

Water Quality Standards Advisory Committee (WQSAC)

MEETING SUMMARY

Thursday, January 13, 2022, 1:30 pm – 3:30 pm
WEBINAR

Attendees

Name	Organization
Allan Palmer	Granite Shore Power LLC
Andrea LaMoreaux	NH Lakes Association
Ashley Piper	Pennichuck
Brian Maloy	Monadnock Paper Mills
Chris Perkins	Weston & Sampson
Clifton Bell	Brown and Caldwell
Dan Arsenault	EPA R1
Dave Neils	NHDES
Emily Eastman	?
Gregg Comstock	NHDES
James J. Steinkrauss	Rath, Young and Pignatalli
James Tilley	NHDES
Joanna Sullivan	Hazen and Sawyer
John Magee	NHFG
Ken Edwardson	NHDES
Ken Rhodes	Fuss & O'Neill
Mary Butow	NHDES
Paul Stacey	Footprints in the Water
Peg Foss	NHDES
Stephen Roy	NHDES
Sherry Young	Rath, Young and Pignatalli
Ted Diers	NHDES
Ted Walsh	NHDES
Tracy Wood	NHDES

Agenda

Item	~Time	Subject	Lead by
1.	1:30	Introductions	Ken Edwardson
2.	1:35	Draft Summary of Nov-4, 2021 Meeting	Ken Edwardson
3.	1:40	Legislative Update – Budget	Ted Diers
4.	1:50	Pre-Draft Rules	Ken Edwardson
5.	3:15	Other Business <ul style="list-style-type: none"> • The next two regularly scheduled WQSAC meetings are on 4/14/2022 and 7/14/2022. Other	Ken Edwardson
6.	3:30	Adjourn	Ken Edwardson

List of Meeting Documents for WQSAC meeting:

- Draft Summary of Nov-4, 2021 Meeting [20211104-wqsac-mtgsum-DRAFT.pdf]
- Cross-reference table - Env-Wq 1700 rule effective DEC-01-2016 to Draft Pre-IP Changes as of JAN-11-2022 [DRAFT-Changes-Table-Pre-IP-Env-Wq1700.pdf]

Note: This meeting was only offered as a webinar via MS Teams paired with a dial-in number.

For the companion handouts to these notes see the materials in the NHDES document library.

1) Introductions

In the interest of time Ken lead the groups straight into the second item on the agenda.

2) Draft Summary of Nov-4, 2021 Meeting

Add Ken Rhodes to the attendees list.

3) Legislative / Budget Update - Ted Diers

Legislation:

- HB 1167: Set MCLs for 6 PFAS and total in statute as surface water quality standards. We are putting MCLs in our rules for 4 we have MCLs. Combining may not be correct as different and is many cases unknown health effects of the different PFAS. The science behind a combined PFAS criteria is unclear. NHDES not in favor.
- HB 1440: Set MCLs for the 4 PFAS that already have MCLs in rule but also takes the next step of turning them into the human health criteria in our surface water quality standards by this September. Ken wrote comprehensive planning document. We don't have bioaccumulation factors. Need to determine this first. NHDES is concerned about the need for BAFs and the unknown impacts to WWTFs and constituents. NHDES does not have resources allocated or the science to take this big step in the time allotted in the bill.
- HB 1618: DW equivalent of HB 1167. Hearing was yesterday.
- HB1620: Extend lower Merrimack River designation up to Hooksett border. Does not follow the normal process for designating a river.
- HB 1066: Cyanobacteria commission is being proposed and given cyanobacteria growth links back to nutrients, WQSAC members may want to monitor this bill. NHDES is in favor.

Budgets:

Season to start in the next few months plus capital budget. In the summer (July/August) the agencies will generate their budgets and in February the Governor presents his budget.

Ken Rhodes – Comm. Scott said money is plentiful, but issue is resources to issue it quick enough (regulatory agency are lacking staff to review /approve designs and issue \$ fast enough). Ted – we will have 100s of million \$ more than we have in the past. We are having problems hiring – very challenging. Ted added that the pressure is also hitting the consulting capacity to support the projects. Ken R concurred and added that NHDOT has twice as much added funding as NHDES for needed infrastructure projects.

Ted noted that NHDES has a new Water Division Director, Rene Pelletier who comes into the position with tons of experience across all NHDES programs.

4) Pre-Draft Rules

Ken stepped through the pre-initial proposal draft rules that have not yet had legal review. The discussion followed the table that was sent out with the meeting reminder, "Cross-reference table - Env-Wq 1700 rule effective DEC-01-2016 to Draft Pre-IP Changes as of JAN-11-2022" [DRAFT-Changes-Table-Pre-IP-Env-Wq1700.pdf]. The focus was on pieces of the rules that have not yet been seen by the WQSAC in the draft rule form. Notes of the discussion are provided as an added column to the table below.

5) Other Business

Sherry Young – Are the marked-up rules available for distribution? Ted- not yet. Need legal review. Our intention is to send a pre-IP document to all prior the initial proposal.

Ted asked the approximate schedule – Ken E.

- April meeting --send all pre-IP draft (assuming legal has reviewed it).
- Then IP and Public Hearing likely at the summer WQSAC meeting. This could become a separate event if there are other pressing topics we would like to bring to the WQSAC groups attention.
- Then move into the Joint Legislative Committee on Administrative Rules (JLCAR) process.
- Submit to EPA mid fall 2022.

6) Adjourn

The meeting was adjourned at approximately 2:35 pm.

List of Potential Future WQSAC meeting topics: A running list of potential future WQSAC meeting topics and their status (presented in no particular order) is attached after the table, "Cross-reference table - Env-Wq 1700 rule effective DEC-01-2016 to Draft Pre-IP Changes as of JAN-11-2022".

Cross-reference table - Env-Wq 1700 rule effective DEC-01-2016 to Draft Pre-IP Changes as of JAN-11-2022

Rule Effective 12-01-2016 Section Modified	Proposed Revisions	Comments	WQSAC Discussions & Activities (Presentations by NHDES unless otherwise noted) (*some pre-2018 materials are still being added to the new website)	Discussion from the Jan-13, 2022 WQSAC Meeting
CHAPTER Env-Wq 1700 SURFACE WATER QUALITY REGULATIONS	N/A	N/A	N/A	N/A
PART Env-Wq 1701 PURPOSE; APPLICABILITY; COMPLIANCE SCHEDULES	N/A	N/A	N/A	N/A
PART Env-Wq 1701 PURPOSE; APPLICABILITY; COMPLIANCE SCHEDULES	Added "VARIANCES"	To reflect content addition.	Jan-14, 2021 (slides 59-66)	No changes to draft text since last seen. No discussion.
Env-Wq 1701.02 <u>Applicability.</u> (b)(1)	Struck " of any pollutant "	The certainty of a discharge and the requirement of a "pollutant" is inconsistent with Section 401 of the Clean Water Act and case law.	Nov-4, 2021 (slide 14)	No changes to draft text since last seen. No discussion.
Env-Wq 1701.03 <u>Compliance Schedules in NPDES Permits.</u> (a)(2)	Clarifying text. Modify list to become; (b)(2)a. (b)(2)b. (b)(2)c.	Clarity to eliminate confusion.	Jan-13, 2022 Meeting	No discussion.
Env-Wq 1701.03 <u>Compliance Schedules in NPDES Permits.</u> (b)(2)	Clarifying text. (b)(2)	Clarify that all agencies agreement is necessary.	Jan-13, 2022 Meeting	No discussion.

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na	New Section Env-Wq 1701.04 Variances (a) (b) (c)	Variances are allowed under the CWA without explicit authorization in State WQStds. Added here for transparency.	Jan-14, 2021 (slides 59-66)	No changes to draft text since last seen. No discussion.
PART Env-Wq 1702 DEFINITIONS	N/A	N/A	N/A	N/A
Env-Wq 1702.04 “Assimilative capacity”	Modified text	Create consistency between definition and Env-Wq 1708 by stipulating concentration or mass, and adding flow or volume.	Jan-13, 2022 Meeting	Paul Stacey – Any assimilative capacity hook if don’t have assimilative capacity remaining. Ken noted that all the antidegradation details are in 1708.
Env-Wq 1702.18 “Discharge” means: (a)	Clarifying text Struck “ pollutant ”	The certainty of a discharge and the requirement of a “pollutant” is inconsistent with Section 401 of the Clean Water Act and case law.	Nov-4, 2021 (slide 14)	No changes to draft text since last seen. No discussion.

Rule Effective 12-01-2016 Section Modified	Proposed Revisions	Comments	WQSAC Discussions & Activities (Presentations by NHDES unless otherwise noted) (*some pre-2018 materials are still being added to the new website)	Discussion from the Jan-13, 2022 WQSAC Meeting
Env-Wq 1702.26 "Mixing zone"	Struck "wastewater"	Inclusion of the term "wastewater" in the 2016 mixing zone definition could be misinterpreted to mean that mixing zones only apply to wastewater treatment facility discharges and not to other discharges such as those from construction projects or stormwater activities.	Nov-4, 2021 (slide 12)	No changes to draft text since last seen. No discussion.
PART Env-Wq 1703 WATER QUALITY STANDARDS	N/A	N/A	N/A	N/A
Env-Wq 1703.06 <u>Bacteria</u> . (b)	Added text	To align to the changes that were made to RSA 485:A8,V in 2021.	Jan-14, 2021 (slides 67-71) Jul-8, 2021 (slide 43) Nov-4, 2021 (slide 27)	Some added text based on the RSA revisions. No discussion.

<p>Env-Wq 1703.07 <u>Dissolved Oxygen.</u></p>	<p>-na-</p>	<p>No change.</p>	<p>Oct-13, 2016 NHDES-Current Crit., History, Other NE States, Issues. Mtg.sum. Feb-9 2017 Pennsylvania Apprch. Mtg.sum. Apr-13, 2017 NHDES-Why D.O.; NHDES-D.O. and temp.; NHF&G-FW Fish/Life stages; EPA 1986 FW Crit. Doc. Mtg. sum. Sep-8, 2017 SB127- a) D.O.%Sat. removed, b) NHDES to adopt D.O. criteria Oct-12, 2017 EPA-Glen Thursby – Va. Prov. Apprch. Mtg. sum. Feb 2018 – NHDES DO data to EPA Jan-11, 2018 NHDES-Update (slide 6). NHFG to generate species info. Apr-12, 2018 NHDES-Update Mtg. sum. Oct-11, 2018 NHDES-Update Mtg. sum. Dec 2018 – Marine Fish Info; NHFG to NHDES to EPA Apr-11, 2019 NHDES-Marine Discussion & Additional materials Jul-25, 2019 NHDES-Status of EPA work update Mtg. sum. & Additional materials Dec-6, 2019 EPA presentation on GBE data and VPA larval recruitment & Additional materials Dec 2019 Legislation in process changing “dissolved oxygen concentration” to “dissolved oxygen” Apr-9, 2020 NHDES-Attainment goal level. Conc & %Sat equivalency. Baseline criteria. Jan-14, 2021 NHDES-Summary in context of triennial review (slides 72-76)</p>	<p>Ken noted that not all presentations are on Web. Largely confined to the older materials as there were added requirements when the new NHDES website went live. Still need to make some ADA compliant. We’re working on it and hope to have on DES website soon.</p> <p>No discussion.</p>
<p>Env-Wq 1703.15 <u>Gross Beta Radioactivity.</u></p>	<p>Env-Wq 1703.15 <u>Radionuclide Contaminants.</u></p>	<p>Major change to 1703.15-1703.17 as the old radionuclide criteria were</p>	<p>Jul-8, 2021 (slides 21-22) Nov-4, 2021 (slides 16-21)</p>	<p>No changes to draft text since last seen. No discussion.</p>

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	(a) (b) (b)(1) (b)(2) (b)(2)a. (b)(3) (b)(4)	based on a predecessor to the Safe DW Act. 1703.15 used to house the “Radionuclide Contaminants” MCLs.		
Env-Wq 1703.16 <u>Strontium 90.</u>	Env-Wq 1703.16 <u>Average Annual Concentrations Assumed to Produce a Total Body or Organ Dose of 4 mrem/year.</u> (a) (b) (c) (c)(1) (c)(2)	Major change to 1703.15-1703.17 as the old radionuclide criteria were based on a predecessor to the Safe DW Act. 1703.16 used to house the “Average Annual Concentrations Assumed to Produce a Total Body or Organ Dose of 4 mrem/year” MCLs.	Jul-8, 2021 (slides 21-22) Nov-4, 2021 (slides 16-21)	No changes to draft text since last seen. No discussion.
Env-Wq 1703.17 <u>Radium 226.</u>	Env-Wq 1703.16 <u>Cyanotoxins.</u> (a) (a)(1) (a)(2) (b) (c)	Major change to 1703.15-1703.17 as the old radionuclide criteria were based on a predecessor to the Safe DW Act. 1703.17 used to house the cyanotoxin criteria derived from EPA 304(a) guidance.	Jul-25, 2019 - Cyanobacteria (slides 1-28) Oct-1, 2020 Written update EPA Cyanotoxins Tech. Document Support draft Jan-14, 2021 (slides 48-50) Nov-4,2021 (slide 22)	No changes to draft text since last seen. No discussion.

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Env-Wq 1703.20 <u>Risk Factors for Human Health Criteria.</u> (c)	Clarification	2016 language is ambiguous and lead to many conversation and a fair bit of confusion.	Nov-4, 2021 (slide 15)	No changes to draft text since last seen. No discussion.
Table 1703-1: <u>Water Quality Criteria For Toxic Substances</u>	N/A	N/A	N/A	N/A
Column Header: Protection of Aquatic Life Concentration in micrograms per liter (µg/l)	“ug/l” to “ug/L”	Corrected scientific notation.	Jan-13, 2022 Meeting	No discussion.
Column Header: Protection of Aquatic Life Concentration in micrograms per liter (µg/l)	New note (v)	Added default toxins criteria frequency and duration statement for aquatic life designated use.	Nov-4, 2021 (slide 11)	No changes to draft text since last seen. No discussion.
Table 1703-1 -added rows-	Additional rows	Additional rows where MCLs exist in Env-Dw 702- 706 and there was no corresponding row in Table 1703-1.	Jan-14, 2021 (slides 55-58) Jul-8, 2021 (slides 21-22)	No changes to draft text since last seen. No discussion.
Table 1703-1 -Many rows-	Updated Human Health Criteria	Many rows updated with most current “Water & Fish Ingestion” and “Fish Consumption Only” criteria.	Jan-14, 2021 (slides 46-47) Jul-8, 2021 (slides 11-16)	No changes to draft text since last seen. No discussion.
Table 1703-1 -Many rows-	“l” to “l” “Note l” to “Note l” “note l” to “Note l” “note l” to “Note l”	Created consistent use of “Note l” including some cases where 2016 rules missed adding italics to “l”.	Jan-13, 2022 Meeting	No discussion.

Rule Effective 12-01-2016 Section Modified	Proposed Revisions	Comments	WQSAC Discussions & Activities (Presentations by NHDES unless otherwise noted) (*some pre-2018 materials are still being added to the new website)	Discussion from the Jan-13, 2022 WQSAC Meeting
Table 1703-1 CAS No: 7429905 Chemical Name: Aluminum	Struck fixed criteria	New criteria are variable dependent upon DOC, pH and hardness.	Oct-17, 2017 (mtg. sum.) EPA introduced draft 304(a) guidance Apr-11, 2019 (mtg.sum.) Jul-25, 2019 Mass. proposal Oct-1, 2020 Written update EPA Aluminum Tech. Support Document draft & NHDES sampling. Jan-14, 2021 (slides 51-54) Nov-4, 2021 (slide 23)	Defaults in the table have removed since the criteria is performance based on site specific pH, DOC and hardness. The 1-year, monthly sampling at the trend monitoring sites is complete. Ken plans to analyze the data in terms of flow, season and location in the states to provide some guidance on what data is needed to understand the limiting conditions.
Table 1703-1 CAS No: 70776033 Chemical Name: Chlorinated naphthalenes	Added in the missing "h". Chlorinated naphthalenes	Typo	Jan-13, 2022 Meeting	No discussion.
Table 1703-1 CAS No: N/A Chemical Name: Dinitro-o-cresol (2,4)	Deleted line	This name is an older synonym to Dinitro-o-cresol (4,6) (CASNO 534521) that was mistakenly left here between 2002 and 2015. Dinitro-o-cresol (4,6) (CASNO 534521) remains.	Nov-4, 2021 (slide 10)	No changes to draft text since last seen. No discussion.
Table 1703-1 CAS No: 193395 Chemical Name: Ideno(1,2,3-cd)Pyrene	Added in the missing "n". Indeno(1,2,3-cd)Pyrene	Typo	Jan-13, 2022 Meeting	No discussion.

Rule Effective 12-01-2016 Section Modified	Proposed Revisions	Comments	WQSAC Discussions & Activities (Presentations by NHDES unless otherwise noted) (*some pre-2018 materials are still being added to the new website)	Discussion from the Jan-13, 2022 WQSAC Meeting
Table 1703-1 CAS No: 72435 Chemical Name: Methoxychlor Human Health, "Water & Fish Ingestion"	Deleted "l"	Updated 304(a) guidance value is below the MCL → "l" no longer applies	Jan-13, 2022 Meeting	No discussion.
Table 1703-1 CAS No: 108883 Chemical Name: Toluene Human Health, "Water & Fish Ingestion"	Deleted "l"	Updated 304(a) guidance value is below the MCL → "l" no longer applies.	Jan-13, 2022 Meeting	No discussion.
Table 1703-1 CAS No: 71556 Chemical Name: Trichloroethane 1,1,1 Human Health, "Fish Consumption Only"	Deleted "l"	Note "l" removed as it only applies to "Water & Fish Ingestion".	Jan-13, 2022 Meeting	No discussion.
Table 1703-1 CAS No: 88062 Chemical Name: Trichlorophenol 2,4,6 Human Health, "Fish Consumption Only"	Deleted "c"	Note "c" is removed as the 2 ug/L is based on organoleptic while the cancer-based FC value is 2.8 ug/L	Jan-13, 2022 Meeting	No discussion.
Env-Wq 1703.22 <u>Notes For Table 1703-1.</u>	N/A	N/A	N/A	N/A
Env-Wq 1703.22 (d)	Added "also"	Clarification	Jan-13, 2022 Meeting	No discussion.

Rule Effective 12-01-2016 Section Modified	Proposed Revisions	Comments	WQSAC Discussions & Activities (Presentations by NHDES unless otherwise noted) (<i>*some pre-2018 materials are still being added to the new website</i>)	Discussion from the Jan-13, 2022 WQSAC Meeting
Env-Wq 1703.22 (h)	“1703.32” → “1703.33”	Typo	Jan-13, 2022 Meeting	Ken needs to fix the formatting. No discussion.
Env-Wq 1703.22 (l)	Added, “The following criteria are to be met as...”	Added to align with MCL criteria frequency and duration assessment.	Jan-13, 2022 Meeting	No discussion.
Table 1703-2A:	Additional rows Removed rows	Rows added where MCLs in Env-Dw 702-706 were previously missing in Env- Wq 1700. Two rows removed as updated “Water & Fish Ingestion” criteria are below the MCL → “Note I” no longer applies.	Jan-14, 2021 (slides 55-58) Jul-8, 2021 (slides 21-22)	No changes to draft text since last seen. No discussion.
Env-Wq 1703.22 (o)	Modified	Selenium note from 2016 now directs to the new section Env-Wq 1703.34. Too complicated to be just a note.	Oct-1, 2020 Written update EPA Selenium Tech. Support materials in draft July-8, 2021 (slides 32-43)	No changes to draft text since last seen. No discussion.
Env-Wq 1703.22 (s)	Modified	Aluminum note rewritten to align with the updated 304(a) aluminum guidance variable dependent upon DOC, pH and hardness..	Oct-17, 2017 (mtg. sum.) EPA introduced draft 304(a) guidance Apr-11, 2019 (mtg.sum.) Jul-25, 2019 Mass. proposal Oct-1, 2020 Written update EPA Aluminum Tech. Support Document draft & NHDES sampling. Jan-14, 2021 (slides 51-54) Nov-4, 2021 (slide 23)	No changes to draft text since last seen. No discussion.

Rule Effective 12-01-2016 Section Modified	Proposed Revisions	Comments	WQSAC Discussions & Activities (Presentations by NHDES unless otherwise noted) (*some pre-2018 materials are still being added to the new website)	Discussion from the Jan-13, 2022 WQSAC Meeting
Env-Wq 1703.22 (v)	Added	Added default toxins criteria frequency and duration statement for aquatic life designated use.	Nov-4, 2021 (slide 11)	No changes to draft text since last seen. No discussion.
Env-Wq 1703.24 <u>Freshwater Aquatic Life Criteria For Metals</u>	N/A	N/A	N/A	N/A
Table 1703-3: Row: Chromium+3 Column: b _c	“.6848” → “0.6848	Technical correction.	Jan-13, 2022 Meeting	No discussion.
Env-Wq 1703.30 <u>Saltwater Chronic Aquatic Life Criteria for Ammonia at a Salinity of 10 g/kg.</u>	N/A	N/A	N/A	N/A
Table 1703-8:	“Temperature” → “Temperature”	Typo	Jan-13, 2022 Meeting	No discussion.
-na-	Env-Wq 1703.34 <u>Freshwater Aquatic Life Criteria for Selenium.</u>	Selenium section to align with updated 304(a) guidance. Too complicated to be just a note at Env- Wq 1703.22 (o).	Oct-1, 2020 Written update EPA Selenium Tech. Support materials in draft July-8, 2021 (slides 32-43)	No changes to draft text since last seen. No discussion.

Rule Effective 12-01-2016 Section Modified	Proposed Revisions	Comments	WQSAC Discussions & Activities (Presentations by NHDES unless otherwise noted) (*some pre-2018 materials are still being added to the new website)	Discussion from the Jan-13, 2022 WQSAC Meeting
PART Env-Wq 1705 FLOW STANDARDS	N/A	N/A	N/A	N/A
PART Env-Wq 1705 FLOW STANDARDS	PART Env-Wq 1705 PERMITTING RELATED STANDARDS	Heading changed to reflect content of the Part.	<p>Sep-08, 2017 - SB127-Nutrient limits based on flow > 7Q10</p> <p>Oct-17, 2021 Mtg. sum. Topic was introduced at WQSAC meeting.</p> <p>Jan-11, 2018 NHDES-Background (slides 7-20); EPA-Permit Limits Calcs (slides 1-12); Clifton Bell-Alternatives (slides 1-21)</p> <p>Apr-12, 2018 - NHDES-Recap (slides 1-13) & Applying other States Targets to a NH permit site (slides 1-3)</p> <p>Oct-11, 2018 NHDES-Alternative scenarios (slides 1-77)</p> <p>Apr-11, 2019 NHDES-Update Mtg. sum.</p> <p>Jul-25, 2019 Nutrient permitting cont. (slides 1-25) & Additional materials</p> <p>Dec-6, 2019 Additional materials</p> <p>Jan-14, 2021 NHDES-Summary in context of triennial review (slides 77-82)</p> <p>Nov-4, 2021 Rules framework (slide 24)</p>	Discussion in sections below.
Env-Wq 1705.02 Dilution and Nutrient Conditions for Permitting.	N/A	N/A	N/A	N/A
Env-Wq 1705.02 Low Flow Conditions for Permitting.	Env-Wq 1705.02 Dilution and Nutrient Conditions for Permitting.	To reflect content.	-See above-	No discussion.

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Env-Wq 1705.02 (a)	Added text	Clarify	-See above-	No discussion.
Env-Wq 1705.02 (d)	Moved to Env-Wq 1705.02 (f), modified	Provide for permitting toxins.	-See above-	No discussion.

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-na-	New Env-Wq 1705.02 (d) (d)(1) (d)(1)a. (d)(1)b. (d)(1)c. (d)(2)	New river nutrient permitting framework.	-See above-	<p>Clifton B. - The 30 ug/L seems to be defacto water quality criteria. Will it go through more public comment? What is the literature and documentation in support of the 30 ug/L?</p> <p>Ken E. – Largely came out of the research that this group has seen over the recent years. 30 ug/L is a base permitting value that will cover many facilities without need for additional work.</p> <p>Ted – Rulemaking includes opportunity for public comment. We know it’s not the right number everywhere. That’s why its limited to permit determination and have included other ways to determine the appropriate number for permitting with lots of flexibility. Hope to be in rulemaking in next few months which will provide more opportunity for public comment.</p> <p>Clifton B. – Site specific guidance for state-wide targets coming. This is not the time or place for those guidance.</p> <p>Ted – Agreed. Appreciate Clifton’s input. Consider guidance in the future and lean on Clifton for resources and articulation. Perhaps an annotated resource list. Wanted the 30 ug/L so that only the few would need to model.</p> <p>Paul – Variability in nutrients in space and time. Models help but not the total answer.</p> <p>Dave Neils (in the chat) –noted the river trend report provides a frequency distribution of TP data collected across the state: Water Monitoring Strategy Condition Report: Status and trends of water quality indicators from the River Monitoring Network</p>

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-na-	Env-Wq 1705.02 (e)	Provide for permitting ammonia as a toxin to aquatic life.	-See above-	No discussion.
-na-	Env-Wq 1705.02 (g) (g)(1) (g)(2)	Pertaining to data used for permitting.	-See above-	No discussion.
-na-	Env-Wq 1705.03 Restoration Activities (a) (b)	Pertaining to ecological restoration.	-See above-	Ken R. – example of Restoration Project? Ken E. – Nippo Lake alum treatment. Ken R. – Department may want to think in terms of construction projects approved by NHDES. Is it temporary or long-term, construction and operation? Paul Stacey – I tend to think of alum as a long-term management rather than a “restoration”. Similar rehabilitation of stream buffers is good idea that may involve short term discharges of dirty water when constructing but will take many years for the vegetative buffer to grow and be an effective BMP for improving water quality. Ted- Dam removals. Culvert replacements. Resilience back into the environment.
PART Env-Wq 1706 SAMPLING AND ANALYSIS	N/A	N/A	N/A	N/A
Env-Wq 1706.01 <u>Procedures.</u>	Added text	To align to the changes that were made to RSA 485:A8,V in 2021	Jan-14, 2021 (slides 67-71) Jul-8, 2021 (slide 43) Nov-4, 2021 (slide 27)	Some added text based on the RSA revisions. No discussion.

Rule Effective 12-01-2016 Section Modified	Proposed Revisions	Comments	WQSAC Discussions & Activities (Presentations by NHDES unless otherwise noted) (*some pre-2018 materials are still being added to the new website)	Discussion from the Jan-13, 2022 WQSAC Meeting
PART Env-Wq 1708 ANTIDegradation	N/A	N/A	N/A	N/A
Env-Wq 1708.12 <u>Transfer of Water</u> . (a)	Edit	As written, the definition could be an issue for Instream Flow Program activities and perhaps transfers to surface waters aiming to groundwater recharge.	Nov-4, 2021 (slide 13)	No changes to draft text since last seen. No discussion.

Ted – We did have the change in statute regarding shellfish bacteria. That will be in updated appendix in our rules.

Ken E. - Similarly, there are now references in the appendices for the calculation of the new aluminum criteria.

List of Potential Future WQSAC Meeting Topics and Status

Last Updated 11/04/2021

Topic	Description	Status
PFOA & PFOS Criteria in Env-Wq 1700	In October, 2016, NH adopted emergency rules to establish an ambient groundwater drinking water standard of 70 ppt for PFOA & PFOS. The emergency rule lasts 180 days. There are currently no criteria for PFOA or PFOS in Env-Wq 1700 for the protection of aquatic life or human health (added by NHDES in Sept 2017)	07/2018 <ul style="list-style-type: none"> • SB 309 – NHDES to make plan for WQStds. 12/2018 <ul style="list-style-type: none"> • Toxicologist and health risk assessor hired. 04/11/2019 WQSAC meeting <ul style="list-style-type: none"> • NHDES – Update 07/25/2019 WQSAC meeting <ul style="list-style-type: none"> • NHDES – Update Presentation 12/6/2019 WQSAC meeting <ul style="list-style-type: none"> • NHDES – Draft Report Pres. 12/30/2019 <ul style="list-style-type: none"> • NHDES – Report submitted to legislature 01/14/2021 WQSAC meeting <ul style="list-style-type: none"> • NHDES-MCL Brief in context of triennial review 07/08/2021 WQSAC meeting <ul style="list-style-type: none"> • NHDES-More detailed MCL Brief in context of triennial review
Acute and Chronic Toxicity definitions (Env-Wq 1702.02 and 1702.10)	Should the definitions be more broad? (from July 2016 comments on IP1 by OOE2 ^{Error! Bookmark not defined.}).	01/13/2022 WQSAC meeting <ul style="list-style-type: none"> • NHDES-Added to pre-IP rules draft as a note to Table 1703-1.
Nuisance species (Env-Wq 1702.33 and 1703.03(c)(1)d)	Should nuisance species be better defined because it's too subjective? Should it include a list of "invasive" plants? How do you determine if a waterbody is degraded by development or if it's due to the natural lake aging process? (from July 2016 comments on IP by NHFG3)	
Designated Uses (Env-Wq 1702.16 and 1703.01)	How should conflicts between designated uses be resolved (e.g., aquatic life (which depend on plants for habitat) and boating or swimming (which can be adversely impacted by too many plants)? (from July 2016 comments on IP by NHFG).	

1 IP means Initial Proposal;

2 OOE means Osprey Owl Environmental, Inc.

3 NHFG means New Hampshire Fish and Game Department

Topic	Description	Status
Dissolved Oxygen Criteria (RSA 485-A:8 II, IIa., Env-Wq 1703.07)	In 2017, RSA 485-A:8, II was revised and 485-A:8, IIa., was added that requires DES Commissioner to adopt rules relative to DO water quality standards in a manner that is consistent with EPA guidance on fresh and tidal DO water criteria published pursuant to section 304(a) of the CWA, and other relevant scientific information. (from July 2016 comments on IP by GBMC 4 and others)	In progress. Subcommittee formed and first meeting held 10/13/16. 10/13/2016 <ul style="list-style-type: none"> • NHDES-Current Crit., History, Other NE States, Issues, Start 02/09/2017 <ul style="list-style-type: none"> • Pennsylvania Apprch. 04/13/2017 <ul style="list-style-type: none"> • NHDES-Why D.O. • NHDES-D.O. and temp. • NHF&G-FW Fish/Life stages • NHDES-EPA 1986 FW Crit. Doc. 09/08/2017 <ul style="list-style-type: none"> • SB127- a) D.O.%Sat. removed, b) NHDES to adopt D.O. criteria 10/12/2017 <ul style="list-style-type: none"> • EPA-Glen Thursby – Va. Prov. Apprch. 02/2018 – NHDES DO data to EPA 01/11/2018 WQSAC meeting <ul style="list-style-type: none"> • NHDES-Update. NHFG to generate species info. 04/12/18 WQSAC meeting <ul style="list-style-type: none"> • NHDES-Update 10/11/2018 <ul style="list-style-type: none"> • NHDES-Update 12/2018 – Marine Fish Info; NHFG to NHDES to EPA 04/11/2019 <ul style="list-style-type: none"> • NHDES-Marine Discussion 07/25/2019 WQSAC meeting <ul style="list-style-type: none"> • NHDES-Status of EPA work update 12/6/2019 <ul style="list-style-type: none"> • EPA presentation on GBE data and VPA larval recruitment 12/2019 <ul style="list-style-type: none"> • Legislation in process changing “dissolved oxygen concentration” to “dissolved oxygen” 4/9/2020 <ul style="list-style-type: none"> • NHDES-Attainment goal level. Conc & %Sat equivalency. Baseline criteria. 01/14/2021 WQSAC meeting <ul style="list-style-type: none"> • NHDES-Brief in context of triennial review

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Tidal nutrient related assessment procedures (Env-Wq 1703.14)	Do the nutrient related assessment procedures for tidal waters for dissolved oxygen, chlorophyll a, water clarity, macrophytes, epiphytes and eelgrass need to be revisited? (from July 2016 comments on IP by GBMC).	
EPA Human Health Criteria methodology and assumptions (Env-Wq 1703.21, Table 1703-1)	Are the risk factors, body weight, drinking water intake rates, bioaccumulation factors used by EPA to develop 304(a) recommended human health criteria appropriate? Should DES adopt the EPA 304(a) recommended criteria for 94 chemicals finalized in 2015? (from July 2016 comments on IP by OOE).	01/14/2021 WQSAC meeting <ul style="list-style-type: none"> NHDES-Brief in context of triennial review 07/08/2021 WQSAC meeting <ul style="list-style-type: none"> NHDES-Deep dive into the criteria changes due to the 2015 304(a) updates.
Chloride Criteria – (Env-Wq 1703.21, Table 1703-1)	Should chloride criteria be revised? Note - EPA disapproved Missouri’s proposal to adopt Iowa’s criteria in 2015 (not scientifically defensible and may not be protective based on recent toxicity tests using mussels).	01/14/2021 WQSAC meeting <ul style="list-style-type: none"> EPA notes that draft revised 304(a) may be out this year for comment.
Aluminum Criteria – (Env-Wq 1703.21, Table 1703-1)	EPA issued draft freshwater criteria for aluminum in July 2017. The comment period closed 9/26/17. Should DES adopt the revised criteria once it is finalized? (from DES, 9/7/16).	12/2018 - EPA provided V2 01/14/2021 WQSAC meeting <ul style="list-style-type: none"> NHDES-Presentation 11/4/2021 WQSAC meeting <ul style="list-style-type: none"> NHDES-Draft text for Env-Wq 1700
Assimilative Capacity (Env-Wq 1705.01)	Should the 10% reserve for future growth be maintained? (from July 2016 comments on IP by City of Rochester).	

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River flows for calculation of permit limits (Env-Wq 1705.02)	Should the 7Q10 river flow be used to calculate nutrient related permit limits or should a seasonal flow be used? (from July 2016 comments on IP by City of Rochester).	<p>In progress.</p> <p>09/08/2017</p> <ul style="list-style-type: none"> • SB127-Nutrient limits based on flow > 7Q10 <p>10/12/2017</p> <ul style="list-style-type: none"> • Topic was introduced at WQSAC meeting. <p>01/11/2018 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Background • EPA-Permit Calcs • Clifton Bell-Alternatives <p>04/12/2018</p> <ul style="list-style-type: none"> • NHDES-Recap & Applying other States to a NH permit site <p>10/11/2018</p> <ul style="list-style-type: none"> • NHDES-Alternative scenarios <p>04/11/2019 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Update <p>07/25/2019 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Presentation <p>01/14/2021 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Brief in context of triennial review <p>11/4/2021 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Draft framework Env-Wq 1700 <p>01/13/2022 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Added to pre-IP rules draft for discussion.
Bacteria: Seasonal (versus year-round) disinfection of WWTF effluent	Current regulations require year-round disinfection of WWTF effluent. Some other NE states do not require disinfection during the winter months. Should NH WWTFs be allowed to do the same? Would require rule change and likely a statute change.	
Cyanobacteria Toxins 304(a)	In May 2019 EPA published its final microcystin and cylindrospermopsin 304(a) criteria to protect recreational uses of waters.	<p>07/25/2019 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Presentation <p>01/14/2021 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Brief in context of triennial review <p>11/4/2021 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Draft text for Env-Wq 1700
Presentation	NHDES Monitoring Strategy	
Presentation	Pollutant Tracking and Accounting Pilot Program (PTAPP) being developed for the coast	
Presentation	Trends of Mercury in Fish Tissue	
Presentation	River Order used in the Shoreland Protection Act	
Variances	Should NHDES add variances to the WQStds per 40CFR131.14?	<p>01/14/2021 WQSAC meeting</p> <ul style="list-style-type: none"> • NHDES-Presentation

