N and copper. The permittee has had success in no NPDES discharge monitoring periods (9 out of 17 reviewed months) under NPDES and continues to work on I/I to accommodate GW discharge.

The 4B impairment of Bloods Brook (NHRIV801060301-05) for the Aquatic Life Integrity designated use due to excess phosphorus has been removed. The Meriden Village Water District WWTF is no longer in significant non-compliance, and Bloods Brook has been placed in Category 3 (Insufficient Information).

CONTOOCOOK RIVER - US OF PETERBOROUGH WWTF TO BOGLIE BK (NHRIV700030104-18)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
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CONTOOCCOOK RIVER - US OF PETERBOROUGH WWTF TO BOGLIE BK	NHRIV700030104-18	ALUMINUM	PETERBOROUGH	4B-T	3-PAS
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The Peterborough WWTF was in violation of its NPDES permit (effective December 1, 2016) in January thru March 2017 for effluent aluminum monthly average concentration limit violations. The facility was in "significant non-compliance" for exceeding its aluminum daily maximum concentration limits in excess of 20% for at least two months during two consecutive quarter review periods. The permittee continues to work through the NPDES permit compliance schedule milestones for lead with a final deadline of 12/1/2020.

The 4B impairment of the Contoocook River (NHRIV700030104-18) for the Aquatic Life Integrity designated use due to excess aluminum has been removed. The Peterborough WWTF is no longer in significant non-compliance, and the Contoocook River has been placed in Category 3 (Insufficient Information).

CONTOOCCOOK RIVER - US OF PETERBOROUGH WWTF TO BOGLIE BK (NHRIV700030104-18)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
CONTOOCCOOK RIVER - US OF PETERBOROUGH WWTF TO BOGLIE BK	NHRIV700030104-18	Total Suspended Solids (TSS)	PETERBOROUGH	4B-T	3-PAS

The Peterborough WWTF was in violation of its NPDES permit (effective December 1, 2016) in December 2016 and January and February 2017 for effluent TSS daily maximum concentration limit violations. The facility was in "significant non-compliance" for exceeding its TSS daily maximum concentration limits in excess of 40% for at least two months during two consecutive quarter review periods. The permittee continues to work through the NPDES permit compliance schedule milestones for lead with a final deadline of 12/1/2020.

The 4B impairment of the Contoocook River (NHRIV700030104-18) for the Aquatic Life Integrity designated use due to excess Total Suspended Solids (TSS) has been removed. The Peterborough WWTF is no longer in significant non-compliance, and the Contoocook River has been placed in Category 3 (Insufficient Information).

JOHNS RIVER - CHASE BROOK (NHRIV801030102-08)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
JOHNS RIVER - CHASE BROOK	NHRIV801030102-08	ALUMINUM	DALTON, WHITEFIELD	4B-T	3-PAS

The Whitefield WWTF was in violation of its NPDES permit (effective December 1, 2014) in November/December 2016, April thru July 2017 and May/June 2018 for effluent aluminum monthly average concentration limit violations. The facility has intermittently been in "significant non-compliance" for exceeding its effluent aluminum 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 CWA-AO-R01-FY19-04 effective as of 11/14/2018 with interim concentration limits for TSS, TP, aluminum & copper.

The 4B impairment of Johns River - Chase Brook (NHRIV801030102-08) for the Aquatic Life Integrity designated use due to excess aluminum has been removed. The Whitefield WWTF is no longer in significant non-compliance, and Johns River - Chase Brook has been placed in Category 3 (Insufficient Information).

JOHNS RIVER - CHASE BROOK (NHRIV801030102-08)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
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JOHNS RIVER - CHASE BROOK	NHRIV801030102-08	BOD, Biochemical oxygen demand	DALTON, WHITEFIELD	4B-T	3-PAS
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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 percent 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.

The 4B impairment of Johns River - Chase Brook (NHRIV801030102-08) for the Aquatic Life Integrity designated use due to excess BOD has been removed. The Whitefield WWTF is no longer in significant non-compliance, and Johns River - Chase Brook has been placed in Category 3 (Insufficient Information).

JOHNS RIVER - CHASE BROOK (NHRIV801030102-08)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
JOHNS RIVER - CHASE BROOK	NHRIV801030102-08	COPPER	DALTON, WHITEFIELD	4B-T	3-PAS

The Whitefield WWTF was in violation of its NPDES permit (effective December 1, 2014) December 2017 and January thru June 2018 for effluent copper monthly average concentration limit violations; in violation April/May 2018 for effluent copper daily maximum concentrations. The facility has intermittently been in "significant non-compliance" for exceeding its effluent copper monthly average and daily maximum concentration limits in excess of 20% 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. EPA issued CWA-AO-R01-FY19-04 effective as of 11/14/2018 with interim concentration limits for TSS, TP, aluminum & copper.

The 4B impairment of Johns River - Chase Brook (NHRIV801030102-08) for the Aquatic Life Integrity designated use due to excess copper has been removed. The Whitefield WWTF is no longer in significant non-compliance, and Johns River - Chase Brook has been placed in Category 3 (Insufficient Information).

LAMPREY RIVER (NHRIV600030703-18)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
LAMPREY RIVER	NHRIV600030703-18	AMMONIA (TOTAL)	EPPING	4B-T	3-PAS

The Epping WWTF was in violation of its NPDES permit (effective April 1, 2000) in, December 2016, January (concentration only), February, March, April, June, July (concentration only) and October 2017 and March (concentration only) 2018 for effluent ammonia-nitrogen as nitrogen daily maximum concentration and load limit violations; in December 2016 (concentration only), and January (concentration only), February, March, April, July (concentration only) and October (concentration only) 2017 for effluent ammonia-nitrogen as nitrogen monthly average concentration and load limit violations. The facility was intermittently in "significant non-compliance" with its NPDES permit for exceeding its effluent ammonia-nitrogen as nitrogen daily maximum and monthly average concentration and load 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. Due to Epping's compliance history EPA issued Order for Compliance CWA-AO-R01-FY-16-07 dated June 9, 2016 requiring Epping to procure the services of a licensed professional engineer with biological nutrient removal expertise to evaluate Epping's

WWTF and make recommendations for improvements to ensure compliance with its NPDES permit limits. The permittee was most recently granted an extension to 7/31/2019 to construct a septage receiving facility and cease all septage flow to lagoon #2.

The 4B impairment of the Lamprey River (NHRIV600030703-18) for the Aquatic Life Integrity designated use due to excess ammonia-nitrogen as nitrogen has been removed. The Epping WWTF is no longer in significant non-compliance, and the Lamprey River has been placed in Category 3 (Insufficient Information).

LAMPREY RIVER (NHRIV600030703-18)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
LAMPREY RIVER	NHRIV600030703-18	PHOSPHORUS (TOTAL)	EPPING	4B-T	3-PAS

The Epping WWTF was in violation of its NPDES permit (effective April 1, 2000) in, February, March, April, July and November 2017 and August 2018 for effluent phosphorous daily maximum concentration and load limit violations. The facility was intermittently in "significant non-compliance" with its NPDES permit for exceeding its effluent phosphorous daily maximum concentration and load limits in excess of 40% for at least two months during two consecutive quarter review periods. Due to Epping's compliance history EPA issued Order for Compliance CWA-AO-R01-FY-16-07 dated June 9, 2016 requiring Epping to procure the services of a licensed professional engineer with biological nutrient removal expertise to evaluate Epping's WWTF and make recommendations for improvements to ensure compliance with its NPDES permit limits. The permittee was most recently granted an extension to 7/31/2019 to construct a septage receiving facility and cease all septage flow to lagoon #2.

The 4B impairment of the Lamprey River (NHRIV600030703-18) for the Aquatic Life Integrity designated use due to excess phosphorous has been removed. The Epping WWTF is no longer in significant non-compliance, and the Lamprey River has been placed in Category 3 (Insufficient Information).

LAMPREY RIVER (NHRIV600030703-18)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
LAMPREY RIVER	NHRIV600030703-18	Total Suspended Solids (TSS)	EPPING	4B-T	3-PAS

The Epping WWTF was in violation of its NPDES permit (effective April 1, 2000) in March and April 2017 for effluent TSS monthly average concentration and load limit violations. The facility was intermittently in "significant non-compliance" with its NPDES permit for exceeding its effluent TSS monthly average concentration and load limits in excess of 40% for at least two months during two consecutive quarter review periods. Due to Epping's compliance history EPA issued Order for Compliance CWA-AO-R01-FY-16-07 dated June 9, 2016 requiring Epping to procure the services of a licensed professional engineer with biological nutrient removal expertise to evaluate Epping's WWTF and make recommendations for improvements to ensure compliance with its NPDES permit limits. The permittee was most recently granted an extension to 7/31/2019 to construct a septage receiving facility and cease all septage flow to lagoon #2.

The 4B impairment of the Lamprey River (NHRIV600030703-18) for the Aquatic Life Integrity designated use due to excess Total Suspended Solids (TSS) has been removed. The Epping WWTF is no longer in significant non-compliance, and the Lamprey River has been placed in Category 3 (Insufficient Information).

LAMPREY RIVER NORTH (NHEST600030709-01-01)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
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LAMPREY RIVER NORTH	NHEST600030709-01-01	BOD, Biochemical oxygen demand	NEWMARKET	4B-T	3-PAS
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The Newmarket WWTF was in violation of its NPDES permit (effective February 1, 2013) in December 2016 thru March 2017 and May and June 2017 for effluent BOD monthly average concentration limit violations. The facility was in "significant non-compliance" for exceeding its BOD monthly average concentration limits for at least four months during two consecutive quarter review periods.

The 4B impairment of the Lamprey River North (NHEST600030709-01-01) for the Aquatic Life Integrity designated use due to effluent BOD monthly average concentration has been removed. The Newmarket WWTF is no longer in significant non-compliance, and the Lamprey River North has been placed in Category 3 (Insufficient Information).

LAMPREY RIVER NORTH (NHEST600030709-01-01)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
LAMPREY RIVER NORTH	NHEST600030709-01-01	TOTAL SUSPENDED SOLIDS (TSS)	NEWMARKET	4B-T	3-PAS

The Newmarket WWTF was in violation of its NPDES permit (effective February 1, 2013) in January, March, April and June 2017 for effluent TSS monthly average concentration limit violations. The facility was in "significant non-compliance" for exceeding its TSS monthly average concentration limits for at least four months during two consecutive quarter review periods.

The 4B impairment of the Lamprey River North (NHEST600030709-01-01) for the Aquatic Life Integrity designated use due to excess Total Suspended Solids (TSS) has been removed. The Newmarket WWTF is no longer in significant non-compliance, and the Lamprey River North has been placed in Category 3 (Insufficient Information).

SOUHEGAN RIVER - TUCKER BROOK (NHRIV700060902-05)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
SOUHEGAN RIVER - TUCKER BROOK	NHRIV700060902-05	COPPER	WILTON, NEW IPSWICH, GREENVILLE	4B-T	3-PAS

The Greenville WWTF was in violation of its NPDES permit (effective March 1, 2009) in June and August thru December 2017 and January, February, May and June 2018 for effluent copper monthly average concentration limit violations.; in violation for October thru December 2018 and January, May and June 2018 for effluent copper daily maximum concentration limits. The facility was in "significant non-compliance" for exceeding its effluent monthly average and daily max concentration limits in excess of 20% 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 CWA-AO-R01-F18-10 was effective as of 7/12/2018 and set interim limits of report only for monthly average and daily max concentrations for aluminum and copper. The permittee is to optimize the treatment process for phosphorus, copper and aluminum.

The 4B impairment of the Souhegan River (NHRIV700060902-05) for the Aquatic Life Integrity designated use due to excess copper has been removed. The Greenville WWTF is no longer in significant non-compliance, and the Souhegan River has been placed in Category 3 (Insufficient Information).

SOUHEGAN RIVER (NHRIV700060906-16)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
SOUHEGAN RIVER	NHRIV700060906-16	AMMONIA (TOTAL)	AMHERST, MILFORD	4B-T	3-PAS

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.

The 4B impairment of the Souhegan River (NHRIV700060906-16) for the Aquatic Life Integrity designated use due to excess ammonia has been removed. The Milford WWTF is no longer in significant non-compliance, and the Souhegan River has been placed in Category 3 (Insufficient Information).

SOUHEGAN RIVER (NHRIV700060906-16)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
SOUHEGAN RIVER	NHRIV700060906-16	COPPER	AMHERST, MILFORD	4B-T	3-PAS

The Milford WWTF was in violation of its NPDES permit (effective March 24, 2000) in September and November 2017 and February 2018 for effluent copper monthly average concentration limits. The facility was in "significant non-compliance" for exceeding its effluent copper monthly average concentration limits in excess of 20% for at least two months during two consecutive quarter review periods.

The 4B impairment of the Souhegan River (NHRIV700060906-16) for the Aquatic Life Integrity designated use due to excess copper has been removed. The Milford WWTF is no longer in significant non-compliance, and the Souhegan River has been placed in Category 3 (Insufficient Information).

SOUTH BRANCH ASHUELOT RIVER (NHRIV802010303-18)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
SOUTH BRANCH ASHUELOT RIVER	NHRIV802010303-18	COPPER	TROY	4B-T	3-PAS

The Troy WWTF was in violation of its NPDES permit (effective December 1, 2013) in February thru May 2017 and February, March, May, June and August 2018 for effluent copper monthly average concentration limit violations; in February thru April and November 2017 and February thru August 2018 for effluent copper daily maximum concentration limit violations. The facility has intermittently been in "significant non-compliance" for exceeding its effluent copper monthly average and daily maximum concentration limits in excess of 20% 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. Troy worked with NHDES Operations to reduce and/or eliminate its effluent permit violations.

The 4B impairment of the South Branch Ashuelot River (NHRIV802010303-18) for the Aquatic Life Integrity designated use due to excess copper has been removed. The Troy WWTF is no longer in significant non-compliance, and the South Branch Ashuelot River has been placed in Category 3 (Insufficient Information).

SUGAR RIVER (NHRIV801060405-29)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
SUGAR RIVER	NHRIV801060405-29	PHOSPHORUS (TOTAL)	NEWPORT	4B-T	3-PAS

The Newport WWTF has been in violation with its effluent phosphorous monthly average concentration limits fairly consistently since its NPDES permit was effective July 1, 2007. EPA AO 09-015 required Newport to come in to compliance with its NPDES permit limits by October 31, 2012. An extension was requested by Newport and approved by EPA to December 31, 2012. Newport installed filters after its lagoons and prior to chlorination for effluent phosphorous removal. There were many issues with the operation of the filters. Newport is no longer utilizing the filters. DES issued AOC 15-020 WD on September 1, 2015 requiring Newport to revisit its facilities plan and design and construct a treatment facility to meet its NPDES permit limits. Newport WWTF was in violation of its NPDES permit in July thru December 2016, January thru March and October thru December 2017 and January 2018 for phosphorous monthly average concentration limits. The facility was in "significant non-compliance" for exceeding its effluent phosphorous monthly average loading 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 despite monthly average concentration interim limits allowed by the AOC. As of May 2018 a modified interim limit was approved by way of AOC amendment dated 04/25/2018. A draft permit was available to public comment from 3/5/2020 to 4/3/2020.

The 4B impairment of the Sugar River (NHRIV801060405-29) for the Aquatic Life Integrity designated use due to excess phosphorus has been removed. The Newport WWTF is no longer in significant non-compliance, and the Sugar River has been placed in Category 3 (Insufficient Information).

TIDE MILL CREEK (NHEST600031004-03-03)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
TIDE MILL CREEK	NHEST600031004-03-03	Chlorine, Residual (Chlorine Demand)	HAMPTON	4B-T	3-PAS

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.

The 4B impairment of Tide Mill Creek (NHEST600031004-03-03) for the Aquatic Life Integrity designated use due to excess Total Residual Chlorine (TRC) has been removed. The Hampton WWTF is no longer in significant non-compliance, and Tide Mill Creek has been placed in Category 3 (Insufficient Information).

WARNER RIVER (NHRIV700030304-16)

Assessment Unit Name	Assessment Unit ID	Parameter Name	Town(s) - Primary Town Listed First	2018	2020/2022
WARNER RIVER	NHRIV700030304-16	COPPER	WARNER	4B-T	3-PAS

The Warner Village Water District (WVWD) WWTF was in violation of its NPDES permit (effective September 28, 2015) from November 2016 thru October 2017 for effluent copper monthly average concentration limit violations; in violation for January thru February 2017 and April thru October 2017 for effluent copper daily max concentration. The facility has intermittently been in "significant non-compliance" for exceeding its effluent copper monthly average and daily maximum concentration limits in excess of 20% 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 AOC CWA-AO-R01-FY17-15 was effective as of 10/31/2017 and set interim limits of report only for daily maximum/monthly average copper concentration. A temporary groundwater discharge permit was issued on 9/4/2018 with an expiration of 1/4/2019. The permittee continues to work towards a long term set up for full/partial groundwater discharge.

The 4B impairment of the Warner River (NHRIV700030304-16) for the Aquatic Life Integrity designated use due to excess Total Suspended Solids (TSS) has been removed. The Warner Village Water District WWTF is no longer in significant non-compliance, and the Warner River has been placed in Category 3 (Insufficient Information).