CLARIFICATION of Section 9.1.1 (State of New Hampshire Conditions) and other New Hampshire specific information for the U.S. EPA 2017 NPDES Construction General Permit (CGP) March 1, 2017

PURPOSE: The purpose of this document is to provide clarification of the conditions specific to the State of New Hampshire in section 9.1.1 of the 2017 National Pollutant Discharge Elimination System (NPDES), General Permit for Discharges from Construction Activities (the Construction General Permit or CGP) issued by the U.S. Environmental Protection Agency (EPA) and which became effective February 15, 2017. In addition, instructions for finding NH specific information (i.e., impaired waters, TMDL information, Tier 3 waters, etc.) which may be required for SWPPPs and/or NOIs are included at the end of this document.

Each condition in section 9.1.1 of the CGP is listed below, followed by a clarification statement (in bold italics) to further explain what is expected by the New Hampshire Department of Environmental Services (NHDES or DES).

9.1.1. NHR120000: State of New Hampshire.

9.1.1.a. If you disturb 100,000 square feet or more of contiguous area, you must Also apply for an Alteration of Terrain (AoT) permit from DES pursuant to RSA 485-A:17 and Env-Wq 1500. This requirement also applies to a lower disturbance threshold of 50,000 square feet or more when construction occurs within the protected shoreline under the Shoreland Water Quality Protection Act (see RSA 483-B and Env-Wq 1400). A permit application must also be filed if your project disturbs an area of greater than 2,500 square feet, is within 50 feet of any surface water, and has a flow path of 50 feet or longer disturbing a grade of 25 percent or greater. Project sites with disturbances smaller than those discussed above, that have the potential to adversely affect state surface waters, are subject to the conditions of an AoT General Permit by Rule.

Clarification of 9.1.1.a.: Self explanatory. Should you have questions regarding this section, please call or email Ridge Mauck (contact information is provided at the end of this document).

9.1.1.b. You must determine that any excavation dewatering discharges are not contaminated before they will be authorized as an allowable nonstormwater discharge under this permit (see Part 1.2.2). The water is considered uncontaminated if there is no groundwater contamination within 1,000 feet of the groundwater dewatering location. Information on groundwater contamination can be generated over the Internet via the NHDES web site http://des.nh.gov/ by using the One Stop Data Mapper at http://des.nh.gov/onestop/gis.htm. If it is determined that the groundwater to be dewatered is near a remediation or other waste site you must apply for the Remediation General Permit (see https://www3.epa.gov/region1/npdes/rgp.html)

Clarification of 9.1.1.b.: It is the responsibility of the person proposing to discharge excavation dewatering water (i.e. groundwater) to surface waters to determine whether that groundwater is contaminated or not. Since EPA does not define "contaminated," and sampling and analysis of groundwater for all of the pollutants required to be tested for in the Remediation General Permit is very costly, DES recommends that applicants use the NHDES OneStop Web Geographic Information System, especially focusing on the Remediation Sites data, and make the determination that the groundwater is uncontaminated if there are no contamination sources such as remediation sites nearby. Distances less than the 1,000 feet used in this condition may be appropriate if additional information justifying a shorter distance is available. When in doubt testing is recommended since there is the possibility of significant fines for discharging without an appropriate NPDES permit. Should you have questions regarding this section, please call or email Jeff Andrews (contact information is provided at the end of this document).

9.1.1.c. You must treat any uncontaminated excavation dewatering discharges as necessary to remove suspended solids and turbidity. The discharges must be sampled at least once per week during weeks when discharges occur. Samples must be analyzed for total suspended solids (TSS) or turbidity and must meet monthly average and daily maximum limits of 50 milligrams per liter (mg/L) and 100 mg/L, respectively for TSS or 33 mg/l and 67 mg/l, respectively for turbidity. TSS (a.k.a. Residue, Nonfilterable) or turbidity sampling and analysis must be performed in accordance with Tables IB and II in 40 CFR 136.3 (http://www.ecfr.gov/cgi-bin/text-idx?SID=ceb45c59a8e56269344454b8ad9f3987&mc=true&node=se40.23.136_13&rgn=div8). Records of any sampling and analysis must be maintained and kept with the SWPPP for at least three years after final site stabilization.

Clarification of 9.1.1.c.: Uncontaminated excavation dewatering discharges to surface water can obtain coverage under the Construction Dewatering General Permit (DGP) rather than the Remediation General Permit (RGP). For information on the DGP see http://www.epa.gov/region1/npdes/dewatering/FinalDewateringGP.pdf. However, for construction sites disturbing an acre or more that will need to obtain coverage under the CGP, NHDES believes that it would be a burden for operators to also have to apply for the DGP. This condition, which contains the TSS limits and monitoring requirements from the DGP, satisfies the substantive requirements of the DGP. NHDES reserves the right to impose additional requirements of the DGP for a particular discharge. If the applicant is unable to measure TSS and can only measure turbidity (NTUs), a factor of 1.5 may be used. Based on an assessment of paired turbidity and TSS data for the years 1998 – 2010, NHDES has determined that multiplying turbidity (in NTUs) by 1.5 is a reasonable approximation of TSS (in mg/L). That is 33 NTU can be assumed to equal 50 mg/L TSS and 66 NTU can be assumed to equal 100 mg/L TSS. If more precise measures are needed, then direct TSS testing would be required. Should you have questions regarding this section, please call or email Jeff Andrews (contact information is provided at the end of this document).

9.1.1.d. Construction site owners and operators must consider opportunities for post construction groundwater recharge using infiltration best management practices (BMPs) during site design and preparation of the stormwater pollution prevention plan (SWPPP). If your construction site is in a town that is required to obtain coverage under the NPDES General Permit for discharges from Municipal Separate Storm Sewer Systems (MS4) you may be required to use such practices. The SWPPP must include a description of any on-site infiltration that will be installed as a post-construction stormwater management measure or reasons for not employing such measures such as 1) The facility is located in a wellhead protection area as defined in RSA 485-C:2; or 2) The facility is located in an area where groundwater has been reclassified to GAA, GA1 or GA2 pursuant to RSA 485-C and Env-Dw 900; or 3)

Any areas that would be exempt from the groundwater recharge requirements contained in Env-Wq 1507.04(e), including all land uses or activities considered to be a "High-load Area" (see Env-Wq 1502.26). For design considerations for infiltration measures see Volume II of the NH Stormwater Manual.

Clarification of 9.1.1.d.: Municipalities and other county, state and federal entities that own and operate separate storm sewer systems (MS4) in urbanized areas are required to obtain coverage under the Small Municipal Separate Storm Sewer System General Permit (MS4GP – see http://www.epa.gov/region1/npdes/stormwater/MS4_2008_NH.html). Post-construction runoff control is one of the required minimum control measures that must be implemented to the maximum extent practicable with an ordinance or other regulatory control mechanism. Most MS4s require the use of stormwater infiltration practices as a post-construction control measure to reduce stormwater flow and pollutant loadings to surface waters. NHDES believes that during any construction, not just in MS4, it is an opportune time to consider stormwater infiltration practices that will maintain the natural hydrology as much as possible. However, in certain sites infiltration of stormwater is not recommended and may be prohibited. The purpose of condition 9.1.1.d. is to recommend that stormwater infiltration be used wherever feasible and to provide applicants with the information on the few situations where it is either not recommended or prohibited. Should you have questions regarding this section, please call or email Ridge Mauck (contact information is provided at the end of this document).

9.1.1.e. Appendix F contains a list of Tier 2, or high quality waters. Although there is no official list of tier 2 waters, it can be assumed that all NH surface waters are tier 2 for turbidity unless 1) the surface water that you are proposing to discharge into is listed as impaired for turbidity in the states listing of impaired waters (see Surface Water Quality Assessment - Watershed Report Cards at http://des.nh.gov/organization/divisions/water/wmb/swqa/report_cards.htm) or 2) sampling upstream of the proposed discharge location shows turbidity values greater than 10 NTU. A single grab sample collected during dry weather (no precipitation within 48 hours) is acceptable.

Clarification of 9.1.1.e.: As noted in Appendix F, New Hampshire does not have an official list of Tier 2/ Tier 2.5 waters. It does, however, have a list of impaired waters and a list of Tier 3 (i.e. outstanding resource waters or ORWs). Since New Hampshire does not have an official list of Tier 2/ Tier 2.5 waters and unless otherwise notified by NHDES, it is acceptable to NHDES if applicants with discharges to surface waters that are not listed as impaired for sediment related parameters (as defined in the CGP), and which are not ORWs, follow the inspection requirements noted in 4.2 and the stabilization requirements noted in 2.2.14.a.i. and 2.2.14.a.ii. of the CGP. If more stringent requirements are considered necessary by NHDES, conditions will be included in other applicable permits or certifications required by DES.

Instructions for determining if a surface water is an ORW (i.e., Tier 3), as well as information about water quality impairments and TMDLs are provided at the end of this document.

Should you have questions regarding this section, please call or email Ken Edwardson (contact information is provided at the end of this document).

9.1.1.f. To ensure compliance with RSA 485-C, RSA 485-A, RSA 485-A:13, I(a), Env-Wq 1700 and Env-Wq 302, the following information may be requested by NHDES. This information must be kept on site unless you receive a written request From NHDES that it be sent to the address shown in Part 9.1.1.g..

i. A site map required in Part 7.2.4, showing the type and location of all post-construction infiltration BMPs utilized at the facility or the reason(s) why none were installed;

ii. A list of all non-stormwater discharges that occur at the facility, including their source locations and the control measures being used (see Part 1.2.2).

iii. Records of sampling and analysis of TSS required for construction dewatering discharges (see Part 9.1.1.c.).

Clarification of 9.1.1.f.: NHDES periodically receives water quality related complaints related to stormwater runoff from construction sites. NHDES may also need to investigate stormwater runoff from construction sites during other surface water quality studies. This condition notifies applicants that in addition to the storm water pollution prevention plan certain additional records must be retained on site and be made available to NHDES upon request.

9.1.1.g. All required or requested documents must be sent to:
NH Department of Environmental Services, Wastewater Engineering Bureau,
Permits & Compliance Section
P.O. Box 95
Concord, NH 03302-0095

Clarification of 9.1.1.g.: Self explanatory. Should you have questions regarding this section, please call or email Jeff Andrews (contact information is provided at the end of this document).

Other NH Specific Information (Waterbody Name, Impairment, ORW and TMDL) Needed for CGP NOIs

According to section 3.2, Appendix F and Appendix J of the CGP, the following must be included in the NOI:

- A list (including names) of all impaired[1] waters to which you discharge;
- The pollutant(s) for which the surface water is impaired;
- Whether a TMDL has been approved or established for receiving waters; and
- A list (including names) of Tier 2, 2.5 or 3 waters to which you discharge [Tier 3 includes Outstanding Resource Waters (or ORWs)].

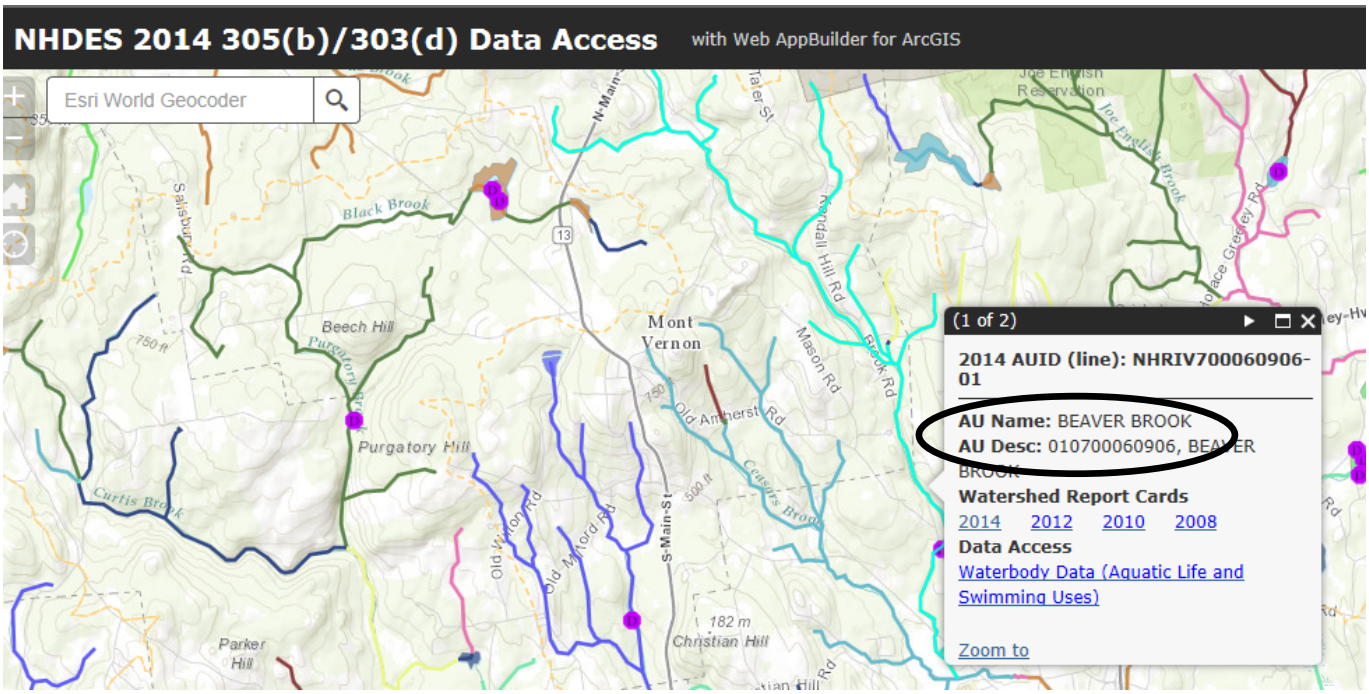
Two methods for finding this information are provided below. Method 1 is for users that do NOT have GIS capabilities and Method 2 is for those with GIS capabilities that need to complete multiple NOIs. As previously mentioned, NHDES does not have an official list of Tier 2 or 2.5 waters but does have a list of ORW (Tier 3) waters. Should you have questions regarding this section, please call or email Ken Edwardson (contact information is provided at the end of this document).

Method 1: For users that do NOT have GIS capabilities

Step 1: Determine the Assessment Unit ID (AUID) of the waterbody of interest. To do this, go the Surface Water Quality Assessment Viewer at the NHDES webpage

[1] According to the CGP (section 3.2 and definitions in Appendix A), impaired waters only include those which are on the 303(d) List and those waters that are impaired and have an EPA approved TMDL.

http://www2.des.state.nh.us/WaterShed_SWQA/SWQA_Map.aspx and click on "OK" at the bottom of the page. This brings you to a map of New England. Zoom in to your receiving water location by clicking and dragging the mouse to center your location on the map and then using the + or – buttons at the top left part of the map to eventually find the town and then the water body. The water bodies with their different assessment units appear as different colors. Put the curser in the exact location of your proposed discharge and click which will then show the box with the Assessment Unit name (AU Name)and Assessment Unit ID (AUID). The screenshot below shows the result for Beaver Brook in Amherst. Write down both the AU Name (e.g. Beaver Brook) and the AUID number (e.g. NHRIV700060906-01) and close the viewer.



When the CGP calls for waterbody names, NHDES recommends including both the AU name and the AUID. If a waterbody is not shown on the report cards, DES recommends calling the waterbody "Unnamed Tributary to AUID?, where AUID? is the AUID of the closest downstream waterbody.

Step 2: Go the "List of ORW and Impaired (4A and 5) Waters for CGP NOIs" (the LIST) on the NHDES website (provided below). In the vast majority of cases, this LIST will provide all of the information needed to complete the portions of the CGP NOI regarding

- the waterbody name,
- if the waterbody is an Outstanding Resource Water (ORW or Tier 3),
- if the waterbody is on the 303(d) list of impaired waters that require a TMDL and the pollutants causing impairment, and
- if the waterbody is impaired for pollutants which have an EPA approved Total Maximum Daily Load (TMDL) study, the names of the impairments, the names of the pollutants allocated in the TMDL (if different than the name of the impairments) and the name of the TMDL. *(Note, in addition to any waters shown on the LIST as having a TMDL, CGP applicants should also list mercury as an impairment for ALL fresh waters and the Northeast Regional Mercury TMDL (approved by EPA on December 20, 2008) as the TMDL which addresses this impairment.*

Two versions of the LIST are provided; one in PDF format and the other in excel (XLS) format. Both are available under "Hot Topics" on the NHDES Stormwater web page at

http://des.nh.gov/organization/divisions/water/stormwater/index.htm. Select the version you are most comfortable using (by clicking on PDF or XLS) and scroll down to the AUID in the left-most column. Both documents are sorted in alphabetical/sequential order by AUID. You can also use the various search modes in each document if you are familiar with how they work.

The following is a screen-shot from the LIST in excel format for the example above.

	A	B	C	D	E	F	G	H
1	List of ORW and Impaired (4A and 5) Waters for CGP NOIs 5/10/12							
2	(Outstanding Resource Waters and Impairments on the 2010 305(b)/303(d) that need, or have a completed, TMDL. File last update May 10, 2012.)							
3	Assessment Unit ID	Assessment Unit Name	Impairment Name	Pollutant allocated in TMDL (if different than "Impairment Name")	CGP eNOI Equivalent (to Impairment Name)	TMDl Approval Date	TMDL Name	Outstanding Resource Water (ORW) (AUIDs not shown are non ORWs) {See http://www2.des.state.nh.us/gis/onestop/ if your AUID says "Review OneStop GIS ORW Layer"}
2755	NHRIV700060905-19	BABOOSIC BROOK - RIDDLE BROOK	Benthic-Macroinvertebrate Bioassessments (Streams)		CAUSE UNKNOWN - IMPAIRED BIOTA			Non-ORW
2756	NHRIV700060905-19	BABOOSIC BROOK - RIDDLE BROOK	Oxygen, Dissolved		ORGANIC ENRICHMENT/OXYGEN DEPLETION			Non-ORW
2757	NHRIV700060906-01	BEAVER BROOK	Aluminum		METALS (OTHER THAN MERCURY)			Non-ORW
2758	NHRIV700060906-01	BEAVER BROOK	Escherichia coli		PATHOGENS	21-Sep-10	NEW HAMPSHIRE STATEWIDE BACTERIA	Non-ORW
2759	NHRIV700060906-01	BEAVER BROOK	pH		PH/ACIDITY/CAUSTIC CONDITIONS			Non-ORW

As shown, for AUID NHRIV700060906-01 (column A), the Assessment Unit name is Beaver Brook (column B). The brook is impaired for aluminum, Escherichia coli, and pH (column C). If an impairment does not have any TMDL information associated with it, it can be assumed to be on the 303(d) list of impaired waters needing a TMDL. Therefore, for the example above, aluminum and pH are on the 303(d) list. Escherichia coli, however, is not because a TMDL (the NH Statewide Bacteria TMDL – column F) was completed and approved by EPA on September 21, 2010 (column E). Since column D (Pollutant allocated in the TMDL (if different than the impairment name)) is blank, the pollutant allocated in the TMDL is the same as the impairment name in column C (in this case Escherichia coli). If column D was not blank, the name of the pollutant shown in column D should also be included in the CGP NOI. Finally, as stated above, CGP applicants should also list mercury as an impairment for ALL fresh waters and the Northeast Regional Mercury TMDL (approved by EPA on December 20, 2008) as the TMDL which addresses this impairment.

Once all impairments have been identified, determine if any of the impairments are (1) sediment or a sediment related parameter, such as total suspended solids (TSS) or turbidity, and/or (2) nutrients, including impairments for nitrogen and/or phosphorus. If the answer is yes to either or both, the CGP requires implementation of more stringent practices [such as those related to inspection and stabilization (see section 3.2.2 of the CGP)]. If there are other impairments with an approved TMDL, section 3.2 of the CGP states that EPA will determine if additional controls are necessary.

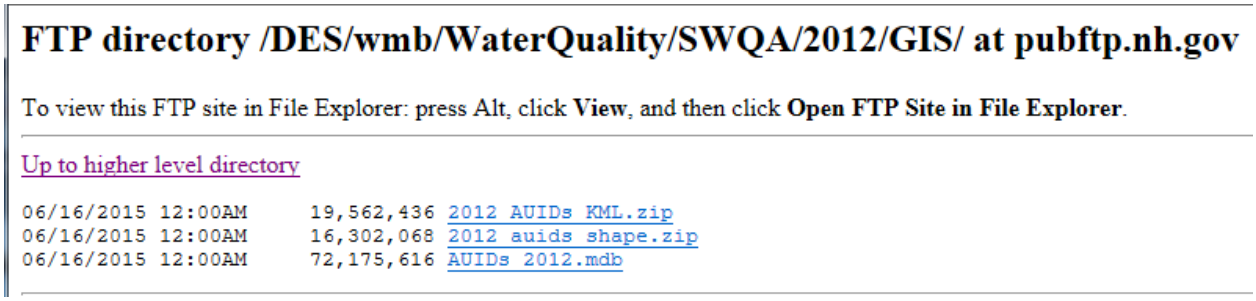
With regards to ORWs (i.e., Tier 3 waters), column G in the example above indicates that AUID NHRIV700060906-01 is not an ORW (i.e., Non-ORW). If it was an ORW, "ORW" would have been shown in this column. If the following is stated in column G, "Review One Stop GIS ORW layer", CGP applicants should follow the instructions at http://NHDES.nh.gov/organization/divisions/water/wmb/tmdl/documents/onestop_gis_wgc_ref_guide.pdf to determine if their waterbody of interest is an ORW.

Finally, if your AUID is NOT shown on the LIST, it means that your waterbody is not impaired for a pollutant that is on the 303(d) list, and it is not an ORW (i.e., Tier 3 water). However, as mentioned previously, if the waterbody is a fresh surface water (i.e., not a marine or tidal water), you should list mercury as an impairment and the Northeast Regional Mercury TMDL (approved by EPA on December 20, 2008) as the TMDL which addresses this impairment.

Method 2: For users that have GIS capabilities

For users that have GIS capabilities and are responsible for multiple CGP NOIs, the following alternative method is recommended to assist applicants with finding the CGP information discussed in Method 1 above.

1. Using a web browser, visit the NHDES FTP sites described below to obtain the AUID and ORW GIS layers
    a) At the login window, click on the box in the lower left hand corner labeled "Login Anonymously". The User name will then be automatically filled in with the word "Anonymous".
    b) Type in your email address in the Email Address block.
    c) Then click on the Log On button.
    d) The folder should appear containing the files below
    e) For the AU layer, go to ftp://pubftp.nh.gov/DES/wmb/WaterQuality/SWQA/2012/GIS/ and choose your preferred feature type (shape, geodatabase, KML) (see screen shot below)



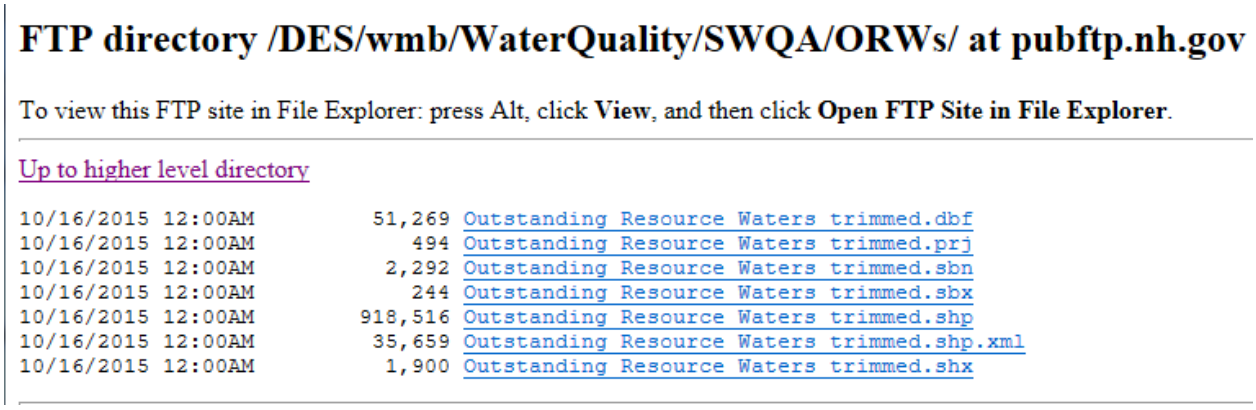
FTP directory /DES/wmb/WaterQuality/SWQA/2012/GIS/ at pubftp.nh.gov

To view this FTP site in File Explorer: press Alt, click **View**, and then click **Open FTP Site in File Explorer**.

Up to higher level directory

06/16/2015 12:00AM	19,562,436	2012 AUIDs KML.zip
06/16/2015 12:00AM	16,302,068	2012 auids shape.zip
06/16/2015 12:00AM	72,175,616	AUIDs 2012.mdb

For the ORW layer, go to ftp://pubftp.nh.gov/DES/wmb/WaterQuality/SWQA/ORWs/ (see screen shot below)



FTP directory /DES/wmb/WaterQuality/SWQA/ORWs/ at pubftp.nh.gov

To view this FTP site in File Explorer: press Alt, click **View**, and then click **Open FTP Site in File Explorer**.

Up to higher level directory

10/16/2015 12:00AM	51,269	Outstanding Resource Waters trimmed.dbf
10/16/2015 12:00AM	494	Outstanding Resource Waters trimmed.prj
10/16/2015 12:00AM	2,292	Outstanding Resource Waters trimmed.sbn
10/16/2015 12:00AM	244	Outstanding Resource Waters trimmed.sbx
10/16/2015 12:00AM	918,516	Outstanding Resource Waters trimmed.shp
10/16/2015 12:00AM	35,659	Outstanding Resource Waters trimmed.shp.xml
10/16/2015 12:00AM	1,900	Outstanding Resource Waters trimmed.shx

AUs are available in shape file and geodatabase formats. KML files are available for Google Earth users. Shape files and the geodatabase are in NAD1983, New Hampshire State Plane, Feet. KML files are in WGS 84. For Google Earth users , the KML files are set-up with labels and will default to drawing all labels for the state when you bring the KML files into Google Earth. To turn the labels off until zoomed in, uncheck the "Feature Labels"

Use the AU GIS layer to identify the AUID and AU name. Use the ORW layer to determine if the waterbody is an ORW. Knowing the AUID, go to the "List of ORW and Impaired (4A and 5) Waters for CGP NOIs" (the LIST) to find impairment and TMDL information as described under Method 1 above.

Questions? Should you have additional questions, please contact:

Jeff Andrews, P.E.	Ken Edwardson	Ridge Mauck

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This document is available on the NHDES website http://des.nh.gov/organization/divisions/water/stormwater/index.htm .